



One Stop Respiratory Clinic- A New Patient Pathway for the Management of High-Risk Respiratory Patients in Primary Care

Dudley in the West Midlands has some of the most deprived neighbourhoods in England, facing alarming inequalities in respiratory health. It has one of the highest rates of hospital admissions and deaths related to asthma and COPD in the country.¹ Delays in early and accurate diagnosis, misdiagnosis, suboptimal treatment and management, to delays in accessing specialist care, can all contribute to poorer respiratory outcomes.^{2,3}

The aim was to tackle the unmet needs of the local population and reduce unwarranted variation in respiratory care by establishing a pharmacist-led One Stop Respiratory Clinic in GP practices across Dudley. The service would focus on finding and managing high-risk patients and improving patient access, outcomes and experience.

"...people living with lung conditions are trapped in a vicious cycle of late diagnosis, a limited number and lack of access to treatments, and poor support leaving people to fend for themselves. This leads to avoidable hospital admissions.

"...as many as 750,000 people in England are misdiagnosed with asthma."³



A Specialist Pharmacist Respiratory Clinic was established within Dudley with collaborative working with local experts



*Practices that needed the most support were identified by analysing population-level data. Risk-stratification tools were used to case-find high-risk respiratory patients who then had a face-to-face consultation with the Pharmacist. **The mobile clinic** ran twice a week, rotating between 2 different PCN practices every quarter & also accepted direct referrals from clinicians. Using the current infrastructure in primary care helped reduce the costs of delivering the service.

High-risk patients include those:

- Issued 12 or more short-acting beta agonist (SABA) inhalers or 1 or more oral steroids in the last year.
- On a SABA inhaler without a confirmed diagnosis.
- Who had an unscheduled respiratory related hospital visit.
- With learning disabilities, mental health issues, English as a second language and in other vulnerable/disadvantaged groups (appropriate reasonable adjustments were made).
- Who are difficult to treat or deemed urgent by practice clinicians.

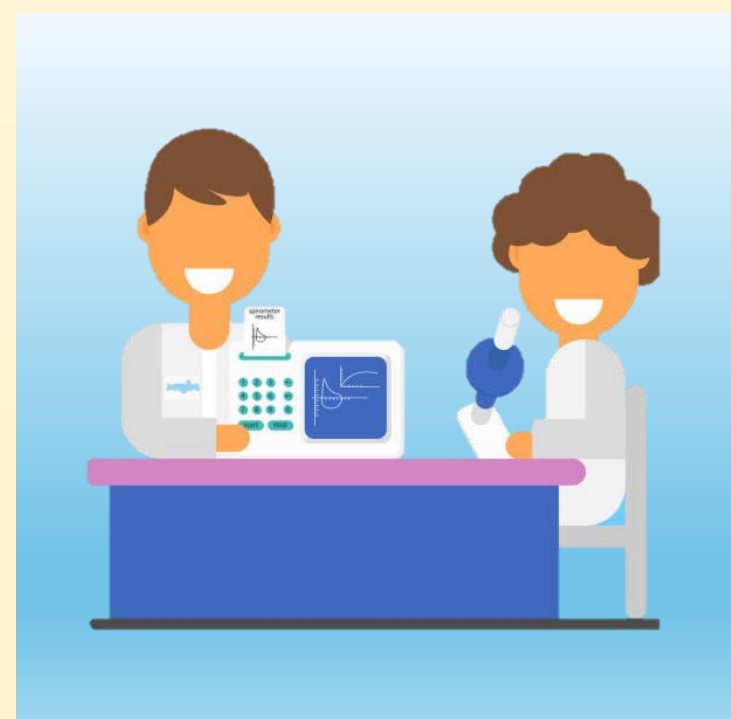
Patients promptly started on the correct treatment plan including smoking cessation advice and access to pulmonary rehabilitation***



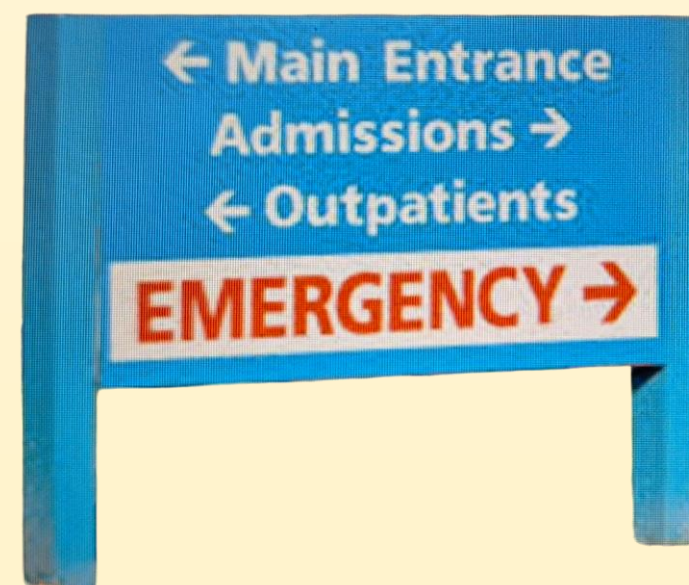
A population health approach was taken to identify patients at high risk of poor outcomes*

**Quality assured spirometry, Fractional Exhaled Nitric Acid (FeNO) testing and peak flow monitoring was performed to support diagnoses made.

***A patient-centred approach was implemented, incorporating a holistic strategy that addressed linked co-morbidities. There was also a strong focus on empowering patients to self-manage and improve their ability to effectively recognise and respond to any deterioration in their respiratory condition.



The correct diagnosis was established following appropriate testing and assessment including screening for differential diagnoses**



A joint satellite multidisciplinary team clinic with the regional Difficult Asthma Centre was established to identify patients suitable for specialist treatments.



Summary of Findings and Outcomes

- The Specialist Respiratory Pharmacist reviewed a total of 376 patients over a period of 12 months.
- The pharmacist diagnosed all 87 patients who were on SABA monotherapy without a confirmed diagnosis. Out of these, **68 were found to have asthma**, and **19 were diagnosed with COPD**. These patients were immediately started on the correct treatment plan and had a post-treatment follow-up before being discharged from the clinic.
- 100% of patients (n=79) who received 12 or more SABA inhalers over the past year, reported a **significant reduction in SABA use** and improvement in symptom scores following interventions made by the Pharmacist including optimisation of treatment, correction of inhaler technique and management of triggers and comorbidities.
- Patients with difficult-to-treat symptoms (n=30) were seen in the clinic within a few weeks of their referral, rather than waiting up to a year to see a hospital specialist. The Pharmacist successfully managed the majority with **only 3 patients requiring an onward referral** to a respiratory consultant. This included 2 patients suspected of having Interstitial Lung Disease and 1 patient with Inducible Laryngeal Obstruction. This not only **increased access to specialist care in a timely manner** but also enhanced the quality of referrals to secondary care, helping to **reduce waiting lists and pressure on secondary care**.
- Out of 30 patients referred by practice clinicians for diagnostic testing, 22 were found to have asthma, 6 had COPD, and 2 were confirmed not to have either condition, which led to stopping unnecessary treatment. **Referral to testing time was within 6 weeks** compared to 24 to 36 weeks via the normal pathway. Most patients, about 80%, received their **diagnosis on the same day** as their appointment, while the rest were diagnosed within four weeks thereafter. Referral to treatment time via the normal pathway was between 24 weeks to more than 52 weeks. This delay happened because of long waits for diagnostic tests and follow-up appointments with the GP to action the results. The situation was made worse by test results that often came back normal due to the variable nature of conditions like asthma. This resulted in more follow-up tests and even more delays.
- All patients (n=19) who received urgent and unscheduled care in the past year, were given oral steroids or belonged to a vulnerable group, reported less SABA use, better symptom scores and improved self-management of their condition after the Pharmacist's interventions.
- 7% of patients seen in the clinic were either **incorrectly coded or misdiagnosed with asthma or COPD**, 3 patients had beta-blocker treatment stopped.
- 27% of patients seen in the clinic were prescribed treatments for coexisting comorbidities and conditions such as sleep apnoea and breathing pattern disorder were also identified.
- 117 patient records were examined in collaboration with the Difficult Asthma Team to identify suitable patients for asthma biologics. This resulted in 9 patients initiated on biologic therapies. Referral to treatment time of less than 12 weeks compared to more than 52 weeks through the existing pathway.
- 66% of patients who attended a face-to-face consultation reported feeling uncertain about how to manage worsening respiratory symptoms or a potential exacerbation of asthma or COPD. All these patients felt more confident at the end of their clinic visit and received a personalised action plan.

100% of patients rated the appointment as either an "excellent" or "Very good" experience overall.



Feedback from GP practices was excellent with an overwhelming request for the service to continue.

Conclusion and Future Steps

- A pharmacist-led model of care that demonstrates the value of patient-centred and proactive care closer to the patient's home in enhancing respiratory outcomes.
- The clinic offers early and accurate diagnosis of asthma and COPD in addition to case-finding and managing high-risk respiratory patients promptly to reduce hospital appointments and potentially **prevent avoidable hospital admissions**, all of which contribute to **reduced healthcare costs**.
- The seamless care and holistic approach at the One Stop Clinic helps improve safety, access to specialist services and enhances the overall patient journey.
- New ways of collaborative working with local experts have improved access to specialist services and treatments in a timely manner.
- Looking forward, the plan is to scale and replicate this model elsewhere by upskilling experienced primary care staff to deliver the service.