

# The Integrated Respiratory Physician Associate Fellowship: improving respiratory patient outcomes across primary care and secondary care

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## Introduction

Asthma accounts for 2-3% of primary care consultations and 60,000 hospital admissions yearly, while COPD leads to 1.4 million GP visits and is the fourth leading cause of death globally. The high prevalence of these conditions underscores the need to improve patient management, reduce admissions, and lower mortality.

The Integrated Respiratory Physician Associate (PA) Fellowship pilot aimed to enhance outcomes through a cross-systems PA at the Willows practice and Primary Care Network (PCN), focusing on asthma and COPD patients. A monthly multidisciplinary team (MDT) meeting involving a respiratory consultant, nurse, GP, and PA fellow was created to optimise care and reduce secondary referrals.

## Aims & Objectives

1. Demonstrate the value and impact of a cross-systems Physician Associate (PA) in improving respiratory care.
2. Strengthen co-ordination between primary and secondary care via integrated multidisciplinary teams (MDTs).
3. Improve asthma and COPD outcomes in the primary care network (PCN) by conducting annual reviews, compliance assessments and promoting services such as smoking cessation referrals and pulmonary rehabilitation.

## Methods

Over nine months, the PA reviewed 382 asthma and COPD patients in approximately 100 clinics. Data recorded included appointment type, Asthma Control Test (ACT) score or Medical Research Council (MRC) dyspnoea score, pulmonary rehabilitation or smoking cessation referrals, medication changes, and MDT referrals.

Of these patients, 34 were discussed in seven monthly integrated respiratory MDTs. Common reasons for MDT referrals included overlapping asthma and COPD diagnoses, frequent exacerbations, unclear or incorrect diagnoses, poor disease control, and overuse of short-acting beta agonists (SABA). Outcomes for MDT-discussed patients were also tracked.

## Results

Figure 1: A pie chart to show the percentage of patients reviewed, by type of appointment:

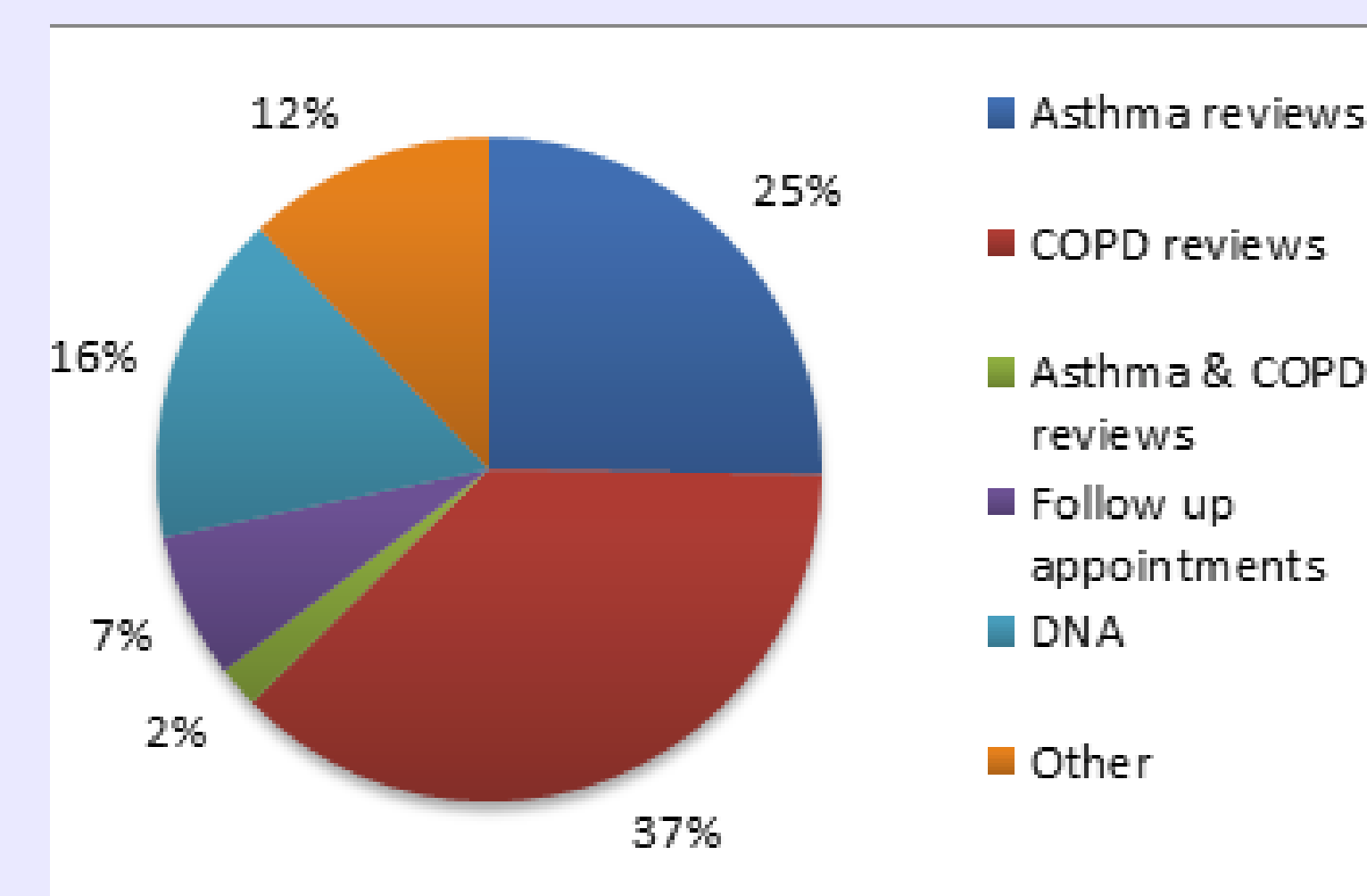


Figure 2: A bar chart to show the number of patients per MDT outcome:

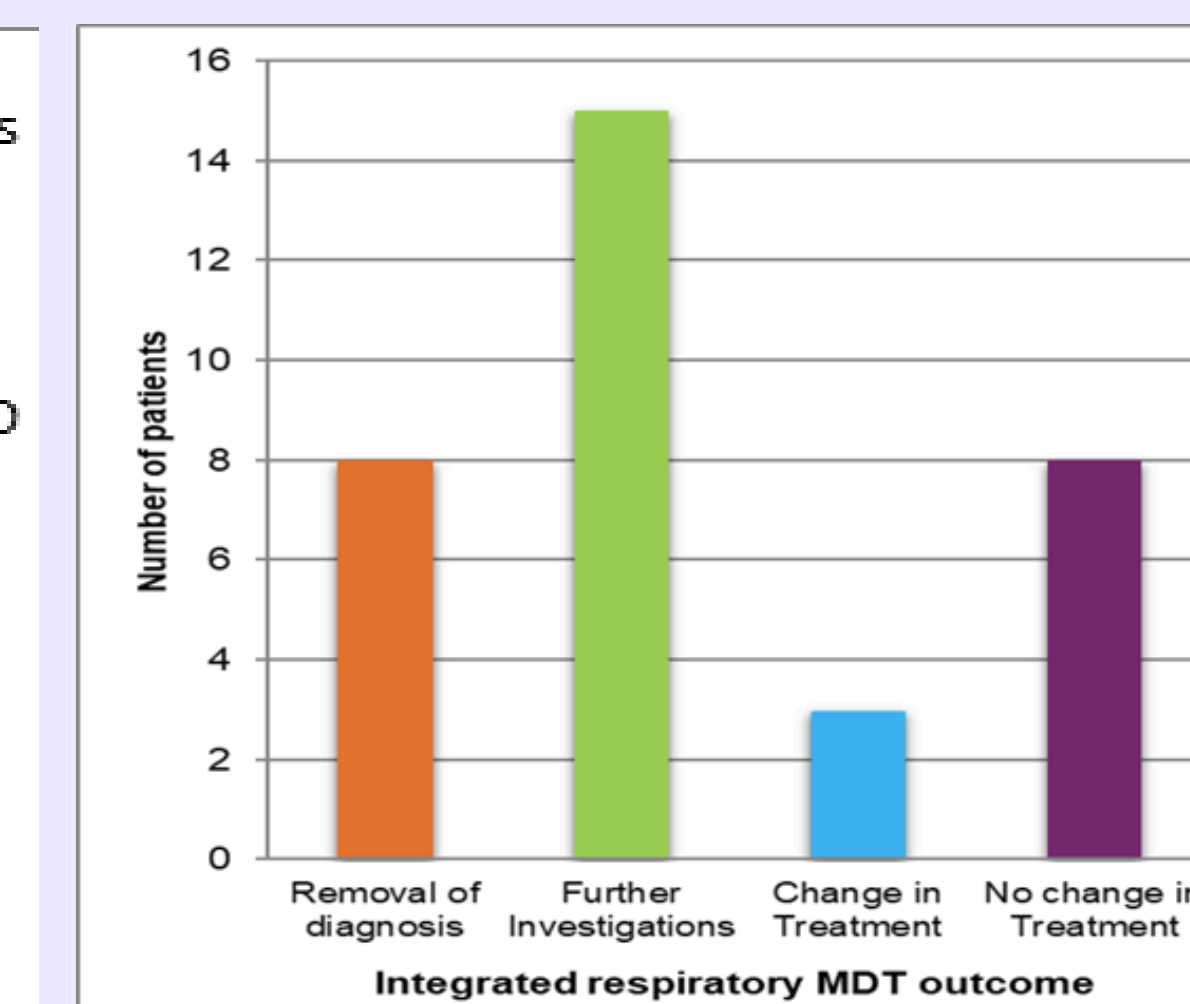


Table 1: Number of asthma patients with an ACT score >20 and their treatment options:

	Number of patients	Treatment options	Number of patients
ACT score >20	47	No change	29
		Step down treatment	7
		Adherence support	9
		Other*	2

\*Other - issued aerochamber or peak flow meter

Table 2: Number of asthma patients with an ACT score <20 and their treatment options:

	Number of patients	Treatment options	Number of patients
ACT score <20	43	No change	15
		Started on low dose ICS	6
		Started on medium dose ICS	12
		Started on high dose ICS	1
		Adherence support	2
		Started on LAMA	2
		Other*	3

\*Other - issued rescue pack of antibiotics & steroids

Table 3: Number of COPD patients and MRC dyspnoea scores respectively, and pulmonary rehabilitation options:

	Number of patients				
MRC grade below 3	51	PR option	Number of patients		
MRC grade above 3	88			Offered & referred	9
				Offered & declined	58
				Unsuitable	10
		Other	11		
Other*	3				

\*Other - completed/ already referred/ already commenced pulmonary rehabilitation

Table 4: Number of COPD patients and smoking status' respectively, and smoking cessation referral options:

Smoking status	Number of patients				
Never smoked	5	Smoking cessation referral	Number of patients		
Ex-smoker	82			Offered & referred	13
				Offered & declined	42
Current smoker	55				

## Conclusion

- 8 out of 34 patients discussed in MDTs had incorrect diagnoses removed, and 15 underwent further investigations (e.g. spirometry and reversibility testing, FeNO, assessment for breathing pattern disorder etc).
- Long-term PA integration could reduce secondary care referrals and help primary care networks (PCNs) meet annual Quality and Outcomes Framework (QOF) targets.
- Benefits include better co-ordination between primary and secondary care, optimised treatment management, and enhanced education and knowledge-sharing in primary care.

## Discussion

Feedback from a post-fellowship colleague questionnaire revealed significant improvements in asthma and COPD outcomes due to the PA role, enhancing care management and co-ordination. There is strong support for expanding this integrated PA model to other specialties to further elevate patient care. Challenges related to role awareness, continuity of care, and clinic booking can be addressed through ongoing role development.

## Future scope of work

Continuing the integrated PA role would benefit from further data collection to assess patient care changes using the Asthma Control Questionnaire (ACQ), Asthma Quality of Life Questionnaire (AQLQ), and COPD Assessment Test (CAT). Additionally, monitoring emergency department admissions and exacerbations would help evaluate the overall impact on healthcare resource utilisation.

## References

- 1) National Institute for Health and Care Excellence (2023). Asthma. [online] NICE. Available at: <https://cks.nice.org.uk/topics/asthma/>.
- 2) National Institute for Health and Care Excellence (2023). Chronic Obstructive Pulmonary Disease. [online] NICE. Available at: <https://cks.nice.org.uk/topics/chronic-obstructive-pulmonary-disease/>.