Expediting specialist review of patients with uncontrolled asthma in primary care via virtual multidisciplinary meeting and digital patient identification tool

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Background

Up to 200,000 people in the UK have severe or uncontrolled asthma, with significant impact on quality of life and healthcare cost. Biologic therapy may improve symptoms and reduce exacerbation frequency but access to treatment is variable with 60% of patients with uncontrolled asthma taking over 2 years to reach specialist care. This delay is likely multifactorial:

- Identification of patients with uncontrolled asthma in primary care
- Long waiting time for investigations (e.g. lung function test) to confirm diagnosis
- Long waiting time for secondary and tertiary care assessment

Aim

We aim to improve identification of uncontrolled asthma in primary care and expedite specialist referral via a virtual multidisciplinary team meeting (MDT) at a primary care network (PCN) in North West London (NWL). This was coupled with an educational programme to upskill the primary care team.

Method

A secondary care asthma physician led a weekly virtual MDT. Attendees included GPs, nurses and pharmacists. Cases were identified by the PCN team and discussed as per MDT design (Figure 1). To enhance case discussion, PCN pharmacists used a digital patient identification tool, SPECTRA(1), to identify high risk patients.

The education programme comprised of 4 sessions: diagnosis of asthma and potential mimickers, optimising annual review, medicine optimisation and referral to specialist care/ introduction to biologic therapy.

Outcome measures were the number of patients referred to specialist care (and subsequent biologic therapy commencement), oral corticosteroid (OCS) and salbutamol prescription rates at PCN level.

Results

There were 4068 adult asthmatic patients registered at the PCN. 24 MDTs were conducted between November 2022 and May 2023. Only 7 patients were identified by the PCN team for discussion. Two patients were subsequently referred to specialist centre with one biologic commencement (March 2024).

SPECTRA identified 60 high risk patients (Figure 2). Four patients were highlighted for specialist referral with one patient subsequently commenced on biologic therapy (March 2024).

There was a significant reduction in salbutamol prescription (p = 0.01) though similar observation was made across NWL (Table 1). There was no significant difference in OCS prescription (p = 0.40).

Figure 1. Virtual multidisciplinary team meeting (MDT) format.

PCN = Primary Care Network

Figure 2. SPECTRA search and subsequent MDT outcome

ICS = inhaled corticosteroid
OCS = oral corticosteroid

	Baseline[1] N = 4068	Study[1] N = 4068	P-value[2]
OCS	1.91 (2.11) 1.00	1.79 (2.12) 1.00	0.40
Salbutamol	2.46 (1.70) 2.00	2.26 (1.49) 2.00	0.01
Salbutamol (NWL)	2.15 (1.62) 2.00	1.93 (1.40) 1.00	<0.001

[1] Mean (Standard deviation) Median
[2] Wilcoxon rank sum test

Table 1. Comparing OCS and Salbutamol prescription at baseline (01/03/2022-31/08/2022) and following study (01/03/2023-31/08/2023).

OCS = oral corticosteroid
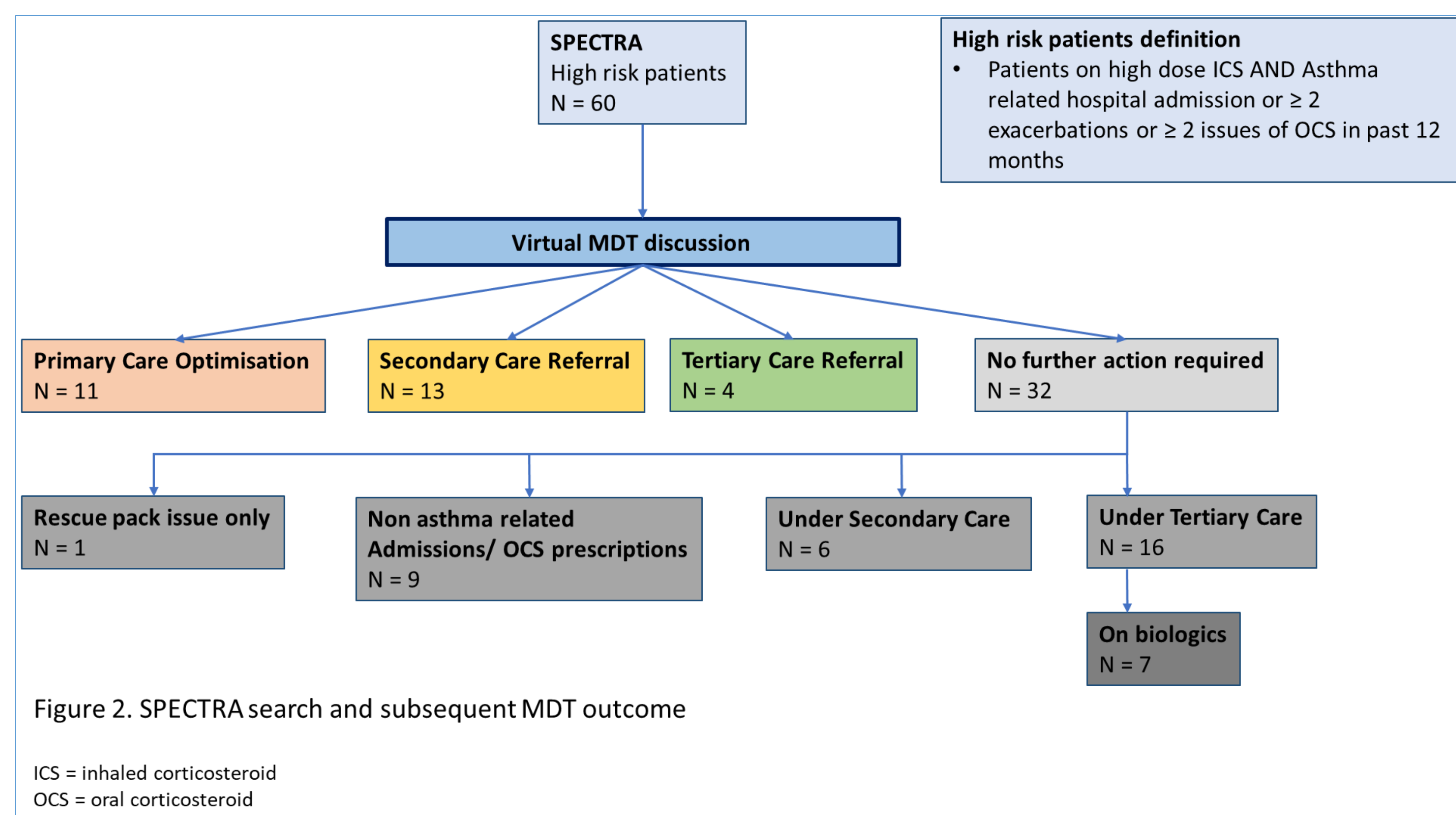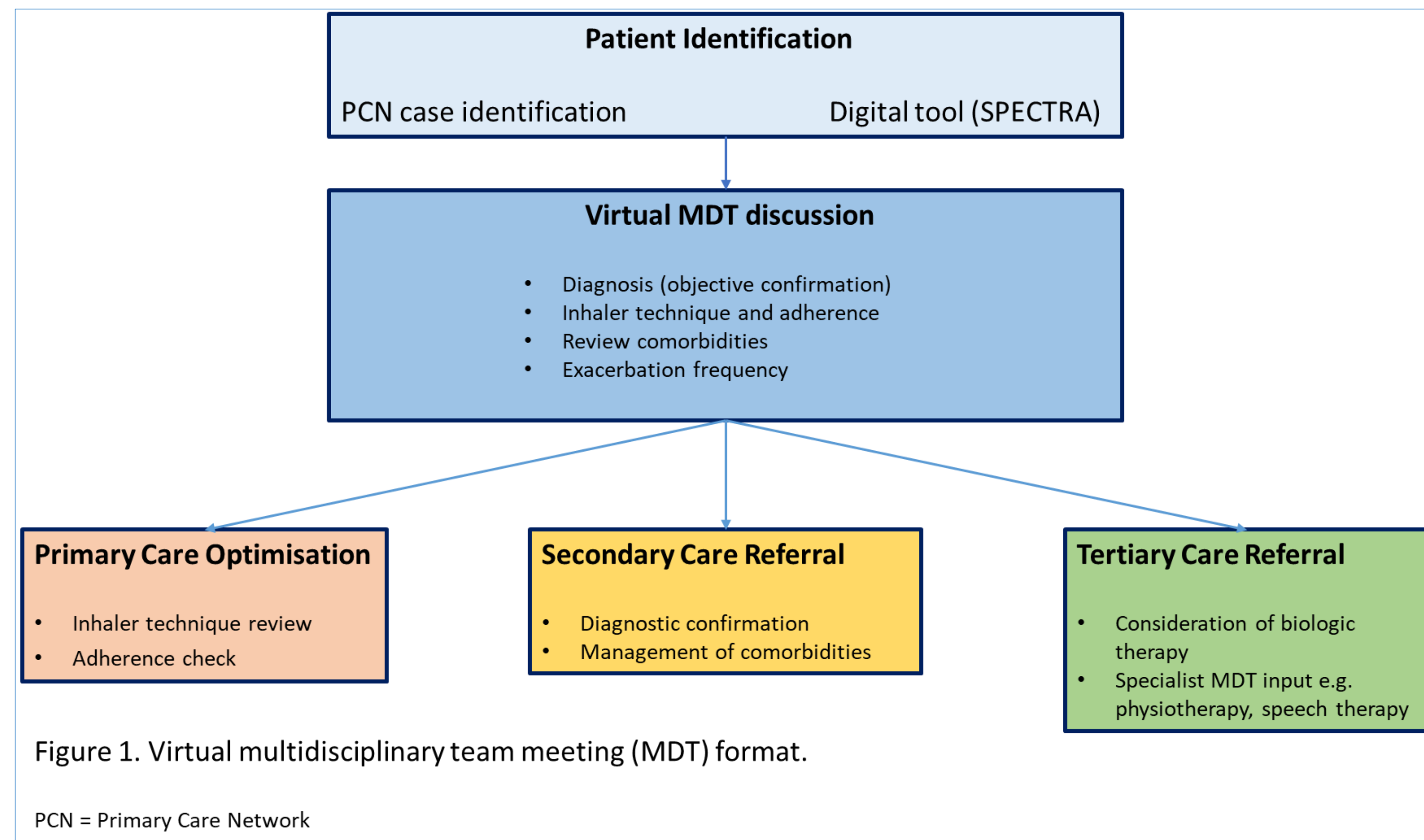NWL = North West London. Total number of adult asthmatic patients = 182,931

Conclusions

Virtual MDT coupled with patient identification tool such as SPECTRA can enhance identification of patients with uncontrolled asthma and subsequent specialist referral. PCN pharmacists can perform a pivotal role in patient identification and linking management between primary and specialist care, with support from secondary care physician. However, dedicated time is needed to achieve this.

Based on current experience, future projects can by led PCN pharmacists from multiple PCNs, supported by a local secondary care physician. This will maximise virtual MDT efficiency and facilitate specialist referrals and discharge back to primary care.

Reference

1. SPECTRA website https://suspected-severe-asthma.co.uk/