



Accelerated Access Collaborative – Rapid Uptake Product Series

# Accelerating patient access to diagnostic and treatment innovations for severe and uncontrolled asthma

Oct 2021



#### Welcome







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#### Reminder of the Rapid Uptake Programme



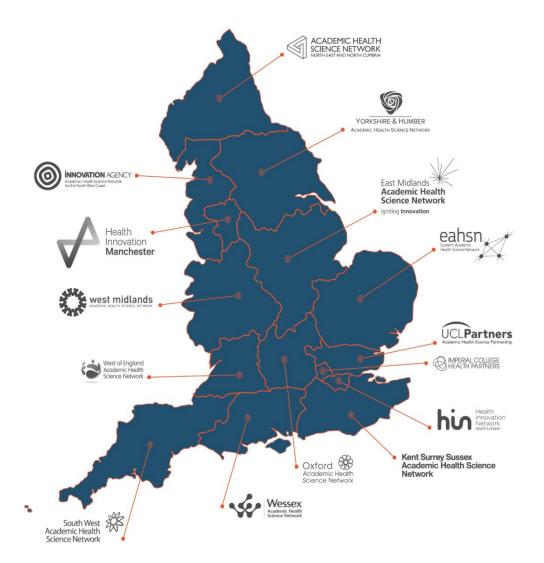


- The AAC supports the NHS to more quickly adopt clinically and cost-effective innovations, to ensure patients get access to the best new treatments and technologies
- As part of the AAC's work to support stronger adoption and spread of proven innovations, the AAC has selected a range of latestage innovations (post-NICE appraisal) to accelerate uptake in the NHS - 'Rapid Uptake Products' (RUPs)
- This programme has been designed to identify and support products with NICE approval that support the NHS Long Term Plan's key clinical priorities, but have lower than expected uptake to date
- Seven products were supported under this programme in wave 1 during '19/20. The products currently supported by the AAC until March '22 in wave 2 of the programme are::
  - Lipid management for secondary prevention of CVD (HIST, ezetimibe and PCSK9i)
  - FeNO testing to aid diagnosis of asthma
  - Biologics for treatment of severe asthma

#### Role of the AHSN Network







- We are catalysts for innovation
- We connect partners across sectors
- We create the right conditions for change
- We encourage spread and adoption of innovation

#### Asthma in the UK







 Over 5.4 million people in the UK suffer from asthma with the NHS spending £1.1 billion on asthma annually

 Only half of asthma patients adhere to medications, increasing morbidity and treatment costs

 90% of £1.1bn goes directly on asthma medication inc. excessive prescription of some asthma medications  Despite advances in therapy there has been a 33% increase in asthma mortality over the last 10 years in England and Wales

 Currently less than 20% of severe asthma patients are able to access asthma biology therapies  30% of patients currently diagnosed with asthma are <u>suspected to have</u> <u>been misdiagnosed</u> **∧CCELERATED ∧CCESS COLLABORATIVE** 





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#### FeNO Testing



#### Fractional exhaled Nitric Oxide (FeNO)

**National** (Wessex National Lead AHSN)

- Aims:
- 1) Improve patient care and outcomes through more effective diagnosis of patients with suspected asthma
  - 2) Improve patient care through better understanding of an individual patient's condition in relation to their fractional exhaled nitric oxide (FeNO) score

**Priority areas** 

# Priorities/Areas of focus for delivery over the next 12 months Develop an educational training package for FeNO. Consider delivery through existing education providers. Pursue endorsement from NICE and PCRS Collect real world evidence with exemplar sites on cost and operational benefits realised and patient outcomes and document the model and approach Identify potential funding models and incentives to support uptake (prescribing savings achieved at GP level will be realised at system level) working with e.g. commissioners, STPs and ICSs Develop a rollout toolkit to support organisations to implement including: Dissemination of emerging hub model from national respiratory programme GIRFT Advice on how to implement FeNO Business case and financial modelling support Training package and deployment Dissemination of exemplar pathway and clinical decision-making tools Pathway Transformation Funding support Summary of best practice case studies from exemplar sites

- WAHSN responsible for delivery of #4 but contributing to shape of national programme
- Current/future focus local delivery and wrap around activity to strengthen success



1,055

247

LinkedIn

Views

**Impressions** 

#### Fractional exhaled Nitric Oxide (FeNO)





















Measures NO in the exhaled breath, providing an indication of eosinophilic inflammation

Alongside a detailed clinical history and other tests, used to support the diagnosis (and management) of asthma

But FeNO isn't new - why now?

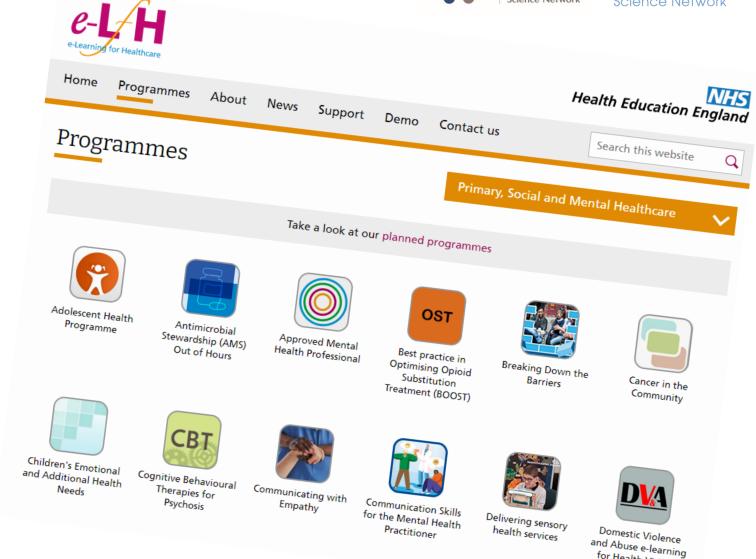
### Work stream 1 – FeNO training package





for Health Visitors and Nurses

- Two educational modules
- Primarily targeted at a primary care
- Developed by HEE Technology Enhanced Learning (TEL) team
- Module 1 introduce FeNO
- Module 2 focuses on the interpretation of FeNO with by worked case examples
- Supports AHSN national workforce agenda
- Module 1 released in coming weeks...



#### Work stream 2 – real world use

- Product of numerous NICE led interviews case studies
- Describing existing use of FeNO across the country
- 6 on the toolkit website
- Purpose to give guidance to possible FeNO use for those seeking inspiration





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#### Fractional exhaled Nitric Oxide (FeNO) – Models of Care #1: Screen Clinical, Northern Ireland

Organisations in England and Northern Ireland who have used, planned to use or commissioned FeNO for Asthma diagnosis and management have shared their real world experiences. A number of example care models and pathways were shared and one of them is described here.

Population	27,495 patients (3 practices)			
Staffing	Pharmacist, practice nurse, GP and access to respiratory consultant.			
Frequency	Weekly			
Setting	Health centre hub for 3 practices			
Service	The practice clinical systems were interrogated to identify the following patient cohorts:  Asthma patients who had ordered 12 or more reliever inhalers in the previous 12 month  Patients who were prescribed regular inhalers and who were not on the practice's respiratory registers  Patients who were prescribed separate ICS and LABA inhalers  FeNO measurement as an asthma management tool in primary care was run alongside the ri management project as a pilot.			
Established	2015-2018			
Investigations	Patients attending the practice nurse for annual review or as a result of being symptomatic were offered: FeNO measurement; medications use review including compliance check; education focussing on symptom recognition and management of potential exacerbations; inhaler technique check.			
Management	When FeNO level was elevated patients were offered appropriate therapeutic intervention and patient education.			
Oversight	GP with access to secondary care consultant.			
Follow-up	People with elevated FeNO were invited for follow-up.			
Funding	NAPP Pharmaceuticals sponsored the FeNO equipment and pharmacist time for the project as service to medicine. Some practices used year-end capital funding to purchase devices and a supply of consumables.			
Driver for change	To address the findings of the National Review of Asthma Deaths (NRAD) report.  The main aim of the project was to identify high risk patients and ensure all relevant healthcar professionals were engaged in the patient's care pathway so the chance of a serious event occurring was minimised.			
Outcomes	The patient reviews led to drug cost savings due to implementation of a practice formular and to the development of practice asthma management protocols. Projected prescribing cost savings were in the region of £15,000 pa.  The median FeNO measurement before / after intervention and education was 72 / 45 pp P value of < 0.001			



Work stream 4 – FeNO deployment toolkit

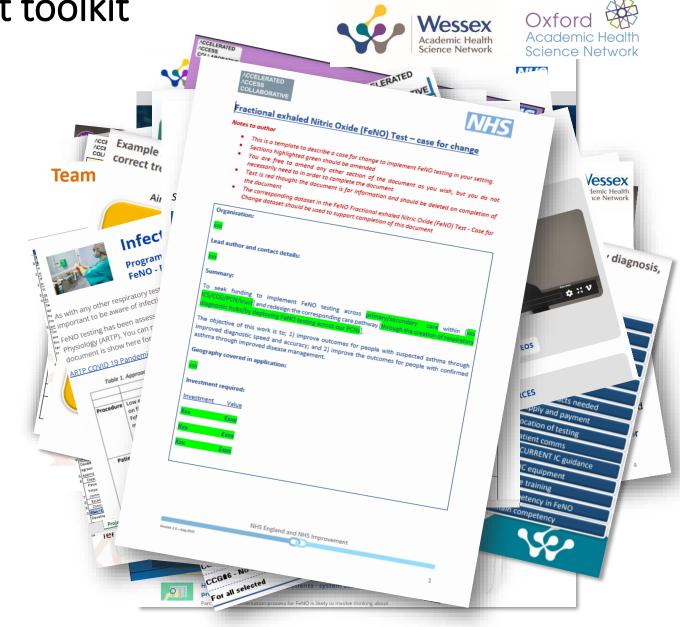
Extensive online deployment toolkit created

Purpose: One stop shop to enable and support implementation

Numerous resources – from 3 perspectives;

- FeNO product specific
- Care pathway transformation
- Wider change management

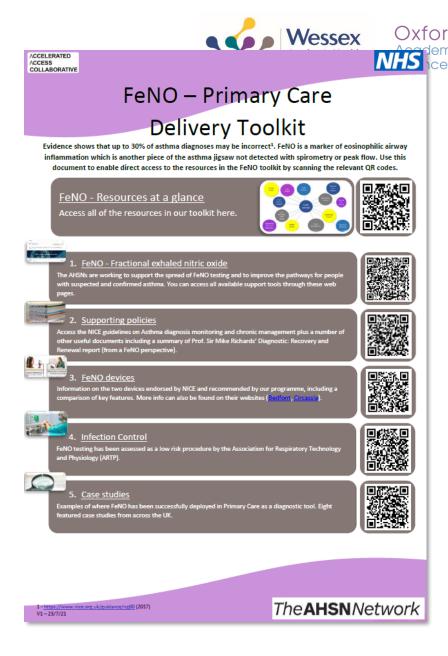
Available to all hosted on Wessex AHSN website

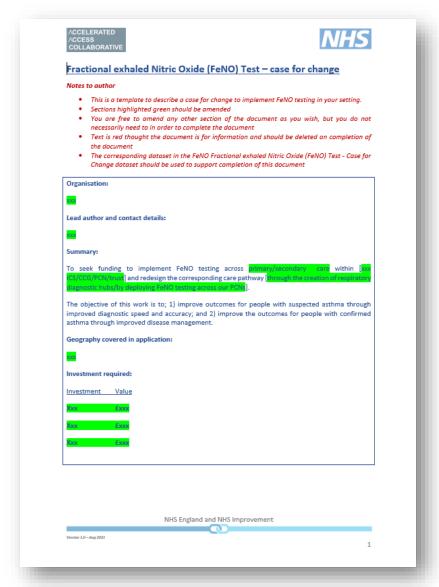


#### **Quick access document**

Enabling fast access to all resources

QR codes









#### **Case for change**

Describing a case for change (why, how, costs, benefits)

Overcoming funding barrier

# Ardens data reporting template

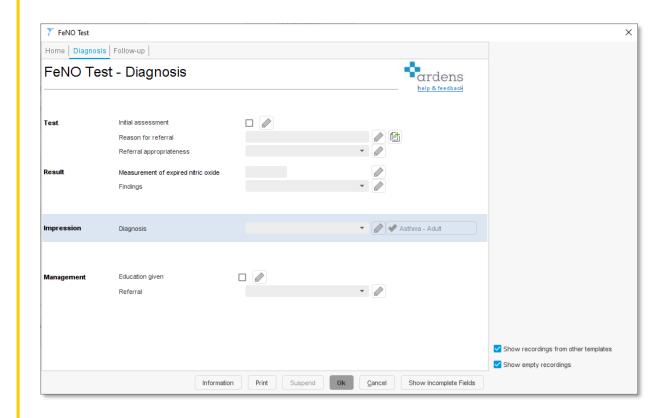
At final design stage

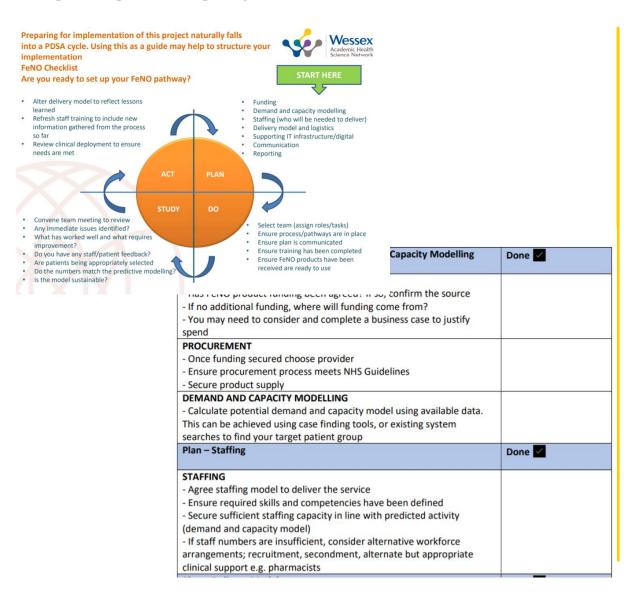
Will be available to all TPP and EMIS users (not just existing Ardens users)

Will enable consistent data to be collated













#### **Project delivery documents**

# Project plan, driver diagram, PDSA, ALS template, deployment checklist etc.)

Enabling implementation and sustainable adoption

**Networks** – essential to implementation science and successful adoption

Series of events share learning, connect people, and amplify success

# 12<sup>th</sup> Oct – first **FeNO Learning Collaborative**

Bringing together people who;

- Already use
- Are planning to use
- Considering use

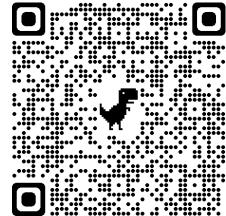






The collaborative will bring together healthcare professionals who are currently using FeNO, are in the process of implementing testing or are interested in/planning to do so. In collaboration with the Accelerated

Access Collaborative (AAC) the 15 Academic Health Science Networks (AHSNs) are supporting projects in their regions to improve asthma outcomes - this series of events aims to share learning and discuss



#### QoF

QOF 2021/22 will be based on the indicator set already agreed for 2020/21

FeNO contributes to QOF points...

QOF has increased from 567 to 635 points in 2021/22

1 point = £201.16











Quality and Outcomes Framework guidance for 2021/22

#### **AST006**.

The percentage of patients with a diagnosis of asthma on or after 1 April 2021 with either: 1. a record of spirometry and one other objective test (FeNO or reversibility or variability) between 3 months before or 6 months after diagnosis;

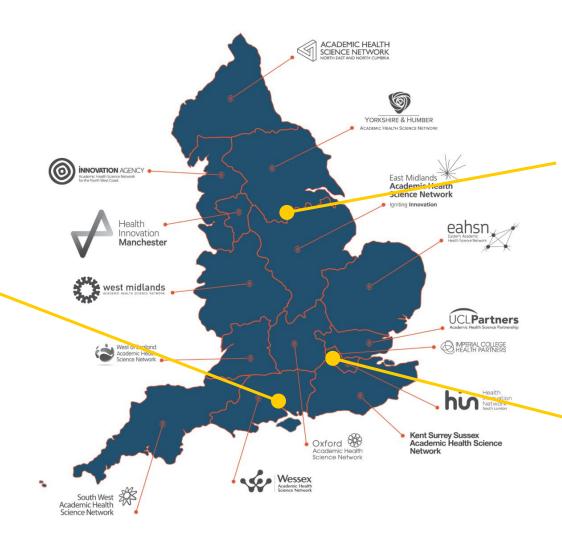
or 2. If newly registered in the preceding 12 months with a diagnosis of asthma recorded on or after 1 April 2021 but no record of objective tests being performed at the date of registration, with a record of spirometry and one other objective test (FeNO or reversibility or variability) recorded within 6 months of registration

15 points

#### 3 examples...

#### **Hampshire**

Supporting a GP federation to bid to Pharma to develop a "breathless diagnostic service"







# Yorks and Humber

Mobile respiratory testing – possible mobile vehicle

#### **West London**

8 respiratory diagnostic "Hublets"

#### **Pathway Transformation Funding**

Two types of award – " "open" and "bundle" awards

Total award – c.£915k

33 awards – 8 open (purple), 25 bundles (Green)

All with the purpose of supporting pathway transformation

AHSNs heavily involved with deployment and support

BUT – AHSNs also working with local projects too...







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Asthma Biologics



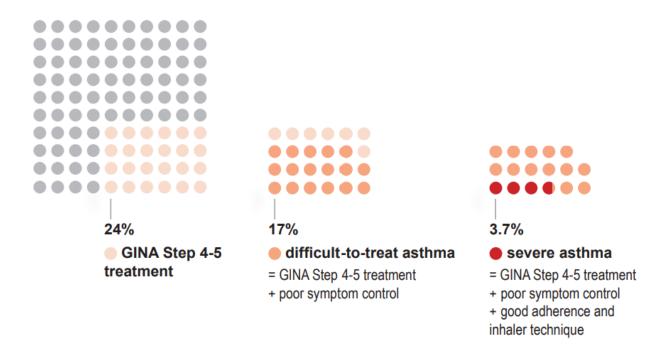
#### What is Severe Asthma?





- Type of asthma that does not respond to regular asthma treatment (inhaled steroids and long-term bronchodilators)
- Distinct from 'difficult asthma' can result of poor adherence, other comorbidities and/or an incorrect diagnosis
- Different sub-types of severe asthma
- Estimated ~200,000 people in the UK have severe asthma

#### Proportion of patients with difficult to treat and severe asthma<sup>1</sup>



#### The Burden of Severe Asthma





## Severe asthma patients have poorer outcomes<sup>1,2</sup>

Uncontrolled **severe asthma** patients:

**8x** risk of death

**10x** risk of hospital stays

Effect on patients



Can't undertake daily activities<sup>3</sup>



Anxiety, depression and anger<sup>3</sup>



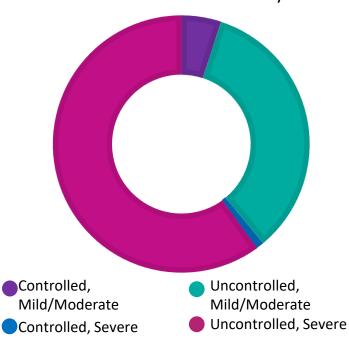
Time off work/study<sup>3</sup>



Exacerbations<sup>4</sup>

# Severe asthma accounts for majority of asthma costs<sup>6,7</sup>

Share of total direct cost of asthma for different levels of severity



Effect on cost



Cost of treating severe uncontrolled asthma compared to mild controlled asthma<sup>5</sup>

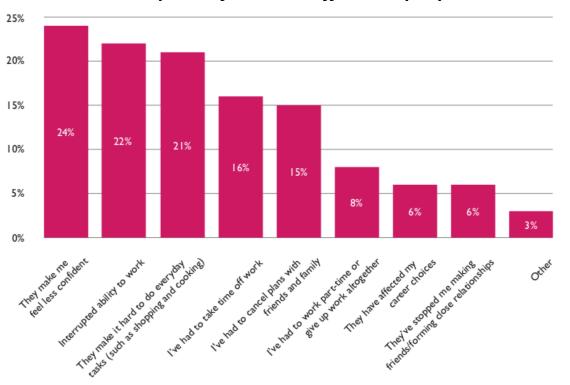
1. Price D et al. NPJ Prim Care Respir Med 2014; 12; 24: 14009., 2. Fernandes AG et al, J Bras Pneumol. 2014; 40(4): 364-372, 3. http://www.asthma.org.uk/News/asthma-experts-form-new-partnership-to-halve-european-asthma-deaths [Accessed September 2020] 3. Boston Scientific. Uncovering Asthma. 2015. 4. Foster JM et al. Eur Respir J 2017; 50: 1700765 5. NHS England. Service specifications: Specialist respiratory services (adult) – severe asthma. 2017. Available at: https://www.england.nhs.uk/publication/specialised-respiratory-services-adult-severe-asthma/ 6. Sadatsafavi M et al. Can Respir J 2010; 17: 74-80. 7. Sullivan SD, Rasouliyan L, Russo PA, et al. Extent, patterns, and burden of uncontrolled disease in severe or difficult-to-treat asthma. Allergy 2007;62:126–33

#### The Burden of Severe Asthma

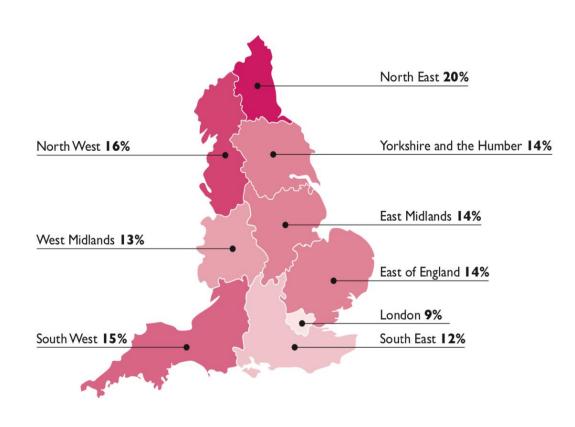




#### Most common impacts of OCS side effects on people with asthma<sup>1</sup>



#### Percentage of asthma patients prescribed ≥2 courses of OCS<sup>2</sup>



#### Overview of Biologics for Severe Asthma





Biologic Therapy	Indication	Admin Route	
Omalizumab	Severe allergic asthma	Sub-cutaneous	
Mepolizumab	Severe eosinophilic asthma	Sub-cutaneous	
Reslizumab	Severe eosinophilic asthma	IV	
Benralizumab	Severe eosinophilic asthma	Sub-cutaneous	



- Improve asthma control
- Improve lung function
- Improve quality of life
- Reduce reliance on OCS
- Reduce exacerbations

NB: Dupilumab for Severe eosinophilic asthma currently undergoing NICE TA process

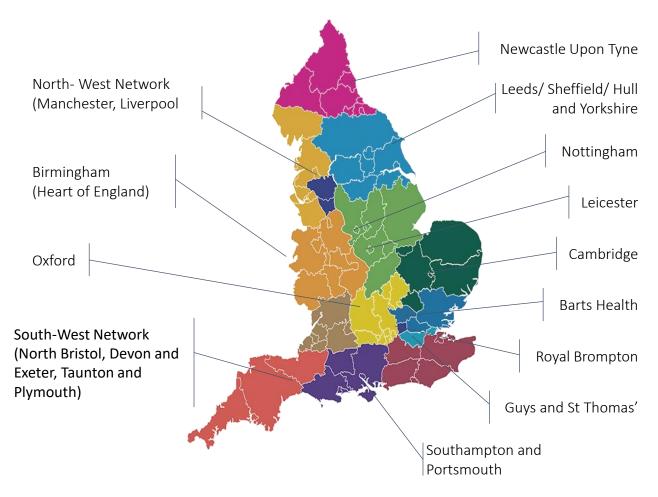
#### Accessing Severe Asthma Care in England





- Severe Asthma Care currently delivered through 13 Severe Asthma Centres (SAC) centres across the country
- Currently huge variation in practice and pathways<sup>1</sup>
- Patients living closer to SAC or a secondary care spoke site are likely to receive better care<sup>1,2</sup>
- Significant health inequalities problem to address
- Estimated that over 60k severe asthma patients in the UK would benefit from asthma biologics, currently only 10k able to access<sup>2</sup>

#### Overview of Severe Asthma Centres (SACs) in England



#### AAC Asthma Biologics Programme



Aim: To improve severe asthma care and access to biologic therapies in England



Developing a model consensus pathway for Severe Asthma



Establishing dashboards for measures of improvement



Creating clinical decision and support tools



Focussing in education and upskilling the clinical workforce

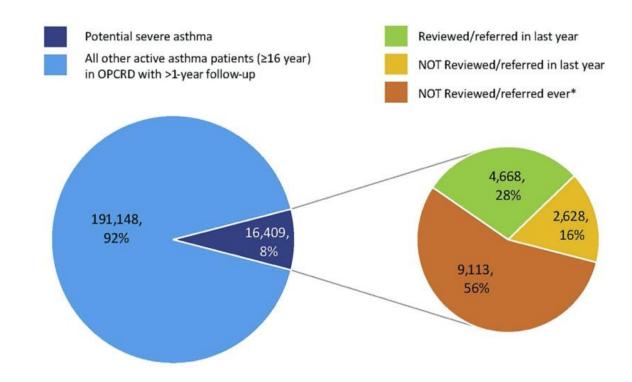
#### Early Identification





- Most patients with asthma are diagnosed and managed in primary care.
- Appropriate and timely review of patients with potential severe asthma in specialist care improves outcomes by
  - facilitating accurate diagnosis
  - Identifying and controlling comorbidities,
  - optimising adherence and
  - offering access to biologics

A recent review of primary care databases (OPCRD) showed: about 8% of Asthma patients in primary care have potentially severe asthma; of these less than 30% were referred to or known to secondary care



Proportion of patients with active asthma (age 16 years) managed in UK primary care with potential severe disease and their referral status. \*During the OPCRD look-back period (mean, 19.2 years; 95% CI, 19.1-19.3).1

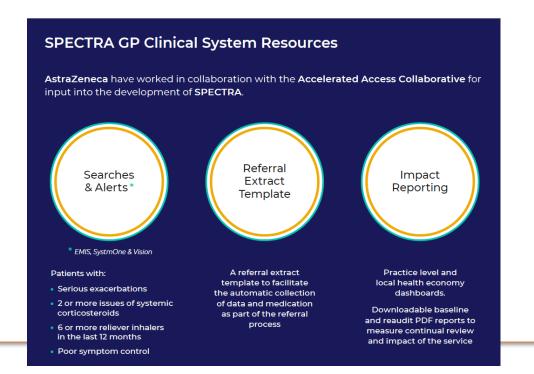
#### Early Identification Tools and Resources





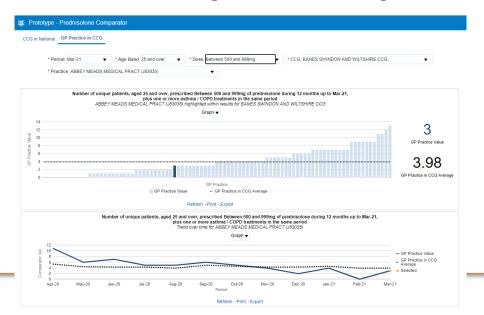
#### **SPECTRA Clinical Audit Tool**

- Search criteria aligned with future SA pathway
- Includes clinical system alerts and referral templates
- Collaborative working with AAC, AZ and Oberoi
- Available for any site, PCN or CCG to download and use <a href="https://suspected-severe-asthma.co.uk/">https://suspected-severe-asthma.co.uk/</a>



#### NHSBSA Respiratory Dashboard – OCS searches

- National prescribing database
- Setup in part to assess impact of programme on OCS use in primary care
- Can also be used at practice level to highlight patients in at risk groups
  - 1g, 2g and 3g Prednisolone + an inhaler in last 12 months
- Free to use for NHS organisations through ePACT2



#### Investment and Impact Fund (IIF)





#### **Respiratory indicators**

- Jan 21, NHSE/I and BMA deferred the introduction of new PCN service requirements and IIF incentives until Oct 21
- IIF indicators for 21/22 and 22/23 now published
- Overall, the scheme will be worth £150m in 2021/22 and £225m in 2022/23 for PCNs
- In next 18 months, 5 areas of focus:
  - Improving prevention and tackling health inequalities in the delivery of primary care
  - Supporting better patient outcomes in the community through proactive primary care
  - Supporting improved patient access to primary care services
  - Delivering better outcomes for patients on medication
  - Helping create a more sustainable NHS



#### Delivering better outcomes for patients on medication (commence Apr 22)

Aim: by 24/25, 90% of patients on the asthma register will be regularly prescribed an ICS, while only 10% will be prescribed 6 or more SABA inhalers per year.

- RESP-01: % of patients who were regularly prescribed\* an ICS over the previous 12 months
  - \* 22/23: 3 or more ICS prescriptions; 23/24 onwards: 5 or more
- RESP-02: % of patients who received 6 or more SABA inhaler prescriptions over the previous 12 months

#### Helping create a more sustainable NHS (commence Oct 21)

Aim: by 23/24 only 25% of non-salbutamol inhalers prescribed will be MDIs and to reduce the mean propellant (F-gas) carbon intensity of salbutamol inhalers prescribed to 11.1kg

- ES-01: MDI prescriptions as a % of all non-salbutamol inhaler prescriptions issued on or after 1 October
- ES-02: Mean carbon emissions per salbutamol inhaler prescribed on or after 1 October (kg CO2e)

#### **Enhanced Role for Pharmacy**





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Pharmacy Role in Supporting Medicines Optimisation in Respiratory Medicine

June 2021



- October 2020: pharmacy survey on current and potential role
- March 2021: Pharmacy Clinical Sub-group established
- June 2021: paper presented to the national Product Working Group
- The overall aim agreed upon by the Pharmacy Clinical Subgroup was:

'To foster an integrated role for the pharmacist where they lead on medicines optimisation and adherence support for people with asthma.'

1

#### Integrated Care Model





#### Level 3: Focused (senior pharmacists)

Deliver adherence interventions for patients with complex needs

Provide leadership and training on medicines optimisation,
adherence assessment and interventions

#### Level 2: Structured (advanced level pharmacists)

Identify at-risk patients for example, patients on high doses of oral corticosteroids

Conduct high quality structured medication reviews

Deliver interventions to improve inhaled corticosteroid (ICS) adherence, reduce short-acting beta-agonist (SABA) overuse

#### Level 1: General (all pharmacists)

Optimise inhaler technique
Identify SABA over-use and ICS under-use
Support smoking cessation and weight management\*
Identify inequalities impacting on respiratory outcomes\*

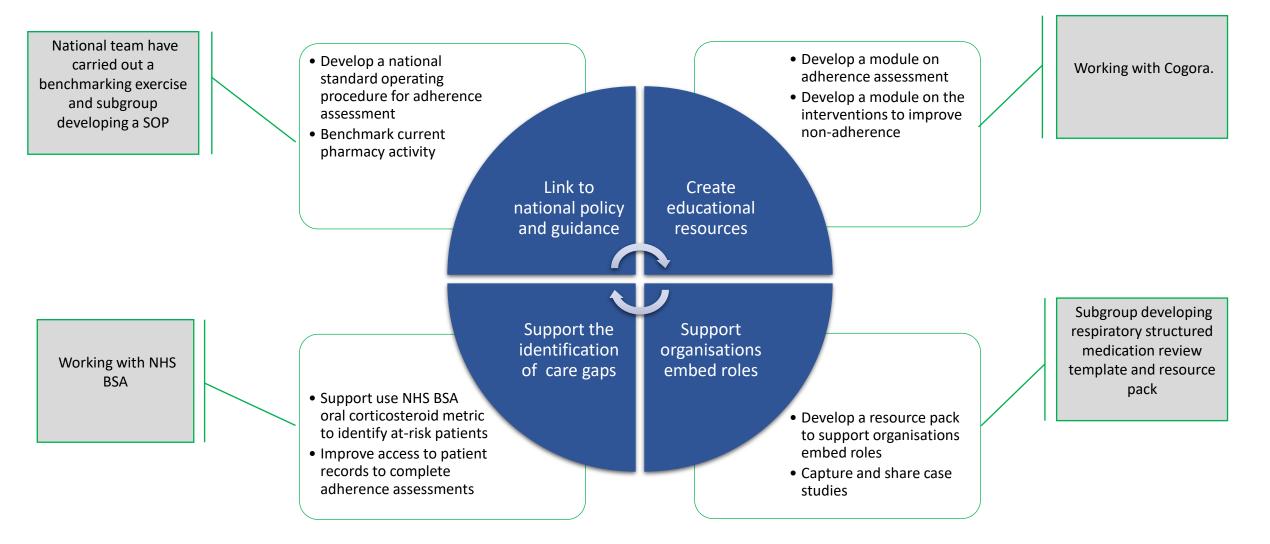
\*In line with local and national policies

- Inhaled corticosteroids are the cornerstone of asthma treatment, yet adherence rates vary widely from 30% and 70%<sup>1</sup>
- Pharmacists are well placed, across all sectors, to detect non-adherence and to deliver interventions to improve medicines use

#### Pharmacists as Asthma Adherence Leads

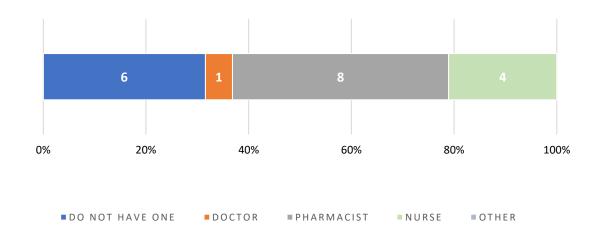






#### Not all SACs have a designated adherence lead

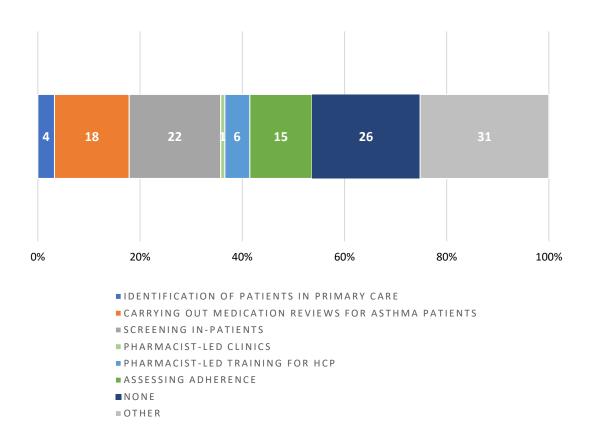
#### Designated adherence lead (n=19)



- It is recommended that every SAC should have a designated adherence lead
- Adherence checks are a requirement for any patient being considered for Asthma Biologics
- The majority of SACs had Pharmacists as the adherence leads
- Respondents from 6 SACs shared that there was no designated adherence lead.
- It may be advisable to assess for some sites whether capacity and throughput may be improved through designation of a formal adherence lead

# The role of secondary care pharmacists in the asthma pathways varies significantly

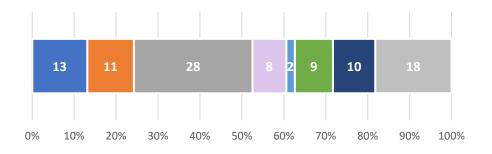
Asthma pathway and Pharmacist involvement (n=70)



- 26 respondents shared that pharmacists are not involved in asthma pathways
- Areas of the pathway that pharmacists were involved in included, screening in patients (22), carrying out medication reviews (18) and assessing adherence (15)
- "Other" (31) areas included:
  - Homecare prescribing and administration
  - Support to provide biologics in the community
  - Staff and patient education
  - Reviewing and influencing formulary decisions and policy
- Expanding the role of the pharmacist is a key part of the AAC programme. In areas where the role of the pharmacist is not well defined, it would be useful to consider supporting the role out of resources.

# Medication reviews were the most common area that primary care Pharmacists were involved in

Asthma pathway and GP practice/ PCN Pharmacist involvement (n=57)

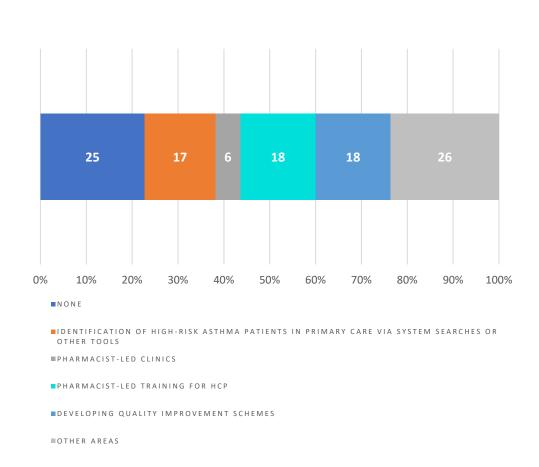


- NONE
- IDENTIFICATION OF HIGH-RISK ASTHMA PATIENTS IN PRIMARY CARE
- = CARRYING OUT MEDICATION REVIEWS FOR ASTHMA PATIENTS
- PHARMACIST-LED CLINICS
- PHARMACIST-LED TRAINING FOR HCP
- **ASSESSING ADHERENCE**
- ■PATIENT INHALER USE TRAINING
- OTHER AREAS

- 13 respondents stated that pharmacists were not involved in the pathway
- PCN pharmacists were mostly involved in conducting medication reviews for asthma patients. Other common areas included patient identification, adherence assessment and inhaler training
- 18 respondents reported opportunities for additional roles which included:
  - Asthma diagnostics
  - Advice for stepping up and down treatment
  - Identifying patients on steroids and issuing steroid cards
- Whilst pharmacist resource, skill and knowledge will undoubtedly vary across primary care their involvement can offer huge benefits to services and patients and should where possible be explored

# Over 20% of CCG respondents reported that CCG pharmacists did not play a role in local asthma pathways

Asthma pathway and CCG pharmacist involvement (n=61)



- Just over 20% shared that their CCG pharmacists did not currently have any involvements in asthma pathways
- The most common areas supported by CCG pharmacists included quality improvement activity, delivering HCP training and involvement in proactive identification
- 26 respondents stated "Other" which included:
  - Respiratory guidance development
  - Supporting nurse-led spirometry
  - Building relationships with local pharmacists
  - Advising primary care on optimisation of inhalers
  - Support in managing and diagnosing of asthmatics
  - Supporting carbon reduction strategies for asthma inhalers

#### Educational Package



#### Learning modules: 2

- 1. Identifying and managing uncontrolled asthma
- Early identification of uncontrolled asthma
- What do we mean by uncontrolled asthma
- What can be done for patients before referral
- Introduction into treatment escalation, inhaler technique and common comorbidities
- 2. Management of non-adherence
- Measuring adherence
- Evidence-based frameworks
- Personalising interventions and improving medication adherence

#### Live webinars: 3

- Uncontrolled asthma
- Identification and managing barriers to asthma medication adherence
- Masterclass

#### Podcasts: 2

- Real world practice: practical tips for treating and understanding uncontrolled asthma
- The HASTE tool





#### Summary



#### Summary

- Two significant pieces of innovation and improvement work ongoing in Asthma
- Programmes are developing a diverse suite of tools and resources
- These may support you and your systems local objectives
- For more information
  - Visit the Wessex and Oxford AHSN websites
    - **FeNO** https://wessexahsn.org.uk/programmes/56/feno-fractional-exhaled-nitric-oxide-for-the-diagnosis-and-management-of-asthma
    - <u>Asthma Biologics https://www.oxfordahsn.org/our-work/adopting-innovation/national-programmes/asthma-biologics/</u>
  - Reach out to you local AHSN leads contacts on next slides

#### **AHSN Leads**





AHSN	Asthma Biologics Name	Asthma Biologics Email	FeNO Name	FeNO Email
KSS	Charlotte Roberts	charlotte.roberts18@nhs.net	Charlotte Roberts	charlotte.roberts18@nhs.net
Eastern	Nick Clarke	Nick.Clarke@eahsn.org	Nick Clarke	Nick.Clarke@eahsn.org
East Midlands	Kate Dawson	kate.dawson@nottingham.ac.uk	Michael Ellis	Michael.Ellis@nottingham.ac.uk;
West Midlands	Helen Hunt	helen.hunt@wmahsn.org	Emma Suggett	emma.suggett@wmahsn.org
South West	Steve Johnson-Wood	Steve.Johnson-Wood@swahsn.com	Steve Johnson-Wood	Steve.Johnson-Wood@swahsn.com
Wessex	Joe Sladen	joe.sladen@wessexahsn.net	Joe Sladen	Joe.sladen@wessexahsn.net
West of England	Rachel Gibbons	Rachel.Gibbons10@nhs.net	Rachel Gibbons	rachel.gibbons@weahsn.net
Yorkshire and Humber	Harriett Smith	harriet.smith@yhahsn.com	Harriett Smith	harriet.smith@yhahsn.com
HIN	Kate Covill	Kate.covill@nhs.net	Kate Covill	Kate.covill@nhs.net
Oxford	James Rose	James.Rose@oxfordahsn.org	Matthew Epton	matthew.epton@oxfordahsn.org
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HI Manchester	Binita Kane	binita.kane@mft.nhs.uk	Binita Kane	binita.kane@mft.nhs.uk
UCL Partners	Mandeep Butt	mandeep.butt@uclpartners.com	Gareth Cairns	gareth.cairns@uclpartners.com
Imperial College	Annette Arnold	annette.arnold@imperialcollegehealthpartners.com	Logan Ryan	Logan.Ryan@imperialcollegehealthpartners.com
Innovation Agency NWC	Julia Reynolds	julia.reynolds@innovationagencynwc.nhs.uk	Julia Reynolds	julia.reynolds@innovationagencynwc.nhs.uk





#### **Question & Answer Session**

