Kent Surrey Sussex Academic Health Science Network

Shared learning: Example of FeNO used in breathlessness pathway

What is the project?

FeNO testing is a method that assists with the diagnosis of asthma by measuring fractional exhaled nitric oxide (FeNO) in the breath of patients suspected of having asthma. The aim of this innovation will be to improve patient care and outcomes by more effective diagnosis of patients suspected of having asthma.

KSS AHSN have been driving both the local adoption and implementation of innovations, and pathway transformation, and have engaged with respiratory teams across Kent Surrey and Sussex to see how best we can support the geography in improving patient care and outcomes and increasing patient and clinician access to FeNO testing across primary care.

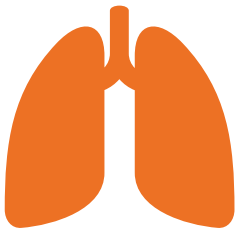
With collaboration and partnership across the system, the respiratory programme group put together a business case to Surrey Heartlands ICS to deliver an integrated breathlessness diagnostics service based in primary care, tackling breathlessness as a symptom of COPD, asthma and heart failure.

The partners are: Dorking Healthcare, SaSH, First Community, and Surrey Heartlands ICB.

What was the problem?

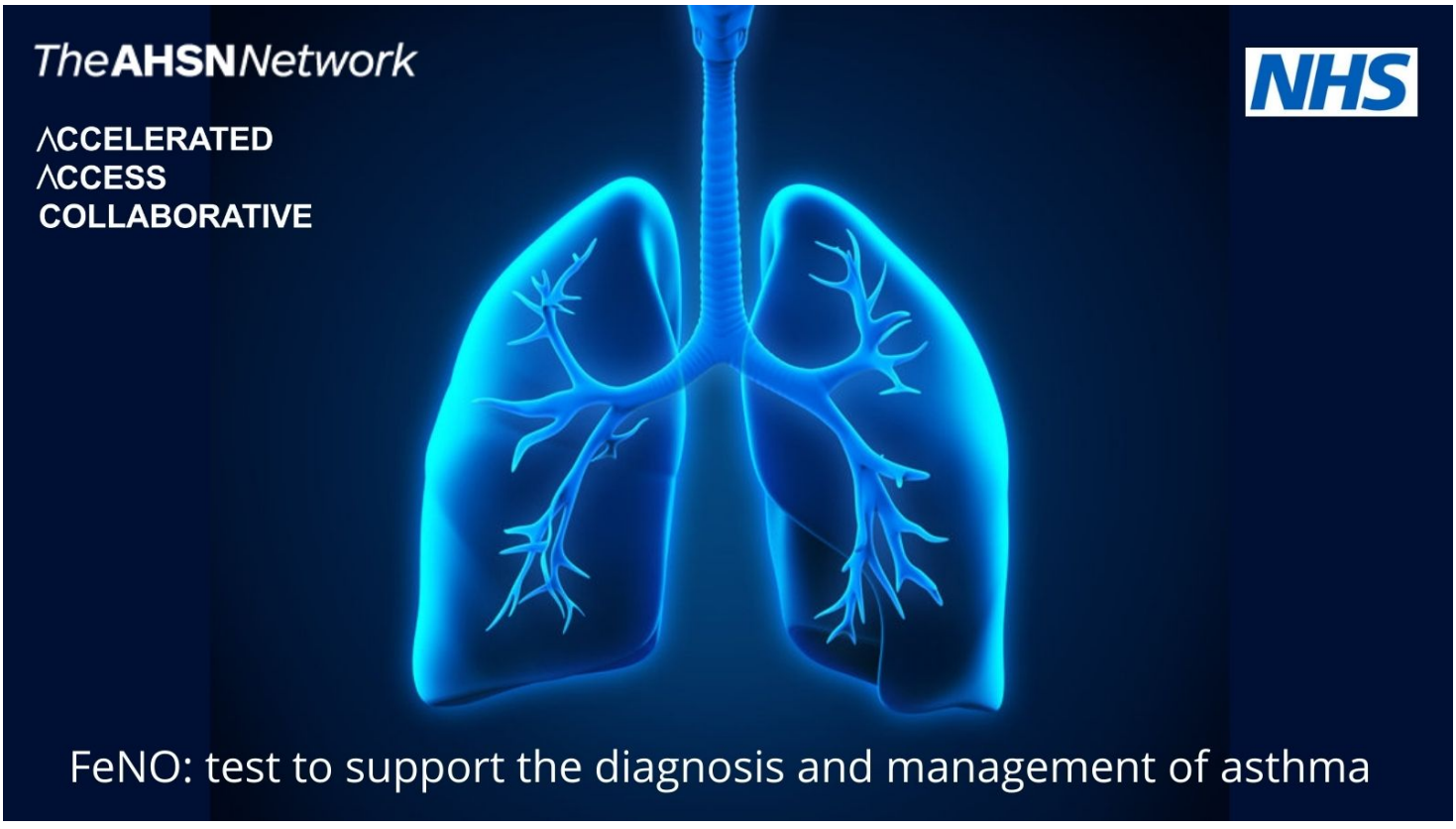
Analysis of local data indicated that there were an estimated 1300 patients in East Surrey with undiagnosed COPD and around 600 adults and children with undiagnosed asthma. There was also a 20% discrepancy between actual and expected prevalence in COPD diagnosis.

The local acute provider Surrey and Sussex Healthcare Trust (SaSH) had a lengthy waiting list, including a backlog built up over the pandemic, and patients awaiting a diagnostic outcome.



1,300
estimated undiagnosed patients in East Surrey*

**Source: modelled estimate based on Right Care NPI Case Finding and QOF disease register prevalence.*



Key deliverables

In response to this challenge, the initiative sought to establish a six-month Breathlessness Service that would deliver key benefits for patients both directly and through relieving pressures on the wider system as it recovers from the impact of the pandemic.

FeNO is one element of improving and streamlining the diagnosis of breathlessness symptoms, and has been identified as a pathway of focus since 2021, both as part of the respiratory transformation programme alongside the delivery of year one Community Diagnostic Centre priorities.

BARRIERS:

- Availability of workforce
- Uptake by patients (similar pilots have seen a range of 40–65% uptake)
- Estate provision to enable multiple site provision
- Funding
- Integrated breathlessness pathway
- Communications across different care settings
- Number of strands to incorporate into one pathway
- Time availability and capacity
- A clinical triaging process not anticipated

OVERCOMING THE BARRIERS:

- Maintaining oversight of the implementation and evaluation of the initial stage of the service
- Using this learning to ensure early engagement with clinicians when agreeing the pathway, or redesigning the pathway to incorporate changes
- Recruitment of additional staff into the service
- Offering services across PCNs to encourage ease of access
- Securing funding for deployment of FeNO devices in the pathway
- Alignment of breathlessness pathway
- Ensuring Making Every Contact Count (MECC) with referral in other services.

Key learning

In response to this challenge, the initiative sought to establish a six-month Breathlessness Service that would deliver key benefits for patients both directly and through relieving pressures on the wider system as it recovers from the impact of the pandemic.

Improving and streamlining the diagnosis of breathlessness symptoms has been identified as a pathway of focus for 2021/22 both as part of the respiratory transformation programme alongside the delivery of year-one Community Diagnostic Centre priorities.

‘The project has shown how an intermediate breathlessness clinic between primary and secondary care can help investigate patients with breathlessness in an efficient manner and streamline patients who need secondary care investigation to have these done appropriately and be followed up by the relevant clinician.’

GP, East Surrey

Impact

- We have increased the availability of FeNO testing within primary care from zero.
- We have carried out 180 FeNO tests to date within primary care as a result of the PTF project.
- We have funded 16 other GP practices to have at least one FeNO device.
- Of the 180 tests carried out to date, around a third have then undergone a medication change or change of dose.
- Of those seen within the first stage of the Breathlessness Service, all have benefited in terms of expedited tests, quicker pathways overall, and the commencement of treatment / recommendation to the GP to commence treatment.
- 17% were referred to smoking cessation and 22% to weight management.
- 72% underwent FeNO testing, with over a third of those then being diagnosed, a third being indicated for further investigation, and a third undergoing medication changes.
- The MDT discussion between the breathlessness and the acute respiratory and cardiology teams was key to determining further management of 50% of patients seen.
- Patient feedback about the Breathlessness Service has been extremely positive.

Clinician feedback

The commissioning of the breathlessness service was undertaken by Surrey Heartlands ICS working collaboratively with other partner providers.

Clinician feedback has been extremely positive, with the benefits being cited as:

- Patient investigations and diagnosis have been expedited.
- We have also managed to discharge some without the need for further secondary care review.
- I feel we were able to reduce waiting times for some patients with initial assessments and tests.
- I feel the clinic has had a positive impact on patient waiting times and their care.
- Many patients were given a diagnosis and a care plan at the clinic and a discharge summary sent to the GP.
- Those that needed further investigation at secondary care level have had tests or further management expedited.
- Patients appear to have earlier specialist input to advice on investigations and management.

'This project has been an evolution from successfully bidding to receive two FeNO devices for use within East Surrey, to then sourcing funding to widen this provision to all practices and funding to launch the pilot breathlessness service.

This has been a collaboration between many colleagues around East Surrey Place and has served to demonstrate that despite challenges, there is merit in further developing provision for breathlessness patients being delivered across primary, secondary and community.

We still have a lot of work to do to achieve our original ambition tackling the shortfall in accurate and timely diagnosis, but can use the outcomes of the work done to date to move us forward in our journey.'

Su Ryan, Associate Director within East Surrey Community Services and Lead for East Surrey Respiratory Programme