

Pathway Transformation Fund (PTF)

Evaluation – interim report **Early & accurate diagnosis;** **Risk stratification &** **optimisation**

August 2026

Pathway Transformation Fund (PTF): Evaluation of Implementation and Early Impact across Respiratory Pathways

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Detailed data gathering, analysis and reporting prepared **by clinical and project management colleagues from the nine consortia** who are delivering this work:

- **Cornwall**
- **Humber**
- **Liverpool**
- **Manchester**
- **Merton**
- **Mid Yorkshire**
- **North West London**
- **Sherwood Forest**
- **Southampton**

Feedback from patients and staff who have been involved in either the Early & Accurate Diagnosis programme, or an OPTIMISE review at one of the nine locations listed above.

This has been a substantial team effort and we are very grateful to all those who have contributed.

Clinical Innovation Adoption Team – August 2026

1. Introduction and Context

1.1 Purpose of the evaluation

The purpose of this evaluation is to assess the implementation and early impacts of the Pathway Transformation Fund (PTF) programme across its two clinical priorities: Early and Accurate Diagnosis (EAD) and Risk Stratification Optimisation (RSO) and support.

This work is designed as a real-world service evaluation rather than a causal impact study, recognising the constraints of timeframe, data availability, and variation in local implementation.

1.2 Overview of the Pathway Transformation Fund (PTF)

The Pathway Transformation Fund supports system transformation across respiratory care, with a focus on improving the quality, consistency, and efficiency of services for people with asthma and chronic obstructive pulmonary disease (COPD). It supports local systems to strengthen respiratory pathways through targeted investment, workforce development, and data-enabled approaches to care delivery.

1.3 Clinical priorities:

Early and Accurate Diagnosis (EAD)

The Early and Accurate Diagnosis priority focuses on improving access to, and delivery of, high-quality respiratory diagnostic services. The programme addresses inconsistent diagnostic capacity, variation in quality assurance, and unequal access across population groups, which contribute to late or missed diagnosis of asthma and COPD. By expanding diagnostic capacity and supporting timely, quality-assured testing, EAD aims to enable earlier identification, earlier treatment initiation, and improved long-term outcomes.

Risk Stratification and Optimisation (RSO / OPTIMISE)

The Risk Stratification and Optimisation priority focuses on the early identification of high risk of exacerbation COPD patients and delivering structured OPTIMISE reviews to support proactive, guideline-aligned care and provide patient initiated follow up in event of deterioration. Linkages to virtual wards is encouraged. The programme seeks to reduce avoidable exacerbations and emergency admissions by improving outcomes through an evidence approach of care to achieve disease stability, supporting self-management, and strengthening coordination across services.

1.4 Evaluation scope and timeframe

The evaluation covers activity delivered between October 2025 and March 2026, with linked data analyses extending beyond this period where data availability allows. It focuses on early, measurable indicators of change rather than long-term outcomes. Primary audiences include NHS England, participating systems and providers, Integrated Care Boards (ICBs), Health Innovation Networks (HINs), and delivery partners.

2. Evaluation Approach

2.1 Evaluation aims and objectives

Overall aim

To assess the implementation and early impacts of the PTF programme across its two clinical priorities, with a focus on service delivery, access, experience, equity, and early indications of system impact. This would include early recommendations that can help clinicians to improve the pathway.

Objectives

The evaluation seeks to:

- describe changes in activity, capacity, and throughput across respiratory services
- assess access to, and engagement with, enhanced diagnostic and optimisation activity
- examine timeliness, efficiency, and consistency of guideline-aligned care
- capture patient and workforce experience of service delivery
- explore early indications of impact on healthcare utilisation and disease stability, where feasible
- assess variation and equity across population groups and sites
- generate actionable recommendations to drive further transformation in the pathway.

2.2 Evaluation design (mixed-methods service evaluation)

The evaluation adopts a mixed-methods service evaluation design, combining routinely collected quantitative data with qualitative insights from patient and workforce experience activity. A common analytical approach is applied across both clinical priorities, enabling consistent interpretation while accommodating differences in delivery models and data maturity.

Quantitative analyses are descriptive and focus on observed patterns over time, variation across sites, and stratified analyses by population group where data allow. Qualitative findings are used to contextualise quantitative results and to identify implementation learning, enablers, barriers, and sustainability considerations.

2.3 Role of the evaluation framework and logic models

The evaluation is underpinned by a shared evaluation framework and priority-specific logic models. The logic models describe the intended relationships between programme inputs, activities, outputs, and outcomes for EAD and RSO, while the evaluation framework specifies

the outcomes, questions, metrics, and data sources that can reasonably be assessed within the programme period.

Given the timeframe and the real-world delivery context, the evaluation focuses on early indicators of change, patterns over time, and variation across sites, rather than causal attribution. Medium- and long-term outcomes articulated in the logic models represent anticipated directions of change to which the programme is expected to contribute over time.

2.4 Analytical principles and interpretive approach

Analyses are designed to support learning and improvement rather than definitive estimates of effectiveness. Findings are interpreted cautiously, recognising the absence of a randomised control group, variation in local implementation, and external influences such as seasonal pressures and system-wide change. Within-person pre/post comparisons are used where linked data are available, supplemented by comparator analyses where feasible.

2.5 Equity as a cross-cutting theme

Equity is embedded throughout the evaluation. The final report expects to include analyses which are stratified by demographic characteristics including age, sex, ethnicity, and deprivation to assess whether access, uptake, delivery, and early outcomes appear proportionate across population groups. Equity findings are interpreted in the context of data completeness and small-number considerations.

3. Data Sources, Methods and Limitations

3.1 Overview of data sources

The evaluation draws on multiple data sources:

- Monthly site-level reporting on process metrics and delivery progress
- CSU-linked pseudonymised datasets for healthcare utilisation and prescribing-based indicators (RSO only)¹
- Patient experience data collected centrally and locally (surveys, interviews)
- Workforce survey (RSO only, n=88²) and implementation learning captured through monthly Communities of Practice.
- Final reports submitted by each of the 9 sites

¹ The results of this study will be included in the final report (December 2026). It is not possible to include the data at this stage as the linked datasets require six-months to elapse after the project end date (31st March) so that changes can be observed.

² Appendix 1 provide more detail regarding survey respondents

The interim report summarises key information arising from these methods and resulting analyses. Fuller analysis and more detailed information (including case studies) is available in the Appendix.

3.2 Data completeness and quality considerations

Data completeness and quality vary across sites and measures. Reporting lags in national datasets and variation in local data systems affect the availability of some outcomes within the programme period. These factors are considered explicitly in analysis and interpretation.

The monthly returns were not consistently completed – gaps and anomalies in the resulting data are noted in the report. Baseline data is not available, and a number of metrics requested in the monthly data returns were consistently difficult to complete, and are therefore excluded.

Figure 1 Summary of data fields which were difficult to collect

Early & Accurate Diagnosis	
Cancellations by provider or service	
Wait time (days) – referral to diagnostic test	
Wait time (days) – Diagnostic test to confirmed diagnosis	
Risk stratification and optimisation	
Smoking cessation education given	Results provided, but baseline data regarding number of smokers / ex-smokers is not available.
Referrals to smoking cessation service	
Referrals to smoking cessation service declined	

3.3 Information governance and data protection

This work is classified as a service evaluation using routinely collected operational data. All analyses are conducted in line with relevant information governance approvals and data sharing agreements. CSU-linked analyses use pseudonymised datasets, and patient and workforce experience data are reported in anonymised, aggregate form.

3.4 Variations in approach to collecting patient feedback

Patient feedback was gathered through: (a) surveys designed and delivered by each of the nine sites n=681 (b) semi-structured interviews scheduled and delivered independently by HIOTV (n=6) (c) and a series of ad hoc case studies. This provides a rich and varied set of insights. However the dataset is likely to be biased towards those who (a) have a strong view about the service (b) are able to engage with the consent and information governance paperwork required and (c) have capacity to talk on the phone / complete a survey. This is therefore unlikely to be fully representative.

4. Programme Implementation and Delivery

4.1 Overview of site participation and models of delivery

Final reports submitted by each of the nine consortia describe the delivery models (summarised in Figure 2 below and full details in the Appendix). A variety of approaches were used to identify and approach patients (including case-finding in primary care records, use of COPD champions and identifying patients through a lung cancer screening programme).

Similarly, delivery of OPTIMISE reviews varied across GP practices, multi-disciplinary one-stop clinics and local diagnostic centres. Approaches to resourcing the work also differed, with some sites putting a greater focus on training, and / or engagement with the voluntary and community sector. Multi-disciplinary teams were key in almost all circumstances.

Figure 2 Summary of delivery models Early & Accurate Diagnosis, and OPTIMISE reviews

Location & delivery setting	Approach to identification and targeting	Staff, resources & notable delivery info
Cornwall Super-Saturday clinics held at GP surgeries. <i>Delivered through Cornwall Partnership NHS Foundation Trust</i>	Initial searches delivered by admin staff and reviewed by clinical team. 	Clinics delivered by multi-disciplinary team, all on the same site at the same time. Including (for example) • “what matters” conversations led by VCSE partners • Signposting and support (e.g. breathers groups, community hubs, PR) • Digital advisors to support onboarding to myCOPD and MyAsthma app.
Humber One-stop diagnostic clinics in multiple locations (community diagnostic centres, primary care, hospitals) <i>Delivered through 10 PCNS</i>	All patients attending a lung cancer screening programme who reported at least one respiratory symptom and/or had evidence of emphysema. Written invites + phone calls	Clinics run by respiratory specialist nurses, (trained in spirometry), supported by a clinical support worker. Video and written education resources created for primary and neighbourhood care teams, hosted on ICB website. These supplemented more formal engagement and training activities (e.g. including performing / interpreting spirometry). Newly diagnosed patients offered a treatment plan and access to myCOPD and/or myAsthma.
Liverpool All diagnostic interventions delivered in primary care practices, including evenings and weekends. <i>Delivered through Liverpool University Hospitals Group</i>	Patient records reviewed in areas of highest deprivation: where diagnosis confirmed, or where it was suspected, patient was referred for diagnostics. Screening and disease review delivered by COPD specialist nurse, clinical fellow (academic	Diagnostics delivered by physiology team from Liverpool Heart and Chest Hospital. Rapid review by respiratory consultant to confirm diagnosis & MDT for difficult cases. Recording tool for EMIS with data entered at time of screening and review. Useful for project data reporting and confirmed QoF criteria were met.

Location & delivery setting	Approach to identification and targeting	Staff, resources & notable delivery info
	specialist respiratory doctor) practice nurses, practice ANP and some GPs	Wider determinants addressed through referrals to Citizen's Advice Bureau ' <i>advice on prescription</i> '
Manchester Rapid access spirometry clinic One stop MDT community clinic bringing together GP and secondary care <i>Delivered through 4 PCNs</i>	Used Ardens to search for patients at risk (with or without COPD diagnoses). Later adopted simplified criteria (symptoms / smoking / emphysema) DNAs and patients at risk of inequity actively managed (phone calls, multi-lingual materials and access to language line)	Respiratory consultant clinics moved to community settings to create one-stop clinics
Merton Primary care/ community based hub sites (e.g., Nelson and Wide Way Medical Centre) <i>Delivered through Merton Health CIC</i>	Searches focused on: • Suspected or misdiagnosed asthma/COPD • Patients without recent review or spirometry • High A&E users and high-need cohorts Structured triage model to determine appropriate diagnostic test prior to appointment with an ARTP trained clinician	Patient pathway: GP referral → nurse-led triage → targeted diagnostic testing → MDT review where required Team comprised: ARTP-accredited clinicians (nurses, clinical pharmacists), respiratory nurses, consultant-led MDT input. Clinic slots expanded and weekend appointments available.
Mid Yorkshire 6 GP practices across the city of Wakefield at a variety of times; weekdays, evenings and weekends <i>Delivered through Mid Yorkshire Teaching Trust</i>	Ardens reports on SystmOne. Over 850 Patients invited for a Spirometry or FeNO Test by phone. For asthma patients, the respiratory specialist nurse did an initial screening during this call.	Team of administrators, HCAs, nurses and GPs from multiple organisations in a coordinated delivery approach. Spirometry tests were interpreted by a trained GP and spirometry training sessions were held for HCAs and nurses. 13 GPs also had the opportunity to apply for ARTP accredited spirometry interpretation training. FeNO machines were purchased and training provided for nurses and HCAs across the city.

Location & delivery setting	Approach to identification and targeting	Staff, resources & notable delivery info
North West London Network of 25 primary-care based respiratory hublets (Respiratory Diagnostic Hubs) <i>Delivered through 6 PCNs</i>	Respiratory champions at 6 PCNs/boroughs undertook case finding using a local tool (COPD Radar) 	Lung tests results reviewed by respiratory champions with support from respiratory consultants. Respiratory consultants from all 4 acute trusts in NWL agreed minimum standards for consultant reviews.
Sherwood Forest Diagnostic MDT review and support available through community pathways which deliver care closer to home <i>Delivered through Sherwood Forest Hospitals NHS Foundation Trust</i>	Target cohort: High-risk respiratory patients and those with suspected undiagnosed disease Focused on high-risk and deprived communities.	Respiratory consultants, nurse specialists, physiologists, GP practice staff. Made use of a respiratory champion network and ARTP spirometry training (6 primary care staff). Aimed to integrate smoking cessation, care navigation and wider support within the pathway.
Southampton Primary care (apart from Southampton where Community Diagnostic Centre was also used) <i>Delivered through 8 PCNs</i>	Local screening tool used to find patients as follows: • IMD1/2, Current smokers, Hospital admission for respiratory problem in last 12 months, =>3 infections needing Abx/OCS in last 12 months, Eosinophils => 0.5 (asthma only)	Searches delivered by admin team Caseloads reviewed by respiratory nurses with support from ICOPD team (consultant and band 7 nurse)

4.2 Implementation timelines and variation

A review of monthly reports demonstrates that implementation timelines varied enormously. Challenges in securing project sign-off, accessing data and securing buy-in from partners delayed all projects to a greater or lesser extent. The restructuring of ICBs which took place during the implementation period has also had a significant. As a result, four sites will be extending their work beyond March 2026.

5. Findings: Early and Accurate Diagnosis

5.1 Intended outcomes and evaluation questions (summary)

Problem: Too many people with asthma and COPD are diagnosed late or not at all, resulting in delayed treatment, avoidable disease progression, preventable hospitalisations, and premature mortality. Access to quality-assured diagnostic services is inconsistent, with underserved populations facing the greatest barriers.

Goal: To improve the speed, quality, and equity of respiratory diagnoses across systems by expanding access to high-quality diagnostic services and ensuring earlier identification of asthma and COPD.

Extract from the Early & Accurate Diagnosis Logic Model which informs this evaluation (full logic models available in the Appendix)

To test the extent to which programme activities address the problem and goal outlined above, the evaluation aimed to explore the following evaluation questions. In practice, data is not yet available to fully answer all questions.

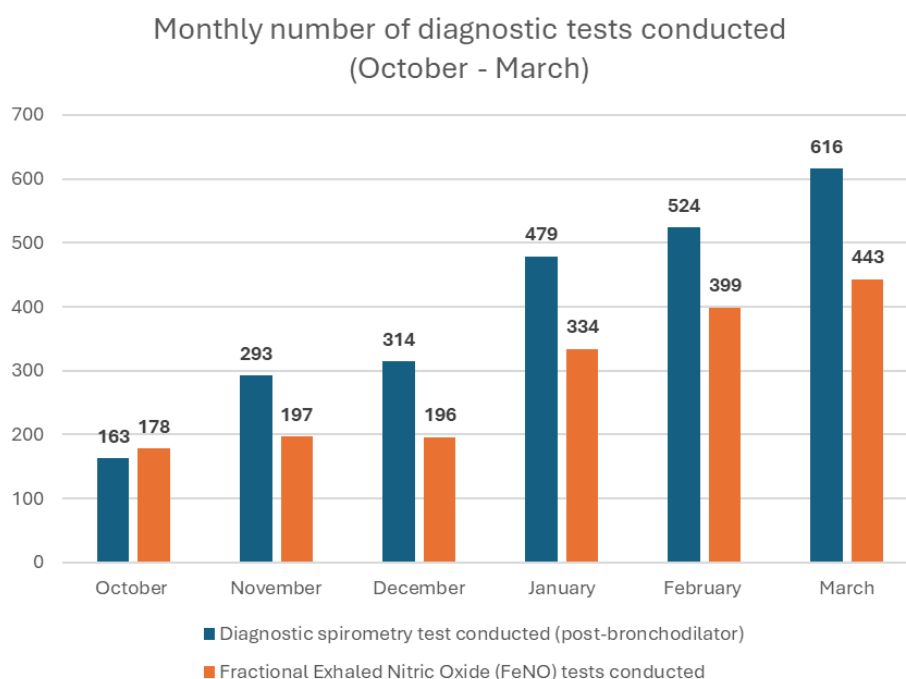
Figure 3 Evaluation questions

Theme	Key evaluation question
Timeliness	Has timeliness improved? a) Are patients waiting less time from referral to diagnostic test? b) Are patients waiting less time from diagnostic test to confirmed diagnosis?
Quality & Outcomes	Are DNA and cancellation rates reducing over time? Are more COPD and asthma diagnoses being confirmed?
Equity	How are different population groups accessing diagnostic services?
Patient experience	What are patient experiences of accessing diagnostics?
Workforce experience	What are staff experiences of delivering diagnostics?

5.2 Activity, capacity, and throughput

Monthly reporting data suggests that the programme delivered at least 2,389 spirometry tests and 1,747 FeNO tests between October 2025 and March 2026. The rate of testing increased steadily over the reporting period.

Figure 4 Number of diagnostic tests conducted³



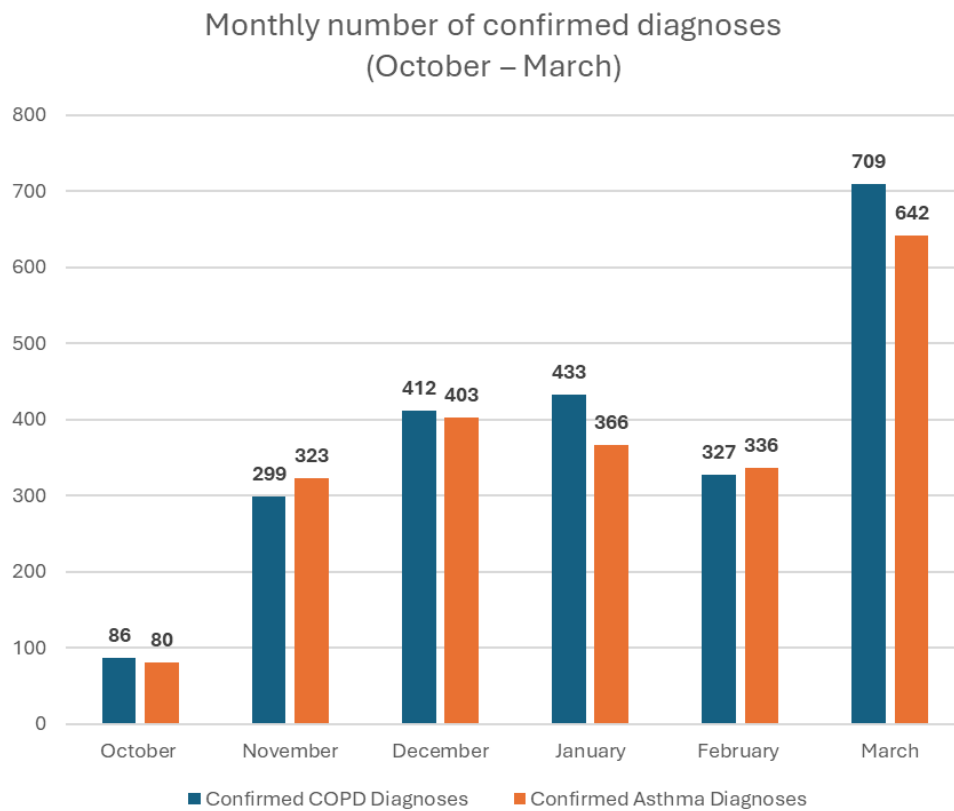
2389 Diagnostic spirometry test conducted (post-bronchodilator) in total

1747 Fractional Exhaled Nitric Oxide (FeNO) tests conducted

Figure 5 demonstrates that 52% of those referred received a diagnosis of COPD and just under 50% received an asthma diagnosis. The rate of confirmed diagnoses appears to vary across the reporting period, with March showing a very high rate of diagnosis. This increase in March is largely the result of recording anomalies, rather than increases in clinical activity. That said, it is clear that the period November to March sees a much higher rate of diagnosis than was observed at the start of the project in October.

³ Excludes data for Humber

Figure 5 Number of confirmed diagnoses⁴



2266 Confirmed COPD Diagnoses in total

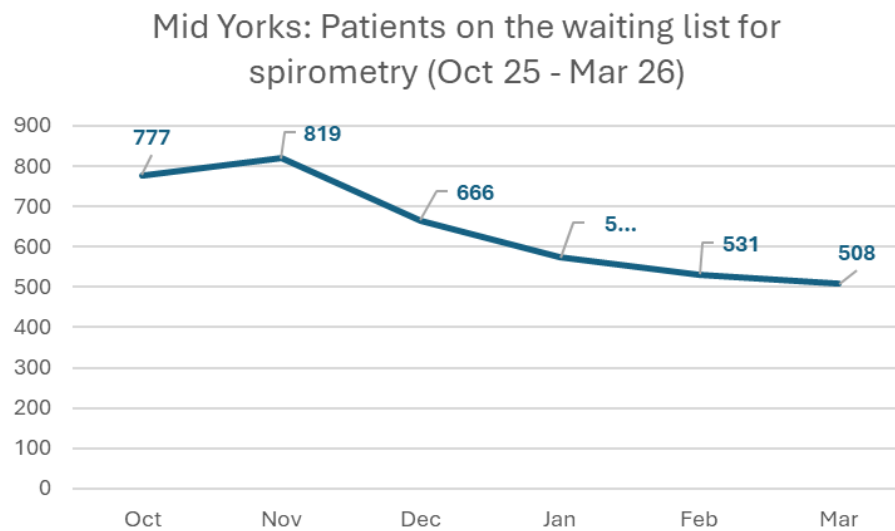
2150 Confirmed Asthma Diagnoses in total

5.3 Access, timeliness, and efficiency of diagnostics

Just one consortia (Mid Yorks) was able to collect clear data regarding waiting times. This showed a promising reduction in the waiting list for spirometry

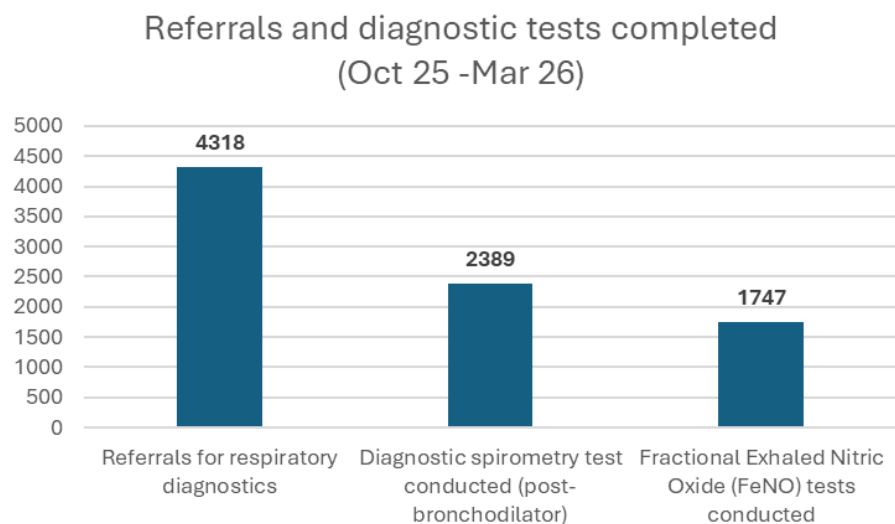
⁴ Excludes data for Humber

Figure 6 Mid Yorks consortia – reduction in waiting times for Spirometry



Monthly reporting data offers more insight regarding the efficiency of diagnostic testing: 55% of those referred to respiratory diagnostics received a spirometry test and 40% received a FeNO test during the reporting period (see Figure 7).

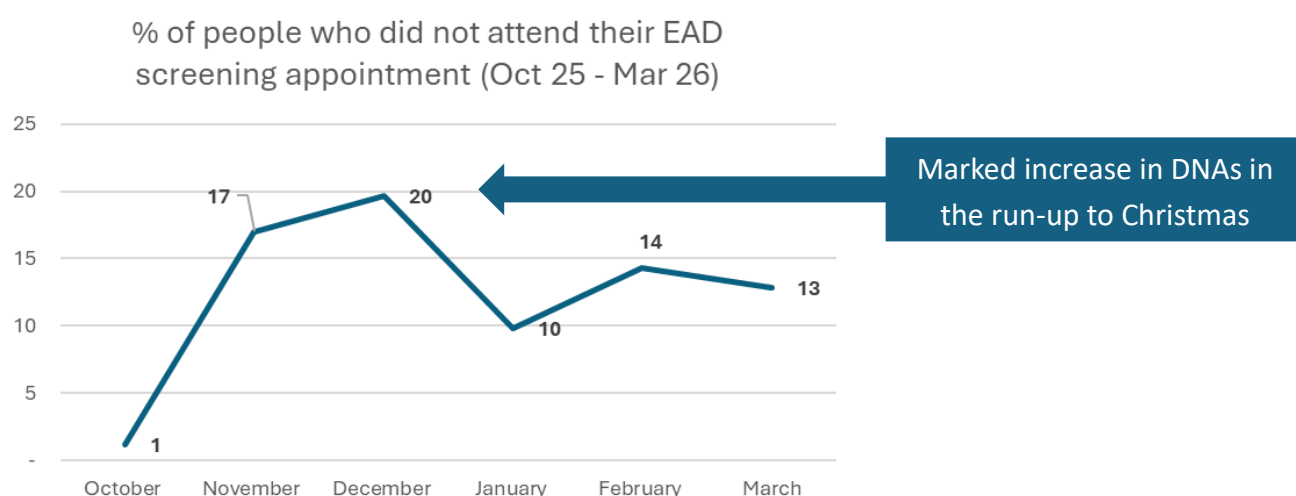
Figure 7 Efficiency of diagnostic testing⁵



Data regarding DNAs (did not attend) was provided by seven sites, although the data was sporadically reported and so conclusions should be drawn with care (see Figure 8). According to the available data, the average DNA rate was 12% and this varied quite considerably over time and between different sites.

⁵ Excludes data for Humber

Figure 8 DNA rates over time (data from 7 out of 9 sites)⁶



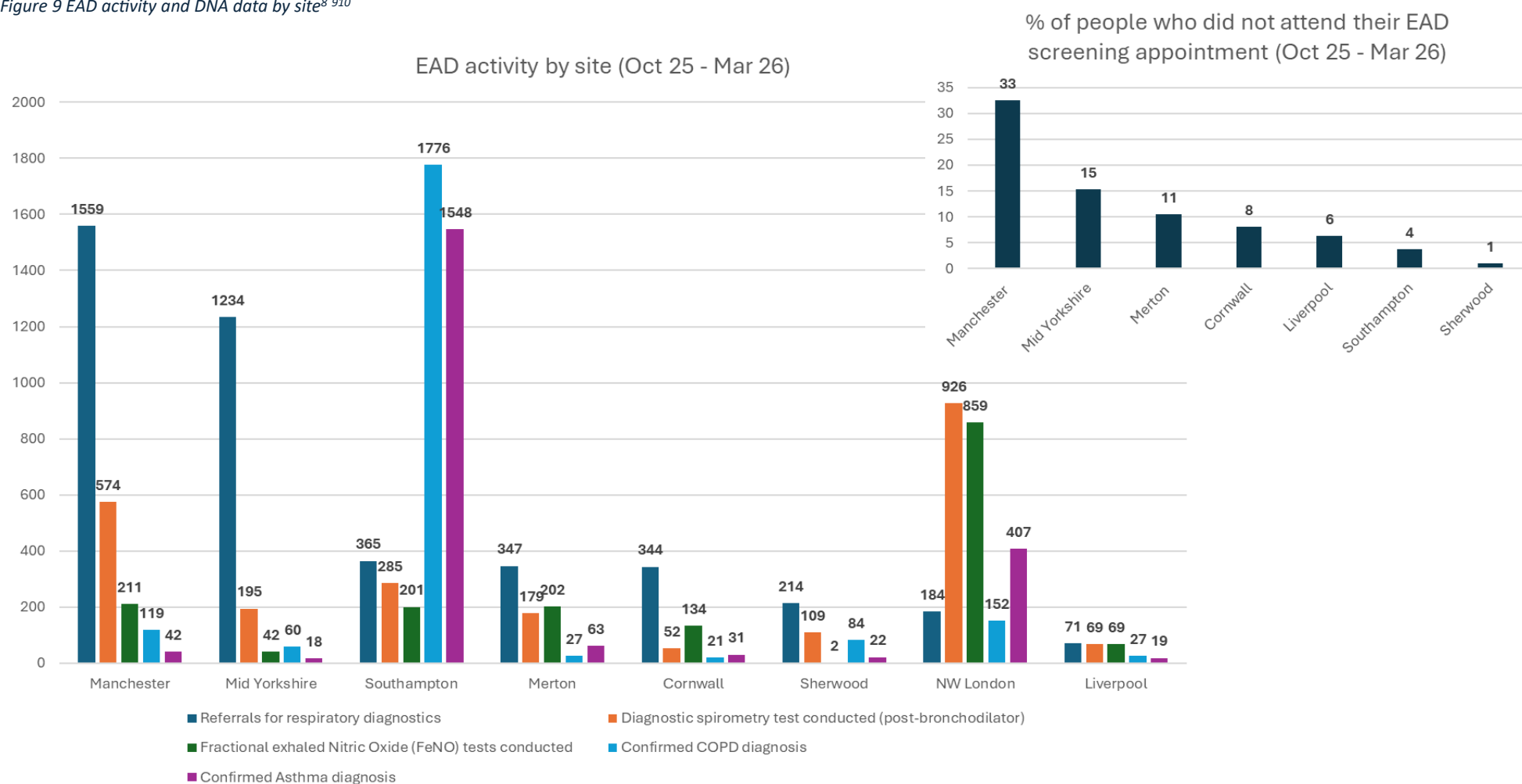
5.4 Variation across sites and populations

A review of the different delivery models (see Figure 2 and the Appendix) reveals that creative and varied approaches were taken by the nine sites. The differences in model delivery *broadly* fall into two groups: those where administrative staff were involved in case finding (Cornwall and Southampton) and those where diagnostics were delivered through a one-stop clinic model (Cornwall, Humber, Manchester). A review of the output from these different models (Figure 9) does not offer clear insights or conclusions regarding the extent to which different delivery models affect progress.⁷ Figure 9 reveals there is significant variation in rates of referrals, testing, confirmed diagnoses and DNA across the sites.

⁶ Excludes data for Humber and NW London

⁷ The data study (due to report in December 2026) may provide more insight

Figure 9 EAD activity and DNA data by site^{8 910}



⁸ Data for Humber is excluded

⁹ Diagnosis data for Southampton includes diagnoses which were delivered before the project began.

¹⁰ Data for North West London includes tests (Spirometry and FeNO) which were delivered outside of the OPTIMISE project. Data reporting challenges means it is not possible to isolate those which were delivered as part of the OPTIMISE programme

5.5 Patient experience (site-level qualitative summaries)

In their final reports, seven sites shared patient feedback concerning Early & Accurate Diagnosis¹¹. Feedback regarding the overall experience was very positive.

There was **very positive feedback regarding staff** (high levels of trust and professionalism), **organisation & efficiency** (well-organised, efficient booking system) with a **very high proportion saying they would recommend the service** to others.

Seven people were asked about the impact of the service: they all reported that the advice had made them feel **more confident in managing their breathing and inhalers**.

Areas for improvement related to timing of appointments, facilities (navigation, comfort, request to hold sessions at the GP surgery), **the need for repeated appointments and information** about the test procedure. Feedback regarding **waiting times varied** – some sites reported excellent feedback whereas others found it to be an area for improvement. A small number of patients felt **confused about their results** or how to manage their new condition.

5.6 Implementation learning and delivery insights

Monthly qualitative feedback from the consortia highlights useful learning¹². When combined with the results of the workforce survey (n=88) we can observe a number of commonly occurring themes.

It's clear that access to spirometry expertise and FeNO testing machines has been a key issue. Sites reported these useful enablers:

- **Informal collaboration between spirometry specialists** (e.g. WhatsApp group)
- Access to resources which enables **extra FeNO machines** to be purchased
- **Triaging** to determine whether someone needs a FeNO appointment or a spirometry appointment
- Ensuring **OPTIMISE is scheduled** at a time when diagnostic tests have had time to be completed and reviewed

Staff really valued having easy access to FeNO machines.

By contrast, one site described challenges in accessing spirometry because of a local need to have a chest x-ray before referral.

¹¹ Merton: n=500, Manchester: n=7, Mid Yorks: n= 25, NW London: n=98, Southampton: n=21, Humber: n =11, Sherwood: n=19

¹² A summary is provided in the Appendix

The **value of training sessions in upskilling and motivating teams** was noted by some sites and firmly emphasised in responses to the workforce survey (e.g. lunch and learn sessions appear to have been popular). It's clear that collaborative training allowed some sites to build more cohesive working relationships across primary, community, secondary and VCSE partners: there are descriptions of community teams enjoying being part of the team, and GPs unexpectedly wanting to shadow the screening process.

Some staff reported a transformation in their ability to deliver COPD & Asthma screening, describing it as the best learning experience they'd had in years.

There's no doubt that **the lack of time and resource to devote to this work was a major barrier for staff, with data being a significant contributor to this time and capacity pressure** (data challenges included access to Business Intelligence support, interoperability between systems, and data quality). Sites recommend strong early engagement with data issues, standardised codes for EAD and OPTIMISE activities and automated processes wherever possible. It took significant amount of time to review initial patient lists, including a lack of access to data in at least one site. One site also reported challenges in understanding the different systems across the different practices. longer than intended.

Staff were surprised by the poor quality of coding in primary care, discovering uncoded patients and inconsistent use of codes.

The remaining learning applies across both programmes of work (Early & Accurate Diagnosis and OPTIMISE reviews). These themes were highlighted by all sites, suggesting they are important considerations:

- **Governance, project management & partnership working:** sites consistently report the criticality of ensuring shared understanding, building strong clinical leadership, working with neighbourhood teams and the voluntary sector, and involving IG colleagues at an early stage. ICB re-organisations in Spring 2026 have significantly hindered effective partnership working.
- **Time and capacity:** sites highlight the criticality of a dedicated project manager and administration support, the need to allow plenty time at the outset to set up the project, and the overall time pressure on clinical and administrative colleagues to deliver the work.

A number of other themes were highlighted but less consistently.

Communication and patient engagement. Encouraging attendance is difficult when patients don't see themselves as unwell. Some digital communications can create unnecessary anxiety for patients but there is evidence that Facebook has promoted sign-up to MyCOPD and MyAsthma. Bite-sized videos appear useful.

Multi-disciplinary teams. Hugely beneficial when they work well. In some locations, they have been very difficult to establish and to deliver consistently. One site highlighted the value of triaging of cases for MDT to enable more effective discussions.

Wider determinants of health affect engagement. Care Navigators and the voluntary sector are helpful, along with alternative recruitment approaches (e.g. referrals from Citizen's Advice and promotions on World COPD day).

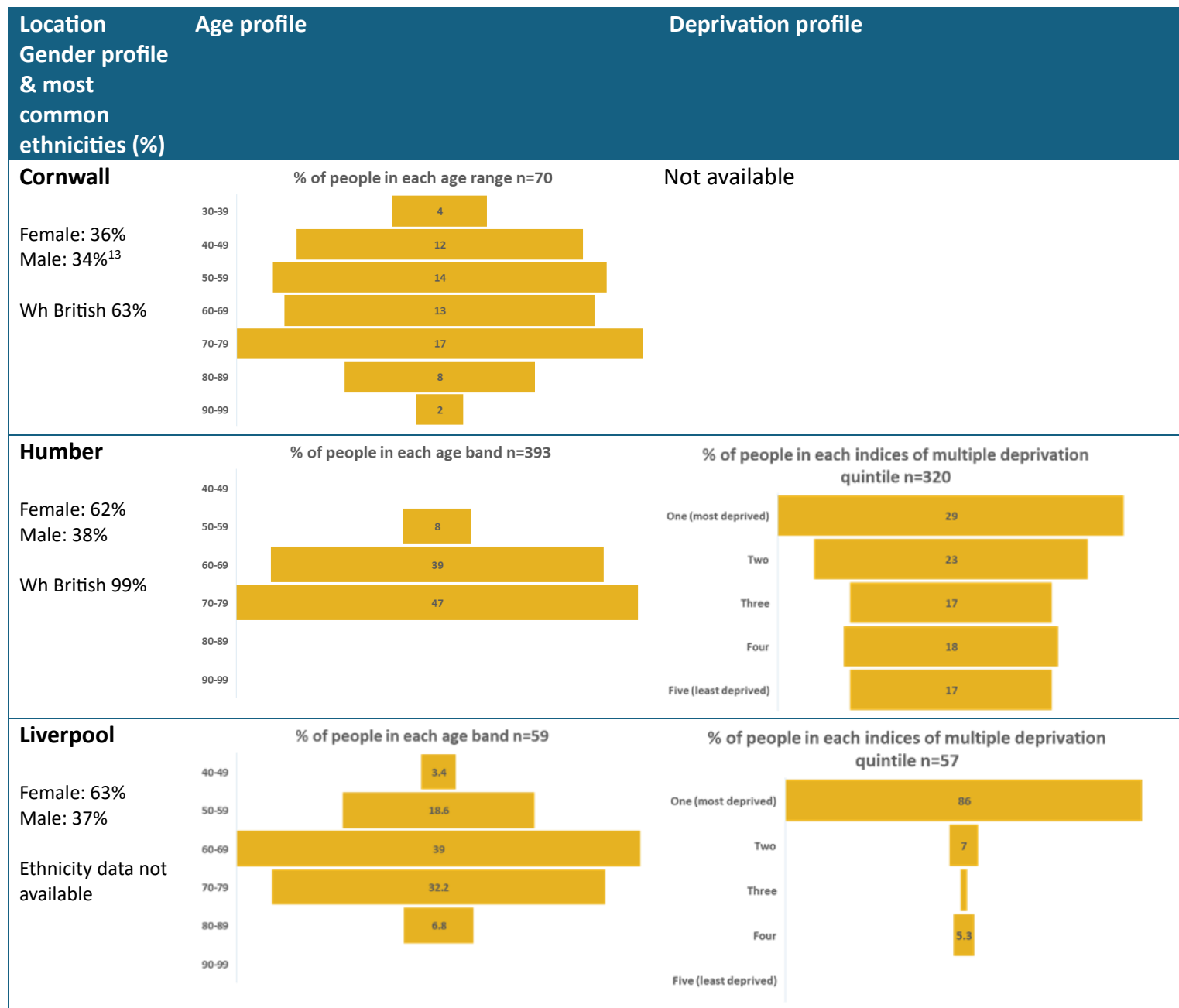
A small number of sites highlighted concerns in **access to clinic rooms** and **sustainability**.

5.7 Equity considerations for EAD

Final reports submitted by the sites offer useful insights into the equity profile of those identified as part of the Early & Accurate Diagnosis programme. The table below provides an outline summary, with full details in the final reports prepared by each site (see Appendix). Based on the available data, we can draw these conclusions

- **Gender:** overall, 54% of those identified were female and 45% were male. However the detail for each site is quite varied, with some sites (e.g. Liverpool 63%, Humber 62%) identifying a significantly higher proportion of women than others (e.g. Cornwall 36%).
- **Ethnicity:** Without detailed population profiles, it is difficult to determine the extent to which the service has accessed a representative proportion of their population. However those areas which have higher levels of diversity in their population (e.g. NW London, Merton, Manchester) have more diverse ethnicities represented among the patient group.
- **Age:** All age ranges are represented (including 0-19 in NW London and 0-17 in Sherwood Forest). However, mid to older age bands ((e.g. 40+) occur most commonly.
- **Deprivation:** All sites have been successful at identifying people in the areas of highest deprivation, with most identifying people in the most deprived quintile. Manchester appears to have been extremely successful in accessing patients living in the most deprived quintile (although data quality issues mean that this conclusion should be treated with caution).

Figure 10 Summary of demographic profile



¹³ This does not add to 100%, so we assume the remaining proportion declined to respond, or chose another gender. This information was not captured.

Location
Gender profile
& most
common
ethnicities (%)

Age profile

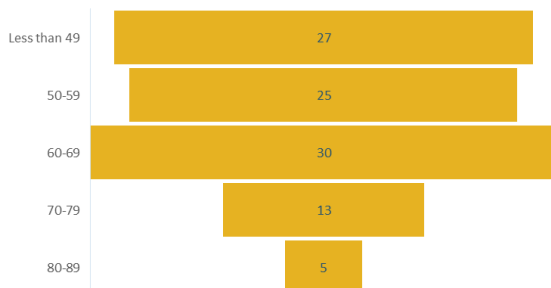
Deprivation profile

Manchester¹⁴

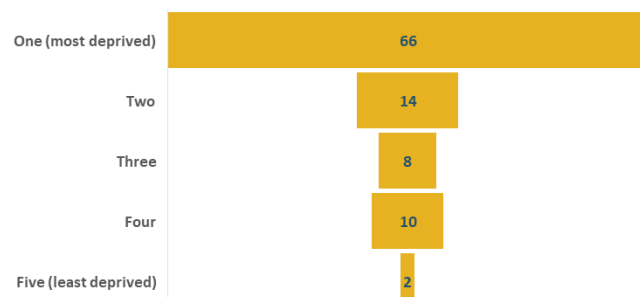
Female: 54%
Male: 45%

Wh British: 49%
Mixed: 27%
Asian: 15%

% of people in each age range n=294



% of people in each indices of multiple deprivation quintile n=294

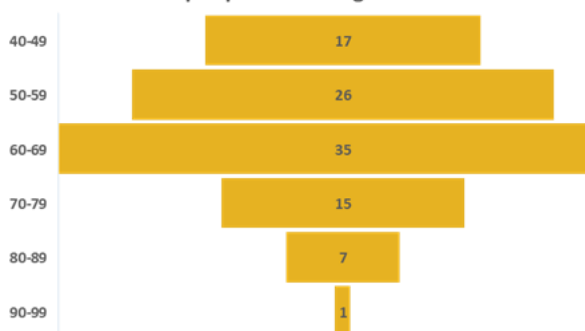


Merton

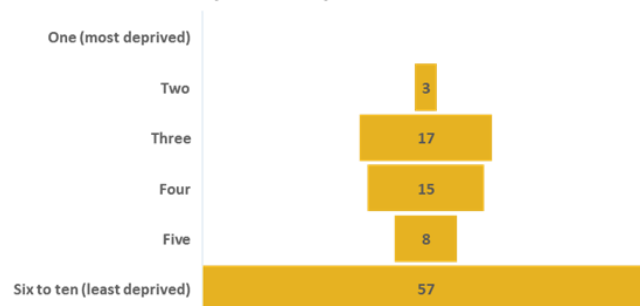
Female: 55%
Male: 45%

Mixed: 34%
Asian: 30%
Wh British: 15%
Other: 12%

% of people in each age band n=281



% of people living in each indices of multiple deprivation quintiles n=375

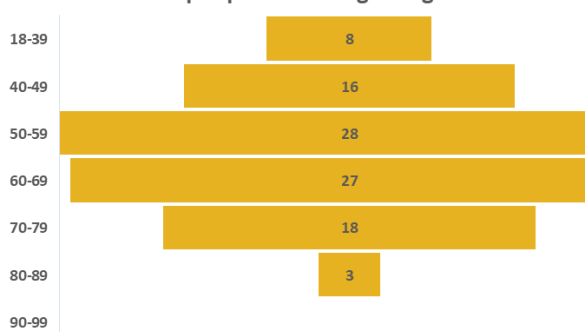


Mid Yorkshire

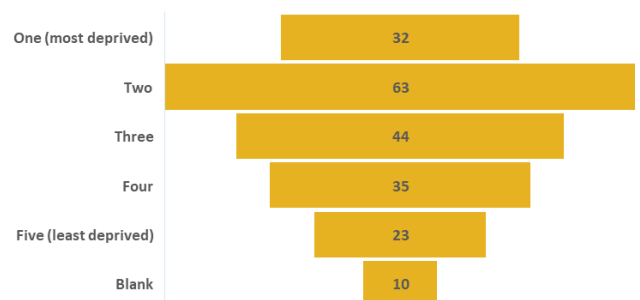
Female: 48%
Male: 52%

Wh British: 89%
Wh Other: 12%

% of people in each age range n=274



% of people in each indices of deprivation quartile n=274



¹⁴ Manchester reported difficulties in submitting accurate demographic data – these findings should be treated with caution.

Location
Gender profile
& most
common
ethnicities (%)

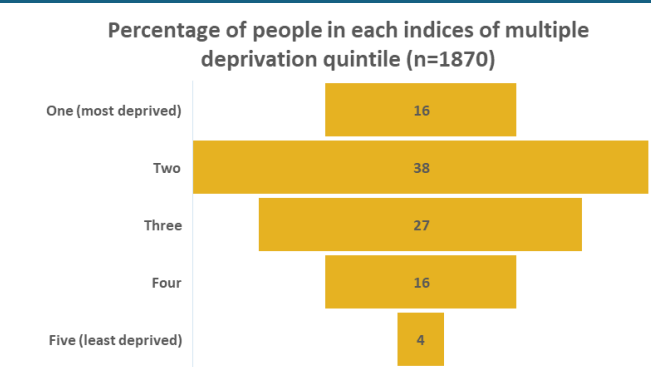
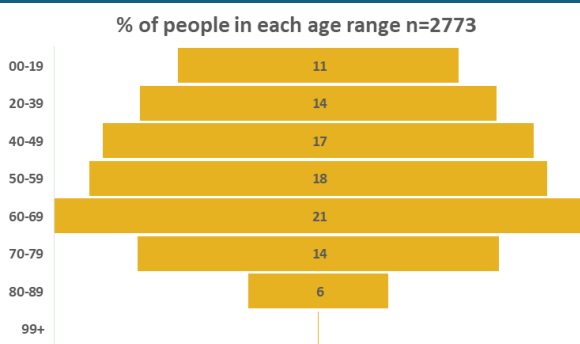
Age profile

Deprivation profile

North West
London

Female: 56
Male: 44

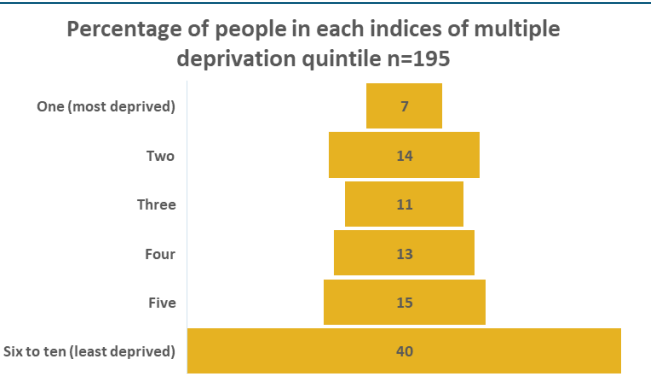
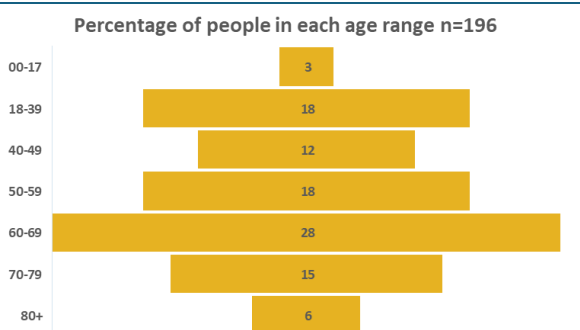
Wh (British or
other): ~40%
Asian: ~30%
Black: ~10%



Sherwood

Female: 56
Male: 44

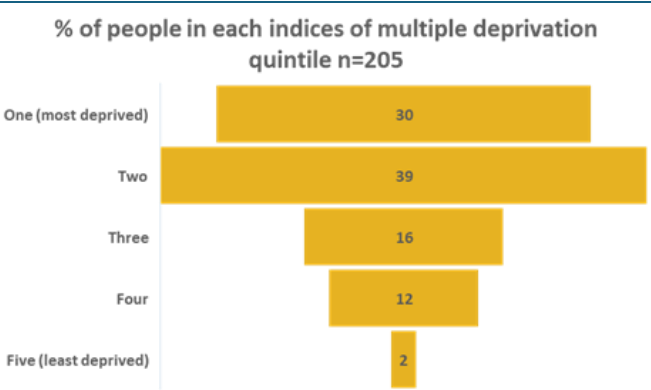
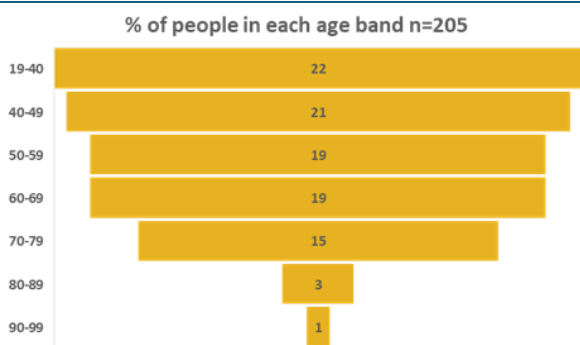
Ethnicity data not
available



Southampton

Female: 46%
Male: 54%

Wh British: 70%
Wh Other: 11%
Asian: 11%



6. Findings: Risk Stratification and Optimisation (RSO / OPTIMISE)

6.1 Intended outcomes and evaluation questions (summary)

Problem: Rising-risk COPD patients are not consistently identified or proactively managed, leading to avoidable exacerbations, emergency admissions, and worsening health inequalities.

Goal: To identify rising-risk COPD patients earlier and deliver personalised, integrated care that prevents deterioration, reduces hospital demand, and improves health equity and patient outcomes.

Extract from the Risk stratification and optimisation Logic Model which informs this evaluation (full logic models available in the Appendix)

To test the extent to which programme activities address the problem and goal outlined above, the evaluation aimed to explore the following evaluation questions. In practice, data is not yet available to fully answer all questions.

Figure 11 Evaluation questions

Theme	Key evaluation question
Patient identification & engagement	What proportion of rising-risk patients complete an OPTIMISE review? Which patients do not complete an OPTIMISE review, and what are the perceived reasons for non-attendance? What support or engagement strategies are associated with increased uptake of OPTIMISE reviews?
Clinical value	What clinical value does OPTIMISE provide? Does OPTIMISE improve prescribing quality?
Outcomes / system impact	Does OPTIMISE reduce avoidable healthcare utilisation? Does OPTIMISE improve disease stability and reduce acute burden?
Patient experience	What are the patient experiences of OPTIMISE? What is the impact of OPTIMISE on self-management?
Workforce experience	What are staff experiences of delivering OPTIMISE?
Equity	Are inequalities in COPD care reduced?

6.2 Identification of high-risk patients

Monthly reporting data shows that 24,743 patients were identified of which 5,029 (20%) were identified as suitable for OPTIMISE reviews. Figure 12 provides more detail, and makes clear that sites were working to varied criteria when identifying high-risk patients. For some, (e.g. Humber) the number of high-risk patients exactly matches the number who went on to be identified as suitable for an OPTIMISE review. In Manchester for example, the difference between these two metrics is larger.

Figure 12 Summary of OPTIMISE patient caseload and progression October 2025 – March 2026

Consortia	Rising risk patients identified	Identified as suitable for OPTIMISE review	OPTIMISE review completed (Oct 2025-Mar 2026)	% of suitable patients who have a completed review
Manchester	17,600	386	71	18%
Humber	2,046	2,046	307	15%
Liverpool	1,360	169	64	38%
Southampton	1,248	1,248	411	33%
North West London	689	50	23	46%
Mid Yorkshire	677	497	231	46%
Cornwall	391	239	82	34%
Sherwood	377	221	154	70%
Merton	355	173	97	56%
Total	24,743	5,029	1,440	29%

6.3 Engagement with OPTIMISE reviews

Qualitative feedback in the monthly reports submitted by sites show that engagement is difficult. This data suggests there are two key challenges:

- encouraging people to attend a health review when they don't perceive themselves to be unwell
- wider determinants of health affecting people's ability to engage. Sites reported that working with Care Navigators, the voluntary and community sector and taking more creative approaches (e.g. accepting referrals from Citizen's Advice Bureau) has been helpful.

As Figure 13 shows, 29% of 'suitable' patients received their OPTIMISE review during the project timescale. Sites have differing completion rates (ranging from 18% to 70%)¹⁵. Individual site meetings with the PTF central team scheduled for summer 2026 will explore, among other things, the reasons for the differences in completion rates.

¹⁵ This may, in part, reflect different approaches to identifying patients. Some sites seem to have identified patients on a rolling basis, so their completion rate only refers to those who have been identified so far (with more patients still to be identified). By contrast, some sites identified the entire cohort at the outset.

Figure 13 Number of patients identified for OPTIMISE review and number of reviews completed October 2025 – March 2026.

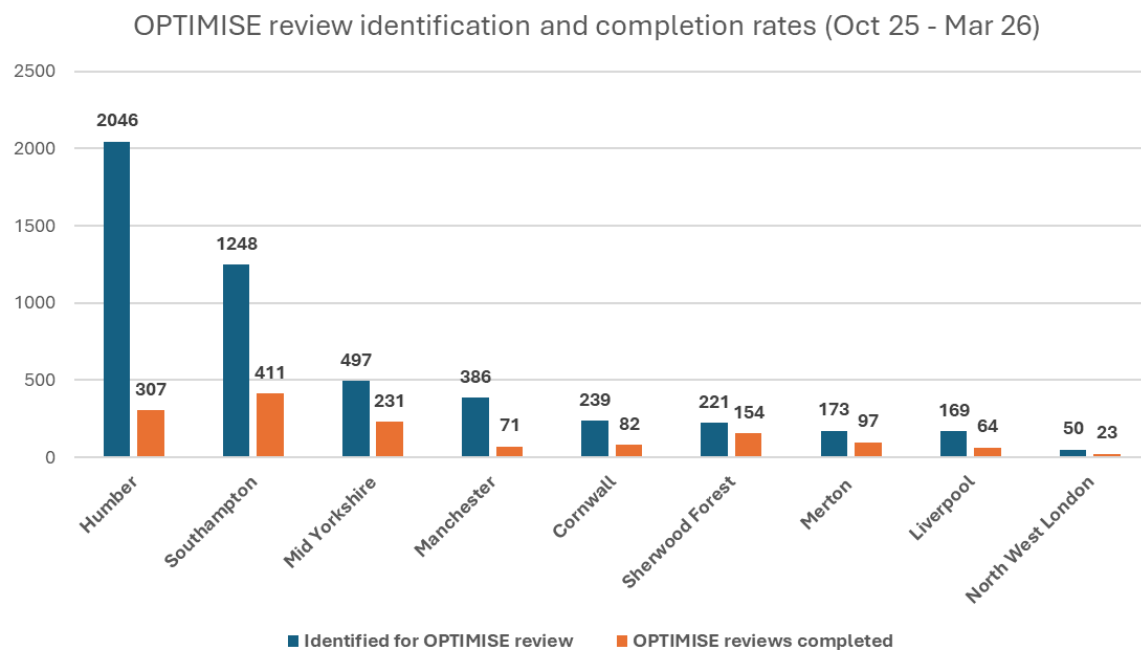
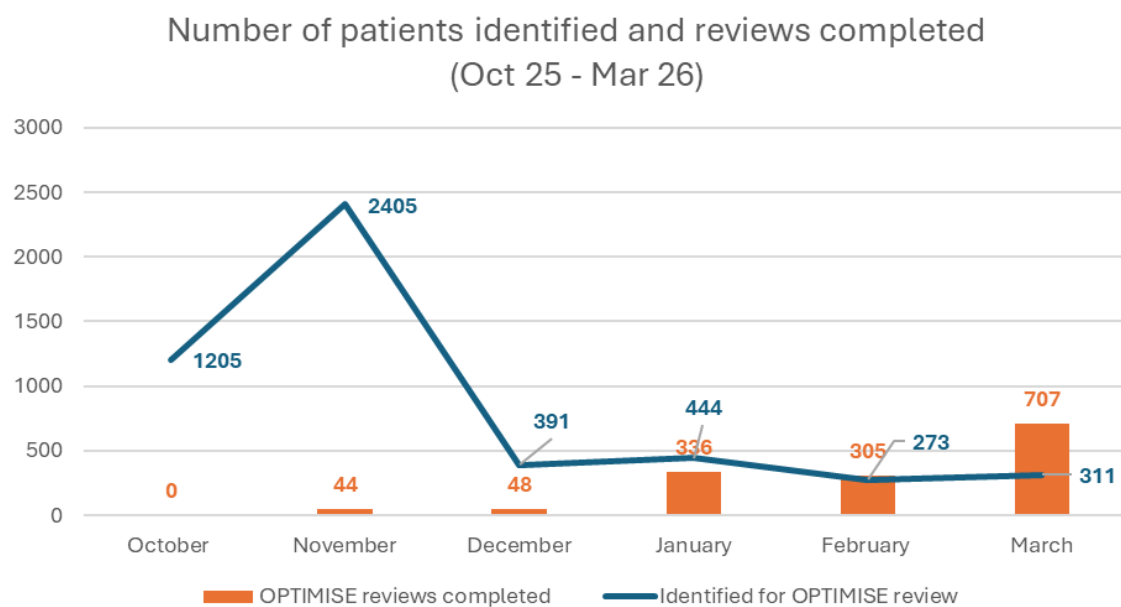


Figure 14 Patients identified and reviews completed¹⁶



5029 Patients identified for OPTIMISE review in total

1440 OPTIMISE reviews completed in total

¹⁶ This chart excludes data from Humber. They identified a further 2,067 patients and delivered 423 OPTIMISE reviews (a 20% completion rate)

6.4 Delivery of optimisation activity

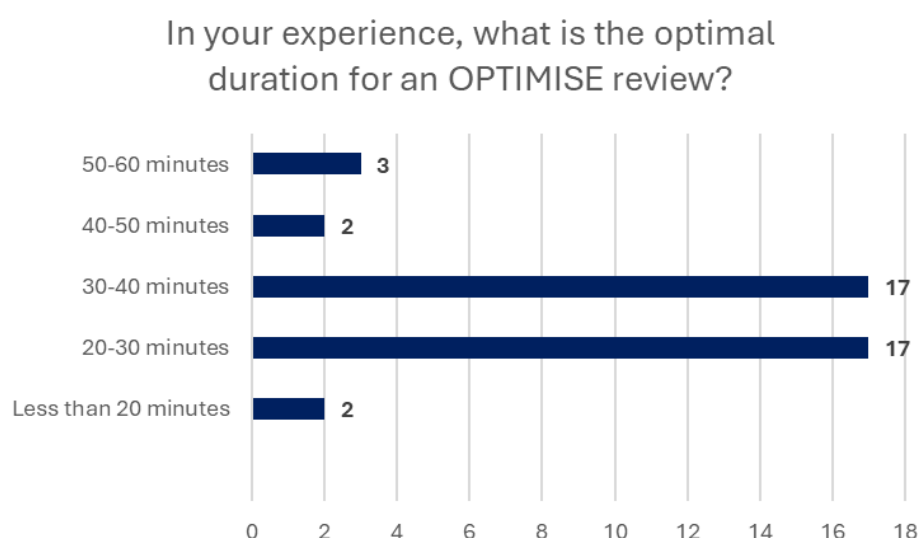
Monthly reporting shows that in almost all cases, a personalised care plan was put in place, with self-management education and inhaler technique observation also taking place at the majority of reviews. A number of other useful interventions and referrals took place, with a very small number of people being admitted to virtual wards.

Figure 15 Summary of monthly reporting data from sites 1st October 2025 – 31st March 2026¹⁷

Activity following OPTIMISE review	Total	% (n=1440)
Personalised care plans put in place	1317	91
Self-management education given	999	69
Inhaler technique observed	998	69
Medication optimisation review	708	49
Onboarded to digital self-management tool	553	38
Flu vaccine administered	464	32
Referrals to social prescribing service	340	24
Referrals to pulmonary rehab	326	23
Onboarded to remote monitoring	111	8
Admission to virtual ward	Suppressed for low numbers	

Patient feedback gathered independently by HIOTV (n = 6 OPTIMISE attendees), suggests that the reviews feel unhurried. The workforce survey (n=88) shows a spread of views concerning the optimal length of time for an OPTIMISE review. Generally GP respondents favoured a shorter review (20-30 or 30-40 minutes) whereas a small number of ‘other’ health care practitioners felt that 50-60 minutes would be optimum. Taking all the responses together, we can see that around 30 minutes is likely to be ideal.

Figure 16 Duration of the OPTIMISE review (all health care delivery staff n= 41)



¹⁷ Excludes data for Humber

6.5 Healthcare utilisation and early outcome indicators

Analysis is underway which should provide wider insight into patient outcomes in the six-month period after their OPTIMISE review. The results of this study will inform a final report (due December 2026).

That said, Humber consortia captured initial data regarding healthcare utilisation and early outcome indicators. It demonstrates small changes in prescribing and patient reported outcomes (see Figure 17 and Figure 18 below).

Figure 17 Humber (taken from Humber Final Report): Prescribed COPD therapies before and after OPTIMISE review. All participating PCNs were given access to educational videos relating to COPD and its treatment and were provided up-to-date copies of the regional COPD guideline to distribute to their teams.

Pharmacological treatment change	Baseline treatment (n=423)	Post review treatment (n=423)	Change n/%
Inhaled Therapies			
- SABA only	3(<1)	1 (<1)	-2(<1%)
- ICS monotherapy	1(<1)	1 (<1)	-
- ICS – LABA	25 (6)	25(6)	-
- ICS + LAMA	1 (<1)	1(<1)	-
- LABA monotherapy	1 (<1)	1(<1)	-
- LABA – LAMA	48 (11)	40 (9)	-8 / -2%
- MITT	23 (5)	23(5)	-
- SITT	287 (68)	303 (72)	+16 / + 4%
- Missing Data	34 (8)	34 (8)	-
Add on therapies at baseline			
- Azithromycin	38 (9)	40 (9)	+2 / <1%
- Carbocisteine	104 (25)	111 (26)	+7 / +2%
- Montelukast	25 (2)	26 (6)	-
- Roflumilast	0(0)	0 (0)	-
- Theophylline	5(1)	5 (1)	-
- Opiates for breathlessness	7 (2)	10 (2)	+3 / +<1%

Figure 18 Humber (taken from Humber Final Report): CAT Score and mMRC recorded during baseline and follow-up appointments for the 337 OPTIMISE participants that received a follow-up appointment during the programme

Patient Reported Outcome Measures	Baseline Appointment (n=337)	Follow-up Appointment (n=337)
CAT Score – n (%)		
- 0-9	68 (20)	65 (19)
- 10-20	103 (31)	83 (25)
- 21-30	66 (20)	74 (22)
- 31-40	17 (5)	32 (9)
- Missing data	83 (25)	83 (25)
- Mean (95% CI)	16.0 (14.9 – 17.2)	18.0 (16.7 – 19.3)
mMRC – n (%)		
- 0	18 (5)	8 (2)
- 1	24 (7)	29 (9)
- 2	65 (19)	68 (20)
- 3	94 (28)	94 (28)
- 4	107 (32)	109 (32)
- Missing data	29 (9)	29 (9)
- Mean (95% CI)	2.81 (2.67 – 2.94)	2.87 (2.75 – 2.99)

The 88 people responding to the workforce survey routinely describe a number of important benefits which they believe the review is offering to patients (Figure 19), as well as important system and service-level improvements (Figure 20).

Figure 19 Workforce views on the benefits to patients (n=88)

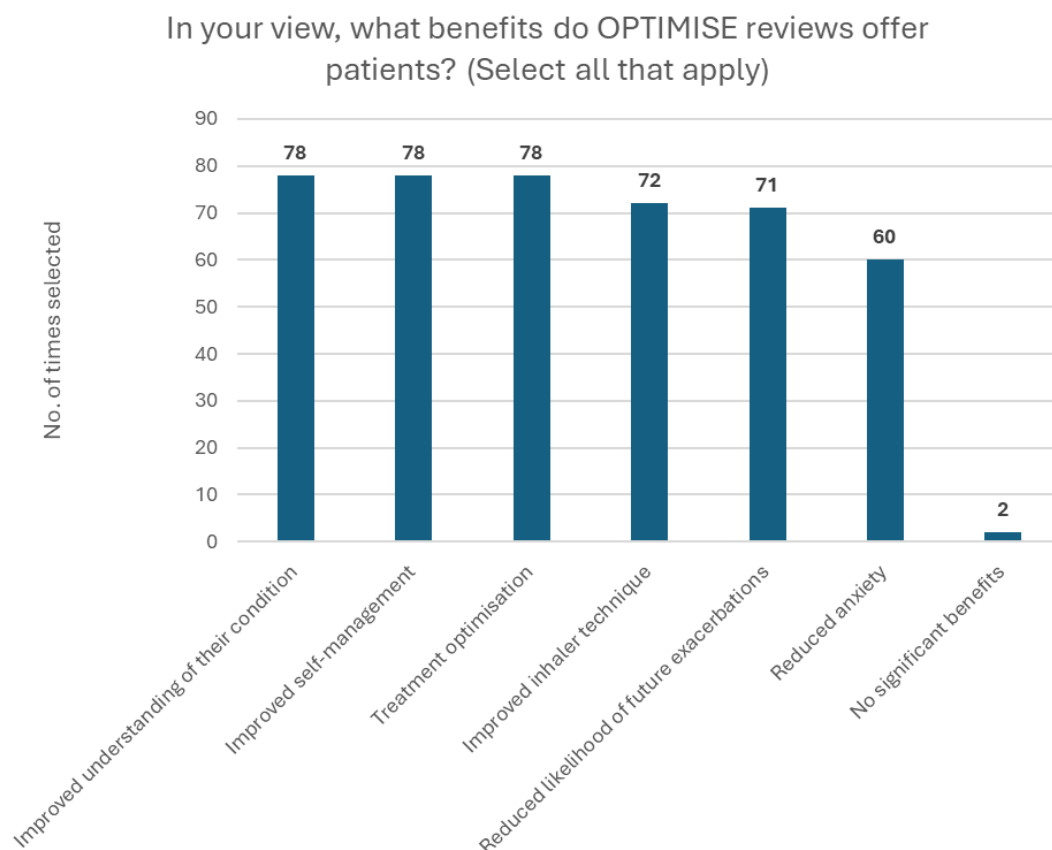
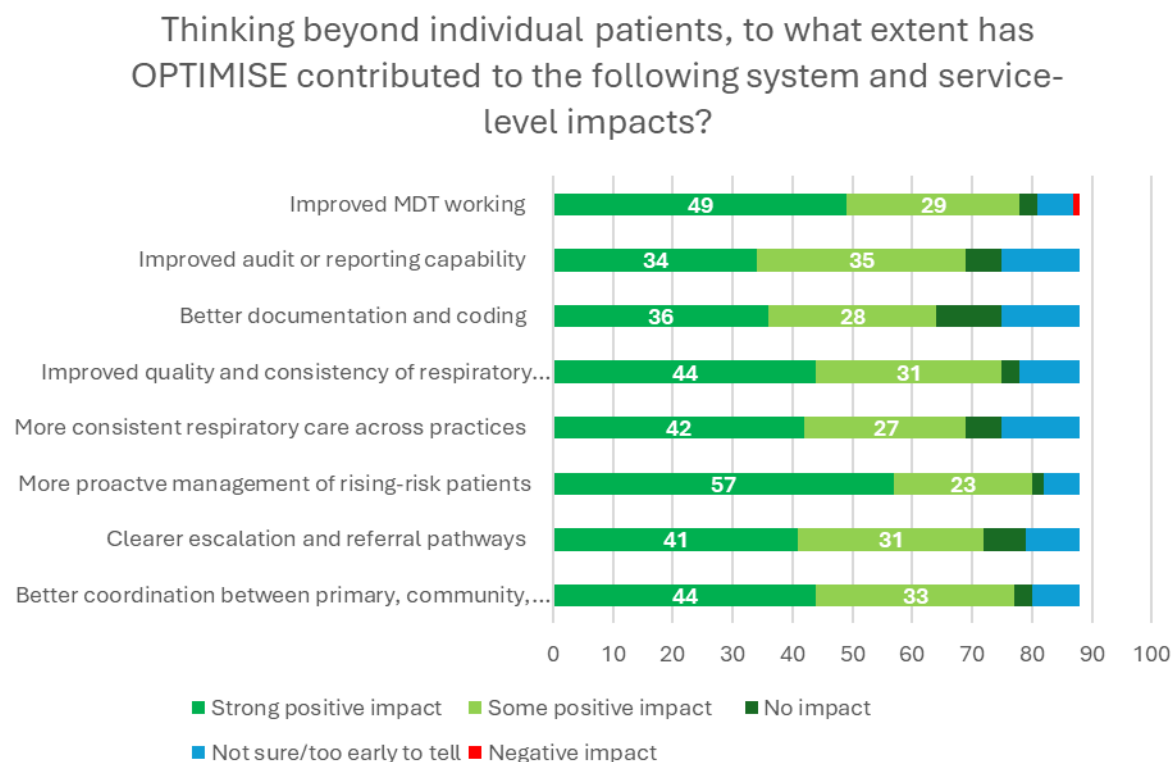


Figure 20 System and service-level impacts of OPTIMISE reviews (n=88)

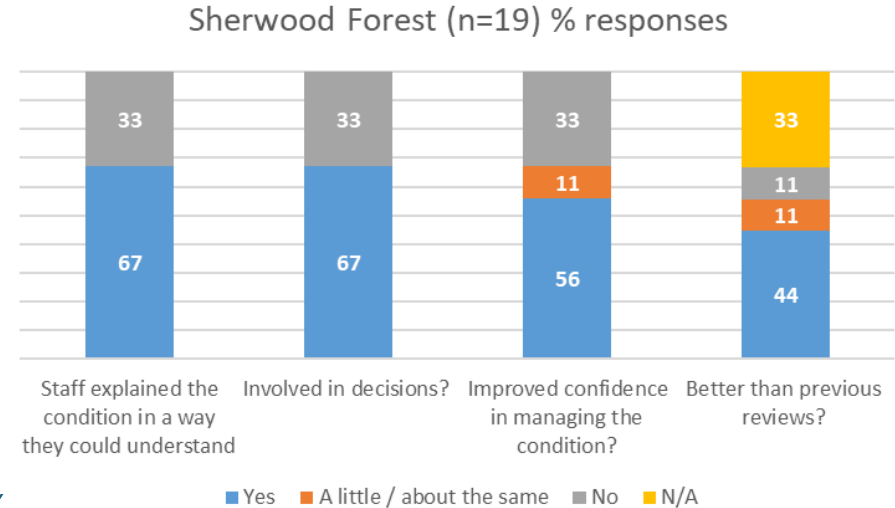
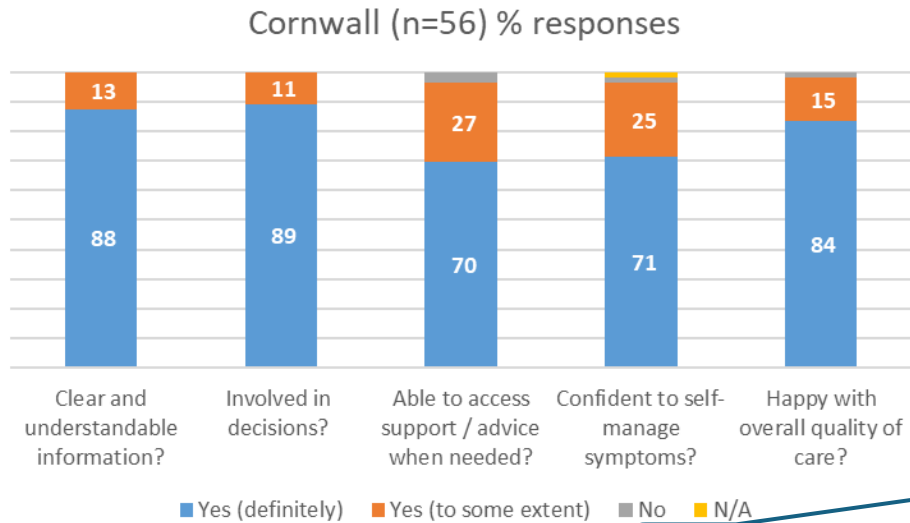
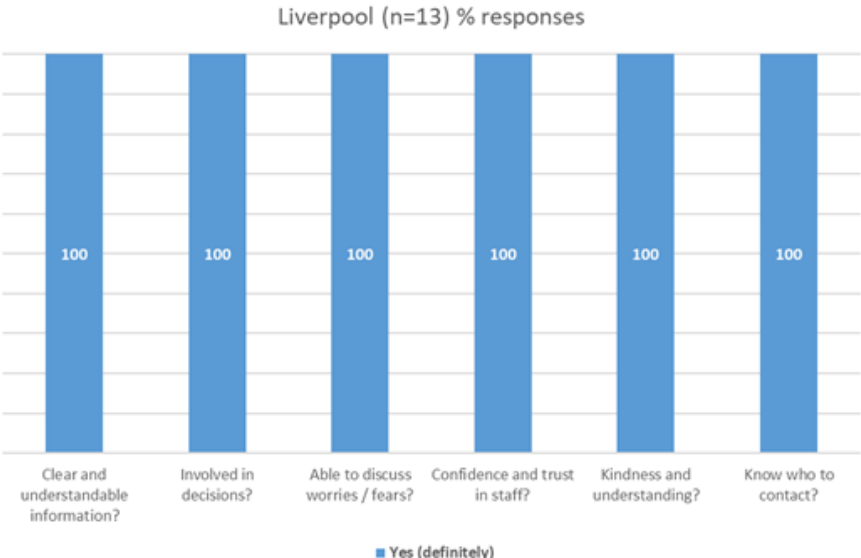
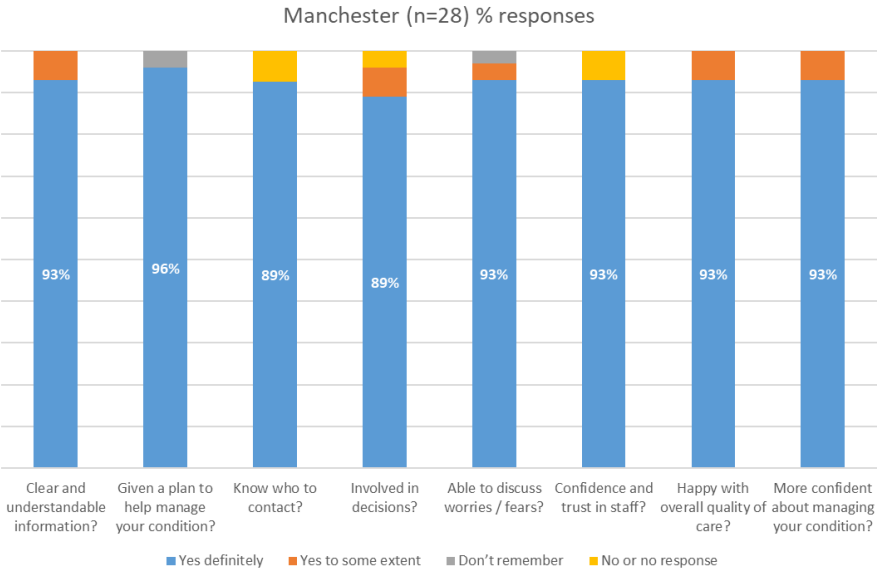


6.6 Patient experience of OPTIMISE reviews

Across the nine sites, at least 681 patients shared feedback. The results cannot be synthesised because the requests were made in different formats in different sites. However as Figure 25 shows, the feedback was positive, with just a small number of improvement suggestions.

- Positive feedback**
- Good quality communication and involvement
 - High level of trust in the staff: kind, knowledgeable, professional
 - The well-coordinated multidisciplinary approach

Figure 21 Patient survey feedback, gathered in four locations



- Improvement ideas**
- Even clearer communication and information
 - Ability to access prescriptions at the same location
 - Even more time to discuss worries and fears

Health Innovation Oxford & Thames Valley's interviews with six patients support these positive findings, and provides a little more nuance. A full analysis is available in the appendix. These patients reported that the experience of the OPTIMISE review is varied. This partly reflects the different delivery models, but there may also be some inconsistencies in delivery (e.g. not all patients had inhaler technique checked, and not all patients remembered being given information).

However, in line with survey data, there is very consistent feedback regarding the positive attitude and expertise of staff, the extent to which patients were involved in decisions and the amount of time which was dedicated to the patients in most cases.

"I had a chance to stay! Usually you're in and out... It wasn't rushed. They were actually looking at my problems and trying to sort it out"

"never looked back...when I logged into the app myself I had no problem...there was a lot of information, all the videos, the breathing techniques, all very very useful"

One patient noted significant benefits arising from being supported to download the myAsthma / my COPD app

Several patients felt the review was timely, and an improvement on other experiences – there were several examples of the review successfully dealing with long-standing health problems which other health professionals had been struggling to address. For example, one patient had been discharged from hospital with inhaler equipment that was unsuitable (and therefore not working). Others noted benefits from improved advice on inhaler techniques, self-management advice and referrals to pulmonary rehabilitation.

Not all patients observed an improvement in their health with one patient expressing frustration at the limited options for their condition

"It's life limiting. I've been told what to do in case of an attack...when you are gasping for breath you just don't know what to do, you panic. Every morning I dread waking up because I'm so breathless. The support and advice is not making any difference"

However on balance, patients felt the review had improved their health, with one exceptionally positive piece of feedback:

"I've told so many people...it is just the most brilliant thing that has ever happened in terms of my health...it wasn't just seeing somebody, because I've done that plenty of times over the years, it's actually seeing this team and the resultant advice and help...when I went to see my doctor the last time he couldn't believe it. He said 'have you had a lung transplant?'"

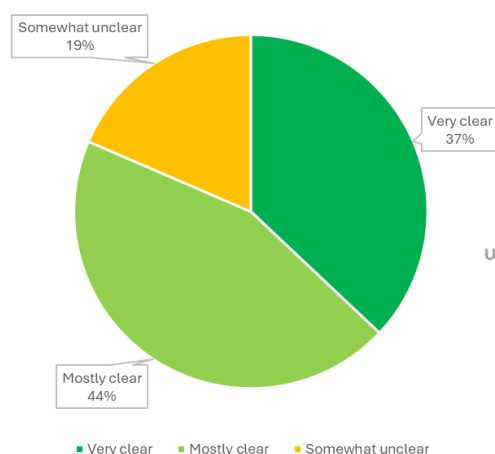
6.7 Workforce experience and system partner insights

Confidence and clarity

The workforce survey (n=88) finds that 88% of those delivering OPTIMISE reviews are confident about this work. However, when responses are broken down by clinician type (Respiratory Nurse, GP, 'other') it's clear that GPs and 'Other' health care professionals need more clarity / support.

Figure 22 Delivering the OPTIMISE review – clarity and feeling equipped: 'Other' roles (n=27)

When you first began delivering OPTIMISE reviews, how clear were the steps involved in the review process?



When you first began delivering OPTIMISE reviews, how equipped did you feel with the following?

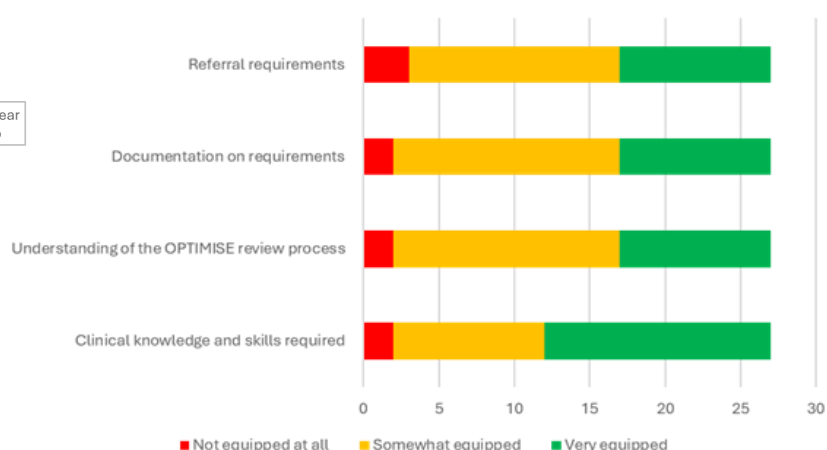
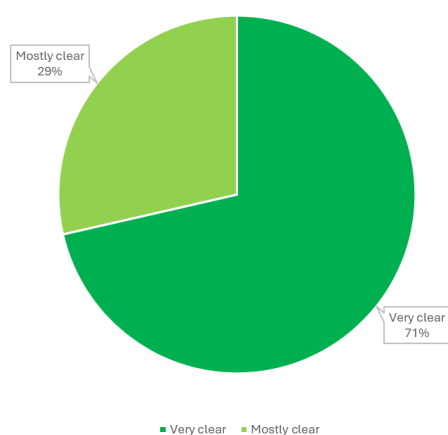


Figure 23 Delivering the OPTIMISE review – clarity and feeling equipped: Respiratory nurse specialists (n=7)

When you first began delivering OPTIMISE reviews, how clear were the steps involved in the review process?



When you first began delivering OPTIMISE reviews, how equipped did you feel with the following?

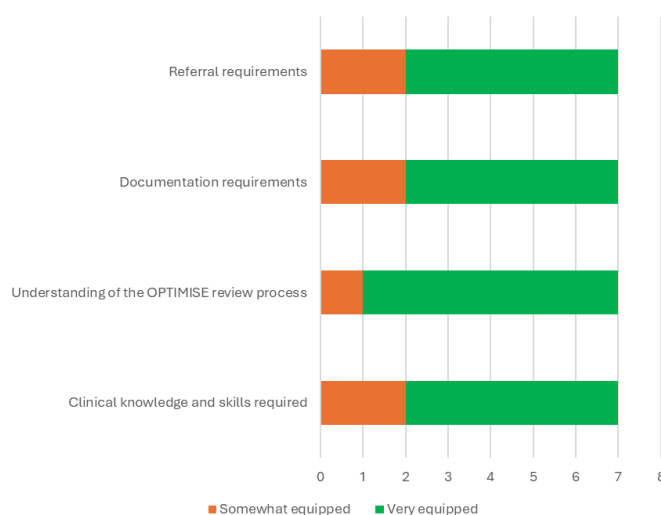
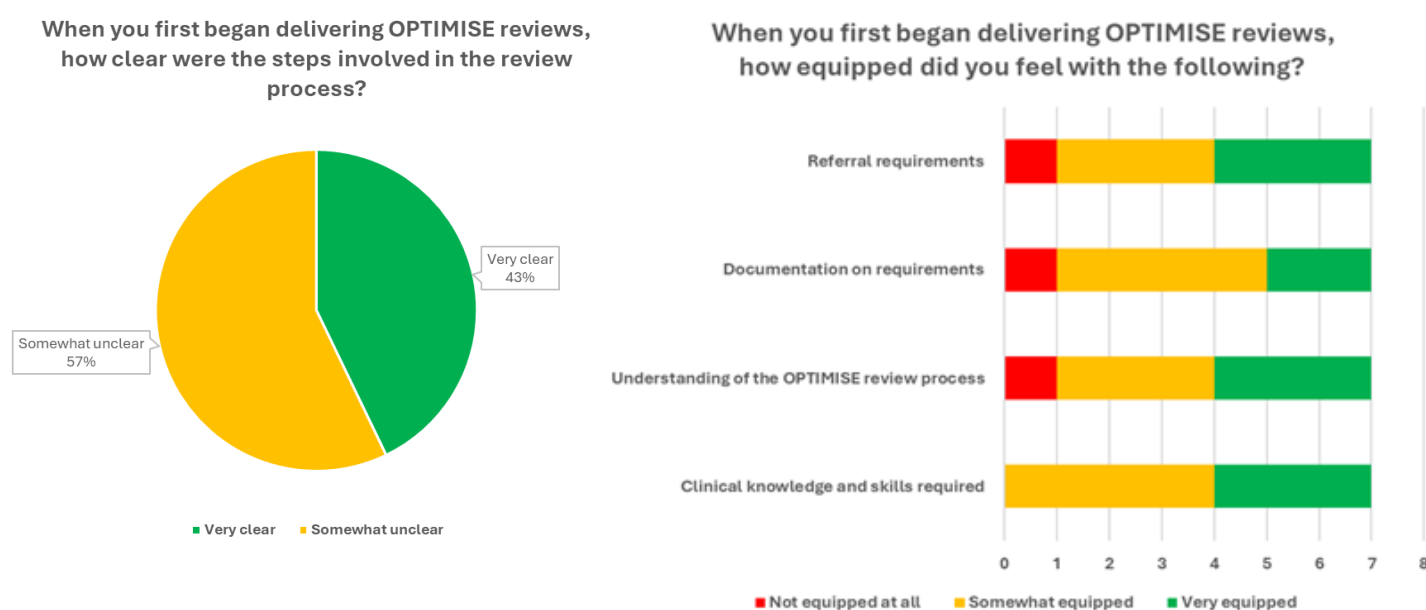
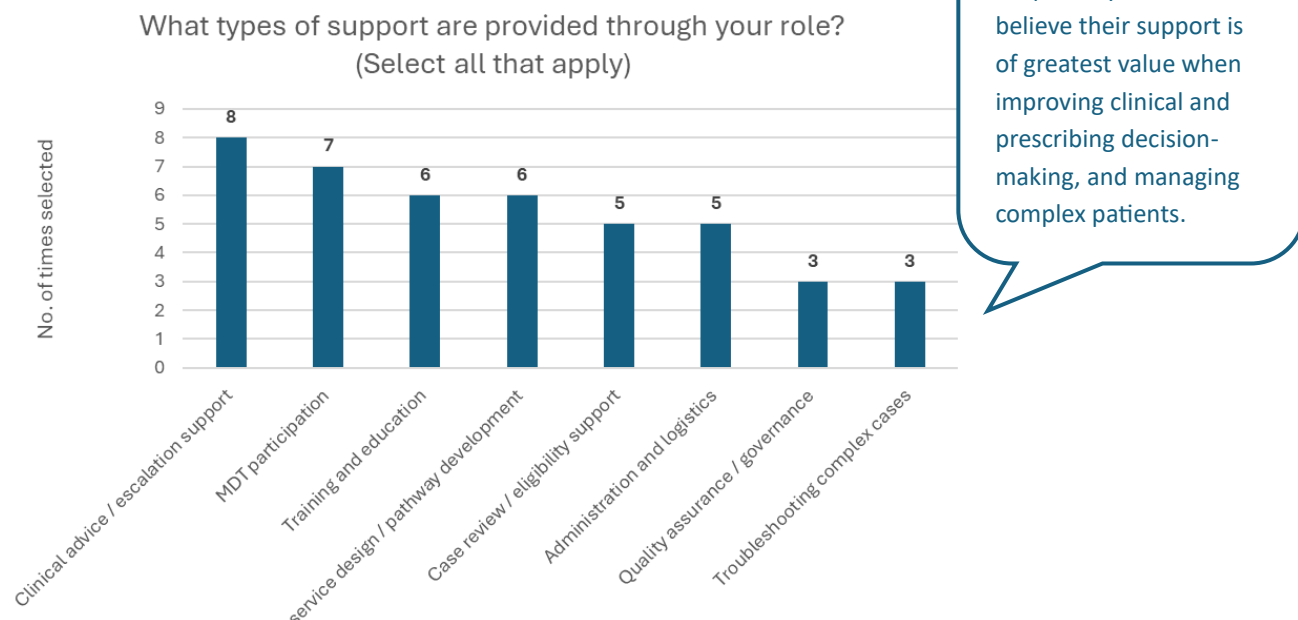


Figure 24 Delivering the OPTIMISE review – clarity and feeling equipped: General practitioners (n=7)



All ten respiratory nurse specialists (RNS) who responded to the survey explained that their role was clear within the OPTIMISE pathway and 90% agreed that their colleagues understood their role. As Figure 25 shows, RNSs are offering colleagues a range of support.

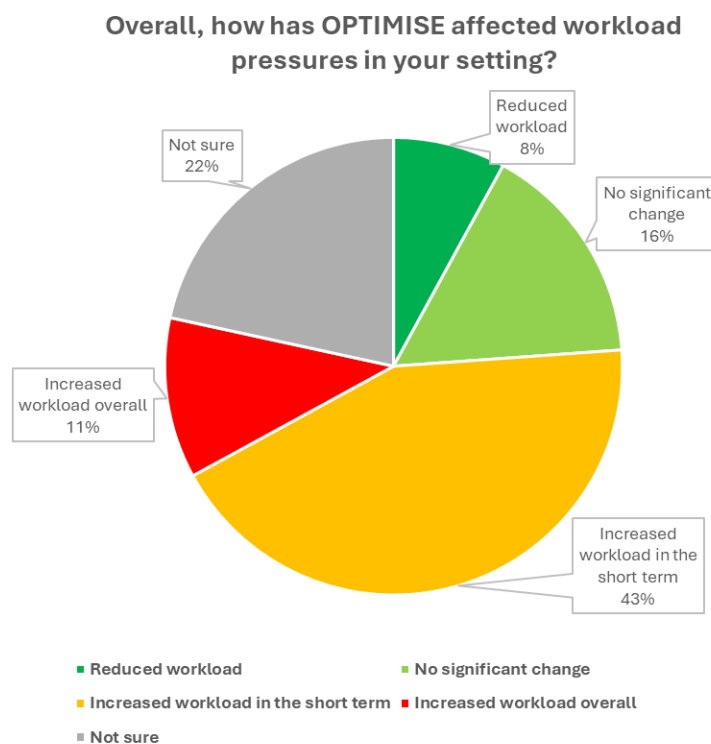
Figure 25 Types of support which respiratory nurse specialists provide (n=10)



Barriers

It's clear that time / resourcing has been a significant barrier for the project's progress (Figure 26).

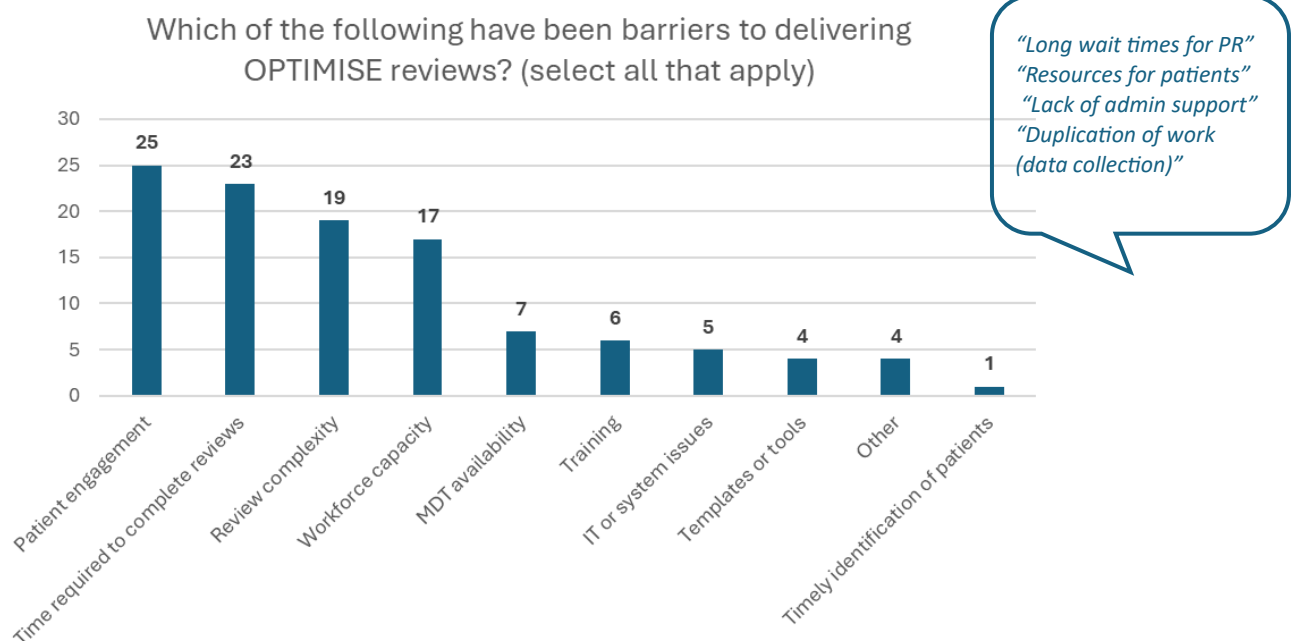
Figure 26 Workforce views on OPTIMISE and workload pressures (n=88)



Qualitative monthly feedback across all sites echoes this finding. It highlights the significant capacity challenges (both administrative and clinical) which the OPTIMISE review creates.

Patient engagement is also a consistent challenge, as is the complexity of reviews.

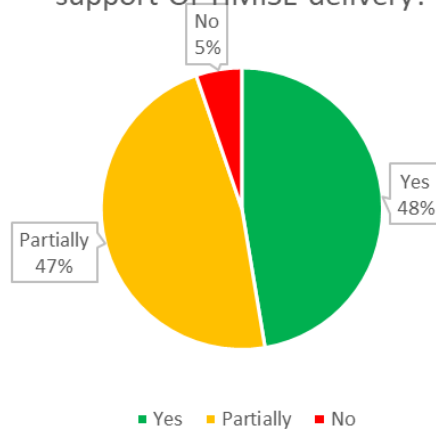
Figure 27 Barriers to delivering OPTIMISE review (all respondents who are delivering reviews n=41)



In addition, GPs responding to the workforce survey had mixed views about the extent to which primary care is currently equipped to support OPTIMISE delivery:

Figure 28 GP views on primary care readiness to support OPTIMISE (n=19)

Do you feel primary care is currently equipped to support OPTIMISE delivery?



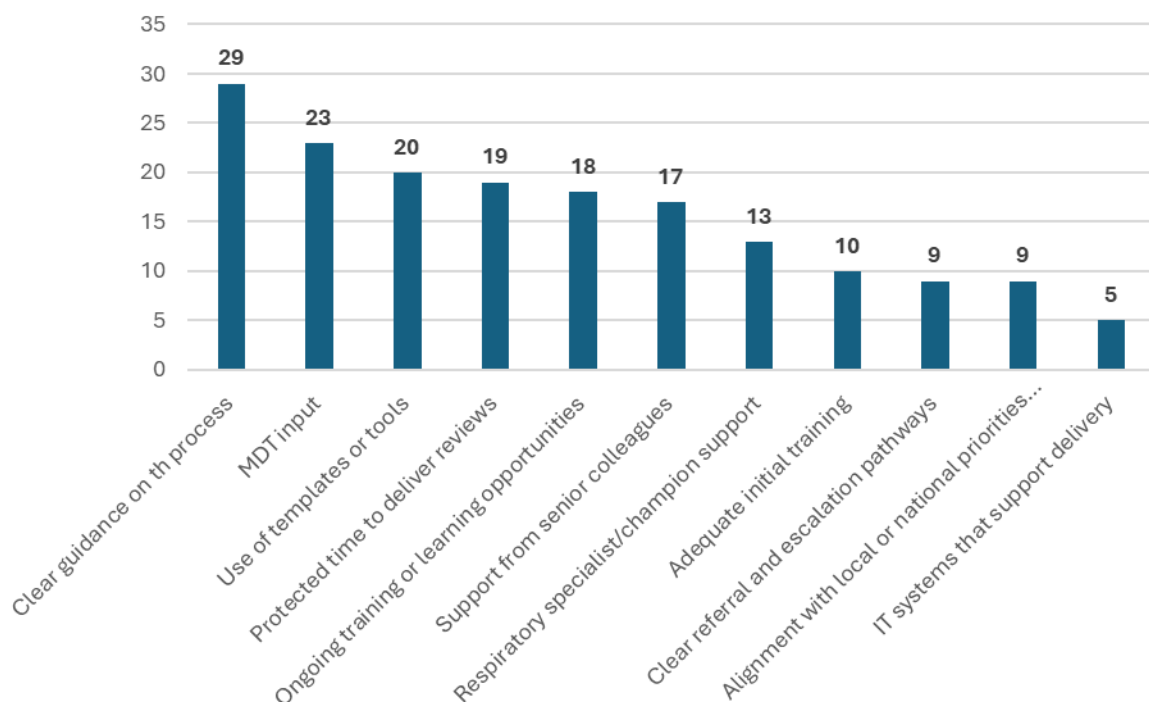
Qualitative monthly feedback from the sites highlights the importance of effective engagement with primary care and their critical role in (for example) MDTs and project governance.

Opportunities

Respondents highlight a range of issues which enable OPTIMISE reviews to work effectively, with clear guidance on the process being the most important.

Figure 29 Enablers to delivering OPTIMISE review (all respondents who are delivering reviews n=41)

Which of the following have enabled effective delivery of OPTIMISE reviews in your setting? (select at most 5 options)



When asked to highlight improvements which would enhance the ability to deliver OPTIMISE reviews, a number of highly practical points were suggested, building on the barriers and enablers highlighted above.

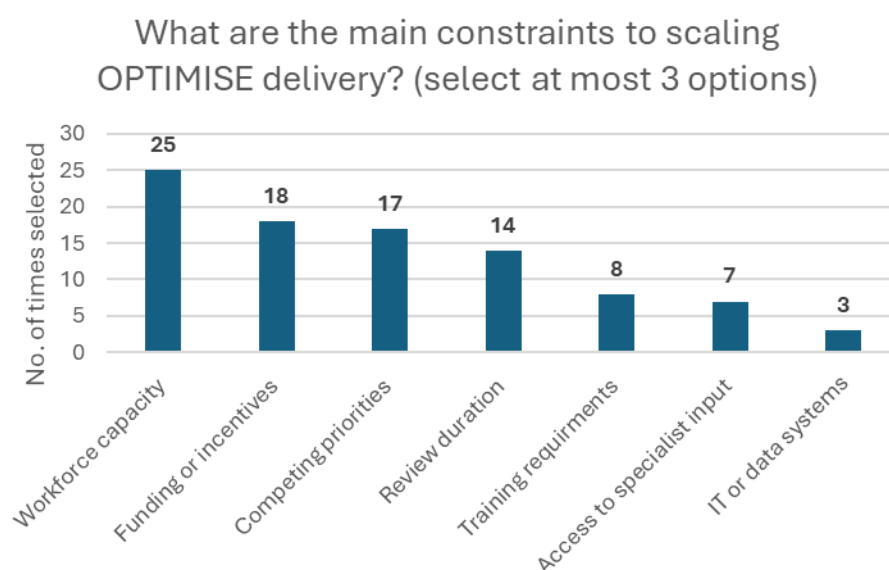
Figure 30 Enablers

What changes, resources or additional support would improve your ability to deliver OPTIMISE reviews?	
Time / capacity	• Funding to allow more time for planning, delivery and to spend time with patients (especially complex patients). • Additional staff. • Consider delivering during the quieter summer period.
Data, coding and templates	• Clearer forms to use when reviewing patients. • More coding options • Using QRisk2 to 'screen' • Access to IT systems • Administration support • Initial training on completing the template
Patient engagement	• Greater patient engagement • Care Co-ordinator support for directly contacting patients rather than relying on bulk SMS messages which are not effective
Support for patients	• Educational resources on COPD to give at point of diagnosis • More specialist nurses in the community to support reviews (post exacerbation and hospital admission) and reviews with harder-to-reach and housebound patients
MDT	• Protected time for MDT • Clarity on MDT referral criteria
Training	• More colleagues trained to do respiratory and OPTIMISE reviews • Shadowing complex COPD and asthma clinics.

Sustainability and scaling

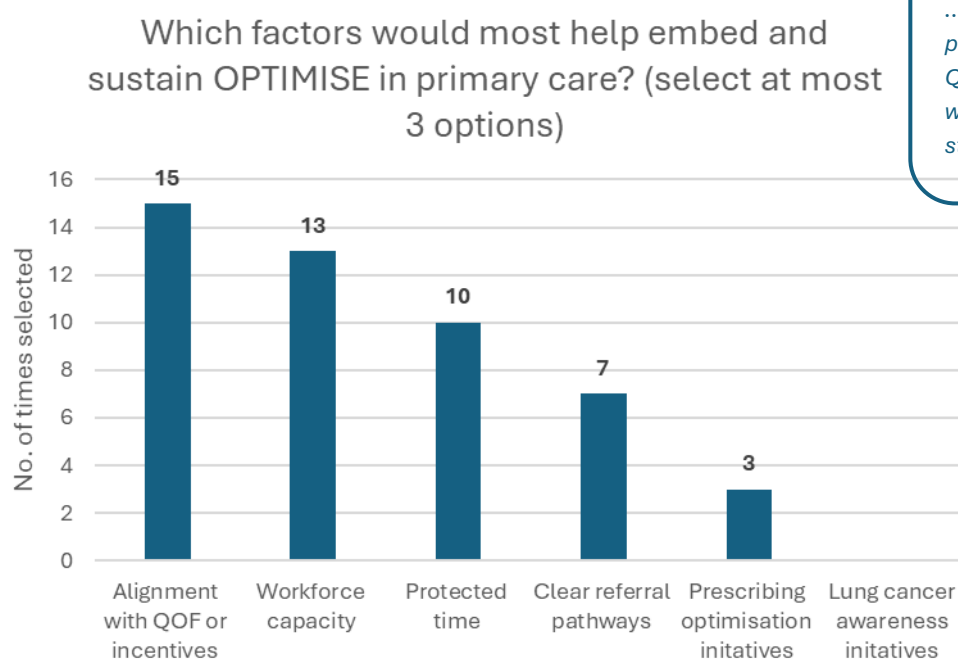
Resource constraints are repeated in responses regarding the feasibility of scaling OPTIMISE. More than 80% of respondents to the workforce survey felt that it would be feasible to deliver at scale, but they highlight a number of resource-related challenges (Figure 31 to Figure 34) among the constraints to scaling.

Figure 31 Constraints to scaling OPTIMISE – all workforce survey respondents (n=88)



Qualitative monthly feedback from a small number of sites highlights concern about project sustainability and on-going staffing. They recommend embedding the work as 'business as usual' as soon as possible.

Figure 32 GP views on how to embed and sustain OPTIMISE in primary care (n=19)



"The timing of current project ...overlaps with busy Winter period and the busy period sorting QOF before April. The project would work much better if it could start soon after April"

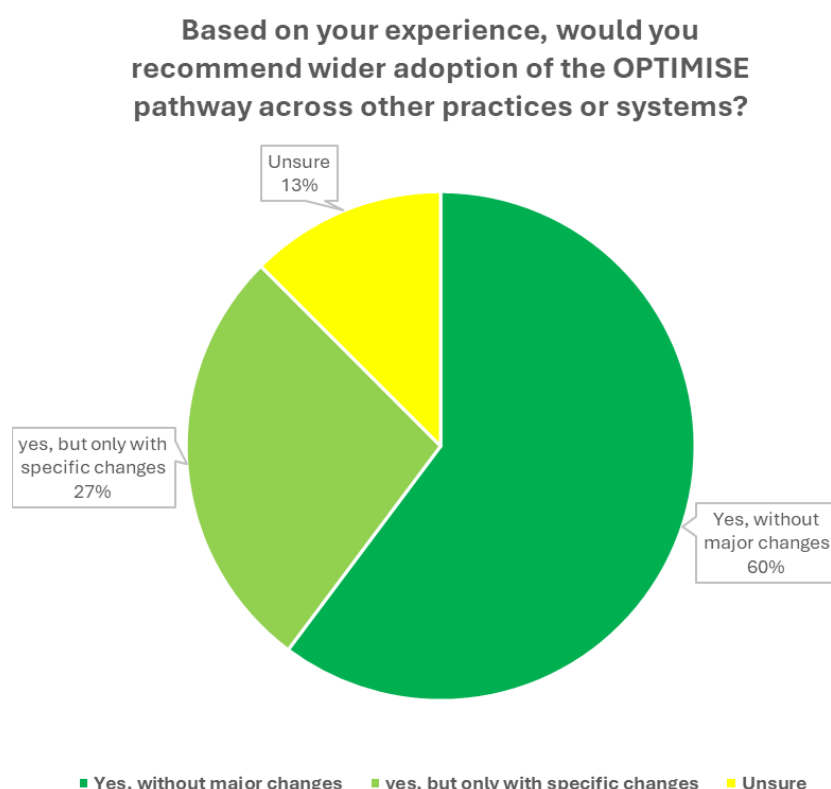
Respondents offer a number of improvement ideas to enable OPTIMISE to be sustained and delivered at scale. There is a clear focus on improved co-ordination with clinical teams and the need for dedicated expert spirometry and FeNO testing.

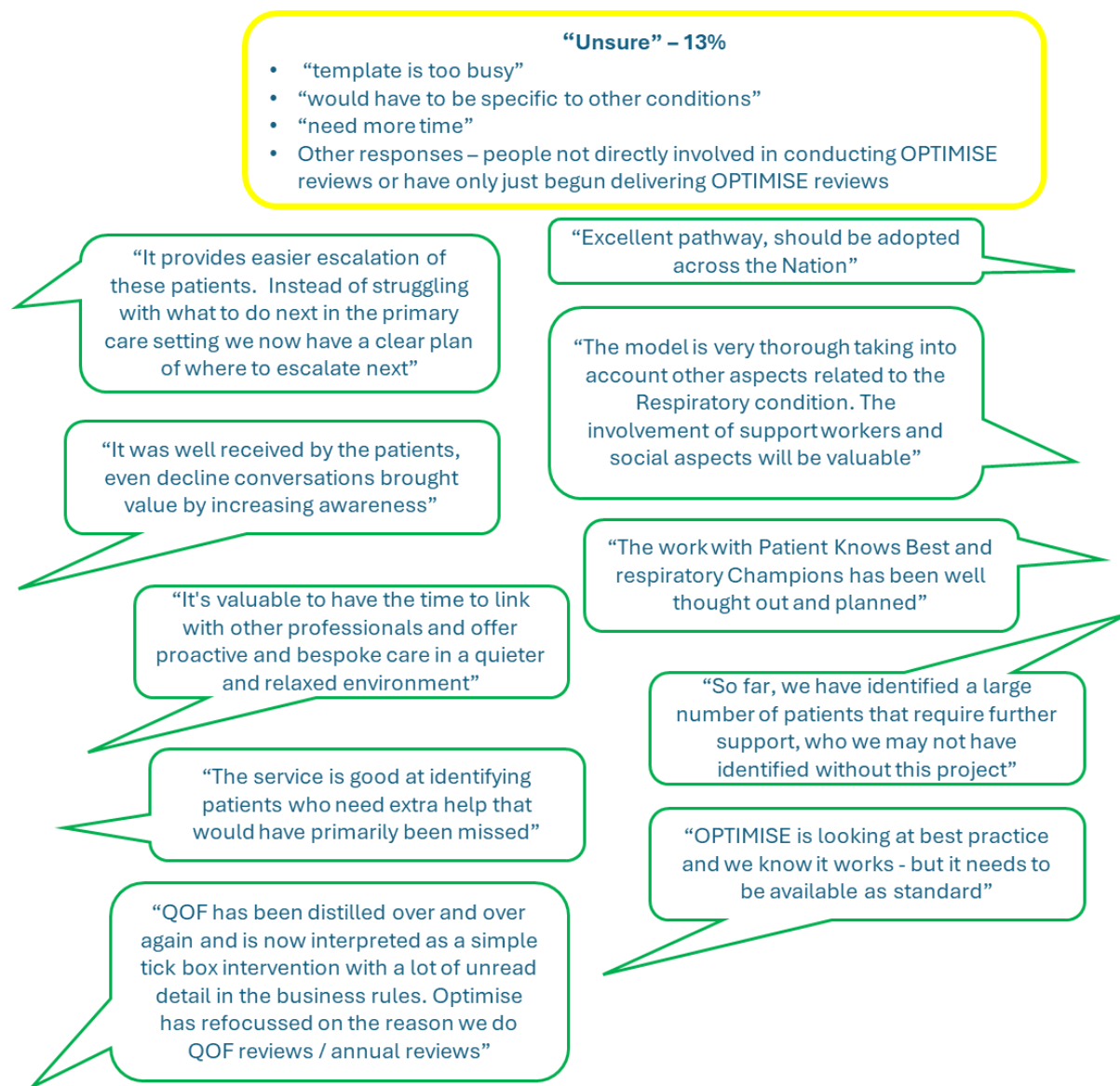
Figure 33 Scaling and sustainability

What would need to change for OPTIMISE to be sustainably delivered at scale?	
Resources	Funding. Improving clinical capacity. More time to conduct reviews. Practice management to support clinic times for reviews. Improved staffing levels • Respiratory nurses • Administrative staff to perform triage phone calls rather than clinical staff • More staff trained to conduct OPTIMISE reviews • More GPs with respiratory interest / expertise
Training	Funding for staff development. Training. Clearer pathways and protocols
Accessibility, information & engagement	Rotating dates for one-stop clinic days. Raising awareness in target sessions. Better resources for patients. Improving patient engagement.
Collaboration	Getting primary care onboard. More Champions in the area. Group discussions and MDT support. Making reviews part of the primary care expectation. Getting patients booked in for investigations quickly.

Overall, respondents to the workforce survey are keen for OPTIMISE to be adopted more widely (Figure 34). Those who expressed uncertainty highlighted concerns about the template which is currently used (the template is 'too busy' see also Figure 30 for more feedback on the template), the need to consider other conditions too, and the need for more time to deliver effectively.

Figure 34 Recommendation regarding the wider adoption of OPTIMISE (n=88)





6.8 Equity analysis and variation

Respondents to the workforce survey are clear that patient engagement is a barrier to the success of OPTIMISE reviews. They indicate that the following types of patients are less likely to engage with OPTIMISE reviews.

Which patient groups are less likely to engage with OPTIMISE reviews?

- Rural areas with poor transport links
- Lower socio-economic background
- Younger patients
 - Young males
- Patients of working age if appointments are booked during the week
- Patients already being seen by local respiratory teams
- Housebound patients
 - Housebound elderly
- Palliative patients
- People with language barriers
- People with additional needs
- People with mental health issues
- People who are homeless
- People with drug & alcohol issues
- People who smoke
- Patients with lower technology literacy
- People from poorer health education backgrounds
- Patients with COPD
- People living in areas of high deprivation
- Older patients
 - 65+

They also have clear views on the alterations which might enable greater engagement.

What changes to service design or engagement would improve uptake and reduce DNAs?

- Improving staffing so that they can provide appointment times which suit patients
 - Including home visits
 - Weekend and evening clinics
 - Involvement of care navigators and District nurses
- Contacting patient through phone calls and providing plenty of SMS reminders
 - Telephone contact day before the appointment
- Engage with VCSE
- Sending a letter with accessible language explaining the resources available and the aim of the day (for one-stop clinics)
- Using multiple types of communication & advertisement e.g. community centres and youth clubs
- Raising awareness on the impact of missed appointments
- Using less technology i.e. not needing a text reply
- Running one-stop clinic days where additional services are also offered
- Public health and use of local groups messaging around COPD
- More HUB/community-based delivery of care
- Dedicated care-coordinators whose role is to exclusively to support respiratory management

7. Integrated Analysis and Interpretation

7.1 What can we reasonably infer at this stage?

Drawing together the available evidence at this interim reporting stage, we can begin to draw conclusions regarding the key evaluation questions, as well as the ingredients which hinder or enable progress.

Figure 35 What are the factors that contribute to success?

Workforce (Sections 5.6, 6.5, 6.7)

- There is clear evidence that the workforce is confident and clear in its work. They deliver these services with kindness, knowledge, professionalism and in a way which ensures patients feel unhurried, confident and involved.
- Training, templates, tools & guidance have been highly valued and have increased people's confidence and ability to deliver the services.

Partnership working (Sections 5.6, 6.5, 6.7):

- Where collaboration with the voluntary sector works well, it is valued in improving patient engagement.
- Where MDTs are working well, which includes the involvement of specialists, they are seen to be a major benefit to the work.

Equity considerations (Section 5.7):

Whilst the data is not always consistent, and is not matched against population baselines, there is evidence that the Early & Accurate Diagnosis work is reaching a diverse range of people.

Patient satisfaction (Section 6.6):

Patient satisfaction is consistently positive, with some patients being able to articulate notable health improvements which they attribute to the OPTIMISE review.

Figure 36 What are the factors that create challenges?

Data (Section 5.3, 5.7, 6.7):

Challenges with data is a consistent theme. This includes difficulties in (a) accessing data and the significant amount of time this absorbs (b) the inconsistency of coding within primary care (c) the need for consistent coding of patients taking part in OPTIMISE reviews to enable more effective monitoring of their outcomes post-review (d) the ability to consistently capture key metrics to inform our understanding of the work.

Capacity and resourcing (Section 5.6, 6.7):

It's clear that the project has absorbed more staff capacity than was anticipated and that this has hindered the project's ability to deliver more substantial results.

Standardising the OPTIMISE process (Section 6.3, 6.4, 6.6)

It would be useful to explore options for increased streamlining of the service as well as creating a standardised model which builds on the more promising elements of the varied implementation approaches.

Patient engagement and support for patients (Section 5.4, 5.5, 5.7, 6.6, 6.7)

An increased focus on creative engagement approaches, including collaboration with the voluntary sector is likely to improve patient engagement, reduce DNAs and increase the diversity of patients who attend. A greater focus on ensuring that understandable advice and information is shared consistently with patients may also be valuable.

Figure 37 SUMMARY - What can we infer about Early & Accurate Diagnosis?

Theme & key evaluation question	What can we infer at this stage?
Timeliness: Has timeliness improved? - Are patients waiting less time from referral to diagnostic test? - Are patients waiting less time from diagnostic test to confirmed diagnosis?	- There is limited data regarding waiting times (although Mid Yorks consortia showed a reduction in the waiting time for spirometry tests). Most patients reported no concerns about waiting times. (Section 5.5) - Among those referred, 55% of received a spirometry test and 40% received a FeNO test during the lifetime of the project. (Figure 4).
Quality & Outcomes - Are DNA and cancellation rates reducing over time? - Are more COPD and asthma diagnoses being confirmed?	- DNA rates fluctuated throughout the project, influenced by seasonable changes and variations between sites. It is difficult to draw clear conclusions about DNA reductions due to limited baseline data. There is some evidence that DNAs decrease with phone calls from a trusted connector prior to appointment. (Figure 4). - There has been a notable increase in diagnoses from November onwards perhaps representing a lag in diagnostic test to diagnosis made in GP records. (Figure 5).
Equity How are different population groups accessing diagnostic services?	Demographic data proved difficult to collect consistently: results must be treated with care. (Figure 10). Gender: 54% of those identified were female and 45% were male. The detail for each site varies. Ethnicity: Reassuringly, those areas which have higher levels of diversity have more diverse ethnicities represented among the patients supported. Age: All age ranges are represented. Mid to older age bands (40+) occur most commonly. Deprivation: The data suggests EAD is successful at identifying and diagnosing people in areas of high deprivation.
Patient experience What are patient experiences of accessing diagnostics?	A very positive experience Section 5.5: Staff are well-regarded, a high proportion of patients would recommend the service to others. Improvements focused on facilities and accessibility. A small number of patients also commented on waiting times and confusion about the diagnosis.
Workforce experience What are staff experiences of delivering diagnostics?	A mixed experience (Section 5.6): Staff very much valued the training and easier access to equipment. However, the lack of time and resources was a major barrier for staff, with project data challenges being a significant contributory factor.

Figure 38 SUMMARY – What can we infer about Risk Stratification and Optimisation?

Theme & key evaluation question	What can we infer at this stage?
Patient identification and engagement - What proportion of rising-risk patients complete an OPTIMISE review? - Which patients do not complete an OPTIMISE review, and what are the perceived reasons for non-attendance? - What support or engagement strategies are associated with increased uptake of OPTIMISE reviews?	- Between Oct 25 and Mar 26, 29% of patients whose notes suggested they were suitable received a review .(Figure 12 and Figure 13). This metric showed significant variation between sites (from 18% to 70%). - Detailed data regarding non-attendance is currently not available, however staff report it to be a problem. Key issues: (i) <i>persuading people to attend a review when they don't feel unwell</i> and (ii) <i>wider determinants of health</i>. - Working with Care Navigators, running Saturday events ,the voluntary sector, local authorities and taking creative approaches (e.g. referrals from Citizen's Advice Bureau) appear to be useful strategies in encouraging engagement.
Patient experience - What is the patient experience of OPTIMISE? - What is the impact of OPTIMISE on self-management?	Very positive feedback - Patients value the quality of communication & involvement, the staff team (kind, knowledgeable, professional), and the well-coordinated multi-disciplinary approach. - Some people explained that they felt more confident in managing their condition. - Improvements should focus on even clearer communication and information, ease of access, and ensuring sufficient time to discuss issues.
Workforce experience What are staff experiences of delivering OPTIMISE?	A mixed experience - Staff largely report feeling clear, confident and well-equipped in their work. (Figure 22 - Figure 25 and Figure 28). - However, they report significant challenges with time and capacity to deliver. (Figure 26, Figure 27, Figure 31) - They are generally optimistic about the work and what it can achieve (Figure 20 Figure 34), but recommend a number of improvements. (Figure 29 - Figure 33).¹⁸
Equity: Are inequalities in COPD care reduced?	<i>Initial data is available from one consortia (Humber) which shows improvements in prescribing rates, and Patient Reported Outcome Measures. We anticipate addressing these questions in more detail when further data is available (Final Report - Dec 2026).</i>
Clinical value: What clinical value does OPTIMISE provide? Does OPTIMISE improve prescribing quality?	
Outcomes / system impact: Does OPTIMISE reduce avoidable healthcare utilisation? Does OPTIMISE improve disease stability and reduce acute burden?	

¹⁸ These will be explored in section 7.2

7.2 Where delivery or impact is variable

The evidence highlights a number of areas where delivery is variable, providing opportunity to investigate the differences and implement improvement. The most notable areas of difference are as follows:

- The length of time required to launch the work
- The number of patients supported
- The level of DNAs
- The proportion of referred patients who access diagnostics and OPTIMISE reviews
- The approach to identifying patients
- The content and length of the OPTIMISE review
- The delivery mechanism (i.e. one-stop clinic vs standard appointment)
- The extent to which voluntary sector partners are involved
- The extent of reliance on MDTs

Five sites (Humber Liverpool, Manchester, Mid Yorks and Southampton) appear to have advanced plans for sustaining at least part of the EAD / OPTIMISE programme. Other sites are actively exploring options and presenting evidence to try to ensure this approach is adopted to business as usual activities.

8. Conclusions & Recommendations

8.1 Emerging conclusions

Based on the available evidence, a number of emerging conclusions can be drawn:

- The programme appears to have had a **positive impact on the availability of spirometry and FeNO services**, contributing to an increase in the number of diagnostic tests conducted and diagnoses delivered. In some areas, we have evidence of reduced waiting times (Mid Yorkshire)
- The programme has **reached a wide set of demographics**. We can be confident that the programme is accessible to people living in the areas of highest deprivation, and to people of all ages. More women than men access the services which is promising as evidence suggests that women may be under-diagnosed.^{19 20 21} A wide range of

¹⁹ McLean, S., Hoogendoorn, M., Hoogenveen, R. *et al.* Projecting the COPD population and costs in England and Scotland: 2011 to 2030. *Sci Rep* 6, 31893 (2016).

²⁰ Calverley PMA, Walker PP. Contemporary Concise Review 2022: Chronic obstructive pulmonary disease. *Respirology*. 2023 May;28(5):428-436. doi: 10.1111/resp.14489. Epub 2023 Mar 15. PMID: 36922031.

²¹ Perez TA, Castillo EG, Ancochea J, Pastor Sanz MT, Almagro P, Martínez-Cambor P, Miravittles M, Rodríguez-Carballeira M, Navarro A, Lamprecht B, Ramírez-García Luna AS, Kaiser B, Alfageme I, Casanova C, Esteban C, Soler-Cataluña JJ, De-Torres JP, Celli BR, Marin JM, Lopez-Campos JL, Riet GT, Sobradillo P, Lange P, Garcia-Aymerich J, Anto JM, Turner AM, Han MK, Langhammer A, Sternberg A, Leivseth L, Bakke P, Johannessen A, Oga T, Cosío B, Echazarreta A, Roche N, Burgel PR, Sin DD, Puhan MA, Soriano JB. Sex differences between women and men with COPD: A new analysis of the 3CIA study. *Respir Med*. 2020 Sep;171:106105. doi: 10.1016/j.rmed.2020.106105. Epub 2020 Aug 13. PMID: 32858497.

ethnicities are represented in those locations where diversity is known to be higher (e.g. Merton, NW London, Manchester).

- **Patient feedback** suggests the programme is **highly valued** and largely delivered in a way which meets their needs.
- **Workforce** feedback suggests that people **see potential** in the approach and are **motivated** by the opportunity to work collaboratively and access training. However finding the **capacity to deliver everything that is required has been extremely challenging** suggesting that the time given to delivery of OPTIMISE reviews within some projects was set too low and primary care will need to lengthen the review times.
- Where it works well, **integrated neighbourhood partnership working involving specialists has been key**. Multi-disciplinary teams appear to be an important part of the process. Specialist support and collaboration with the voluntary, community sector and Local authorities has been key to reaching those groups who might not traditionally engage and addressing barriers created by the wider determinants of health.
- **Not all reviews are delivered consistently**, and outputs vary by site (for example, there is a wide variety in DNAs across the nine sites, ranging from 1% in Sherwood to 33% in Manchester). This needs to be understood further.
- There is **limited evidence regarding effective approaches to reducing DNAs**. More work is required to ensure all individuals are able to access a diagnosis.
- **Data has been a critical challenge**. This manifests in a number of ways: IG challenges in data sharing with inability to access primary care data; poor quality of coding in primary care records; challenges in recording results and capturing monitoring data effectively. The workforce report that these challenges have been the most difficult part of the programme and taken up a large amount of time.
- Five sites (Humber Liverpool, Manchester, Mid Yorks and Southampton) appear to have **advanced plans for sustaining at least part of the EAD / OPTIMISE programme**. Other sites are actively exploring options and presenting evidence to try to ensure this approach is adopted to business-as-usual activities.
- The evaluation suggests that the **expanding of EAD and OPTIMISE approach has merit** and qualitative feedback suggests there is an expectation that this programme could be **successfully scaled**. Site interviews and outcome data (which we expect to share in December 2026) will provide important triangulation for this finding.

8.2 Emerging recommendations

At this stage, recommendations focus largely on process and learning.

Recommendation One: continue to deliver respiratory diagnostics with similar operating models with linkages to onward pathways of care. Draw on the recommendations below to enhance the approach.

Recommendation Two: Integrated neighbourhood approach

Create a clear framework which is understood and agreed by all key stakeholders. This is likely to include:

- Integration of the respiratory specialist (eg: consultant and specialist nurse) workforce into neighbourhood teams, to support training delivery of EAD, OPTIMISE reviews and MDTs
- Defining and recognising the key role of respiratory champions
- Clear and standardised definition of cohorts for inclusion in EAD and the OPTIMISE approach
- Involvement of the voluntary sector or other connectors to help access those patients who are currently under-served by this approach.
- Consistent use of multi-disciplinary teams, which includes effective triaging of cases for inclusion at consultant-chaired MDT

Recommendation Three: Take steps to understand and standardise variations in the model - ensure that the most effective approaches become business as usual and inform a scaling model.

The evidence highlights some variation between sites in the approaches to delivering EAD and OPTIMISE. These variations include:

- rates of DNA and the underlying issues which drive variation
- rate of delivery
- delivery approach (e.g. one-stop clinics, Super Saturday events, standard clinics)
- approaches to training the workforce
- content of the OPTIMISE review (i.e. some evidence that patient information / care plans and inhaler technique do not always form part of the OPTIMISE review, not always clear that the 5 fundamentals are in place)
- length of the OPTIMISE review (evidence suggest 30 minutes may be optimum)
- variations in the cohorts who are referred for EAD
- approach to training to support the delivery of OPTIMISE reviews (improved competency of workforce)
- PIFU²² not always delivered by an appropriate respiratory specialist team
- Approaches to patient education and self-management information: a constructive approach is likely to include discussion AND follow up information (e.g. leaflets)

²² Patient Initiated Follow Up

Whilst outcome data is not yet available to conclusively comment on the value of different models, further investigation of these differences will be useful. This would ideally explore the difference in cost of delivering a standard annual review compared with an OPTIMISE review. The results should be used to inform our understanding of those elements which are 'core' and essential to good quality delivery, and those elements which can be flexed to meet local requirements.

Recommendation Four: Continue efforts to upskill the workforce and create more capacity.

- Ensure there is greater capacity to focus on delivering EAD (including linkages to local pathways of care) and OPTIMISE reviews. Ensuring capacity for project management and engagement with data is key.
- Training in the use of spirometry and FeNO should be maintained and extended, with other learning opportunities (e.g. lunch and learns, shadowing & specialist-led MDTs) also encouraged. This builds skills and creates a culture of multi-disciplinary neighbourhood working.
- Maintain and extend the use of clinical protocols checklist or templates. They are valued, and support consistency.
- Consider role redesign or greater use of allied health professionals to add capacity at a more modest expense.

Recommendation Five: Improve consistency of data collection and performance monitoring

Not all sites were collecting data equitably, with baseline data being especially sparse. Work with neighbourhoods to ensure a reliable and workable focus on:

- Collecting baseline data (including for example, the number of smokers in the cohort)
- Understand DNAs: exploring demographics and understanding what would improve engagement
- Collecting equity data (and comparing it to local profiles)
- Work with sites to agree a more practical and workable approach to collecting waiting time data

Recommendation Six: Improve equity targeting

Without better equity data, it is difficult to determine the extent to which sites are accessing patients which represent their local populations. However, it's clear that many sites have been very successful in accessing people who live in IMD 1. Encourage a continued focus on equity and intersectionality in targeting people for EAD, learning from those sites which have been more successful. This will include involving the voluntary sector and working with community respiratory teams.

Recommendation Seven: Ensure a strong and early focus on data quality, infrastructure and governance

There is an urgent need to improve the quality of data and enable easier access. Improvement here will influence the ability to deliver many of the recommendations outlined above.

- Resolve information governance (IG) barriers to enable appropriate data sharing across settings
- Improve data quality by standardising coding practices and templates in primary care records
- Simplify and streamline data collection systems to reduce administrative burden on staff
- Ensure clear and consistent coding for the interventions

Appendix One: Workforce survey



Workforce survey
results .pdf

Appendix Two: Summary of monthly qualitative feedback from sites



Summary of
qualitative reporting

Appendix Three: Final reports from each site

Cornwall



PTF%20Final%20Re
port%20Cornw

Manchester



PTF%20Manchester.
pptx

North West London



PTF Final
Report_NorthWestL

Humber



Humber COPD
ProCare Evaluation I

Merton



PTF%20Final%20Re
port%20Merto

Sherwood Forest



PTF%20Final%20Re
port%20-%20S

Liverpool



PTF%20Final%20Re
port%20Guida

Mid Yorks



PTF%20Final%20Re
port%20Mid%2

Southampton



PTF%20Final%20Re
port%20South

Appendix Four: Patient interview analysis



OPTIMISE patient
interviews - findings

Appendix Five: Delivery models for the nine consortia



PTF Consortia -
Delivery Models.pdf

Appendix Six: Logic models which inform the evaluation



PTF Evaluation -
Logic Model.pdf