

Optimising Care for Patients with COPD in Line with Local and National Guidelines through Joint Working in Birmingham and Solihull ICB & Hampshire and Isle of Wight ICB



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BACKGROUND

Birmingham and Solihull (BSOL) Integrated Care Board (ICB) & Hampshire and Isle of Wight (HIOW) ICB participated in separate joint working partnerships with GSK to optimise the management of COPD patients in line with best practice clinical guidelines and national NHS England drivers, and to address the backlog of care following the COVID-19 pandemic. The Core20PLUS5 national framework identifies chronic respiratory disease, including COPD, as one of five key clinical areas to reduce health inequalities.

Inhaler emissions account for approx. 3% of the NHS carbon footprint. The propellant used in metered dose inhalers (MDIs) is responsible for most of these emissions.² Strategies were created by the NHS to reduce carbon emissions from MDIs through encouraging choice of lower carbon inhaler alternatives such as dry powder inhalers (DPIs) or soft mist inhalers (SMIs), where clinically appropriate.³ Openprescribing data for MDI prescribing as a proportion of all inhalers (excluding salbutamol) showed BSOL ICB as 88th percentile⁴ (June 2022) and HIOW ICB as 76th percentile⁵ (August 2022) of ICBs in England.

GP practices across the UK faced significant pressure due to high patient volumes and reduced levels of staff.⁶ Given this national context and the backlog of care, both ICBs identified a need for improvement in assessment of patients living with COPD to reduce symptom burden and to reduce MDI prescribing where clinically appropriate for patients.

Each ICB entered into separate Joint Working arrangements with GSK to conduct these assessments, with a pooling of skills, experience and resources. In both projects, GSK funded Interface Clinical Services, an IQVIA business to deliver the patient reviews. The combined outcomes of both projects are presented here.

AIMS

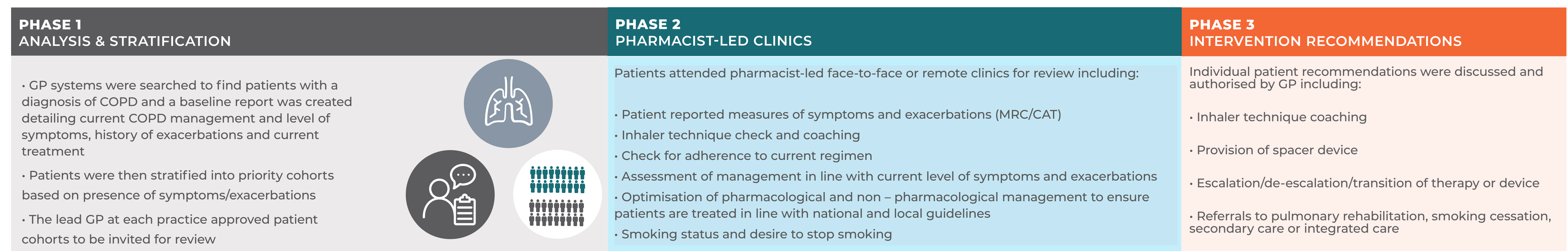
One of the main aims of these projects, was to reduce GP practice burden of long-term COPD management through provision of clinical pharmacist resource.

Additionally, the services aimed to reduce patient's symptom and risk of future exacerbations by:

- Stratifying patients with COPD with respect to their level of symptoms and exacerbations, and providing practices with an overview of their current COPD management.
- Providing pharmacist-led face-to-face or remote COPD clinics for appropriate patients to optimise the pharmacological and non-pharmacological management of their COPD ensuring patients were managed in line with current national and local COPD management guidelines.
- Reviewing inhaler use and aligning patient management to national strategies such as the Investment and Impact Fund 'Help create a more sustainable NHS' enhanced service where clinically appropriate.

METHODOLOGY

These projects were delivered by pharmacists from Interface Clinical Services, an IQVIA business, within 154 practices across 2 ICBs. Combined results are presented here. The reviews were completed in 3 phases:



RESULTS

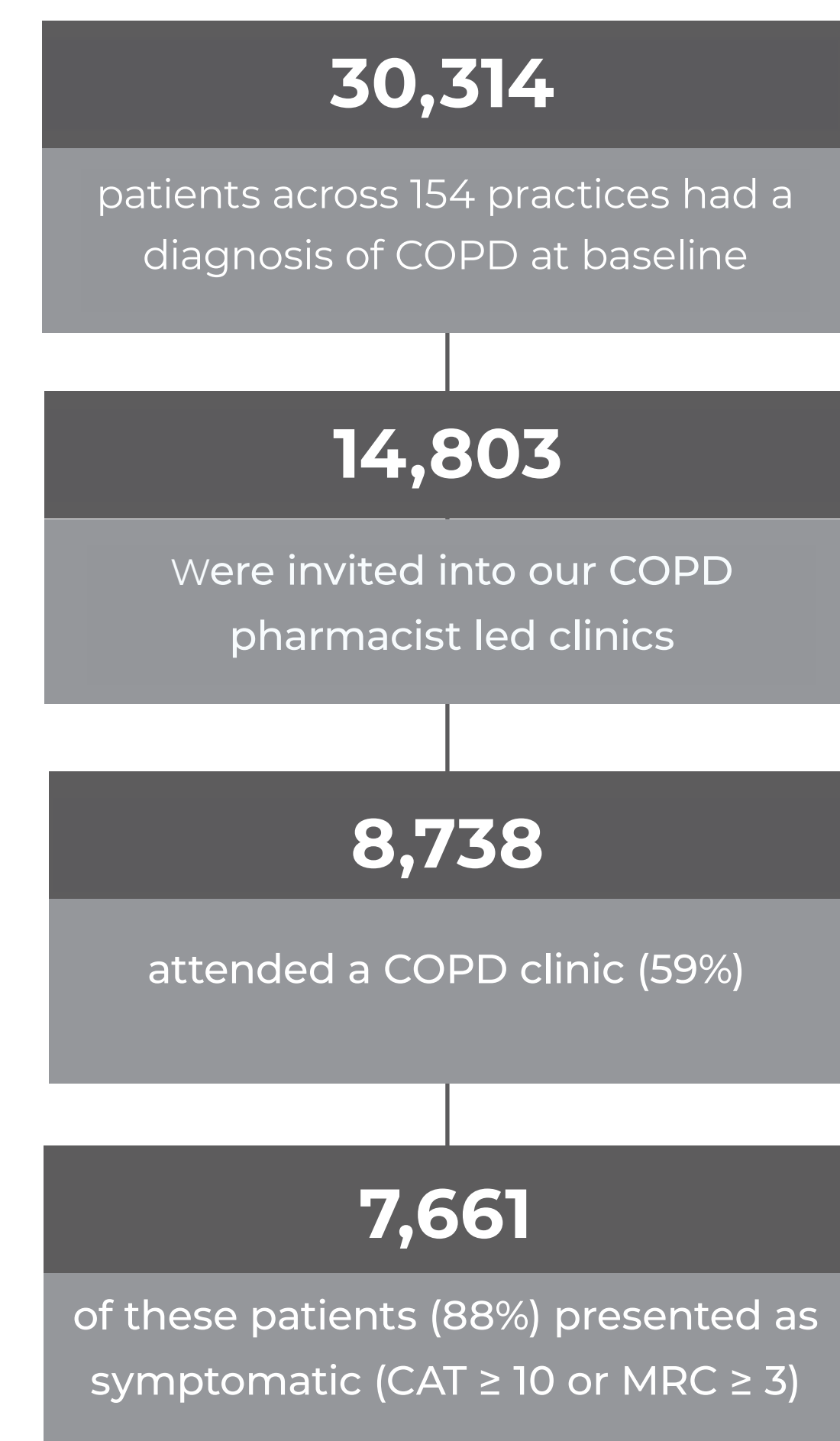


Fig 1. Symptomatic patients seen in clinic (MRC ≥ 3, CAT ≥ 10) Vs non symptomatic patients (MRC 1-2, CAT < 10)

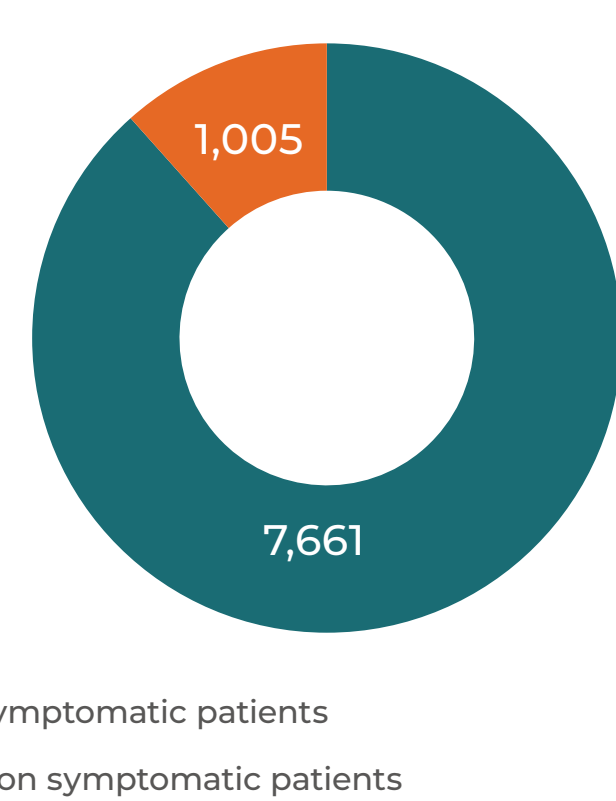


Fig 2. Number of patients with a COPD review in the previous 12 months pre and post clinic

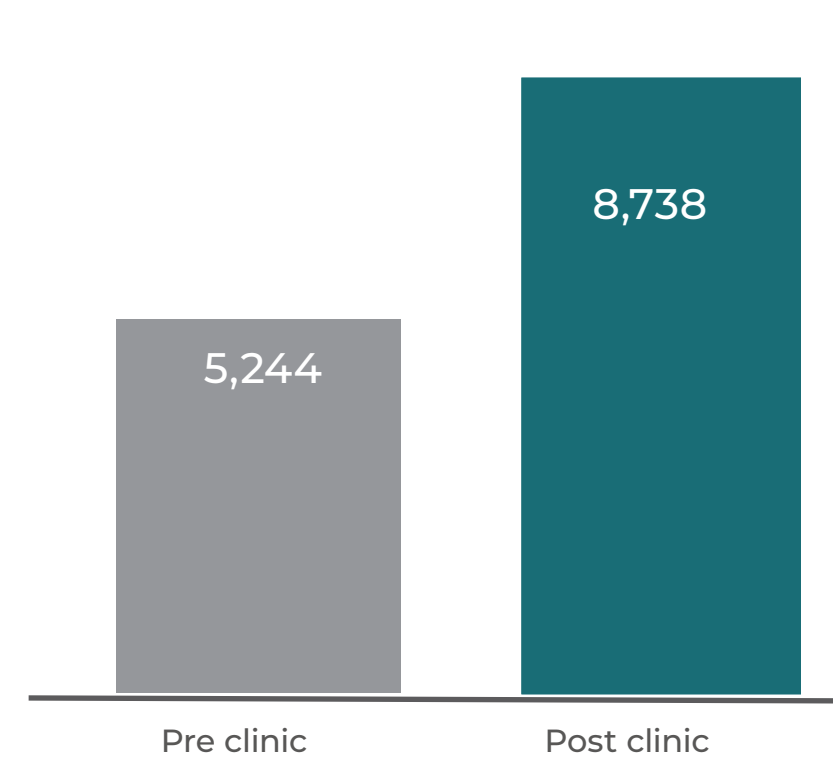


Fig 3. Number of patients with an inhaler technique assessment recorded on the EMR within the previous 12 months pre and post-clinic

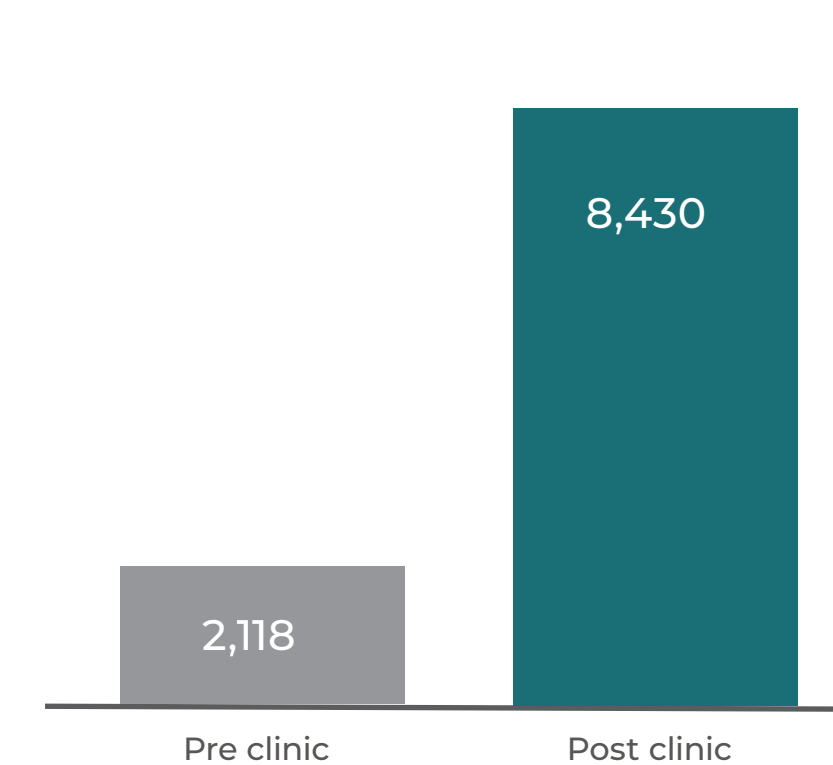


Fig 4. Sustainability impact: comparison of all inhaler device type usage (maintenance and reliever devices) pre vs post clinics

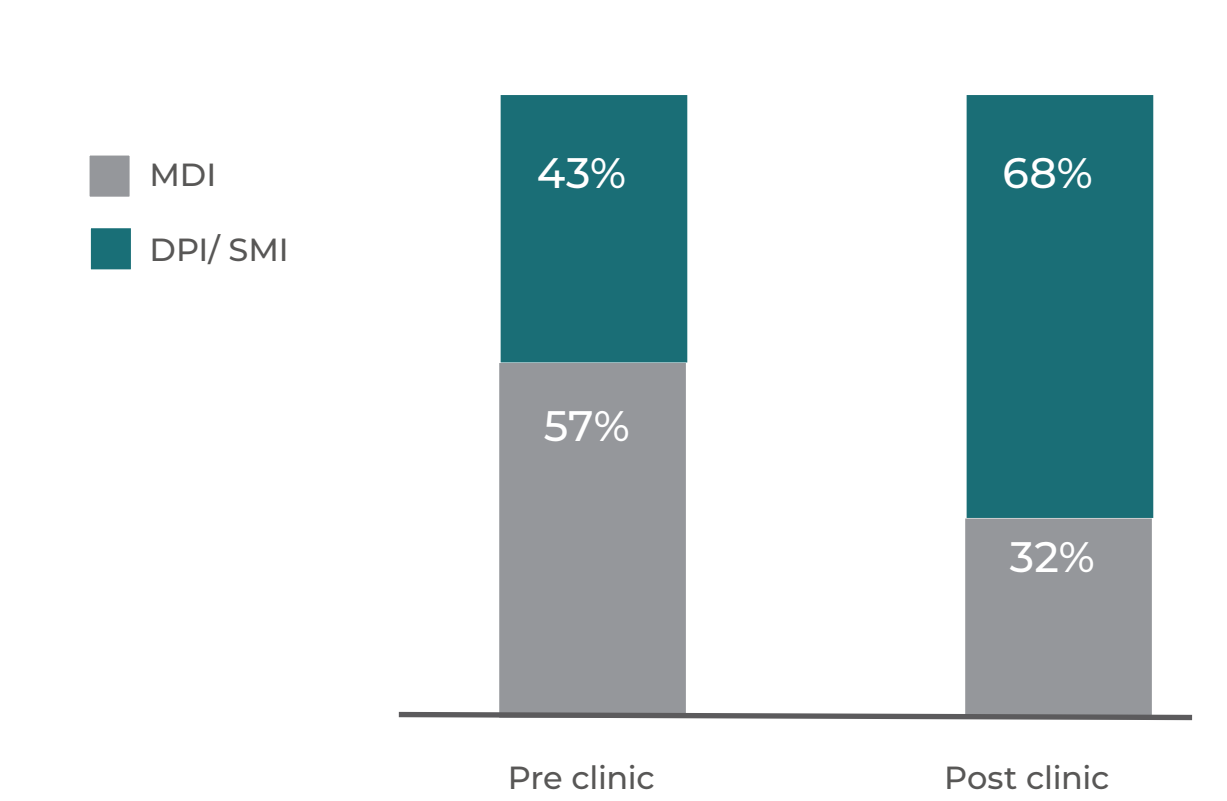


Fig 5. Pharmacological management level post-clinic with respect to type of intervention for patients seen in pharmacist led clinic

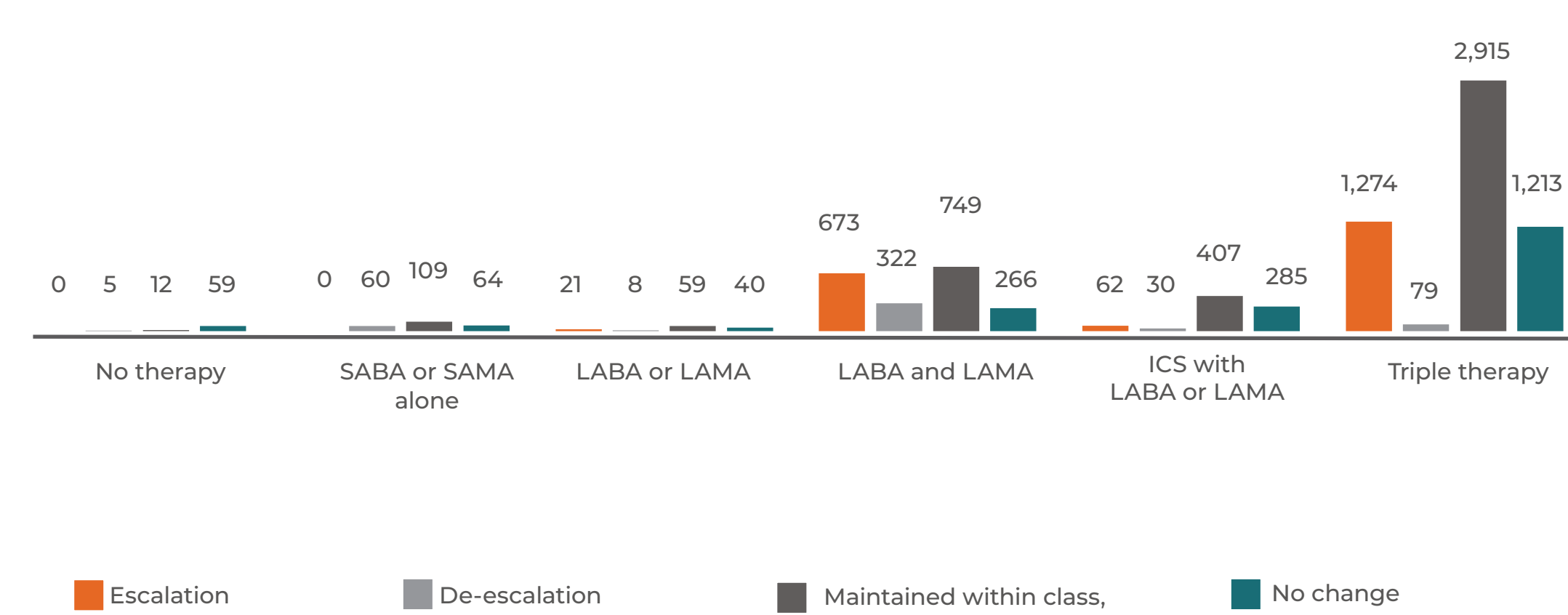
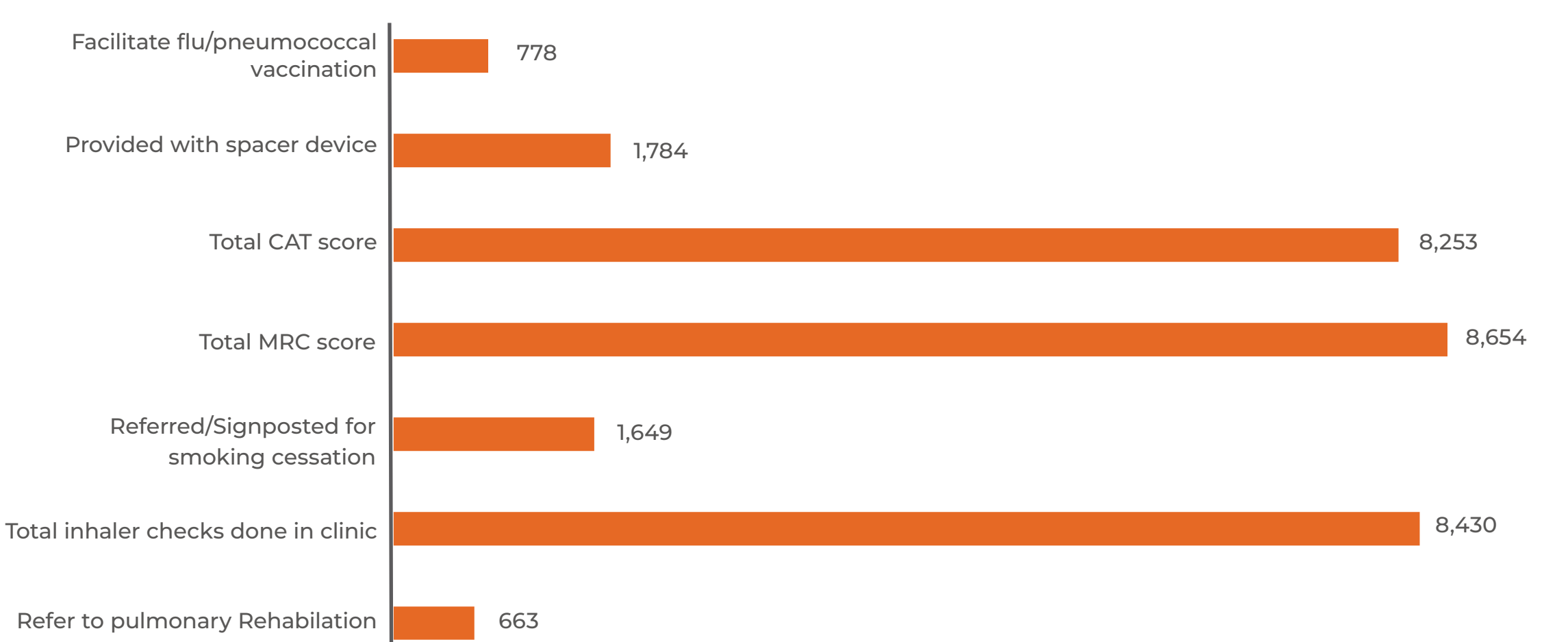


Fig 6. Breakdown of non-pharmacological interventions for patients seen in pharmacist led clinic



Following the stratification of patients in relation to their level of COPD symptoms and exacerbations, 14,803 patients were invited into our COPD pharmacist led clinics. 8,738 (59%) attended a COPD clinic with 7,661 (88%) of these patients presenting as symptomatic (CAT ≥ 10 or MRC ≥ 3). In the 12 months prior, 3,494 (40%) of these patients had no recorded COPD review and of the 8,430 patients who had their inhaler technique assessed in clinic 6,312 (75%) had prior no recording.

Post review, patients with a recorded inhaler technique assessment in past 12 months increased to 8,430 patients (298%). 1,107 (13%) of patients presented to clinic with a suboptimal inhaler technique and of these patients 661 (60%) had been coded as having an optimal inhaler technique in a previous COPD review.

Current COPD treatment was reviewed in line with global and local COPD guidelines. 6,289 (72%) of patients reviewed had a pharmacological change to their therapy in line with clinical guidelines. 2,030 (23%) patients' COPD therapy was escalated to

manage symptoms/exacerbations. 4,259 (49%) patients had a change in inhaled therapy device or molecule based on inhaler technique or rationalisation of current regimen.

There was a 6.3% overall reduction in maintenance devices prescribed, achieved via rationalisation of multiple devices where clinically appropriate. 76% of all maintenance devices used post-clinic were lower carbon, compared to 67% at baseline. Adoption of lower carbon devices increased across all classes (maintenance+reliever) following the projects, with 68% of all inhalers being lower carbon, compared to 43% at baseline.

4,037 (46%) and 3,201 (38%) patients who did not have a CAT score or MRC score respectively in the past 12 month had this updated during the review. 1,649 (59%) patients who are smokers were referred or signposted to smoking cessation and 663 patients (38%) with no prior recorded discussion on pulmonary rehabilitation were referred to pulmonary rehabilitation following the clinics.

DISCUSSION & LEARNINGS

The impact on lower carbon device prescribing shows that incorporating national drivers into patient-facing optimisation programmes delivered at scale such as this is an effective way to catalyse change whilst ensuring that patients have the inhaler device most suited and clinically appropriate for them. A single COPD exacerbation can result in lung damage, have a detrimental impact on quality of life, and increase the risk of death⁷. Providing additional clinical support to practices allowed the ICBs to target one of the five clinical areas of focus (COPD) which require accelerated improvement (Core20PLUS5). This allowed the most in need COPD patients to be assessed proactively thus reducing workload within the multidisciplinary practice teams.

It is important that patient's inhaler technique is assessed regularly e.g. at their annual review as their inhaler technique can wane

over time which can cause an inadequate treatment response potentially leading to an increase in exacerbations and symptoms. By optimising patient pharmacological therapy in an inhaler device they are best able to use, it can contribute to adherence and potentially reduce symptoms and the risk of future exacerbations.

These two partnerships demonstrated proactive review of patients was effective in improving access to care and appropriate interventions to potentially reduce the burden of illness on patients and the NHS. It also provided educational and mentorship opportunities to the multi-disciplinary teams across the practices as HCPs could shadow the Interface Clinical Services pharmacists.

1. <https://www.england.nhs.uk/about/equality/equality-hub/national-healthcare-inequalities-improvement-programme/core20plus5/>

2. <https://www.england.nhs.uk/greennhs/whats-already-happening/improving-health-outcomes-for-respiratory-patients-while-reducing-carbon-emissions/>

3. <https://www.england.nhs.uk/wp-content/uploads/2021/08/B0828-iii-annex-b-investment-and-impact-fund-21-22-23.pdf>

4. <https://openprescribing.net/sicbl/15E/measures/>

5. <https://openprescribing.net/sicbl/D9Y0V/measures/>

6. <https://www.bma.org.uk/advice-and-support/nhs-delivery-and-workforce/pressures/pressures-in-general-practice-data-analysis>

7. <https://www.pcrs-uk.org/sites/default/files/National-COPD-Policy-Action-Plan.pdf>