ASTHMA+ LUNG UK

January 2026

All puffed out

How poor inhaler care is failing people with asthma.

Contents

Executive summary

Asthma deaths have increased by nearly 25% since 2014,[1] and basic asthma care – including vital guidance on how to correctly use inhalers – is given to fewer than 1 in 3 people with asthma each year,[2] despite being advocated by national guidelines.[3] Basic asthma care should be the norm, and limited access to this care increases a person's likelihood of having an asthma attack, being hospitalised, or dying.[4]

Following the new national asthma guideline published by BTS, NICE and SIGN in November 2024, Asthma + Lung UK is calling for better care for the 7.2 million people in the UK with asthma. The guideline presents a key opportunity to review and improve inhaler care, revolutionising asthma treatment through new approaches to treating asthma and expanding access to basic asthma care to improve health outcomes. The new guideline makes ICS-formoterol the reliever of choice for most people with asthma. Where this isn't the case, healthcare professionals should ensure concurrent prescribing of inhaled corticosteroid (ICS) with a SABA inhaler as reliever. In all cases an appropriate personalised asthma action plan should be completed and shared with the patient to outline how to self-manage their condition.

A key part of good care is having the right inhaler, which may mean switching from one inhaler to another. This is a key opportunity to optimise a person's asthma care and ensure they are receiving the best care. However, our survey of those who have had their inhaler changed recently found a worrying situation, and patients are clearly in need of significantly more clinical support. We found that:

- **22% of people** were switched with no appointment to oversee and explain the switch.[6]
- **A third of patients** say their condition control is worse after their inhaler has been switched.[7]
- **39% of people** who have their inhaler switched aren't given any inhaler technique guidance at all.[7]
- **Of those** who were given some form of inhaler technique guidance, only 19% received gold standard guidance, while only 27% were shown how to use it, and just 33% were either told how to use their inhaler or were given a web link or leaflet. 20% of people who switched their inhaler reverted to their old treatment. 10% of those who revert to their old inhaler did so without telling their GP, likely by buying inhalers online.[8]
- 20% of people who switched their inhaler reverted to their old treatment. 10% of those who revert to their old inhaler did so without telling their GP, likely by buying inhalers online[9].

The vast majority of patients who have had their inhalers switched over the last few years have not been appropriately supported by the NHS which diminishes trust and can potentially impact future adherence. With new asthma guidelines offering a crucial opportunity to improve outcomes, it is essential that the NHS as a whole improves performance in this area and better supports patients being moved onto new inhalers in future. This is about getting the basics right year-round, building patient safety into every aspect of asthma care, and supporting people with asthma.

Recommendations

To improve prescribing, national asthma guidelines must be fully implemented. We recommend:

1. **Modernise inhaler prescribing.** Implement updated inhaler guidance:
   a. No-one should be prescribed a short-acting beta agonist (SABA) only treatment regime. Where a SABA is indicated for short-term relief, there should also be a concurrent Inhaler Corticosteroid (ICS) prescription to address underlying causes of asthma symptoms.
   b. Integrated Care Boards (ICBs), Health Boards, and Health and Social Care Boards must ensure that dangerous SABA-only prescribing is identified and reviewed. Where appropriate, SABA should be replaced with ICS-formoterol combination inhalers as the main treatment approach.
   c. All newly diagnosed children and young people aged 5-11 years should be prescribed low-dose inhaled corticosteroid, with a SABA inhaler as needed[10].
   d. ICBs must ensure that all patients with poorly controlled asthma are assessed and treated in line with NICE guidelines. For people with regular asthma symptoms, a history of exacerbations or asthma attacks, oral steroid use, hospitalisation or SABA overuse this is likely to include MART therapy.
   e. ICBS must increase awareness of safety issues around respiratory prescribing through alerts to highlight potentially unsafe prescribing and audits, which can be performed to identify SABA-only prescribing and SABA overuse and ICS underuse.

2. **As part of the above, for patients to receive excellent care, clinicians must ensure that all three aspects of gold-standard inhaler switching care are provided:**
   a. No patients should have their inhaler switched without informed consent and shared decision making.
   b. In-person inhaler technique guidance must be provided alongside any switch: every patient must be shown how to use their new inhaler.
   c. Clinician-initiated follow-up appointments must be arranged and completed within four to eight weeks after a person's inhaler is switched[11].

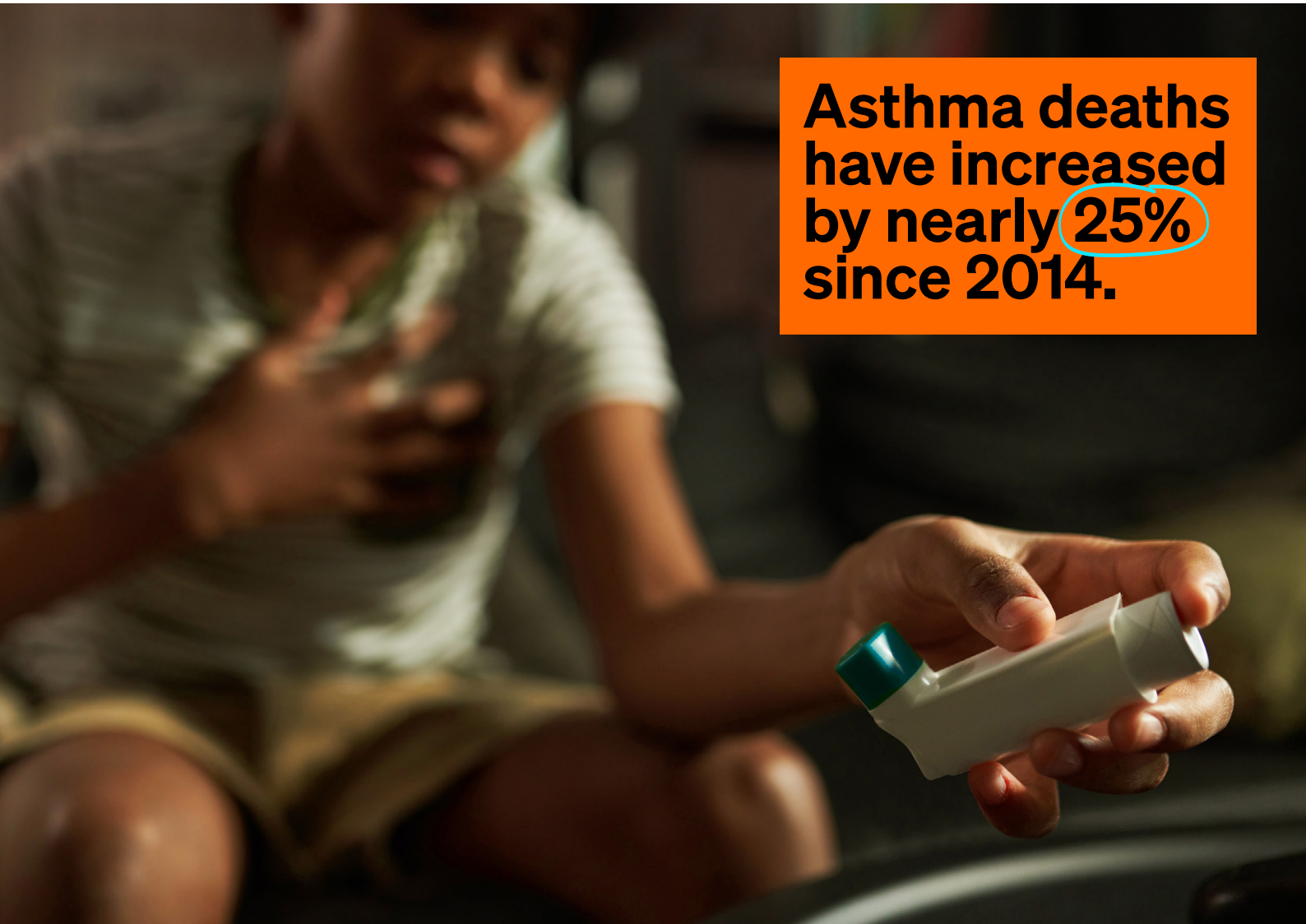
3. **ICBs should explore innovative ways of delivering high-quality care, such as group inhaler reviews, enabling an expansion of in-person care using existing staff resources, digital tools and patient support services.**

4. **Target interventions to people most at risk**. ICBs must tackle health inequalities by prioritising

To upgrade inhalers with mandatory integrated dose counters. We recommend:

5. **Focusing on patient need.** The MHRA should mandate the inclusion of a dose counter in each new pressurised Metered-Dose Inhaler (pMDI) presented for approval to reduce the use of empty inhalers which have been linked to increased patient harm and implicated in child deaths.

6. **Wider collaboration to improve patient safety**. The MHRA should support manufacturers of currently licensed inhalers to gain approval for redesigned versions of these inhalers that include an integrated dose counter.



Introduction

Asthma landscape

Asthma is the most common respiratory condition in the UK, affecting 7.2 million people.[12] Asthma is a variable chronic condition that affects the airways, leading to wheezing and breathlessness.[12] It can be life-threatening if poorly controlled,[4] and four people die from an asthma attack every day.[11] However, with the correct medicines and management approach, it can be controlled, allowing people to live active lives.

Asthma care in the UK is poor: fewer than a third (32%) of people with asthma receive all three elements of basic care each year[2] – a personalised asthma action plan (PAAP), annual review, and inhaler technique checks. It is even worse for children, with less than a quarter receiving all three aspects of basic care.[13] Good practice states that everyone with asthma should receive all of these elements of basic care each year to optimise their care and support their ability to manage their condition to the best of their ability. This collapse in basic care means people with asthma have less control over their condition, a higher risk of asthma attacks, and an increased risk of hospitalisation and death.[4]

We know that poor care has contributed to the rate of asthma deaths rising by almost 25% between 2014 and 2024, leading to the deaths of over 12,000 people.[14] This shocking increase comes despite the findings of the 2014 National Review of Asthma Deaths (NRAD), which showed that two-thirds of asthma deaths are preventable.[4]

The government's health agenda

The government is making significant changes to how healthcare is structured by abolishing NHS England and calling for all Integrated Care Boards (ICB) to reduce their spending by 50% by October 2025.[15,16] At the same time, existing plans to devolve services to Integrated Care Systems (ICSs) continue, meaning more services will be governed at a local level in future, albeit with reduced funding.

The government has also identified three essential shifts needed to save the NHS: from sickness to prevention; from hospital to community care; and from analogue to digital. This report covers work essential to two of these shifts:

Sickness to prevention. New asthma guidelines, published in November 2024, outline how to prescribe effective asthma treatment.[3] The full implementation of these guidelines would optimise inhaler prescribing, meaning that people with asthma are given the correct medication to control their condition and prevent asthma attacks.

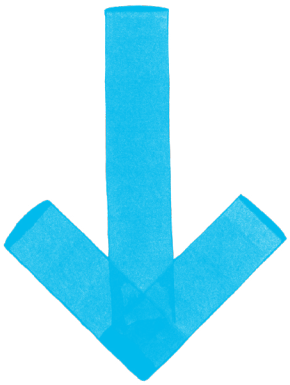
Hospital to community. This would not only save lives but would mean that people can receive the care they need locally, either through their GP or pharmacist, rather than attending hospital. This is essential for the shift from hospital to community.

Improving inhaler care

In November 2024, NICE, SIGN and BTS published a new asthma guideline, setting out treatment pathways to reform asthma care. Central to this is the shift away from prescribing SABA inhalers for adults and young people over 12 with asthma. SABA inhalers are reliever inhalers that contain a short-acting beta-agonist, a medicine that treats asthma symptoms but not the underlying inflammation that causes them[24]. Some patients rely on SABA inhalers because they associate taking their SABA inhaler with fast relief from symptoms, causing them to overuse their SABA while underusing medication that treats the causes of inflammation (which SABAs do not).[25] SABA overuse can see a person's asthma worsen – become less easily controlled – whilst also masking the condition's decline because symptoms appear to remain treated. Overuse of SABA is a key risk factor for emergency admissions and near-fatal asthma attacks.[26]

As a way of replacing SABA inhalers for treating asthma in adults, the new asthma guideline sets out that people newly diagnosed with asthma should be treated with combination inhalers containing corticosteroid to treat the inflammation which causes asthma symptoms and asthma attacks, and formoterol, a specific rapid-onset, long-acting bronchodilator using one of the following two approaches: Anti-Inflammatory Reliever (AIR) or Maintenance and Reliever Therapy (MART). The guideline also outlines the importance of transitioning people already diagnosed with asthma onto ICS-formoterol combination inhalers to improve their condition control.[3]

Asthma + Lung UK is shining a light on the poor state of inhaler care, explaining how suboptimal prescribing, poor inhaler switching care, and poor inhaler design lead to worse health outcomes for people with asthma. This report combines updated guidance with new research into patients' experiences of their care to give a detailed picture of asthma care and inform evidence-based recommendations that will improve asthma care for millions.



Inappropriate inhaler switching

Inhaler switching is the process by which a person's inhaled treatment is changed from one type of inhaler to another. Switching should occur first and foremost to improve patient care and outcomes, but has previously been incentivised because of its environmental and cost benefits.[18]

Most SABA inhalers are pressurised metered-dose inhalers (pMDIs), meaning the medicine in these inhalers is delivered by being pushed out of the inhaler by an aerosol propellant. While safe for use in medical devices, these propellants are harmful to the environment, causing global warming, and mean that SABA inhalers make up 2% of the NHS's carbon emissions.[19] This figure is partly driven by SABA overuse and overreliance, increasing the number of inhalers used, with the emissions from those using three or more SABA inhalers totalling over 250,000 tonnes of CO_2 annually.[20]

The NHS's drive to reduce its carbon footprint in recent years has most commonly seen people switched from a pMDI to a dry-powder inhaler (DPI), which contains no propellant and significantly lower carbon emissions. Switching from a pMDI to a DPI can improve a person's condition control in certain circumstances and reduce the carbon footprint associated with both their treatment and well-controlled asthma.[21] NHS England previously sought to tackle carbon emissions linked to SABA inhalers through Investment and Impact Fund (IIF) incentives between 2022 and 2023.[22,23]

The future of lower-carbon prescribing will likely see a decreased reliance on switches to DPIs, as the majority of ICS-formoterol inhalers currently available are already DPI. Additionally, newer low-carbon pMDIs are gaining approval for use.[24] Lower-carbon pMDIs still contain aerosol propellant; however, this has a lower global warming potential. These pMDIs function in the same way as existing pMDIs, meaning that patients don't need to learn a new technique when switching. Their environmental benefit comes from the use of propellants that are between 200 and 460 times less polluting than those used in current-generation pMDIs.[25]

While the IIF incentives scheme was short-lived and criticised for appearing to incentivise blanket inhaler switching,[26] by focusing attention on SABA overprescribing, it brought down SABA overuse nationally. Inhaler switching remains a common part of asthma care and will likely become more common as new national asthma guidelines recommend clinicians switch patients' inhalers to improve condition control.[3]

20% of people who switched their inhaler reverted to their old treatment.

What causes sub-optimal switching?

Worryingly, not all inhaler switching is done properly, with many switches being carried out without proper care,[27] and with some resulting in poorer condition control for patients.[6]

Asthma + Lung UK heard from over 2600 patients across two rounds of surveys throughout 2024 to learn about people's experiences of inhaler switching care. We found that inhaler switching is usually sub-optimal, leading to poor patient outcomes. We also found that switching quality is declining, with the survey's second round providing more worrying results than the first. The vast majority of patients who have had their inhalers switched over the last few years have not been appropriately supported by the NHS. With new asthma guidelines offering a crucial opportunity to improve outcomes, it is essential that the NHS as a whole improves performance in this area and better supports patients being moved onto new inhalers in future.

This decline in switching quality mirrors the collapse of basic asthma care, which is driving poor patient outcomes. Across both areas of concern, we see people going without proper guidance and support, being left to manage their own asthma care, and too often facing poorer outcomes as a result.[6] Poor quality switching care also drives medicine waste as patients can be unsure of how best to use their inhaler, and how to understand how much medicine it contains. This can be partially overcome by prescribing inhalers with integrated dose counters,[28] but this is not a suitable substitute for good-quality care. Through our membership of the Taskforce for Lung Health, Asthma + Lung UK has contributed to **Best Practice Guidelines for improving the online prescribing of SABA reliever inhalers**, aimed at online providers.

Like the poor provision of basic asthma care, sub-optimal inhaler switching comes as a result of clinicians not having the time, training or resources to undertake routine care to a universally high standard.[29]

What does inappropriate inhaler switching look like for patients?

Asthma + Lung UK surveyed people with respiratory conditions to gain a detailed understanding of the quality of care given when people have their inhaler switched. This survey was done in two rounds: Round 1 between February and March 2024, and Round 2 between August and September 2024. Across both rounds, we surveyed 2600 people.

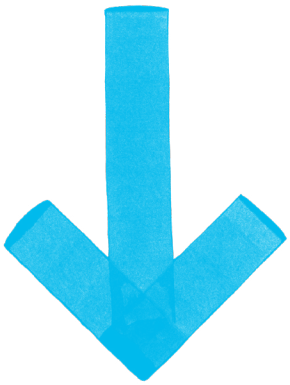
Our survey analysis assessed inhaler switching care through three key aspects:[21]

1 **Individualised care and informed patient consent**, where patients are involved in the decision to have their inhaler switched and understand what this involves.

Informed patient consent and shared decision-making are essential for good inhaler switching. By involving patients in their treatment, clinicians can build or solidify trust with the people they're treating, giving patients a greater opportunity to understand their care and have their questions addressed appropriately.[30]

Our survey found that 22% of people were switched with no appointment, and 16% were switched via phone, email or text.[5] Switching a person's inhaler without an appointment means the switch is done without informed consent and without the patient having a role in the decision to amend their treatment.[30] This can lead to distrust of clinicians and means that important opportunities for patients to seek advice about their care in person are missed. In-person switching allows patients to better understand their care and allows clinicians to proactively educate patients, share resources such as personalised asthma action plans, as well as teach patients' inhaler technique – all essential elements of basic asthma care that cannot be provided remotely via email, text or over the phone.[31] In addition, the General Medical Council's prescribing guidance outlines that clinicians should ask patients about other medications they are taking, including over-the-counter medications.[32] Where people are switched improperly by phone or text, this may not be done.

Our survey also found variation in people's understanding of why their inhaler was being switched. Worryingly, 16.8% of respondents were unclear why their treatment had been changed.[33] Equally concerning is that over half of these people had uncontrolled asthma, meaning their care needs to be optimised to improve condition control and reduce their risk of asthma attack, hospitalisation and death.[4] These people deserve to be better informed about their care.



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Inclusion of optimised inhaler technique guidance, where patients are observed using their new inhaler and have their technique assessed and amended by an appropriately trained clinician.

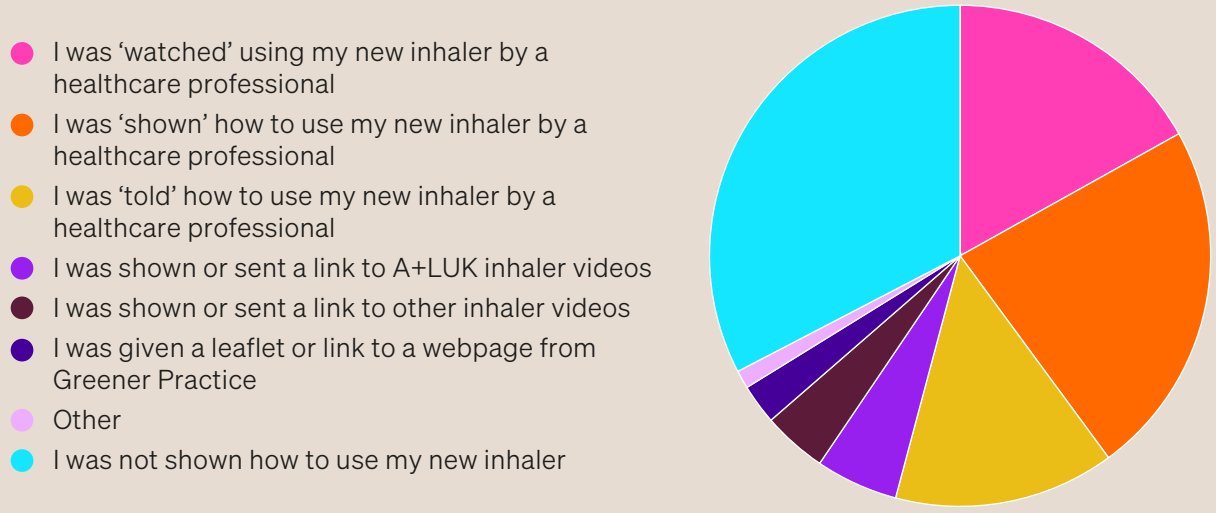
Good inhaler technique helps people breathe medicine straight into their lungs where it's needed. With good technique, people using inhalers are less likely to get side effects because the medicine isn't being absorbed into the rest of their body.[34] Without guidance and regular reinforcement of optimal inhaler technique, it can be difficult for people to know exactly how to get the best from their inhaler and the majority of people using an inhaler exhibit one or more errors in technique as a result.[39] We also know that more regular reviews of patients' inhaler use would result in savings of over £7 million annually by keeping people healthy and out of hospital.[35]

There are different standards of inhaler technique guidance, ranging from patients reading written instructions and watching videos to being guided by a clinician in person. Gold standard inhaler technique guidance sees a clinician watch, review, and correct a person's technique in person.[36]

Our survey showed that 39% of those surveyed weren't given any inhaler technique guidance at all, putting these people at high risk of making errors when using their inhaler and putting them at higher risk of poor condition control, asthma attack, hospitalisation and death.[4] This is particularly concerning as most inhaler switching sees people switched from a pMDI inhaler to a dry-powder inhaler (DPI), which requires a different technique to use optimally.[37]

Of those who were given some form of inhaler technique guidance, only 18.7% received gold standard guidance, while 27% were shown how to use it, and 33% were either told how to use their inhaler or were given a web link or leaflet.[38]

Figure 1: How was inhaler technique shown?



Inhaler technique should be regularly reviewed as part of basic asthma care and should be reviewed by an appropriately trained clinician at a follow-up appointment between four and eight weeks after a person has had their inhaler switched. ICBs, Health Boards, and Health and Social Care Boards should explore innovative ways of delivering high-quality care, such as group inhaler reviews, enabling an expansion of in-person care using existing staff resources. As explained in more detail below, sub-optimal follow-up care means that fewer people can access inhaler technique guidance, worsening access to necessary guidance and good care.

3 Clinician-initiated follow-up care between four and eight weeks post-switch to review condition control inhaler technique and inhaler suitability.

Follow-up care is essential to ensure people's new inhalers are allowing them to manage their condition correctly, without a decline in control or other issues. This should be clinician-initiated and should allow patients to have their condition, treatment and inhaler technique reviewed by an appropriately trained clinician. Follow-up inhaler technique checks are central to this, as poor condition control can be caused by improper technique.[39]

Over 40% of those surveyed received no follow-up care at all. Only 1 in 4 people accessed good follow-up care through a routine appointment to review how they were getting on with their new treatment.[40] This is a worryingly low proportion and gives cause for concern about the impact of poor switching care on patient outcomes. A third (between 31.4% and 35.2%) of patients say their condition control is worse after their inhaler has been switched,[6] and 42% said they didn't feel well informed about their care after their inhaler was switched. Poor condition control post-switch can be due to people not being given inhaler technique guidance, meaning they're unable to get the best from their inhaler, or due to people not being engaged in their switch by their clinician.

Our survey also asked if people were still using the new inhaler they were switched to. Despite a third having poorer outcomes post-switch, 80% of people stick with the inhaler they have been switched to by their clinician. Of the 20% of people who didn't stay with their new inhaler, some found it easy to revert to their old inhaler, either through routine follow-up or by contacting their GP. The most concerning pathway is the 10.6% of people who reverted to their old inhaler without telling their GP.[8] This shows a significant number of people whose care is being improperly managed and who are putting themselves at risk, either by taking someone else's prescription or buying reliever inhalers online.


Asthma is the most common respiratory condition in the UK.

The problems with prescribing

SABA-only prescribing

Sub-optimal prescribing drives poor health outcomes and is a consistent obstacle to providing good-quality asthma care. Within asthma care, this often takes the form of SABA-only prescribing – a treatment regime that often leads to patients over-relying on reliever medication that treats asthma symptoms but not the underlying inflammation.[41]

Some patients rely on SABA inhalers because they associate taking their SABA inhaler with fast relief from symptoms, causing them to overuse their SABA while underusing medication that treats the causes of inflammation.[4] SABA overuse is a feature of poorly controlled asthma and can also lead to a person's asthma worsening[4] – become less easily controlled – whilst also masking the condition's decline because symptoms remain hidden. This means the person will need to take their SABA inhaler more frequently to manage symptoms while inflammation levels continue to rise, increasing the risk of life-threatening asthma attacks.[4]

In addition to driving SABA overuse, SABA-only prescribing also drives high care costs associated with poor health outcomes. We know that improved management of patients' inhaler use, including tackling SABA overuse, would save over £7 million a year in England alone,[35] and reduce the number of people struggling with poor inhaler use by 45%.[35]

SABA-only prescribing should be a thing of the past, with new asthma guidelines recommending combination inhalers in its place. The delivery of this, however, relies on good implementation of the guideline. We know that some ICBs already have concerns about being able to implement aspects of the new guideline, including recommendations on inhaler prescribing, because of a lack of finances.

We are seeing some ICBs prioritise immediate cost savings over implementing the new national guideline, which would provide longer-term health benefits to patients and greater savings to ICBs. This means some ICBs aren't implementing the new asthma guideline as comprehensively as they should be. We know that resource constraints also mean that clinicians likely go without necessary training, which can lead to incorrect prescribing. With further cuts to ICB funding announced in March 2025, there is a real risk that this will become more widespread, undermining effective implementation of the new guideline across the country. This could result in increased patient harm, poorer outcomes, and further waste of resources.

Clinicians must be properly supported in translating the new asthma guideline into a meaningful change in practice, prescribing and care. Good implementation needs clinician engagement and support, and adequate resourcing, including clinician training and clinician and patient education on what optimised asthma care looks like.

Buying online

People can buy inhalers through online pharmacy providers. Between 4–5% of respiratory patients self-report accessing inhalers in this way.[42] Online pharmacy providers advertise their services as quick and cheap, and these can be cheaper than the prescription charge,[43] a key reason why online pharmacy providers are more likely to be accessed by people from the most deprived communities.[42]

Buying inhalers online still requires them to be prescribed to the patient, but this is done remotely, without an in-person review of their condition, and with no proof of them being a suitable or necessary treatment. This presents a complex challenge to good care as accessing inhalers remotely in this way is associated with poorer condition control, worse access to basic care, and poorer patient outcomes.[42]

We found that up to 10.6% of people who have had their inhaler switched have reverted to their old inhaler or regimen without informing their clinician.[8] In the context of asthma, reverting to SABA inhalers without clinical guidance sees patients going without basic asthma care and putting them at risk of SABA over-reliance, a practice associated with a higher risk of asthma attack, hospitalisation and death.[4]

The inappropriate buying of inhalers online is a backdoor to poor outcomes. By improving inhaler switching care, this group of patients will get the guidance, support and care they need, improving their condition control, and reducing the number of people who will seek inappropriate alternatives online.

Implementing national asthma guidelines

The new national asthma guidelines make this report a timely call to action for optimising inhaler prescribing, switching and design. Fully implementing the new guidelines will improve asthma care for millions, saving lives, enhancing patient outcomes, reducing pressure on primary and secondary care, and lowering NHS spending on asthma care.

However, more must be done to ensure ICBs use their limited resources optimally. Good implementation relies on healthcare professionals receiving adequate training, resources and support. The National Review of Asthma Deaths identified a lack of specific asthma expertise and failure to recognise high-risk patients as key drivers of avoidable asthma deaths.[1] Ensuring that more clinicians gain knowledge and qualifications designed to support asthma care is essential to ensuring that patients receive excellent care and are at reduced risk of an asthma attack, hospitalisation and death.[4] Asthma + Lung UK's **Healthcare Professional Hub** contains resources for clinicians to support the delivery of best practice in respiratory care. Further resources produced by the Primary Care Respiratory Society are available on **inhaler switching** and **implementation of the new asthma guidelines**.

We know from the SABINA study that asthma outcomes are worse, as well as care costs, 52% higher for people prescribed three or more SABA inhalers annually than for those prescribed two or fewer.[44] This equates to £2,256,091 per 1,000 high-SABA patients, compared with £1,480,640 per 1,000 low-SABA patients.[44] The average hospitalisation costs for the same high-SABA population are 230% higher than low-SABA patients,[44] further highlighting the high costs associated with the poor health outcomes driven by high-SABA prescribing. This strongly evidences the cost benefits of fully implementing the new asthma guideline, especially the prescribing of combination inhaler regimes in place of outdated SABA-only prescribing.

We know that some ICBs are leading the way in inhaler optimisation, often prompted by international asthma guidance that has been recommending a move away from SABA-only treatment for years.[45] Asthma + Lung UK's South Yorkshire Respiratory Champion, Deborah Leese and her team are involved in the 'DAISY' project: 'Delivering Asthma Improvement in South Yorkshire.'

DAISY focuses on providing additional training and support for clinicians in deprived areas where SABA over-prescribing is very high and will run from November 2024 to October 2025.[46] Through these interventions, SABA over-prescribing in South Yorkshire has continued to reduce across all sub-ICB areas.[47] DAISY's impact is already being felt: between July 2024 and March 2025, SABA overprescribing across South Yorkshire ICB has reduced from 21.58% to 19.46%, improving the care of almost 2000 people with asthma.[48]

You can find out more about the work of our Respiratory Champions on our **website.**


A key part of good asthma care is having the right inhaler.

Unsafe inhaler design

The collapse in basic care means many people who use inhalers don't know how to measure or track their use, putting them at risk of using an inhaler past the point where it stops releasing medication. When an inhaler has run out of medicine, it can still release propellant, which can lead patients to think they are still consuming their medication. This means patients risk using empty inhalers, putting them at risk of poorer condition control, significant asthma attacks, hospitalisation and death, especially when the inhaler is being used during an asthma attack.[49]

We know that over 60% of people with asthma use an inhaler until it stops actuating or puffing,[50] likely meaning they have used the inhaler 60–70 times with negligible medication being released,[50] resulting in dangerously sub-optimal treatment. Over 25% of people with asthma rely on feeling no benefit from the inhaler as their way of knowing that it is empty[50] – an equally dangerous situation – while over 45% rely on shaking the inhaler to determine its content arbitrarily.[50] This problem is worryingly common; one in eight children attending hospital due to asthma have empty inhalers,[50] and we know that 12% of childhood asthma deaths can be attributed to not being able to tell that they were using an empty inhaler.[10]

We want to see all inhalers include an integrated dose counter to make them easier and safer for people to use. People shouldn't have to guess whether their inhaler is still delivering medication. While there are less-accurate, alternative methods of determining whether an inhaler is usable, none are as reliable or easy to use as an integrated dose counter.[51]

To improve prescribing, national asthma guidelines must be fully implemented. We recommend:

1 **Modernise inhaler prescribing. Implement updated inhaler guidance:**

a. No-one should be prescribed a short-acting beta agonist (SABA) only treatment regime. Where a SABA is indicated for short-term relief, there should also be a concurrent Inhaler Corticosteroid (ICS) prescription to address underlying causes of asthma symptoms.

b. Integrated Care Boards (ICBs), Health Boards, and Health and Social Care Boards must ensure that dangerous SABA-only prescribing is identified and reviewed. Where appropriate, SABA should be replaced with ICS-formoterol combination inhalers as the main treatment approach.

c. All newly diagnosed children and young people aged 5-11 years should be prescribed low-dose inhaled corticosteroid, with a SABA inhaler as needed.

d. ICBs must ensure that all patients with poorly controlled asthma are assessed and treated in line with NICE guidelines. For people with regular asthma symptoms, a history of exacerbations or asthma attacks, oral steroid use, hospitalisation or SABA overuse this is likely to include MART therapy.

e. ICBS must increase awareness of safety issues around respiratory prescribing through alerts to highlight potentially unsafe prescribing and audits, which can be performed to identify SABA-only prescribing and SABA overuse and ICS underuse.

2 **As part of the above, for patients to receive excellent care, clinicians must ensure that all three aspects of gold-standard inhaler switching care are provided:**

a. No patients should have their inhaler switched without informed consent and shared decision making.

b. In-person inhaler technique guidance must be provided alongside any switch: every patient must be shown how to use their new inhaler.

c. Clinician-initiated follow-up appointments must be arranged and completed within four to eight weeks after a person's inhaler is switched.[92]

3 **ICBs should explore innovative ways of delivering high-quality care, such as group inhaler reviews, enabling an expansion of in-person care using existing staff resources.**

4 **Target interventions to people most at risk.** ICBs must tackle health inequalities by prioritising the people most at risk of poor care through exemplar work like South Yorkshire's DAISY scheme.

To upgrade inhalers with mandatory integrated dose counters, we recommend:

5 **Focusing on patient need.** The MHRA should mandate the inclusion of a dose counter in each new pMDI presented for approval to reduce the use of empty inhalers which have been linked to increased patient harm and implicated in child deaths.[93]

6 **Wider collaboration to improve patient safety.** The MHRA should support manufacturers of currently licensed inhalers to gain approval for redesigned versions of these inhalers that include an integrated dose counter.

Conclusion

People with respiratory conditions deserve excellent care, and clinicians deserve comprehensive support from health systems in order to provide it. As this report shows, there are many areas in which inhaler care needs to be improved. We know that the vast majority of those who have had their inhalers switched over the last few years have not been appropriately supported by the NHS. Poor inhaler design is a known danger, and the lack of integrated dose counters in many inhalers has a proven record of causing harm and death to patients.[10]

With new asthma guidelines offering a crucial opportunity to improve outcomes, it is essential that the NHS as a whole improves performance and better supports patients in getting the best from their inhalers. Implementation is key; all ICBs must adopt new prescribing guidance, prescribing ICS-formoterol combination inhalers for all newly diagnosed adults and supporting existing asthma patients to transition to MART regime where appropriate and doing away with SABA-only prescribing across the board. Good implementation of the guideline relies on shared decision making and universally excellent standard inhaler switching, which includes informed patient consent, gold standard inhaler technique guidance, and clinician-initiated follow-up care as standard.

Detailed resources to help with guideline implementation can be found at Asthma + Lung UK's **Healthcare Professional Hub**.


Asthma + Lung UK is calling for better care for the 7.2 million people in the UK with asthma.

About this report

This report was written by Alex Fynney. Data on patients' experiences of inhaler switching were collected through the Greener Inhaler Survey, funded by the International Pharmaceutical Aerosol Consortium (IPAC).

Special thanks to Laura Williamson, Jon Foster, Dr Andy Whittamore, and Andrew Cumella for their help in drafting this report, and to everyone who took the time to complete the Greener Inhaler Survey and share their experience with Asthma + Lung UK.

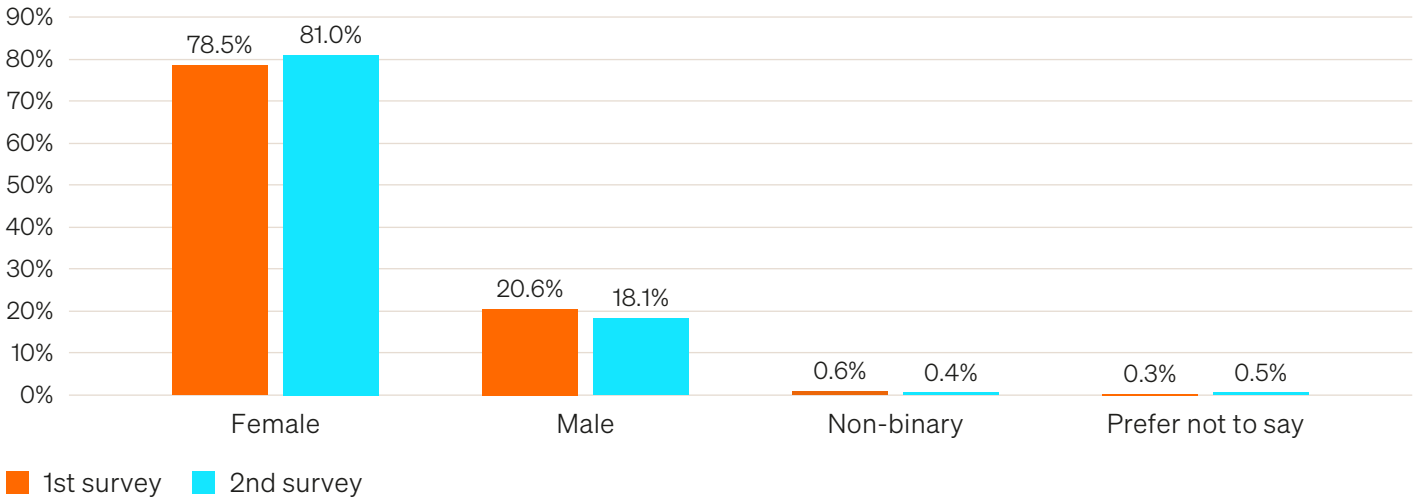
Appendix 1 – Useful resources

- Asthma + Lung UK – Healthcare Professionals Hub
- Asthma + Lung UK – Choosing the right inhaler for your patients
- Asthma + Lung UK – Managing asthma in people aged 12 years and above
- Asthma + Lung UK – Managing asthma in children aged 5–11 years
- Asthma + Lung UK – Asthma action plans
- BTS, NICE, SIGN – Guideline for Asthma: diagnosis, monitoring and chronic asthma management
- BTS, NICE, SIGN – Asthma inhaler patient decision aid
- Primary Care Respiratory Society – Briefing about the dangers of blanket switching
- Primary Care Respiratory Society – Ten ways to implement sustainable greener healthcare
- Primary Care Respiratory Society – How to influence greener respiratory care
- Primary Care Respiratory Society – The PCRS White Paper for Greener Respiratory Care
- Primary Care Respiratory Society – Making safe and clinically appropriate changes for patients with respiratory disease
- Primary Care Respiratory Society – Implementing the new asthma guideline for ICBs, Health Boards and Trusts

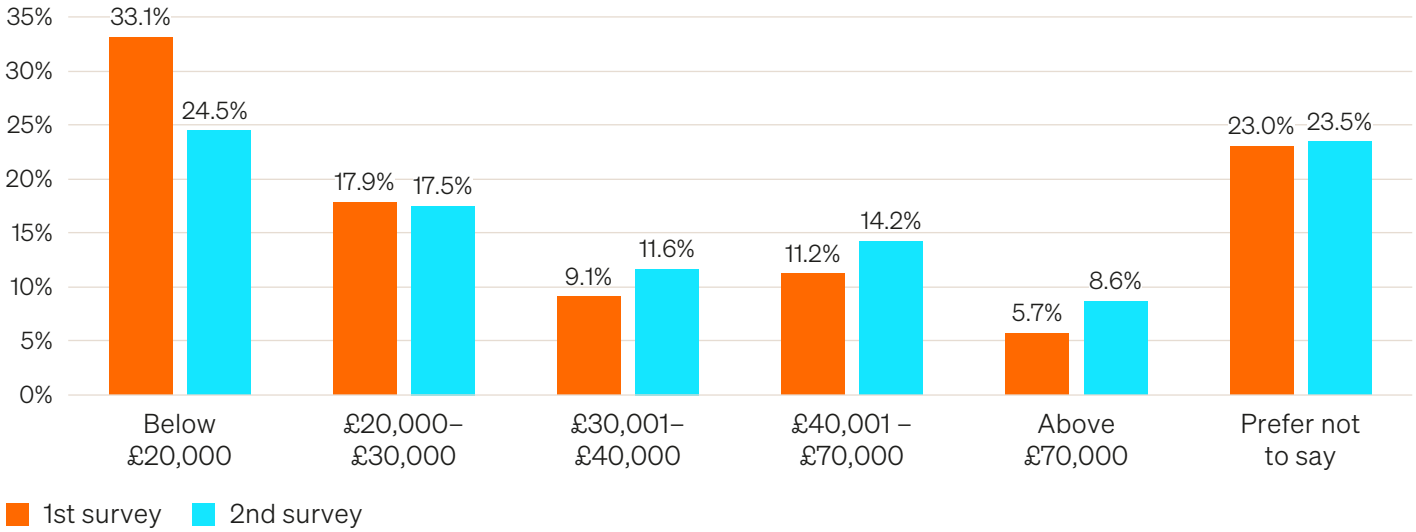
Appendix 2

Graphs/tables generated from the survey data.

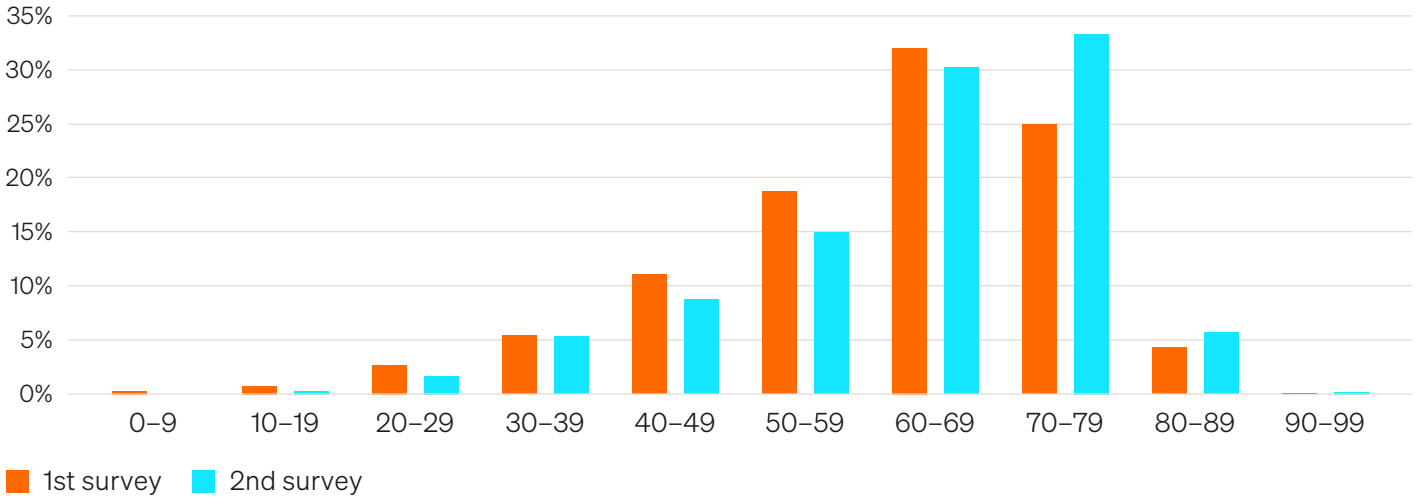
1. Gender



2. Household income

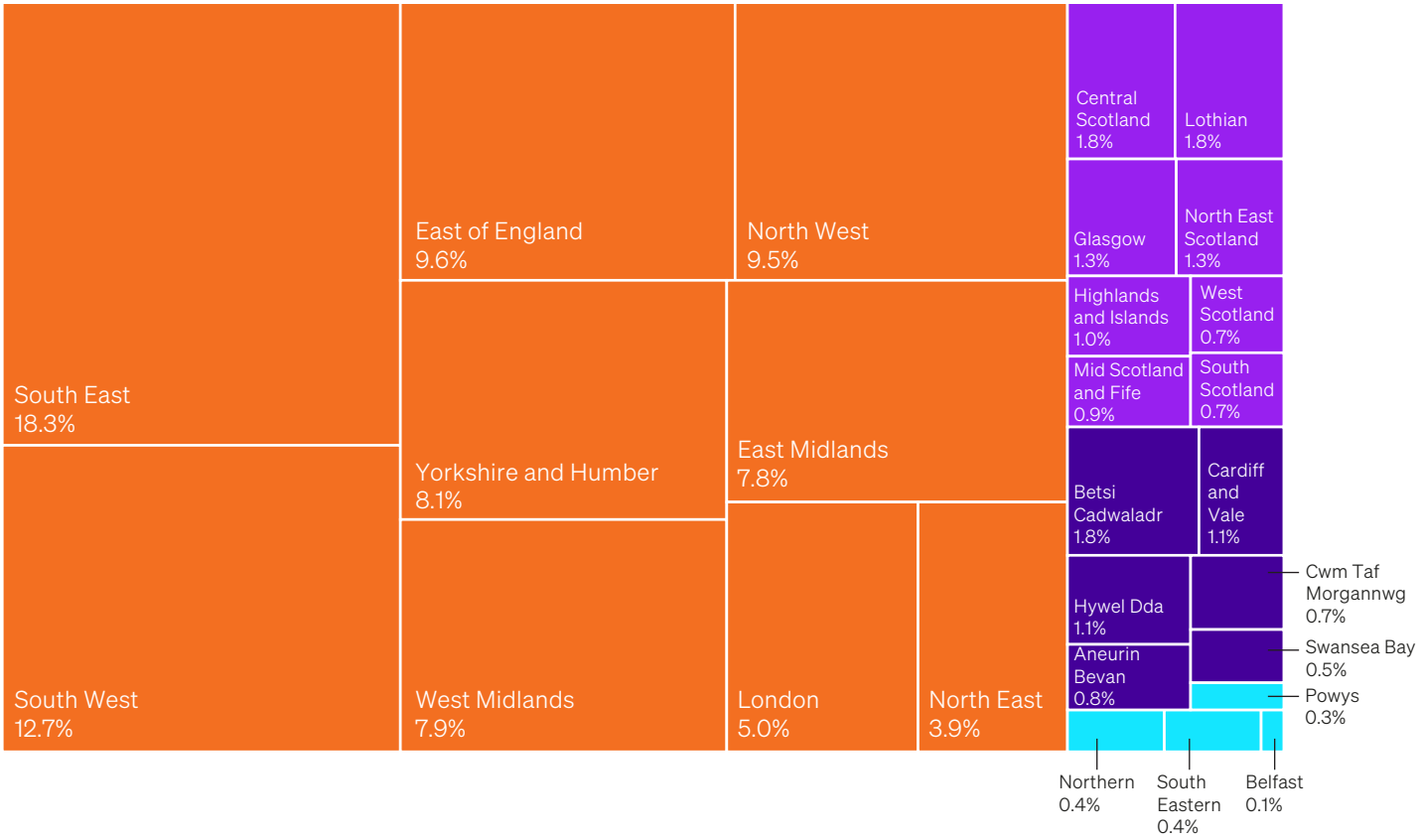


3. Age

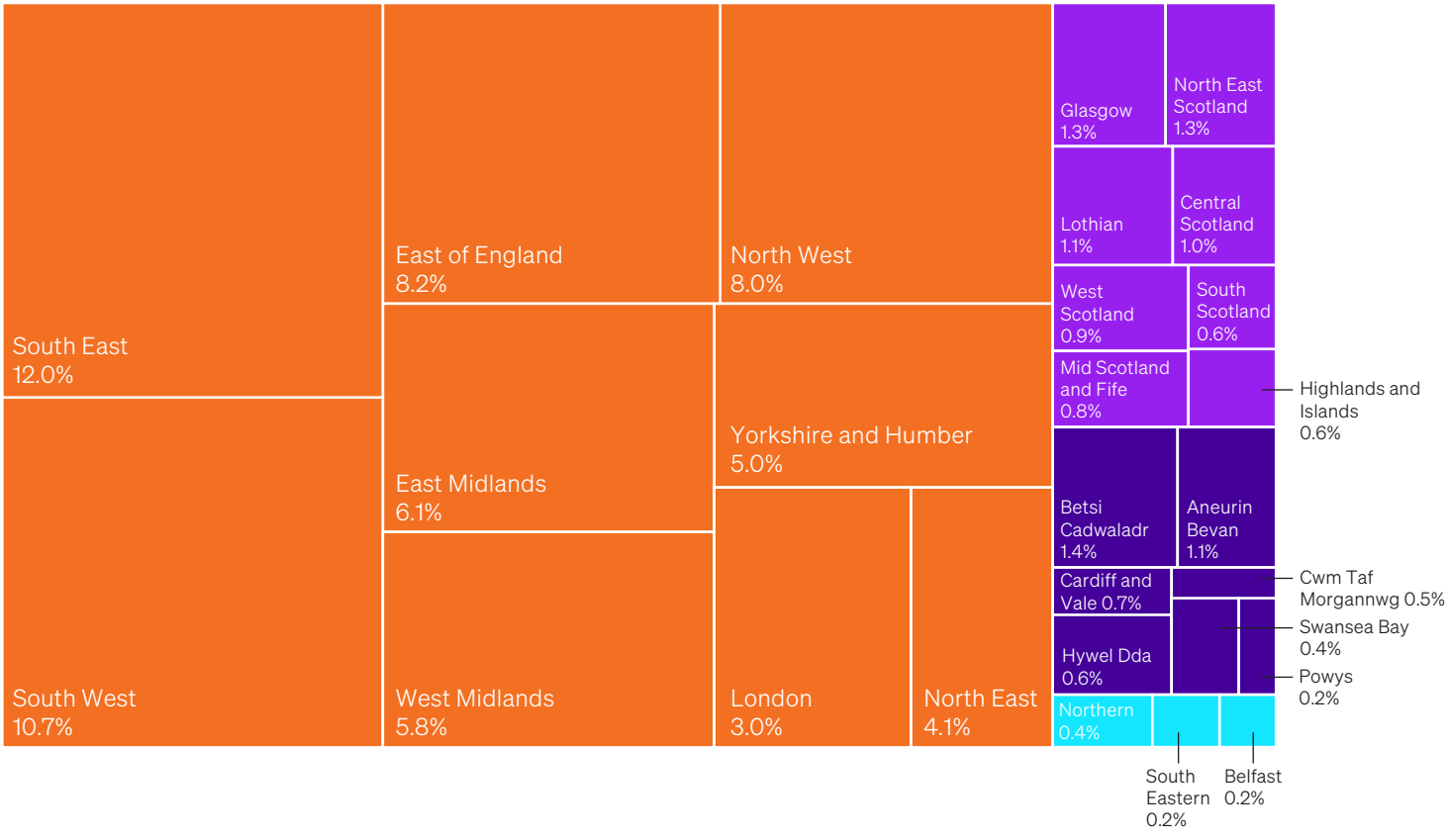


4. Location by region

Round 1 data

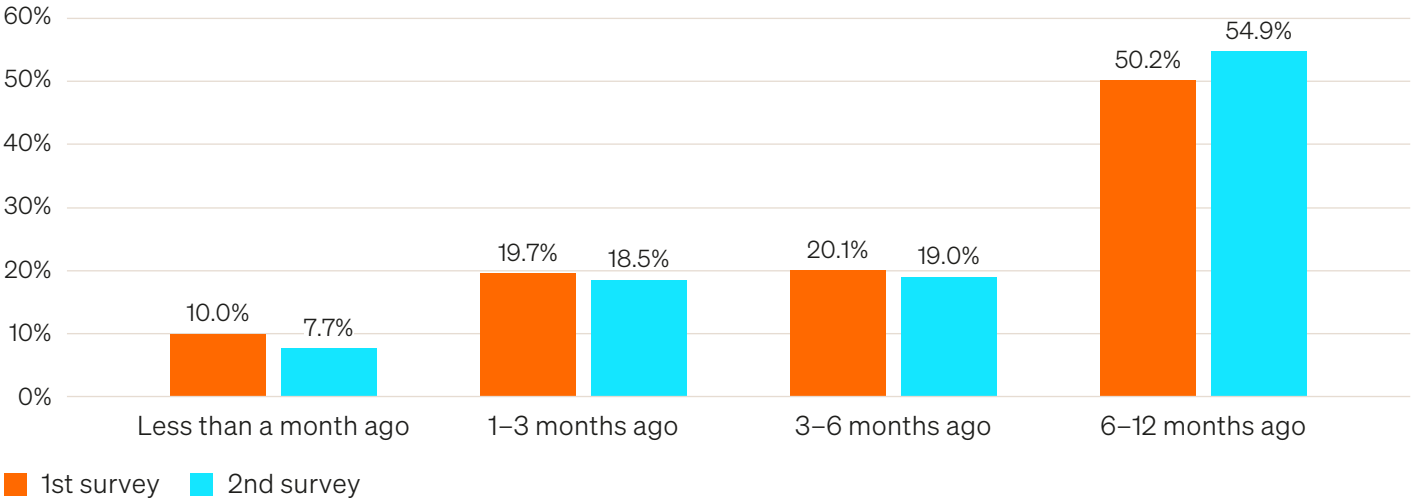


Round 2 data

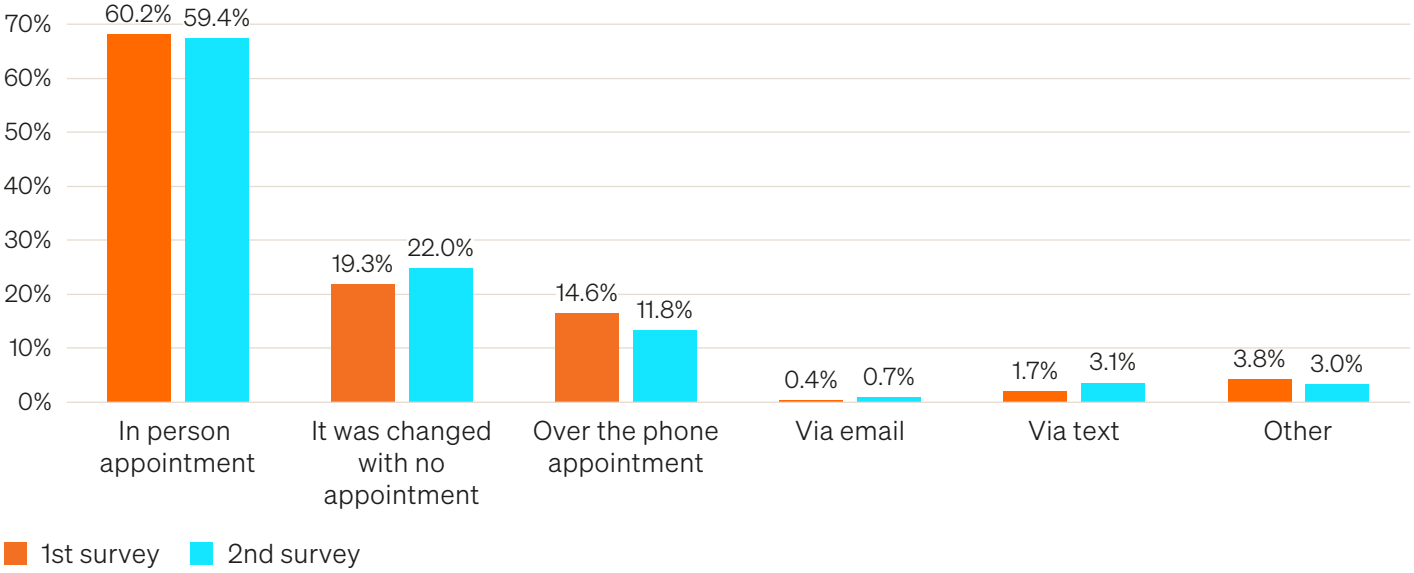


England Scotland Northern Ireland Wales

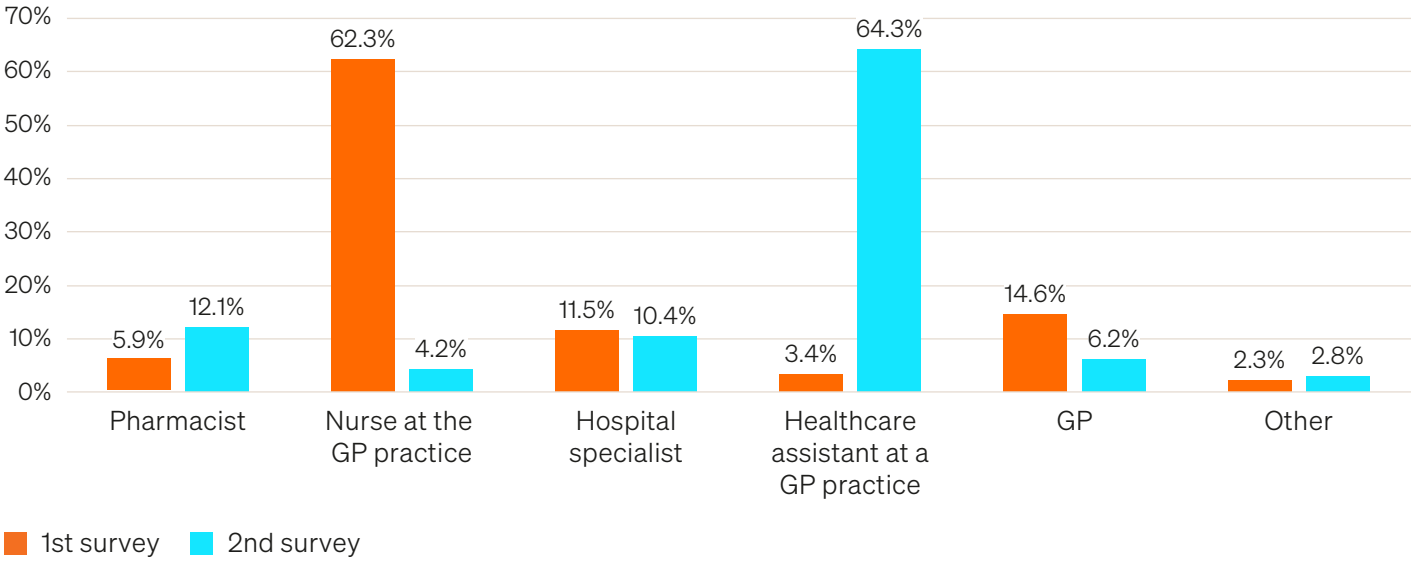
5. When did respondents switch their inhaler?



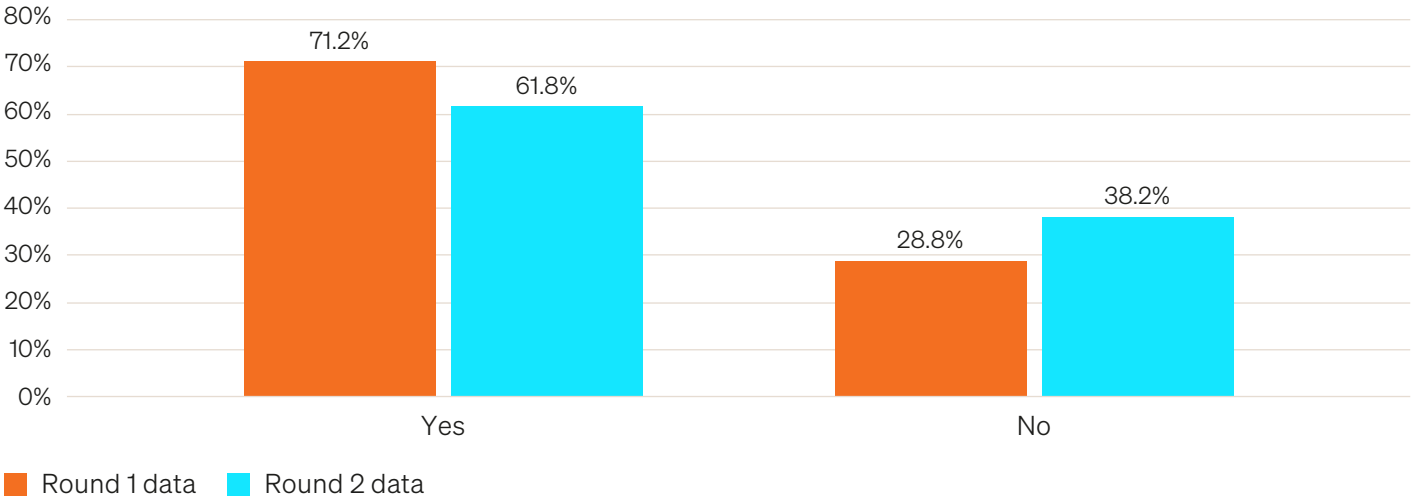
6. How were inhalers switched?



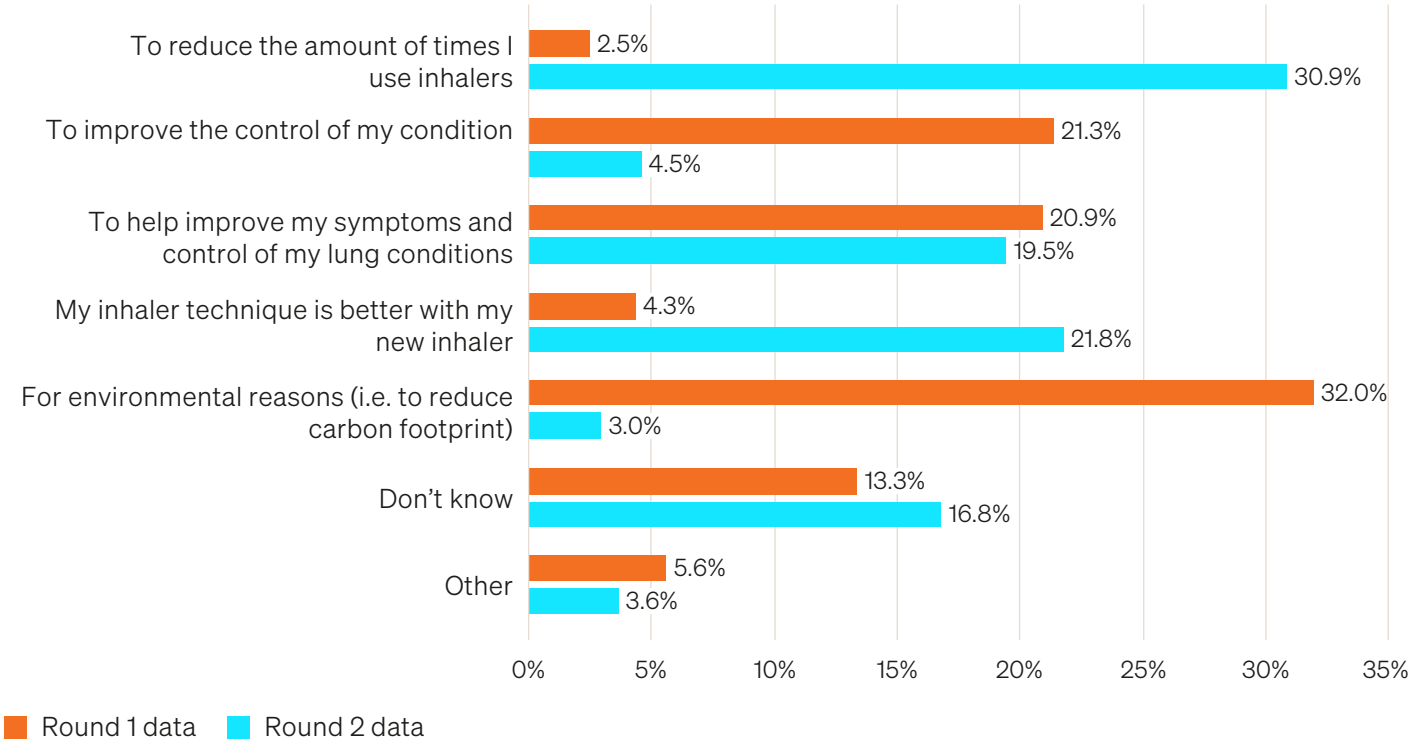
7. Who conducted the switching appointment?



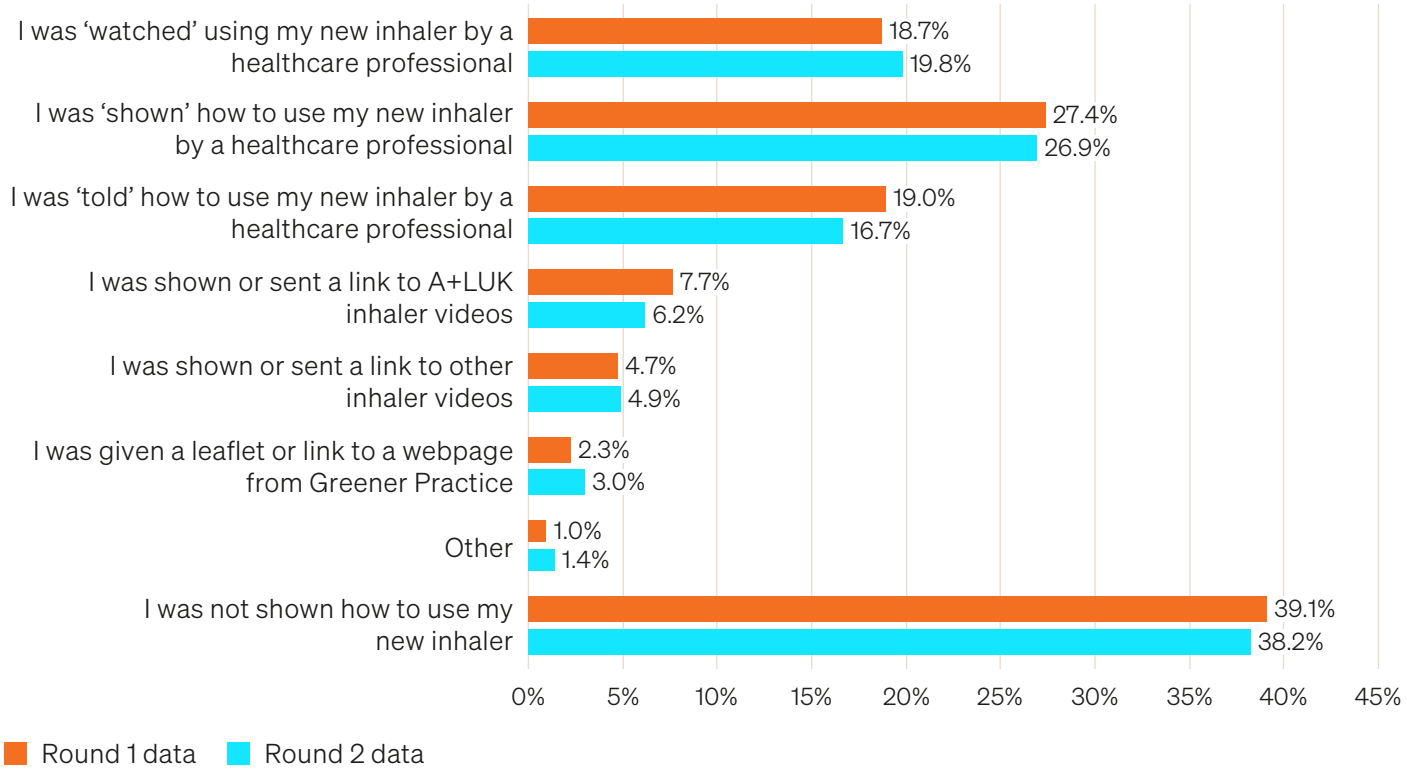
8. Was a reason given for switching?



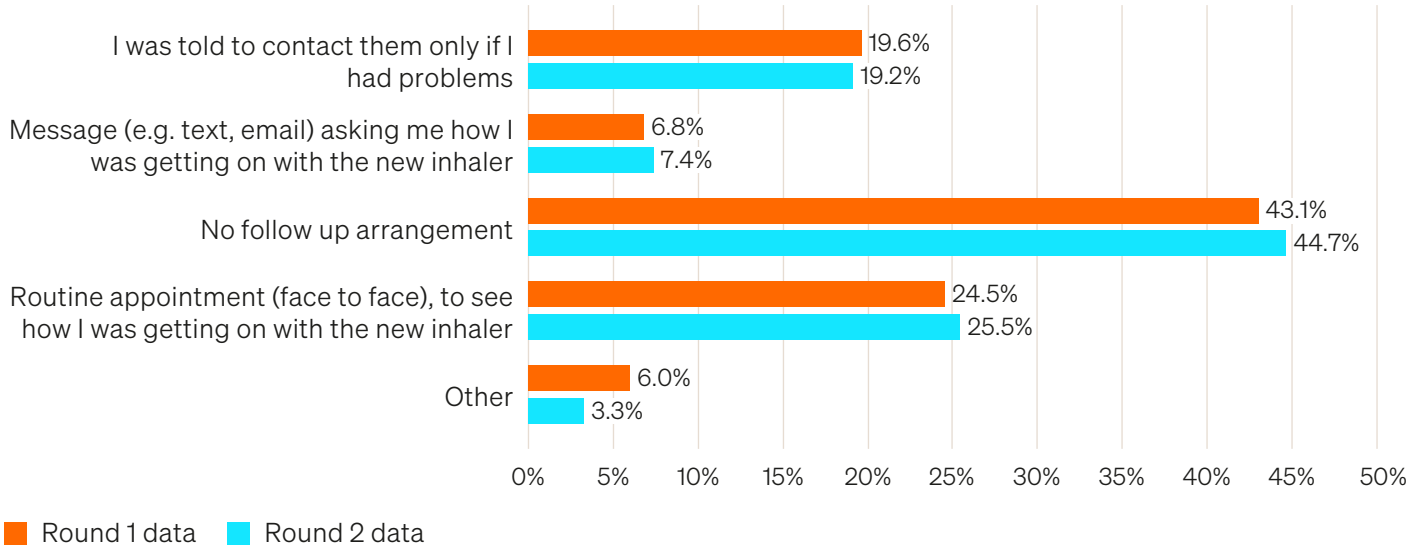
9. What reason was given for switching?



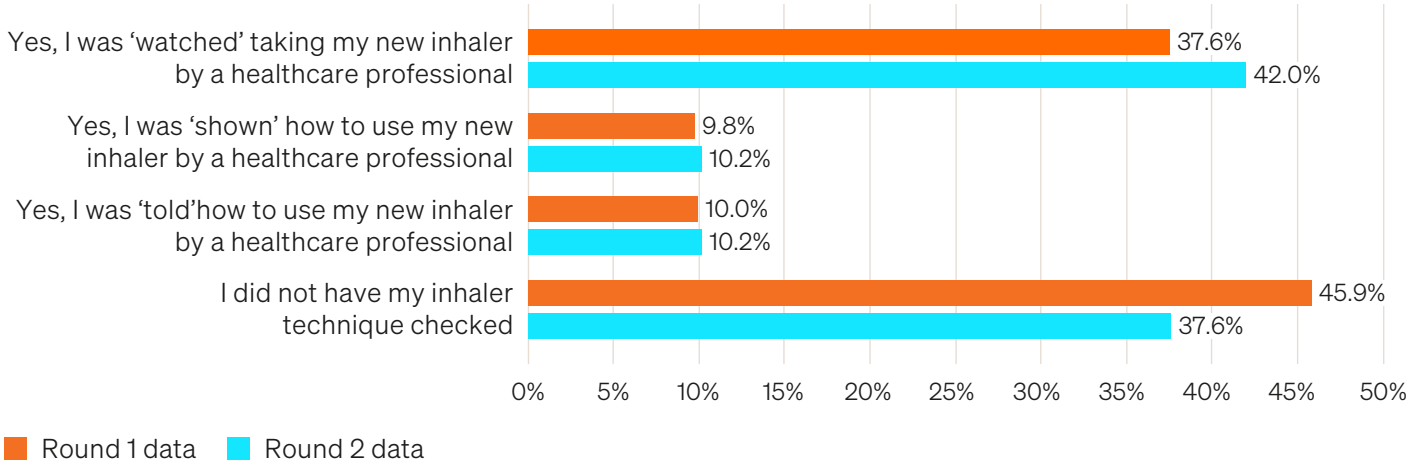
10. How was inhaler technique shown when switched?



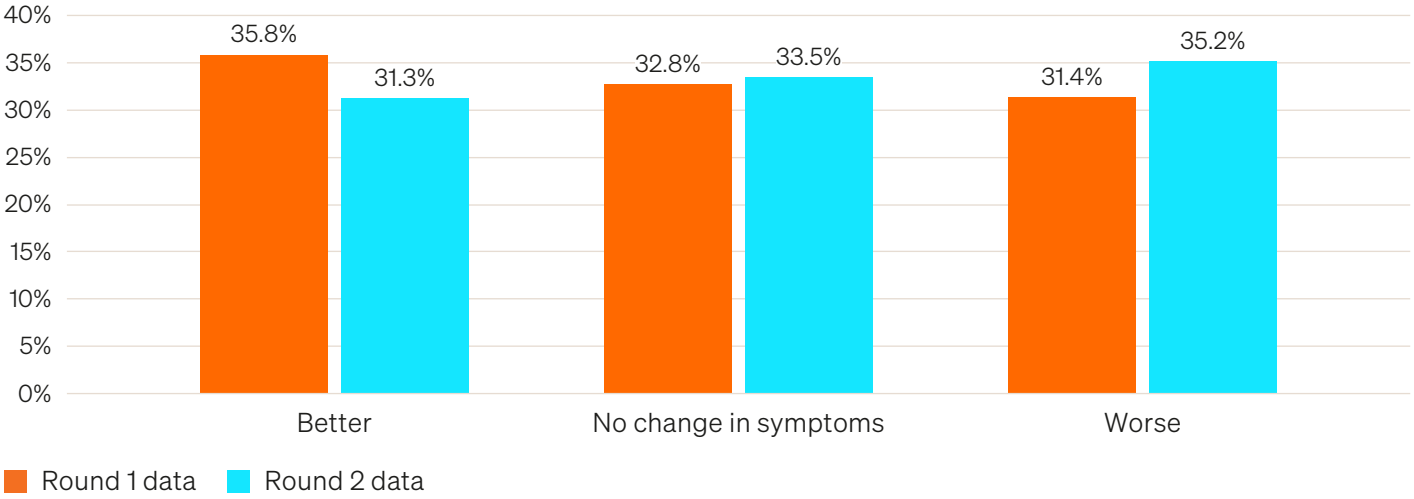
11. Was a follow-up appointment arranged after the switch?



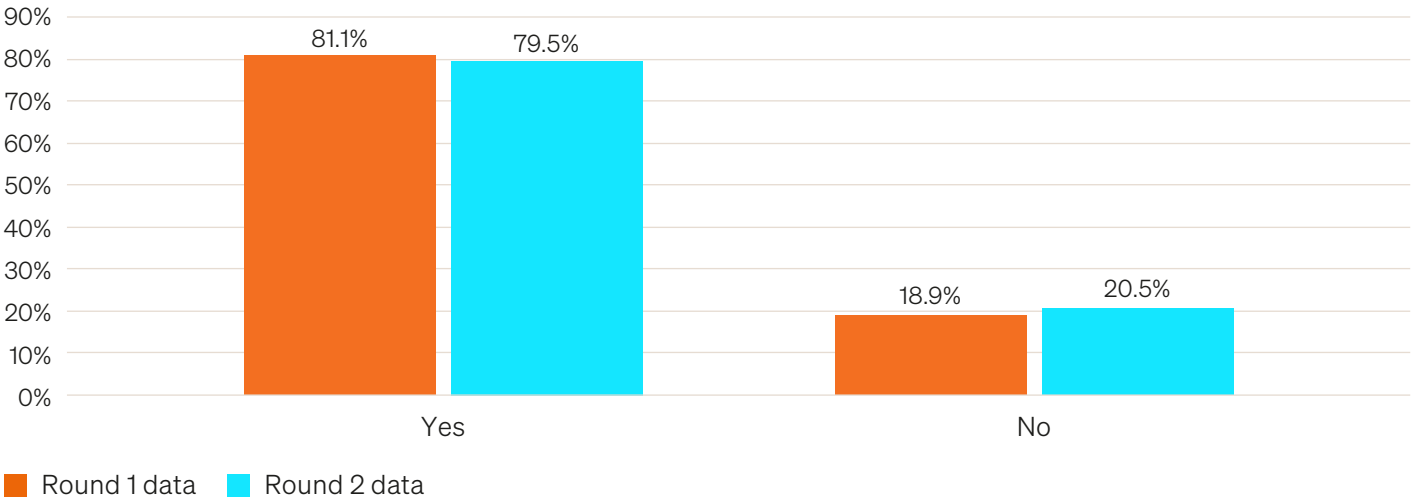
12. How was inhaler technique checked in follow-up?



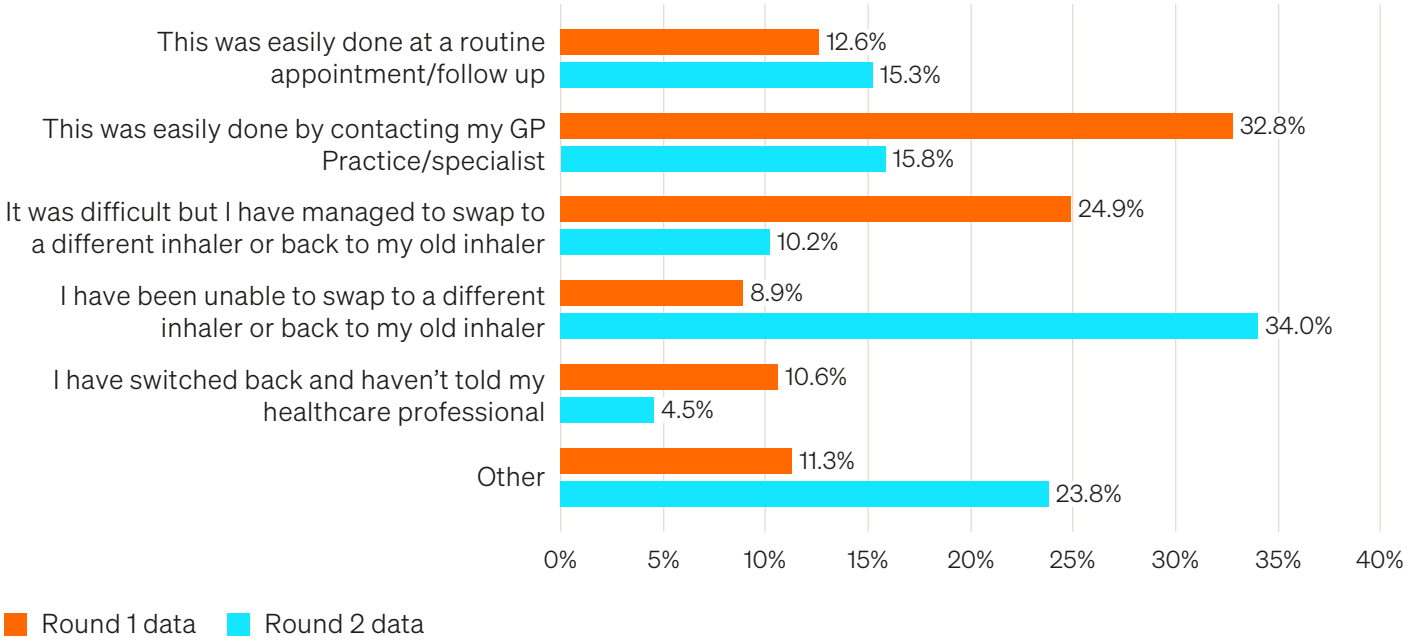
13. Symptoms post switch: better, same or worse?



14. Are patients still using their new inhaler?



15. What was patients' experience of reverting to their old inhaler, if applicable?



Appendix 3 – Patient survey questions

1. What is your age?
2. Where do you live?
3. What is your gender?
4. How old were you when you were diagnosed?
5. What is your household income?
6. Have you had a change from one type of inhaler to another (from inhaler to dry powder, for example) in the last year?
7. When were you changed to a new inhaler?
8. How was your inhaler changed?
9. Were your given an explanation for the inhaler change?
10. Why was your inhaler changed?
11. Were you shown how to use the new inhalers? If yes, how?
12. If appointment (f2f or phone) was this by:
13. Did you feel well informed about the change?
14. Were you given any choice in the type of inhaler you were prescribed?
15. After changing your inhaler, were your symptoms controlled better, worse or with no change?
16. Was there any follow-up arranged?
17. If you had a follow up did you have your inhaler technique checked?
18. If you had a follow up did you have a check of your respiratory condition?
19. Are you still using your new inhaler?
20. If your new inhaler was not suiting you or not working how easy was it to go back to your old inhaler?
21. Did you have any contact with your community pharmacy team when you changed inhaler?

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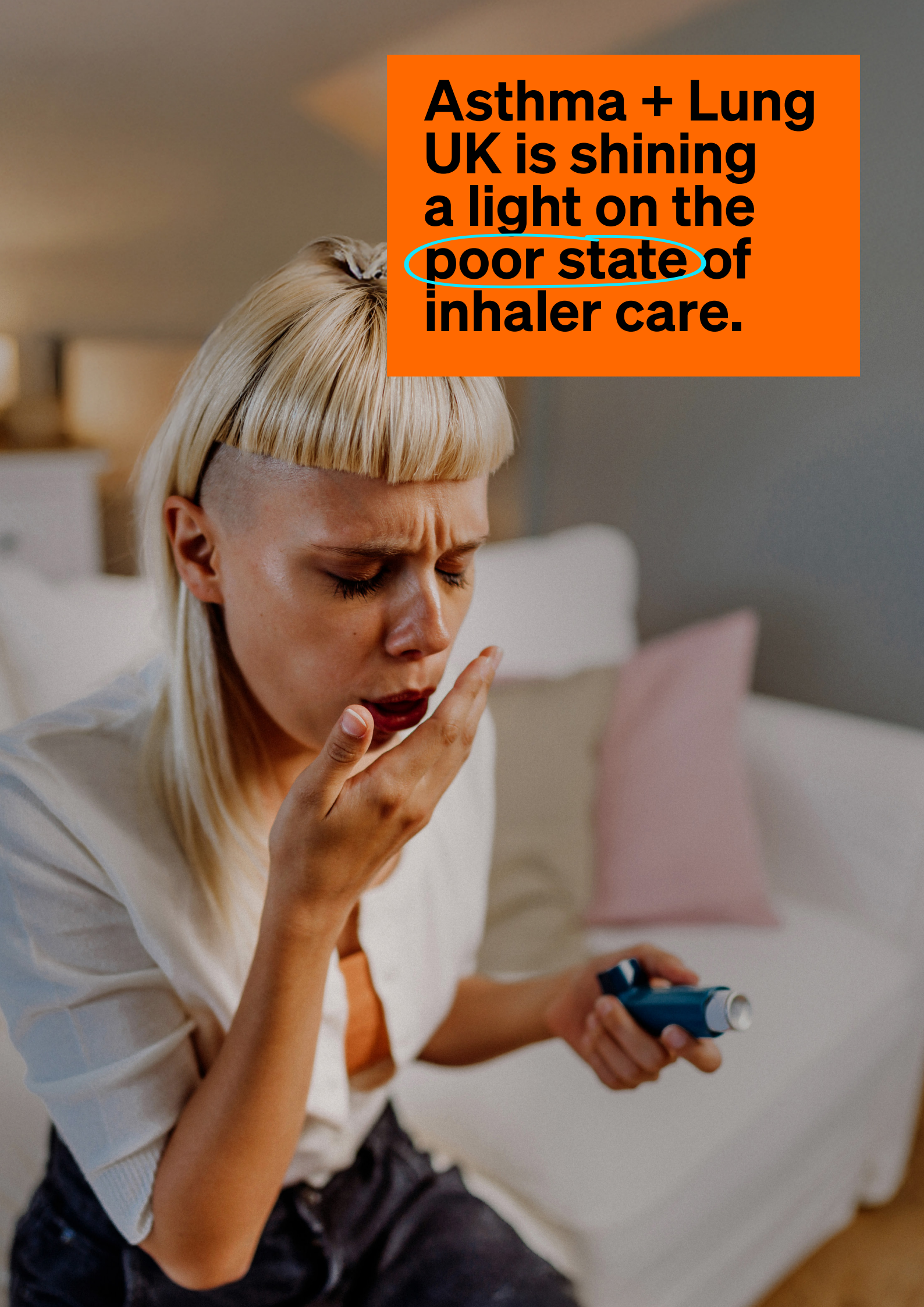
Asthma + Lung UK is shining a light on the poor state of inhaler care.

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