

## Greener Practice webinar:

### New BTS/NICE/SIGN joint asthma guideline: Practice Pointers

Webinar recording, including presentations

“How the new guidelines can help us deliver High Quality and Low Carbon asthma care” and

“Experience of a GP registrar QI project to recall high SABA users and improve asthma care”, and Q&A available at <https://www.youtube.com/watch?v=gv2oxF8aS6o>

Summary below of Q&A with

Dr Aarti Bansal	AB	GP in Sheffield, Clinical Sustainability Lead for Humber and North Yorkshire ICB, founder of the Greener Practice network. Aarti has a background in medical education and has published award-winning research on person-centredness, and has contributed to Health Education England and RCGP's planetary health curriculum for GPs. She has a particular interest in how to implement good asthma care and has led the development of Greener Practice's high quality and low carbon asthma care, quality improvement toolkit.
Dr Laura-Jane Smith	LJS	Respiratory Consultant at King's College Hospital, co-chair of the South East London Responsible Respiratory Prescribing Group and board member of the British Thoracic Society. LJ is leading work on local asthma guidelines to implement national guidance into secondary care and emergency departments.
Deborah Leese	DL	Clinical lead pharmacist for respiratory at South Yorkshire ICB, co-clinical lead for children and young people's asthma for the South Yorkshire Children and Young people's Alliance. Deb is one of 6 Asthma + Lung UK Respiratory champions and is vice chair of the Primary Care Respiratory Society service development committee and is a member of the policy forum. She is also part of the committee for the South Yorkshire Respiratory Interest Group.
Dr Veena Aggarwal	VA	GP in Battersea South West London. Veena did a sustainability fellowship at Greener NHS in 2021. She co-chairs the Greener practice trainee forum and South London groups, and also co-leads the RCGP sustainability group.

## DIAGNOSIS

**1) A) If a patient has already started any form of ICS (such as combined ICS/formoterol) does this make spirometry more difficult to interpret, eg could spirometry be normal as they've already started treatment?**

**B) How many hours do people have to stop their ICS/formoterol before spirometry?**

A: (LJS) It's a common worry that if a clinician sees a patient and they suspect asthma and treat them as asthma that this will mess up the tests, and then they won't ever be sure if they've got asthma or not. I understand this worry, but I don't think it's actually a big problem.

If you use your clinical judgment and on the basis of someone's history and any initial tests you have, then you think it's likely to be asthma, they absolutely need to be treated as asthma, and in that case we would be recommending that they're started on a combination inhaler. And as Aarti said [in her presentation], if they have very infrequent symptoms that would be AIR (anti-inflammatory reliever), so that's just as in when it's needed, and if they have more regular symptoms or have had any exacerbations we would say give them MART (Maintenance and Reliever Therapy) which means regular plus as required. In both cases [AIR or MART] this is using one inhaler, a combined ICS/formoterol.

When they then come to their spirometry, there is a potential for that medication to impact on that test. That is a less bad outcome than them not getting any treatment and risking exacerbation, but for most people it won't have any impact on their test, because what we would advise is that they try not to use their inhaler certainly for 24 hours before the test; our lung function Department won't do reversibility if they've had it within 24 hours because then it's not a meaningful test, but what we say to our patients is – if they're on AIR particularly – if they try not to take any doses for that week and if they're on MART if they can try and have 24 hours minimum 48 Hours if they can [off it].

Now if they're taking a lot of their combination inhaler then it still might reduce the reversibility and the FeNO (fractional exhaled nitric oxide), but if they have very active inflammation we'll still see an impact, particularly with FeNO: if their FeNO is sky high then it will still not be super suppressed so we can still use that information. Even if we have a negative reversibility, low FeNO, but clinically we still suspect asthma, the guidelines are very clear about this, they say that that's the point at which we should be doing bronchial challenge testing, and that is new in these guidelines and is a pressure on secondary care and on spirometry because we haven't done loads of challenge testing. So that's a challenge for us but that's for us [secondary care] to sort out. But the most important thing is that the patient is getting the right treatment based on your clinical diagnosis, and what we're all doing all the time is taking all the information we have and making the best judgment that we can.

**2) Can an AIR inhaler (anti-inflammatory reliever) be used for Peak flow reversibility testing in diagnosis?**

A: (LJS) Can we could use the combination ICS/formoterol for reversibility testing: I guess theoretically yes; it's not quite as quick acting as salbutamol, so I think it's 2 minutes in the data that's published- it's exactly the same efficacy but within that very first minute salbutamol maybe has the edge; but it's not in any guidelines for example from the ARTP

(Association for Respiratory Technology & Physiology) for diagnostic testing so we're still going to be using salbutamol for reversibility testing – that's a test, that's not treatment, where [in over-12s] we're recommending not using SABA.

## TREATMENT

### **1) How do you recommend explaining MART (Maintenance and Reliever Therapy) or combination inhaler use to patients to communicate the benefits, especially if they have been using SABA for many years or feel reluctant to try a combination inhaler instead?**

A: (AB) I will just spend some time saying you've got both medicines in one inhaler, and this medicine is not just as fast-working as a salbutamol inhaler, but it also works for longer, so it's actually better for you. And I'll often say that this is this is the new recommendation, this is new treatment, I might even allude to the fact that it's a little bit more expensive but we think it's better for them, to try and persuade them to do it.

(LJS): It can definitely be a challenge, and I think one of the things to recognize is that this is definitely a shift for patients as well as for clinicians, so we're all kind of on that journey together and it will take some time for this to be normalized. I do very similar, so I tell them that actually treatment for asthma has evolved and that's a really good thing.

Our evidence now is much better and we know that most people do better on a combination inhaler, and we want to make sure they're getting the absolute best care, and that this is what we would recommend to have the best control. And that our expectation is that this will mean that actually they take less medicine overall and that their symptoms are better controlled and that's what we'd hope for them. That actually asthma is not something that should affect you every day, it's something that should be well controlled and you should be able to crack on with your life. So I think some of it is setting expectations, because people often have got used to being limited, and so that conversation could be very helpful.

### **2) There was next a question on rescue use, and what prescribing combination ICS/formoterol as AIR/MART means we should advise patients to do should they find themselves in an emergency scenario, where previously we might have told them to take 10 puffs of salbutamol in a spacer. So how would you advise somebody?**

A: (DL) When we are implementing AIR and MART regimes we should really try and keep people on that one inhaler only and not give them a SABA (short acting beta agonist) alongside it because if we do that we end up encouraging the behaviour of SABA over reliance. The idea of using the AIR and MART approaches is that they are inadvertently increasing their own inhaled steroid dose and dampening down the inflammation in the airways – that doesn't happen if they revert to using the blue inhaler, so I would promote using ICS/formoterol even in an emergency.

There may be some exceptional circumstances maybe in children and/or for people who have a dry powder inhaler and you feel that they may not have the inspiratory effort during an asthma attack to use that dry powder inhaler. I must stress that these instances are rare and actually I would say that somebody who has a pMDI (pressurised metered dose inhaler)

without a spacer is probably less likely to get the drugs in their lungs than if they had a dry powder inhaler but in those exceptional circumstances you may want to supply a one-off salbutamol inhaler and spacer as an “emergency pack” and that shouldn't be on repeat or need to be ordered repetitively, because if it is that's an awful lot of emergencies that person is having.

The best advice really would be to stick with the ICS/formoterol wherever possible as that emergency inhaler so they're getting the benefit from the anti-inflammatory treatment. In terms of the number of doses that you can take: the license states that in an emergency you can take up to six puffs of the ICS/formoterol-containing inhaler at any one time, this is usually at intervals of around 1 to 3 minutes between puffs. If you look at something like the Asthma + Lung UK plan for maintenance and reliever therapy it even says you can repeat that step. Obviously if you're getting to the point where you repeat that step you are effectively going off label with that medicine but if it is an emergency, and that person is potentially at risk of dying from asthma, a few extra puffs of ICS/formoterol is not going to harm them until they get emergency help.

(LJS): Thank you, can I just add one thing to that, I think this is a really common worry and that was really brilliantly explained. The thing I would say is that we have to remember that there are other places that have been using the combination inhalers, both abroad and in regions of the UK which have already really pushed this – many local guidelines already recommend combination inhalers, Southeast London is one of them and there are many others across the country – and there has been anxiety about ‘well what if people are in an emergency’.

What we find is people can use the combination inhalers absolutely fine in an emergency, there's no difference in their outcomes. If they need to seek emergency care because it's not working they do so and they need to do so just in the same way as if their blue inhaler wasn't working; and actually the chance of them getting to that point where they're so bad is lower because they've had more ICS as their symptoms have been worsening. So it's a really common and understandable worry but in practice and in the data we're not seeing any problem, so we should really be very confident in recommending to our patients that they should use the combination inhaler as a rescue treatment.

### **3) How does it influence our management if the patient has asthma and COPD or an overlap between the two?**

A: (LJS) So again this really comes down to a judgment call, none of this is black and white. People don't come with a nice happy label of asthma or COPD, and people can have both, and loads of my patients have both, because you're more likely to end up in secondary care if you've got both because it gets more messy and tricky. Loads of my patients have asthma from childhood and then have smoked and have got a degree of fixed Airways disease but have also got some reversibility and some provoking factors but behave a bit more like COPD or a bit more like asthma – it gets really messy. The important thing is to treat the driving factors that are the problem for that patient's disease, so if I see a patient and they've got a label of COPD and they behave like COPD, in that most of the time they're stable, they don't have a lot of reversibility and they don't really have attacks in the same way except when they have an infective exacerbation, and they've got a good smoking history etc – but their eosinophil counts a little bit up, I'll probably treat them as an eosinophilic COPD and increasingly we're looking at that group and in the future that group may be offered biologics,

but that's really getting into the very much secondary care/tertiary care type care. If a patient has a much more asthmatic phenotype, even if I know they've also got COPD as in they've got some fixed airway disease and I've seen their CT scan and they've got emphysema, if they keep coming to A&E because they're getting flare-ups, if I can see that their FeNO is high, or if I can see that the eosinophil count is high or if they tell me that they're triggered by air pollution or by a dog then I'm going to treat them like asthma. And what that means is I'll give them a higher dose of inhaled corticosteroid and this will be my priority. This is all down to clinical judgment and taking the evidence that you have and then making a judgment.

At the point where you're sort of starting off, and you're really not sure what the diagnosis is I would say the safer thing is to do is to treat as asthma, so if you really can't work it out, treat as asthma because the worst case is you're going to slightly overtreat them with steroids. If they've got COPD in reality, then you're going to get the tests and figure it out and you're going to then tweak your regime and that's absolutely fine, and if it's still not clear please do refer in, use advice and guidance, or use your local respiratory specialist, but at the beginning if you're not sure go down the asthma guidelines because that's a safer approach.

#### **4) Are there any adverse effects or unintended consequences of using more inhaled corticosteroids?**

A: (DL) So the evidence is that people generally do not overdose themselves with things like AIR and MART regimes. The reason being, what they're actually doing is treating their asthma when they're giving themselves those extra doses of inhaled corticosteroids so you don't tend to see the excessive use of inhalers in the way that you would do with a SABA inhaler, which isn't treating the inflammation at all. So that's one thing to hopefully make you feel a little bit better about that.

In the AIR studies, the average daily dose that people were taking was around 50 to 100 micrograms of budesonide daily, that's a tiny dose of budesonide and the MART studies suggest around two to three puffs a day so you're not even getting up into the realms of medium dose ICS and therefore very unlikely to get any systemic side effects from the inhaled corticosteroids. It's usually only when you're getting up to high dose ICS, maybe 2,000 micrograms of beclomethasone equivalent that you are likely to start getting those kind of risks such as adrenal suppression etc where you would be thinking about introducing a steroid warning card. We just don't see that generally tend to happen with the AIR or MART regimes.

(LJS) No, I really don't worry about it, it's not something we see, we only really get worried about systemic absorption in people who I see who are on like super high dose ICS. On the lower steps on all our guidelines we really don't see it, so I really wouldn't worry. I'm always encouraging my patients to use more of their inhalers rather than less because what we're aiming for is control of disease because that's best, and the worst thing is if they end up having to have oral prednisolone because that's a massive dose that is much more likely to have side effects than any of the puffs that they're taking on their inhaler, so I think we need to be really clear about that message. I think the only other thing I would add to that is just to remember that it is just the lower dose regimes that have the MART or AIR licenses, so just be aware that that the higher dose products aren't licensed for AIR and MART because there is the risk of ridiculously high doses of inhaled corticosteroids with those, but not with the lower doses.

**5) How do we improve our care for patients with asthma when a lot of our asthma reviews might be done by phone or using accurx questionnaires at the moment, and general practice is struggling with workload. Where to begin and how do we go about trying improve? Veena and Aarti can you give us your general practice perspective?**

A: (VA): Ideally everyone would have an asthma annual review. A lot of practices do the ACT score and for anyone with a ACT score that's lower than about 20 or 21 to prioritize them. I would also suggest that using these [High Quality Low Carbon Asthma Care Toolkit] searches is a good way of prioritizing patients, looking at the ones who are not using their inhaled steroid, who have had exacerbations, who've had doses of oral steroids who've used more than three or six salbutamols per year: they would be the ones to really focus on. So I think if you're going to stratify them what we did was actually try and start with the ones who are the highest SABA over users, so there were some on about 20 [inhalers per year], so we got them in first and went down the list. I would also say that you know realistically not everybody is going to be able to be controlled in this way, like we try that but we've got we had a lot of patients who had really severe asthma as well as COPD, Bronchiectasis, ABPA so not everyone is able to be completely controlled this way, but just do what you can and if you're going to start anywhere I would start with the easy wins.

(AB): I would I agree with what Veena is saying, but I would strongly encourage everyone to try and have processes in their practice so that patients with asthma are reviewed face to face. Because I think if we're not seeing people face to face then we're not really able to have proper conversations with them about their control, and we're not really talking to them about their inhaler technique and these are absolutely crucial things to be doing.

An ACT score looks at the last four weeks of control. One of the examples that I sometimes give is a patient I saw, who was always reviewed in her birthday month in the summer, when her asthma symptoms occurred in the winter. And so her ACT score was always brilliant but actually she was really severely exacerbating in the winter, and if you looked at her objective inhaler use then she was on very few ICS and a lot of SABA, so she was at high risk. I know some practices have moved to telephone and floreys but that's only giving you one bit of the picture that you need and if we're really going to improve asthma control, we are going to need to see most, if not all, of our patients face to face. But completely agree with Veena, let's stratify and let's look at the highest risk patients first.

(VA): I do agree with you and I don't want you to think that I'm suggesting that that that is a great way of managing it by just picking some patients, but I'm saying if you're if you're going to try and prioritize some urgent ones to see first, then that's what I suggest but yes seeing everybody face to face I would agree with as well.

(LJS): Yeah I think everyone is also agreeing in the chat so I think we do have to [try and deliver face to face reviews]. We absolutely have to improve care, we also absolutely have to be pragmatic and understanding of the situation. What I would say is this is a whole system approach, so this isn't just left to Primary Care, this is a shift that's happening in primary, secondary, community, ED, you know, we are looking at how we improve asthma care across the entire pathway, so everything you do, every patient that you can see and can optimize is a contribution to the overall improvement in population health management which we are all completely invested in. So even if it feels like at the moment, you know if you look and you say in this quarter we can only see our absolute top 5%, that's actually

massive because then we can all chip away and chip away and we will really have a huge impact. I really think these guidelines and this approach has the potential to be completely transformative in a way that we've not seen at all in asthma care in my entire life, so you know I might be overstaying it but I really really think this is a massive opportunity and us all being part of it is really fantastic.

### Links to some of the resources shared by the speakers:

- [NICE/BTS/SIGN joint asthma guideline](#), published 27<sup>th</sup> November 2024
  - The NICE guidance [algorithms](#) and [SIGN summaries](#) are helpful summaries to refer to on the new joint guidelines.
  - The Primary Care Respiratory Society has produced a [range of resources](#) to help practices implement the new guidelines.
- [Greener Practice High Quality Low Carbon asthma care toolkit](#), including:
  - [Education videos](#) (including disease control and approach to consultation)
  - [Projects](#), including clinical searches, education videos and patient-facing resources, to improve asthma care
  - [Visual aid for optimising asthma reviews](#). One-page visual aid to support a person-centred asthma review. Ensuring patients get the right medicine (preventer) to get the right place (airways). It has hyperlinks to various resources.
  - [Airways diagram](#) (links to large version). This can help to explain that the underlying problem in asthma is airway lining inflammation and hence the importance of inhaled corticosteroid as the main treatment for asthma.
  - Patient Videos: Links can be incorporated into SMS/AccuRx messages and/or annual asthma review letters for all patients. They can also be sent in a targeted way to patients identified at risk of poor control.
  - [Asthma + Lung Inhaler technique videos](#) can be sent in SMS/AccuRx messages after prescribing a new inhaler.
  - Greener Practice has created two short animated videos: The first explains what asthma is and how to treat it, and second explains the options around inhaler device choices. Both videos emphasise prioritising disease control.
    - [Greener Practice: What Asthma is and How to Treat It](#)
    - [Greener Practice: Inhaler device types for asthma](#)
- The Clean Air Hub have a [good leaflet](#) you can give patients with respiratory conditions about the effects of air pollution and what they can do.
- You can find more info about the environmental impacts of inhalers on the [Green Inhaler](#) website

- [Why Asthma Kills Report](#) published by the Royal College of Physicians
- [Breathing Unequal Report](#) published by Asthma + Lung UK