



National Update – Supporting Children and Young People with Asthma live their best lives

CYP Transformation Team NHS England

#AskAboutAsthma campaign asks



1. Asthma action plan is in place



2. Inhaler technique check



3. Schedule an asthma review every year and after an attack



4. Air pollution and impacts on lung health

Fundamentals to delivering the AAA asks:



1. Accurate diagnosis is the foundation to good asthma care



2. Training of healthcare professionals



3. Patient education to support self-management



4. Tackling health inequalities

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Diagnosis: background

- There is significant over and under diagnosis of asthma
- Without an accurate and timely diagnosis, access to the structured care essential to good asthma outcomes will be limited
- A lack of diagnosis is also a foundational driver of health inequalities
- Feedback from families outlines how diagnosis is often difficult but once achieved, is a turning point to good asthma control

Research

Ingrid Looijmans-van den Akker, Karen van Luijn and Theo Verheij

Overdiagnosis of asthma in children in primary care:

a retrospective analysis



[Explore this journal >](#)

Original Article

Misdiagnosis of asthma in schoolchildren

C.L. Yang, E. Simons, R.G. Foty, P. Subbarao, T. To, S.D. Dell 



UNIVERSITY OF
BIRMINGHAM

CITY OF
WOLVERHAMPTON
COUNCIL

Parents' views on barriers and facilitators to receiving asthma support for children in Wolverhampton: a qualitative study

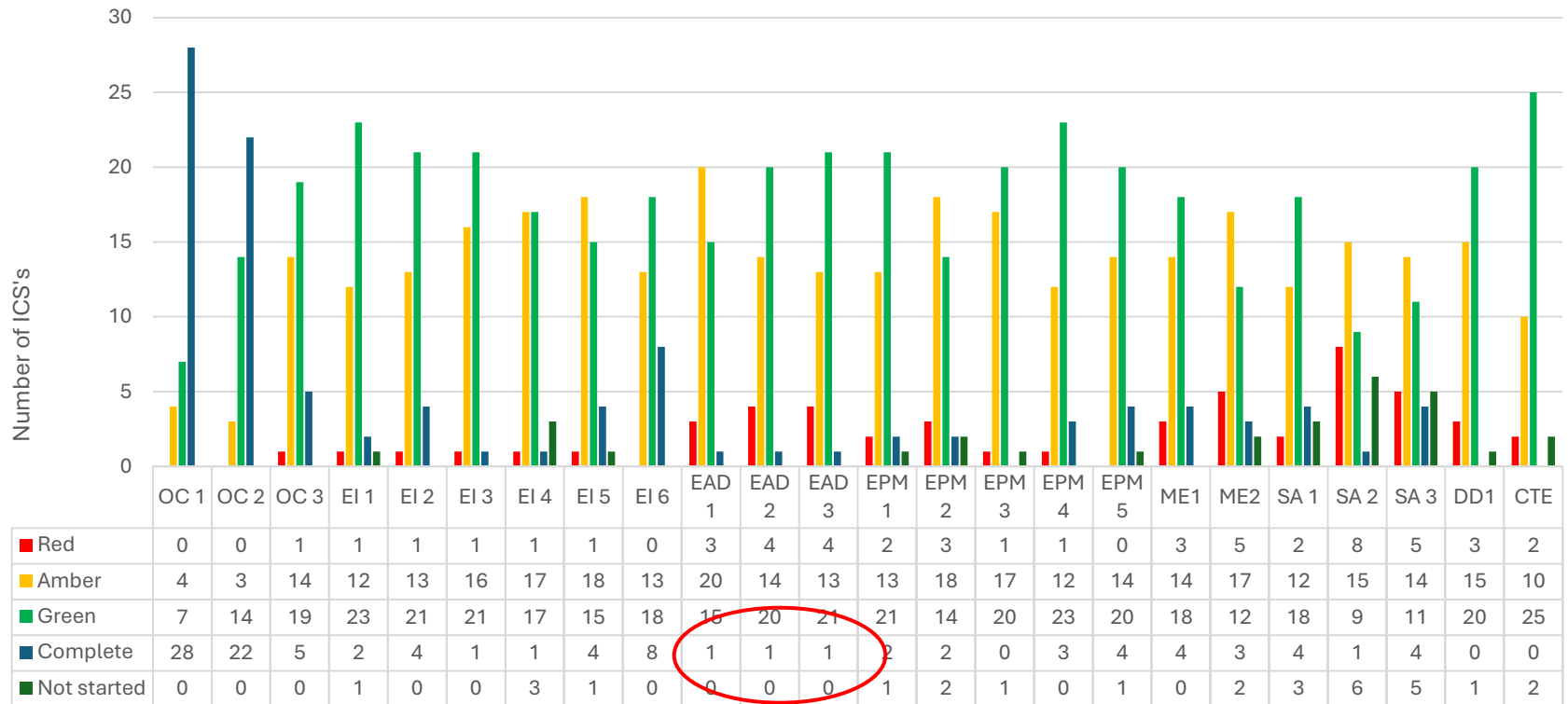
December 2022

Diagnostic pathways are the key



National reporting of Diagnosis Deliverables

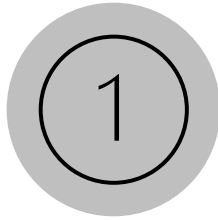
CYP Asthma Deliverables



CYP Asthma Deliverables

■ Red
 ■ Amber
 ■ Green
 ■ Complete
 ■ Not started

Barriers to implementation



Priority



Money



Training

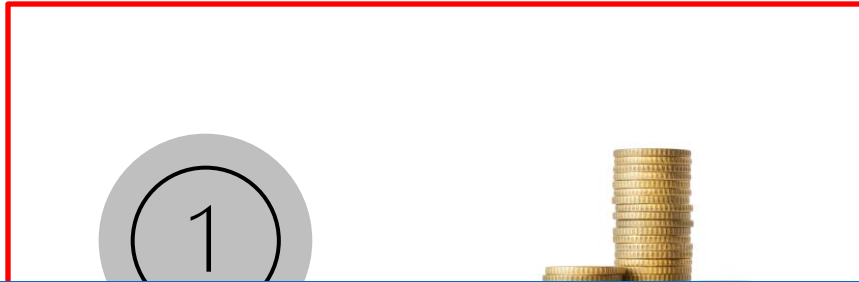


CYP specific



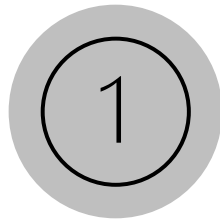
QoF

Barriers to implementation



- Updated guidance:
 - *‘Systems are expected to offer services for children and young people locally within CDCs where it is safe and appropriate to do so; for example...supporting physiology pathways for asthma..... Where it is not appropriate or safe for a CDC to offer services to children and young people, systems should develop alternative plans to increase diagnostic capacity for them.’*
- Messaging
 - 1 of 3 priority areas within the CDC team
 - National vision: 1 CDC per ICS develops a CYP asthma pathway.
 - Funding
- Provision for CYP services in any new bids
- Commissioning standards for spirometry

Barriers to implementation



Priority



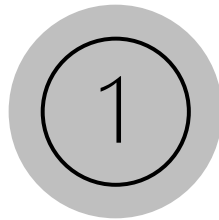
Money



Training

- Working with ARTP to make the accreditation process smoother
- Online training course for spirometry is in development by the Workforce and Education Training team with content provided by ARTP.

Barriers to implementation



Priority



Money



CYP specific

Select protective marking

DRAFT



Diagnosing asthma in children and young people.

Age specific considerations when developing diagnostic models



Publication reference: DRAFT ONLY

Barriers to implementation

Quality and Outcomes Framework guidance for 2024/25

1 April 2024



CYP specific

‘PCAs are available where people cannot perform objective testing.’



QoF

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Training and Education - professionals



Health Education England

The National Capabilities Framework for Professionals who care for Children and Young People with Asthma



Supporting excellent asthma care for all children and young people

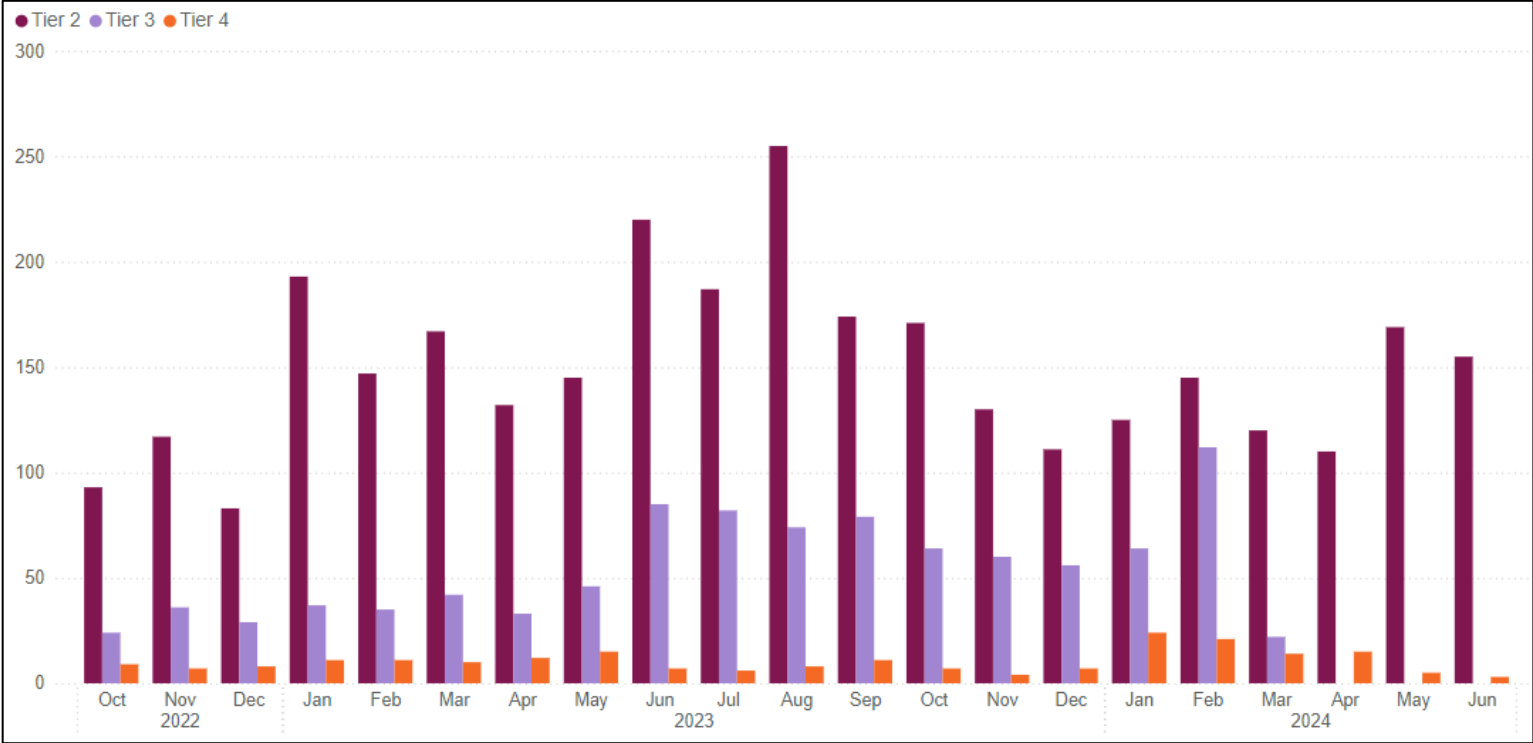


www.hee.nhs.uk

We work with partners to plan, recruit, educate and train the health workforce.



Completed asthma training courses

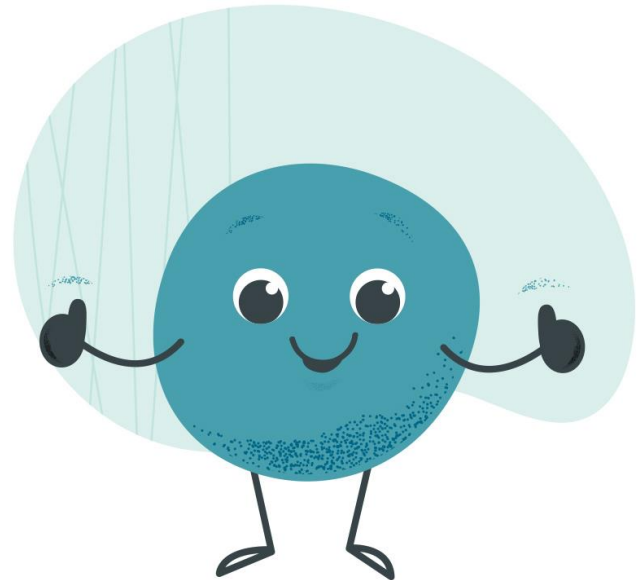


* March 2024 data missing from face to face training tiers 3 & 4

Nearly 50K people have now been trained since the launch of the capabilities framework and the online modules

Future plans

- Support systems in prioritising training
 - NHS standard contract
 - Primary care
- More accessible:
 - Growing demand for face-to-face courses



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Effect of parent/carer education

Archives of Disease in Childhood

Original research



Effect of asthma education on health outcomes in children: a systematic review

Wen-Yi Liu,^{1,2,3} Zhu Liduzi Jiesisibieke,² Tao-Hsin Tung ⁴

- 31% reduction in ED visits
- 54% reduction in hospitalisations
- Most effective is education of both child and carer
- The setting of the education does not impact its effect

Archives of Disease in Childhood

Quality improvement

BReATHE interventions (Beating Regional Asthma Through Health Education)—an innovative approach to children's asthma care in the North East and North Cumbria, UK: an interventional study



 Jennifer Katherine Townshend , Sally Hails , Ruth Levey , Patty DeZwart , Michael McKean , Samantha Moss

Correspondence to Dr Jennifer Katherine Townshend, Respiratory Paediatrics, Great North Children's Hospital Paediatric Respiratory Unit, Newcastle upon Tyne NE1 4LP, UK; jennyj@doctors.org.uk

- Sustained reduction in hospital admissions by 29%

Self-management interventions to reduce healthcare use and improve quality of life among patients with asthma: systematic review and network meta-analysis

Alexander Hodkinson,¹ Peter Bower,¹ Christos Grigoroglou,¹ Salwa S Zghebi,¹ Hilary Pinnock,² Evangelos Kontopantelis,^{1,3} Maria Panagioti^{1,4}

- Regularly supported self-management reduces the use of healthcare resources and improves quality of life across all levels of asthma severity

beat
asthma

What is asthma?



EasyRead version
for parents

www.beatasthma.co.uk

This is an EasyRead version of your



MART

Asthma Management
Plan For:



Name:



Best peak flow:



Date:



Your asthma doctor or nurses's name
and telephone number is:



Your triggers and what you do to

This is an EasyRead version of your



Asthma Management
Plan For:



Name:



Best peak Flow:



Date:



Your asthma doctor or nurses's name
and telephone number is:



Your triggers and what you do to
manage them:

Please take this with you when
you visit your doctor or
asthma nurse.

beat
asthma

beat
asthma

Vaping and asthma



This is an EasyRead
version of:
Vaping and Asthma

www.beatasthma.co.uk

when
or

beat
asthma

Pre-school wheeze

Symptom management after a pre-school wheeze episode best asthma

If your child is on a preventer inhaler, give it as prescribed

Your child is getting better. They may still have a wheeze, but they are:

- Breathing normally
- Happy
- Active
- Their symptoms are not getting worse or changing

Look out for symptoms that show that your child may need their inhaler

- A persistent cough
- Short of breath
- Working harder to breathe
- An increasing wheeze
- Less active or quiet

If your child has symptoms, give 2 puffs of the blue inhaler via a spacer.

If 2 puffs do not relieve their symptoms after 5-10 minutes, give another 2 puffs of the blue inhaler via a spacer, one at a time.

If 2 puffs still do not relieve their symptoms after 5-10 minutes, give another 2 puffs. They have now had a total of 6 puffs.

Your child should now be feeling better, and this should last at least 4 hours.

Your child should be back to normal after around 2-3 days

Your child should always have access to:

- A wheeze plan for future episodes and
- If they have been prescribed a preventer inhaler, ensure they are reviewed at the GP within 6 weeks

WHAT IF MY CHILD IS NOT GETTING BETTER?

If your child:

- still has symptoms after 6 puffs of the blue inhaler OR
- needs their blue inhaler more than every 4 hours

they are not getting better, and you need to take action now.

1. Give up to 10 puffs of the blue inhaler via spacer, 1 puff at a time.

AND

2. Arrange an urgent review with their doctor today, or go to the emergency department if this is not possible.

If your child is continuing to need 10 puffs of the blue inhaler every 4 hours, you should get a more urgent review (within the next few hours)

If your child is having difficulty breathing not relieved by 10 puffs of salbutamol

You should call 999

AND

whilst waiting for the ambulance, use the spacer to give **1 puff of their blue inhaler every 30 seconds**, taking 5 breaths for every puff given

source:

best

source:

Tc

pr

Green Zone Getting a cold

Your child has:

- a cold (runny nose, coughing, sneezing)
- a mild wheeze
- shortness of breath

but they are still able to do their normal day to day activities such as going to nursery/ school.

Green Zone Action

- Give two puffs of their salbutamol (blue) inhaler through a spacer up to four hourly using the technique described on the back of this page.
- You can do this for a few days but if your child is not getting better, **make an appointment to see a doctor.**

IMPORTANT:

If after two puffs your child still has increasing wheeze or chest tightness

Move to the AMBER ZONE

due to viral infections.

Amber Zone: Getting Unwell

Your child still has symptoms after two puffs of salbutamol or has more symptoms, for example:

- out of breath
- coughing
- wheezing
- doesn't feel able to run around and play as usual.

Amber Zone Action

- Give two puffs of their blue inhaler using the technique described on the back of this page and wait ten minutes.
- If they still have symptoms after this, you can repeat the two puffs every ten minutes up to a total of six puffs as often as every four hours as needed.
- If your child is needing six puffs as often as every four hours, keep going, but you must see a doctor **within the next 24 hours**. This can be your GP or your local out of hours service

IMPORTANT:

If after six puffs your child still has increasing wheeze or chest tightness

Move to the RED ZONE

our specialist paediatric asthma nurse, and she will try and reply within 7 days

Red Zone: Severe

Your child seems very unwell

- They still have symptoms after six puffs of their blue inhaler, or they need their blue inhaler more than every four hours
- They are not getting better, and you need to take action now.
- Give up to ten puffs of the blue inhaler via a spacer, one puff at a time.

AND

- Arrange an urgent review with their doctor **today** or go to the emergency department if this is not possible.

If your child needs a further ten puffs of the blue inhaler, you should get an **urgent review within the next few hours.**

If your child is:

- Breathing fast
- Struggling or using a lot of effort to breathe - the skin between the ribs or neck sucking inwards.
- Getting tired
- Unable to talk in a sentence / grunting / panting.
- Pale/grey/blue around lips or face.

You should call 999.

AND

Whilst waiting for the ambulance, use the spacer to give one puff of their blue inhaler every 30 seconds, taking 5 breaths /20 seconds for every puff given.

Dose counters



Background

- Salbutamol pMDIs are the most prescribed asthma medication in the UK and an essential component of acute asthma management.
- Without a dose counter, there is no reliable way to know when the device is empty
- 40% of patients use an inhaler which is empty, believing it to still have doses remaining
- No UK marketed Salbutamol pMDI has a dose counter,
- Affects adults and CYP alike



Consequences

During an exacerbation:

- increases avoidable emergency assistance calls by 8%
- unscheduled hospital visits by up to 45%
- places individuals at risk of a life-threatening asthma attack.

NCMD findings

- A number of deaths where the absence of a dose counter has been a significant contributing factor

Patient anxiety

- 62% report anxiety over not knowing how many doses are left
- 92% report improved anxiety when a dose counter is fitted

Environmental impact

- Expelling propellant which contains HFAs with no clinical benefit
- 13% inhaler discarded before they are empty

Action to date:

- Education:
 - Education for HCPs
 - BNF/BNFc
 - Tiered national training
 - Education for patients
 - Info leaflets (translated and easy read)
 - Animation
- Patient safety alert
- Yellow Card – CDOPs
- Cross system working



International Response

FDA (2003)

- Counters or colour codes. to be integrated into pMDI devices intended for the US market

EMA (2006)

- Support the inclusion of dose counters on pMDI's within the European Union

Australia (2020)

- Phased out Ventolin without dose counter over a 6-month period

UK response

The NCMD, NHS England and MHRA have prioritised this significant safety issue and are working proactively with partners in the pharmaceutical industry to seek to ensure that all pMDIs supplied in the UK have an integral dose counter.



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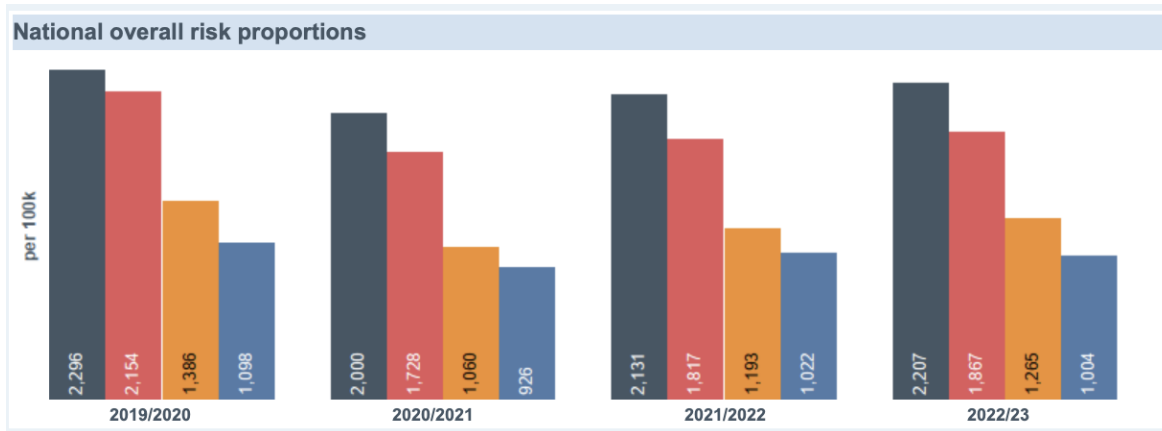


4. Tackling health inequalities

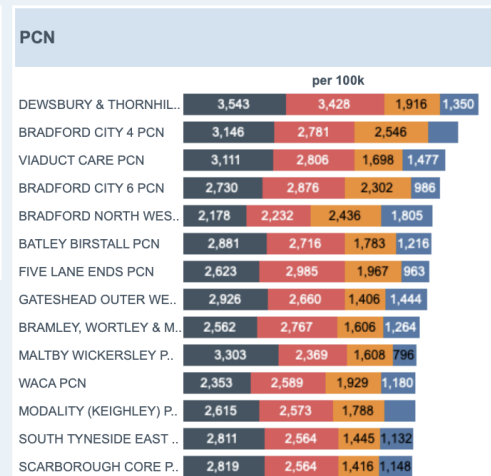
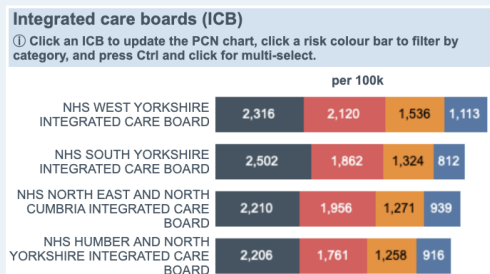
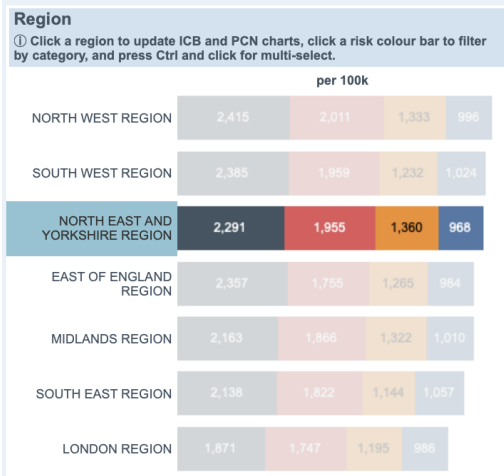
Dispensing dashboard

Risk categories based on patient activity for over dispensing of SABA and under dispensing of ICS:

- Black = Very high risk
- Red = High risk
- Amber = Medium risk
- Blue = lowest risk



Financial year: 2022/23, Age group: Aged 6-10, Aged 11-15, Aged 16-19



Patient level

- EMIS and System1
- All children age 5-18 yrs
- 6 or more SABA or
- 2 or more courses of prednisolone

The logo consists of a blue arrow pointing right, with a white arrow pointing left inside it, creating a double-headed arrow effect. The text "Clinical Digital Resource Collaborative" is written in white on the blue background. Below the arrow, the text "Supporting Clinical Decisions" is written in blue.

**Clinical Digital
Resource Collaborative**
Supporting Clinical Decisions

Summary



Good quality of life comes from good control



Diagnostic pathways



Education



Tackle health inequalities



Thank you