

Take a Breather

STOPPING

the

MONSTER

DAYS

Utilising QI methodologies  
To improve outcomes for CYP  
with wheeze and asthma in TH

*When I have a bad  
asthma day it feels  
like a monster!*

January 2020,  
Rita Araujo, Katie Cole, Tori Hadaway  
on behalf of THT – Born Well Growing Well



Real drawing and quote  
by 5 year old boy.

[www.towerhamletstogether.com](http://www.towerhamletstogether.com)  
#TH2GETHER

**TOWER HAMLETS  
TOGETHER**

*Delivering better health  
through partnership*

# Tower Hamlets

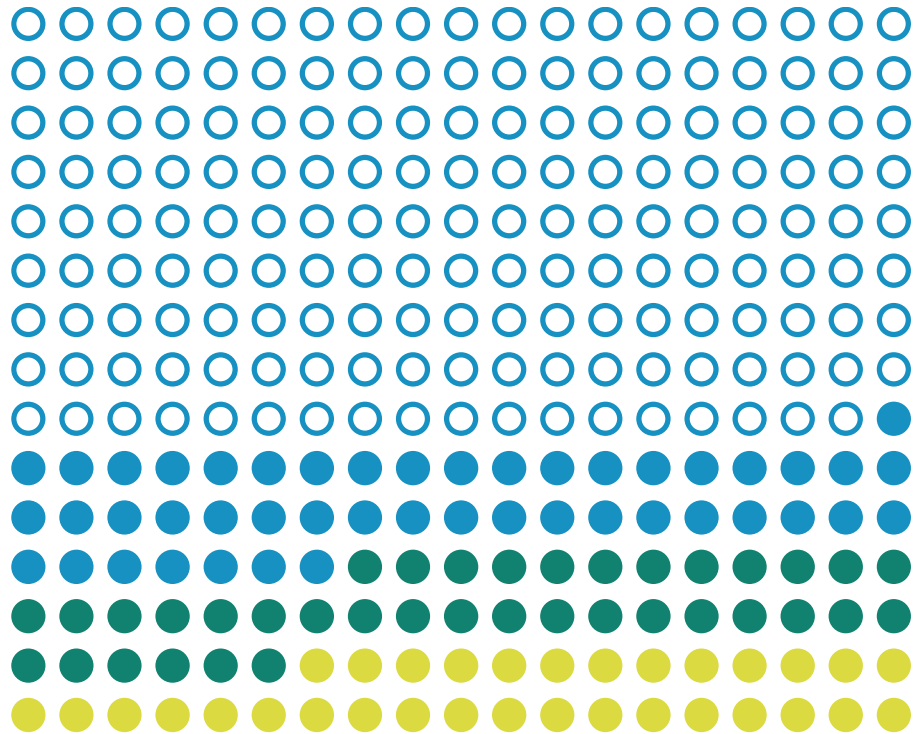


- One of the highest child and pensioner poverty rates in England
- One in four residents lives below the poverty line
- The average household income in our most wealthy ward is more than double that of our poorest
- Lowest (disability-free) life expectancy in London
- Third highest CO2 emissions in London



# Tower Hamlets Together

○ 170 System leaders, researchers & professionals delivering services

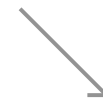


● 46 Adults    ● 37 Children    ● 32 Young People

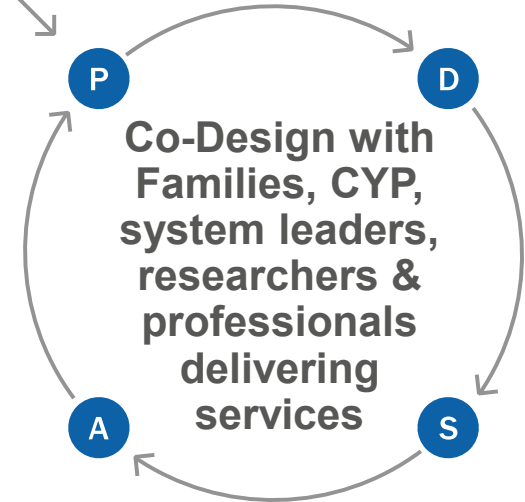
○ Engage with Families & CYP



○ Engage with system leaders & professionals delivering services



○ Engage with Families & CYP



*Rapid Tests of Change*  
Plan-Do-Study-Act Cycles

# System Leaders, Researchers & Professionals Delivering Services



- Public Health - CYP & Healthy Environments teams
- Housing providers
- Clinical Commissioning Group – CYP Integrated Commissioning & Finance Strategy teams
- Tower Hamlets Schools
- Barts Health Trust
- Health Watch Tower Hamlets – Young Influencers
- Quit Right Tower Hamlets
- Clinicians and Managers in primary care
- Pharmacists
- Health Visiting - GPCG
- School Health and Wellbeing - GPCG
- Queen Mary University London researchers
- Voluntary Sector organisations – Global Action Plan/ BBB Charity
- Early Year settings (nurseries & children centres)
- East London Foundation Trust Quality Improvement Team
- Clinical Effectiveness Group



# Why Wheeze / Asthma?



## ▶ Most Common Long Term Condition

Asthma is the most common long term condition affecting Children and Young People (CYP) in the UK

(London Asthma standards for Children and Young people, 2015)

## ▶ TH Context

South Asian families have:

- More difficulty in recognising severity of symptoms
- Higher levels of involvement of wider family
- Higher levels of stigma

(Lakhanpaul et al. BMC Pulmonary Medicine, 2017)

## ▶ Asthma Death

1:6 people in the UK do not know/unsure if the condition can be fatal

Yet rate of asthma deaths in the UK has increased by more than 20% in 5 years

(Asthma UK, 2018)

## ▶ Spend

NHS spends around £1billion a year treating and caring for people with asthma (Asthma UK, 2016)

## ▶ Quality of Care

Of CYP who died, only 4% were offered good quality care (National Review of Asthma Deaths (NRAD), 2014)

65% of people with asthma are not receiving the basic care in the UK (Asthma UK, 2018)

There is clear evidence that to reduce deaths quality interventions need to be placed – especially for those who are at risk of an asthma attack or/and attended acute care (NRAD, 2014)

# THT BWGW Wheeze/Asthma Programme

AIM

To reduced non-elective admissions of children (0-16 of age) with viral wheeze and asthma at the Royal London Hospital by a minimum of 15% in the next 12 months

## PRIMARY DRIVERS

## SECONDARY DRIVERS

## INTERVENTIONS

## OUTPUTS

## OUTCOMES

Health promotion and education

Diagnosis and management

Social Environment

Emotional Wellbeing  
Stigma/Perception of condition  
Signposting to appropriate treatment  
Understanding of condition

Appropriate prescription  
Prompt and accurate diagnosis  
Asthma Action Plans  
Compliance with treatments

Seeking appropriate treatment when needed  
Partnership working  
Smoking in household – air quality in the home  
Air pollution  
Housing conditions

- ★ Group consultations in Schools
- Asthma/Allergy Guidance
- ★ Young People's focused App
- Play and stay in children's centres
- Peer sessions for newly diagnosed children after school
- Educate health / non clinical professionals across borough
- ★ Identify Asthma Champions across the borough
- Children's Asthma NIS
- Integrated key messages in Asthma Action Plan
- Asthma Pharmacist Reviews
- High risk clinics
- ★ Health professional letter to advise stop smoking/reduction in household
- Establishing smoking cessation pathways across organisations
- Promote air text with families/CYP
- ★ Revision of Air Text provision
- ★ Co-design materials for reduction in air pollution exposure
- ★ Develop educational session for health professionals
- School information dashboards to include air quality
- ★ Housing form for clinical staff to complete

**Co-designed Asthma and Allergy friendly school guidance**  
189 CYP reviewed in group consultation in Schools  
- Review all CYP with wheeze/asthma. Identify CYP risk of asthma attack using Asthma Control Test  
- 49 Parents; 16 School Staff.  
Supported bullied pupil to deliver an asthma session to 26 pupils + 1 teacher

Pilot an app with Young People with asthma  
**Note:** TH pilot site selected for health passport app with ambition to be spread nation wide

**757 staff- educated + formal service awareness**  
Shadowing in clinics; Primary care formal training; SENCo Conference; Hospital training; Asthma awareness month across the system; School Nursing; Health visiting teams; Health and Wellbeing events; Pan London event; Locality/network meetings; THT Summer Fair awareness; Take a breather event; Schools; Pharmacies; London Ambulance Service; Voluntary sector organisation  
**72 Asthma Champions identified to date** - 4 HV (one/locality); 23 primary care/3 Early Years; 16 Schools; 26 Secondary care

**Financially incentivising GPs to review CYP with asthma and identify CYP who have been receiving asthma treatment but have no formal diagnosis of asthma**  
Developed searches to aid primary care identifying children at risk  
Developed review templates for primary care to effectively review CYP

Joint clinics with Respiratory Pharmacist (GPCG) so that professionals could start reviewing CYP in primary care setting

**814 CYP reviewed in High risk clinics across 8 networks (face to face/phone)**  
Set up 8 high risk specialist network clinics in primary care in collaboration with 8 GP surgeries. Direct data flow for CYP AE x2/and 1 admission via Barts BIU  
**Note:** In line with NHSE Long Term Plan

Co-produced letter for mothers to take home to fathers who smoke on impact of passive smoking and key contacts for smoking cessation services  
Smoking cessation pathway between Paediatrics Barts Health Trust and Quit Right to refer in parents/young people  
"Air text" service being reviewed by national body as not tailored for CYP needs  
Template for Health professionals to effectively communicate with Housing department when concerns identified in the home and disseminated  
Co-designed leaflets to educate CYP on reducing exposure to air pollution  
Designing/Testing educational session for health professionals on the importance of air quality - 83 health professionals engaged to date  
**Note:** interest from Asthma UK and Health Care Alliance UK

**Identified 48 amount at risk of Asthma attack**  
43% of CYP identified to be at risk of asthma attack had not contacted GP or attended an acute setting  
**Confidence levels increased** in relation to management of condition  
Clear guidance for schools

5 YP trialled the app to date (aim to attain input from 18 YP by April 2020)

Levels of knowledge and confidence reviewing CYP increased  
72 Asthma Champions across the system transferring education into practice and training peers – "training the trainers approach"

Prevalence of asthma has increased in 1%  
Number of CYP with Asthma Action Plan and diagnosis of Asthma has increased from 40% to 75% since 2017  
Templates now in place and being used by professionals

10 Pharmacists confident in reviewing CYP in primary care

Families/CYP had an increase in knowledge and confidence to manage condition  
Families/CYP reduced need of hospital attendances  
100% Families/CYP "Likely" or "Extremely likely to recommend clinic"  
56% at risk of asthma attack  
92% of CYP reviewed improved ACT scores  
65% CYP reviewed had peak flow improved

Letter for health professionals to utilise that is sensitive to culture/context  
Understanding of staff to refer into smoking cessation  
Effective template to communicate with housing teams  
Materials will be ready for dissemination March 2020  
Increase in knowledge and confidence to discuss air quality with patients

★ Piloted for the first time nationally

□ Non viable interventions



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1

2

3

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# 1 Asthma/Allergy Friendly Schools



## ▶ Intervention

Co-designed with families/CYP/SENCOs – group consultation for all CYP with a salbutamol inhaler in school (189 CYP attended to date)

Developed guidance on asthma/allergy

## ▶ Feedback

Confirmed increase in understanding of condition and confidence to manage condition

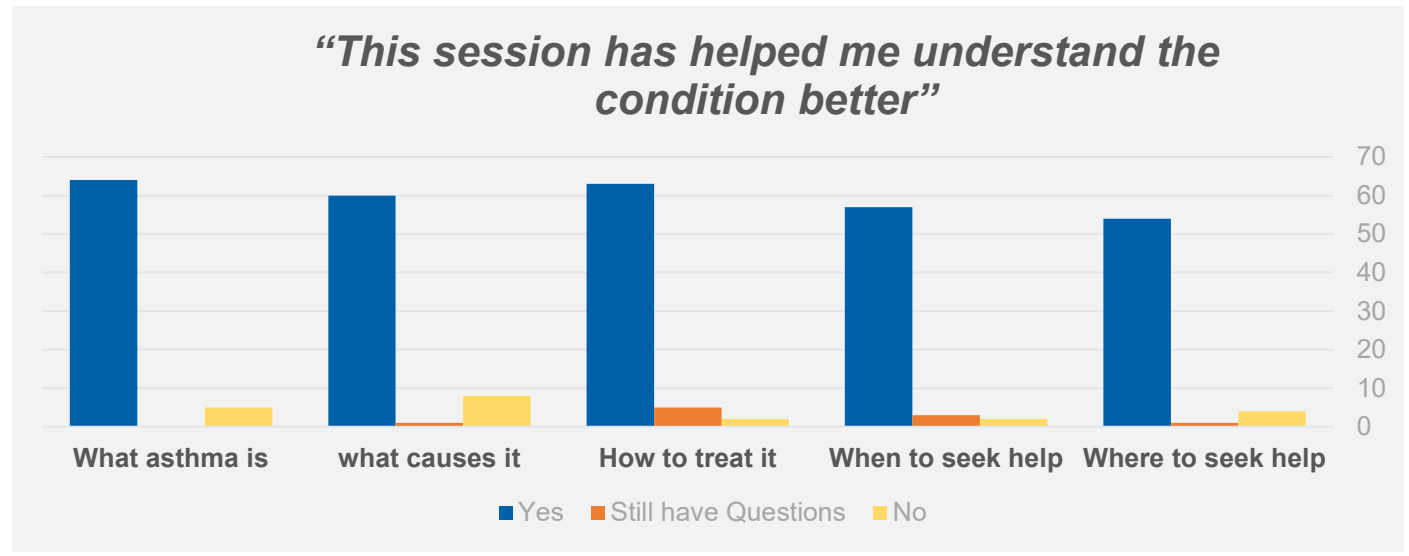
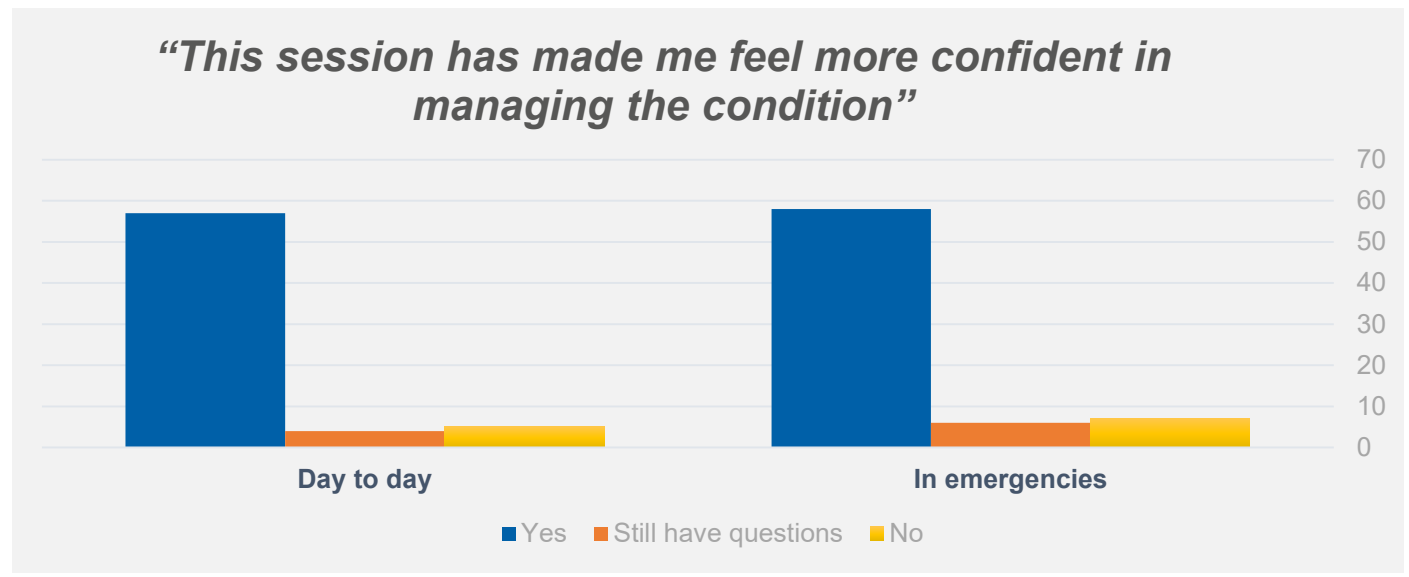
## ▶ Outcome to date

189 CYP: 65% wrong spacer; 60% no Action Plan

46 children risk of asthma attack (ACT score)

Referred into High Risk Clinic

- 71% had not been seen by GP in last year
- 74% wrong spacer (device to deliver medication)
- 57% had no asthma annual review in last year
- 98% had no contact with AE/admission in last year





## 2 High Risk Clinics

### ▶ Intervention

8 network clinics for CYP with wheeze and asthma who attended AE twice or more or/and had an admission (814 reviewed to date)

### ▶ Feedback

“Likely” or “extremely likely” to recommend service.  
Informative; Promote self-care; New approaches;  
One to one; Setting

### ▶ Outcomes to date

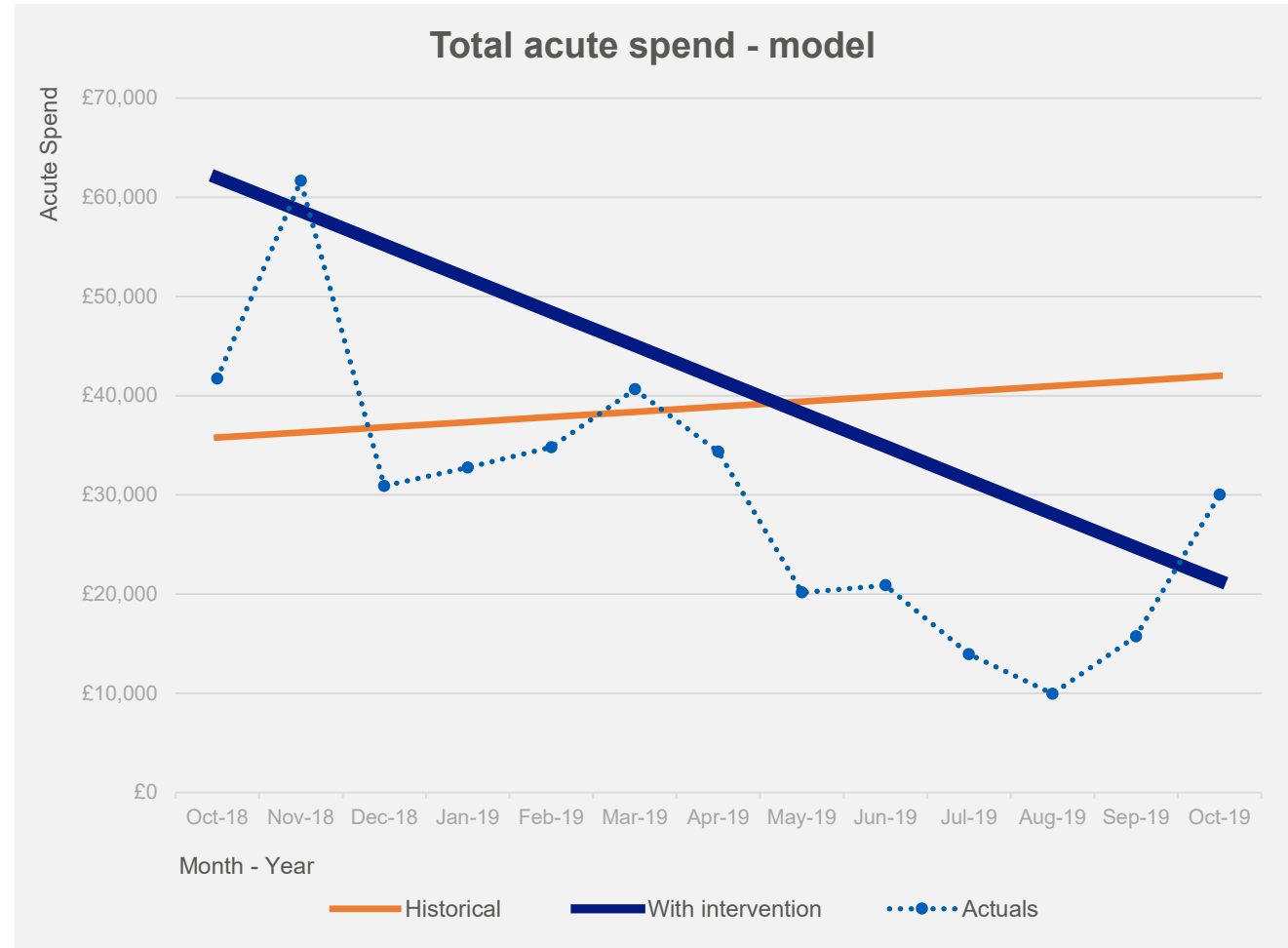
56% identified at risk of asthma attack

36% required a change in medication/spacer

68% had no Asthma Action Plan

65% reviewed twice had peak flow improved

92% reviewed twice ACT scores improved



▶ 19/20 estimated gross saving: £142,691

# 3 Air Quality Programme



## ► Intervention

- Co-designing materials with families/CYP on reducing exposure to air pollution
- Developing (with clinicians) and testing educational session targeted to health professionals – over 80 health professionals feedback
- Developing smoking cessation pathways between agencies e.g. Barts Health Trust and Quit Right TH
- Co-designing, with mothers, letters for smoking cessation advice
- Development of template (with clinicians and housing colleagues) for community clinicians to highlight concerns with Housing providers
- Revision of Air Text provision as not fit for CYP

## ► Outcomes to date

- Increase in knowledge and confidence to discuss air quality with patients
- Materials that are tailored to need

### Air Pollution & You

Air pollution can worsen asthma symptoms including coughing wheezing and breathlessness. The actions below can help:

- Discover the side streets

**Use quieter roads and paths to keep away from heavy polluting traffic.**
- Leave the car behind

**Encourage your whole family to walk, cycle and scoot more.**
- Check the forecast

**Find out what tomorrow's air pollution levels will be: londonair.org.uk.**
- Turn the engine off

**When you do need to use a car, ask the driver to turn the engine off when the car isn't moving.**
- Keep the air clean inside too

**Use fragrance free and low-chemical products. Stop air pollution collecting in your home by using extractor fans and opening windows away from busy roads.**

For more information on how air pollution can affect your health, and how to reduce your exposure, visit [www.cleanairhub.org.uk/tower-hamlets](http://www.cleanairhub.org.uk/tower-hamlets)

### My air pollution plan:

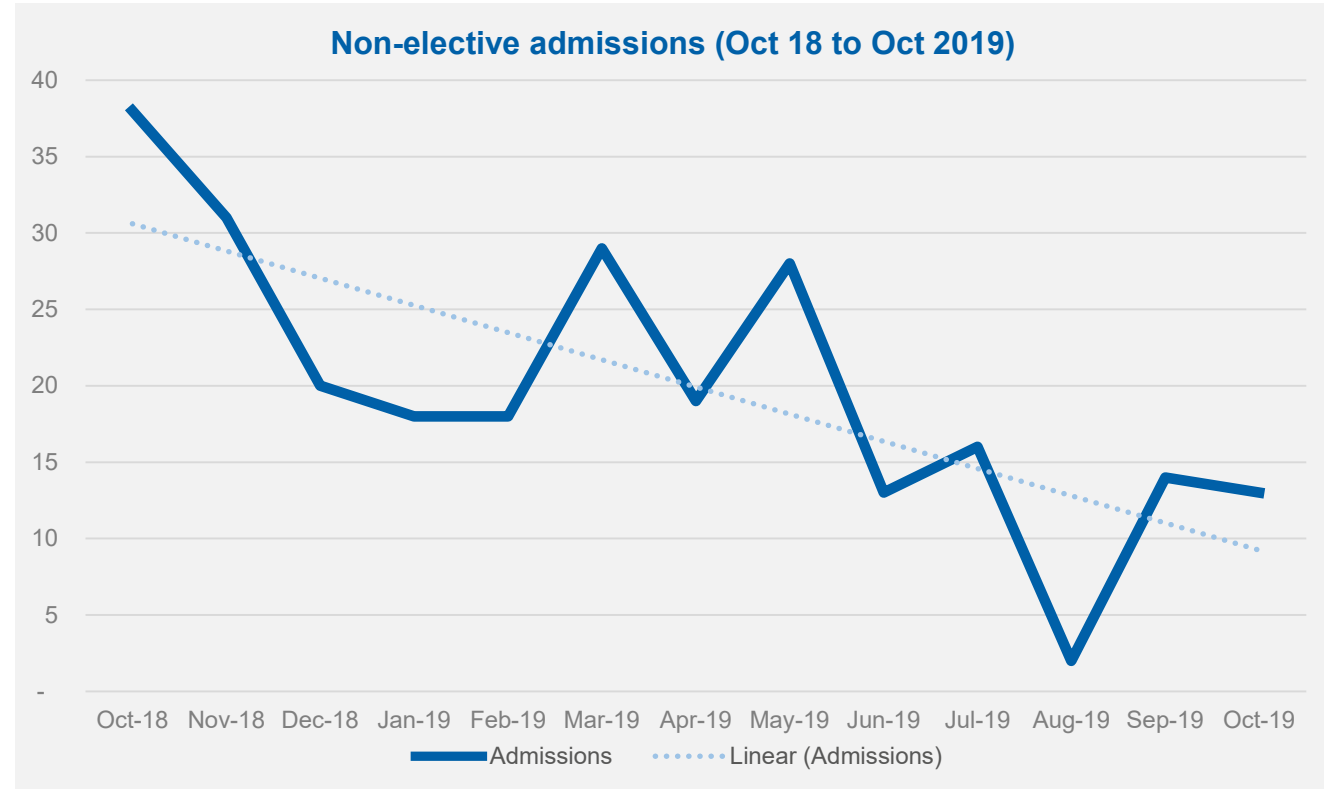
	On all days	On high pollution days
I will use my inhaler as recommended by my GP or asthma nurse	<input type="checkbox"/>	<input type="checkbox"/>
I will treat air pollution the same way I treat other asthma triggers	<input type="checkbox"/>	<input type="checkbox"/>
I will walk, cycle or scoot to school	<input type="checkbox"/>	<input type="checkbox"/>
I will look up quieter routes to avoid roads with heavy traffic	<input type="checkbox"/>	<input type="checkbox"/>
I will turn on the extractor fan when cooking	<input type="checkbox"/>	<input type="checkbox"/>
I will swap my cleaning products to fragrance free options	<input type="checkbox"/>	<input type="checkbox"/>
I will open the window when cooking	<input type="checkbox"/>	<input type="checkbox"/>
I will open the window when cleaning	<input type="checkbox"/>	<input type="checkbox"/>
We will always turn the engine off when our car is stationary	<input type="checkbox"/>	<input type="checkbox"/>
If we paint, we will check it is labelled "low VOC"	<input type="checkbox"/>	<input type="checkbox"/>
We will leave the car at home when we can	<input type="checkbox"/>	<input type="checkbox"/>
I will ask people not to smoke in my home	<input type="checkbox"/>	<input type="checkbox"/>

Tower Hamlets Together is the borough's vision of a seamless health and care experience for its citizens. The partnership is made up of local NHS Trusts, Tower Hamlets Council, the Tower Hamlets GP care group and the Council for Voluntary Service. This project is supported by the Mayor of Tower Hamlets.

# Overarching Outcomes

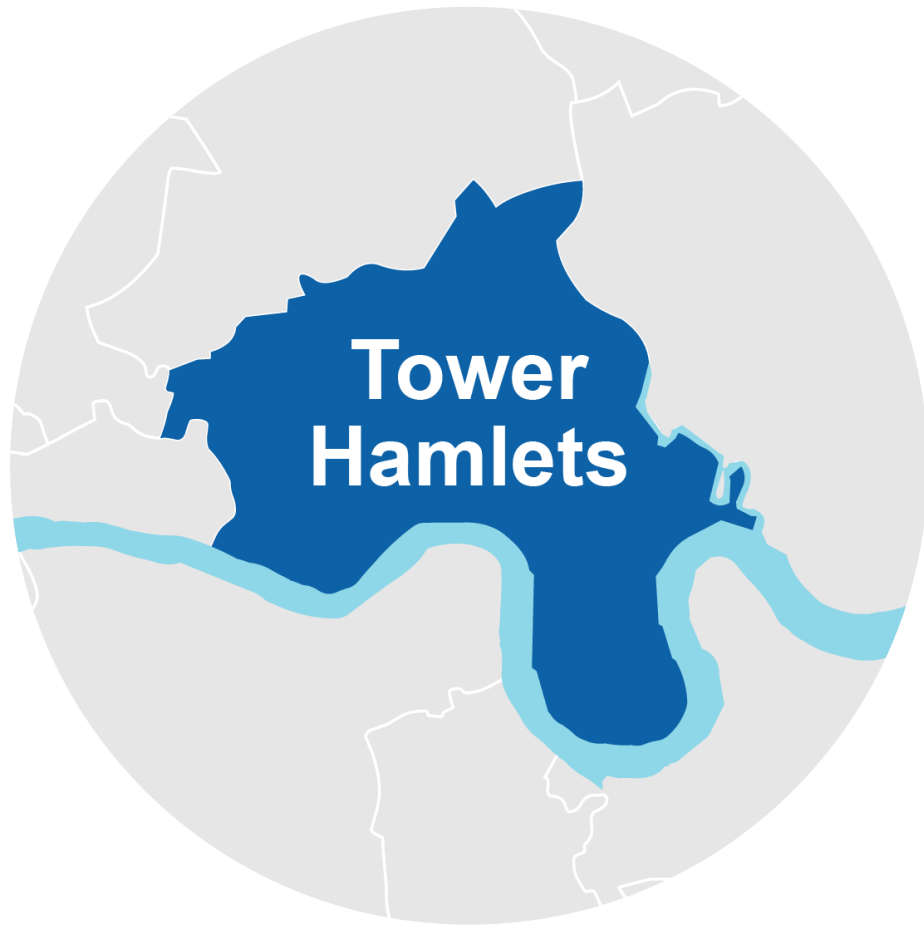


- ▶ 2017 - 40% of CYP with diagnosis of asthma had an Asthma Action Plan >> 2019 - 75% of CYP with diagnosis of asthma had an Asthma Action Plan
- ▶ Number of CYP with diagnosis of asthma increased by 1% (2018 to 2019) – currently at prevalence of 5%
- ▶ Identified 503 CYP who were at risk of having an asthma attack
- ▶ ACT scores improved for 92% CYP reviewed twice
- ▶ 757 professionals educated across the system with increase in confidence and knowledge levels



- ▶ **Our target of reducing non-elective/planned admissions for CYP with wheeze/asthma by 15% has been surpassed by reducing this by 65% in the last 12 months**

# Impact at Scale



- ▶ Understanding of methodologies that assist collaborative work across THT such as QI

# Impact at Scale



- ▶ Initiated NEL CYP Asthma Network
  - Agreed a single Asthma Action Plan template
  - IT system set up d/c letters to be sent to School Nurses
  - 1 Nurse >> 9

# Impact at Scale



- ▶ Asthma Leadership Group
  - Shared business cases and innovative ideas/materials with all 3 London STPs
- ▶ Presented at London Events

# Impact at Scale



- ▶ HLP Health passport app piloted  
ambition: spread nation wide
- ▶ Asthma UK and Health Care Alliance  
UK to utilise designed materials and  
education sessions
- ▶ Committee on the Medical Effects of  
Air Pollutants currently revising  
information provided by Air Text to  
adapt for CYP
- ▶ Presenting at Royal College of  
Paediatrics Child Health conference  
in Liverpool



# Impact at Scale



- ▶ Presenting work to leaders/stakeholders across the world at International Conferences

# Questions?



# Next steps

- Progress with YP Asthma App
- Implement the materials and education sessions developed in air quality programme
- Build on existing partnerships with colleagues in housing – education sessions housing providers
- Expand Asthma Champion membership
- Build on Incentive Scheme developed for primary care for 20/21
- Quarterly “Asthma Together” meetings from April 2020



# Challenges/risks & mitigation



## ► Working across organisations/in partnership

Senior sponsorship and support

QI approach where key leads from organisations dedicated 1h of their time every 2 weeks to meet

Strong lead with trusting relationships across the system

## ► Interoperability

Engaged with families, children and young people

Deep dive analysis for specific areas of work (e.g. high risk clinics)

Manually collected data

Improved data sharing agreements (e.g. BIU Barts Health Trust identifying high risk patients weekly)

## ► Short term funding

Permanent funding secured by:

- utilising data to confirm the impact of the asthma nurse in high risk clinics as well as prevention through school interventions (e.g. Asthma Community Nurse)
- QI methodologies

Investment required for materials but implementation will be done by system stakeholders (e.g. leaflets on air quality)

## ► Engagement with young people

Engaged with “young influencers” locally who engaged with young people and created a WhatsApp group for feedback

## ► Interventions that might not work

Utilised QI methodologies through a rapid test of change approach to quickly realise what would not work e.g. discussions about smoking cessation in a children centre setting, women would giggle/ feel embarrassed to discuss this/ sessions after school – majority reported they would be in mosque, to please do in school time

# Themes – Engagement with Families

- **Lack of information** from health professionals, need for holistic approach, review after hospital attendance valued
- **Air Pollution** interface
- Creating asthma awareness - needs to be **system wide**, written and verbally
- Management in **Schools** - good place for peer support, lack of awareness/knowledge

