



WHOLE SYSTEMS INTEGRATED CARE (WSIC) DASHBOARDS COLLABORATION OF NWL CCGS

ASTHMA



Information Sharing

“Today we see too many missed opportunities to prevent a persons health from deteriorating or to stop their problems from reoccurring.....”

British Red Cross – In and out of hospital report

Our Partners

- Key facts** • Over 2 Million People • Over £4bn Annual Health & Care Spend • 8 Local Boroughs
 • 8 CCGs & Local Authorities • 354 GP Practices • 10 Acute & Specialist Hospitals
 • 2 Mental Health Trusts • 4 Community Health Trusts

CCGs

- | | |
|---|--|
| 
Central London
Clinical Commissioning Group | 
West London
Clinical Commissioning Group |
| 
Hammersmith and Fulham
Clinical Commissioning Group | 
Hounslow
Clinical Commissioning Group |
| 
Ealing
Clinical Commissioning Group | 
Brent
Clinical Commissioning Group |
| 
Harrow
Clinical Commissioning Group | 
Hillingdon
Clinical Commissioning Group |

Out Of Area

19 Out Of Area providers are used by our North West London Patients

Acute

-  The Hillingdon Hospitals
NHS Foundation Trust
-  Chelsea and Westminster Hospital
NHS Trust
-  London North West Healthcare
NHS Trust
-  Imperial College Healthcare
NHS Trust



Community

-  Central London Community Healthcare
NHS Trust
-  Hounslow and Richmond
Community Healthcare
NHS Trust
-  Central and North West London
NHS Foundation Trust
-  London North West Healthcare
NHS Trust

Mental Health

-  Central and North West London
NHS Foundation Trust
-  West London
NHS Trust

GPs



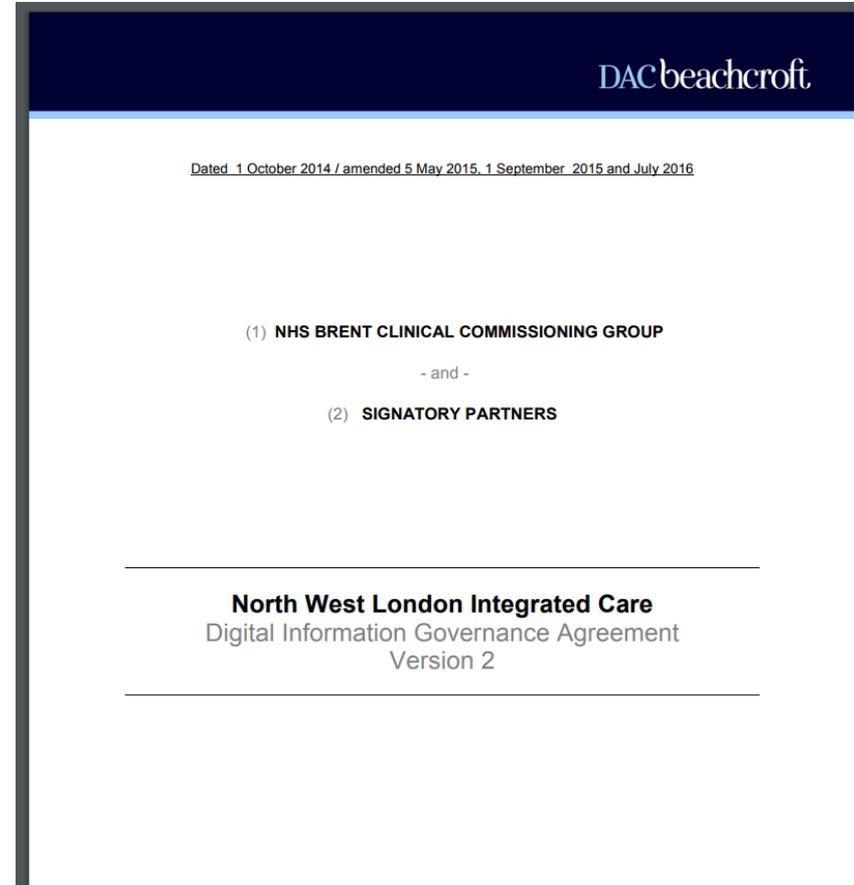
Social Care

-  Brent
-  Harrow COUNCIL
LONDON
-  HILLINGDON
LONDON
-  THE ROYAL BOROUGH OF
KENSINGTON
AND CHELSEA
-  City of Westminster
-  h&f
hammersmith & fulham
-  London Borough
of Hounslow
-  Ealing
www.ealing.gov.uk

Data Sharing in NWL and the Information Sharing Agreement

The purposes of the information sharing are to enable:

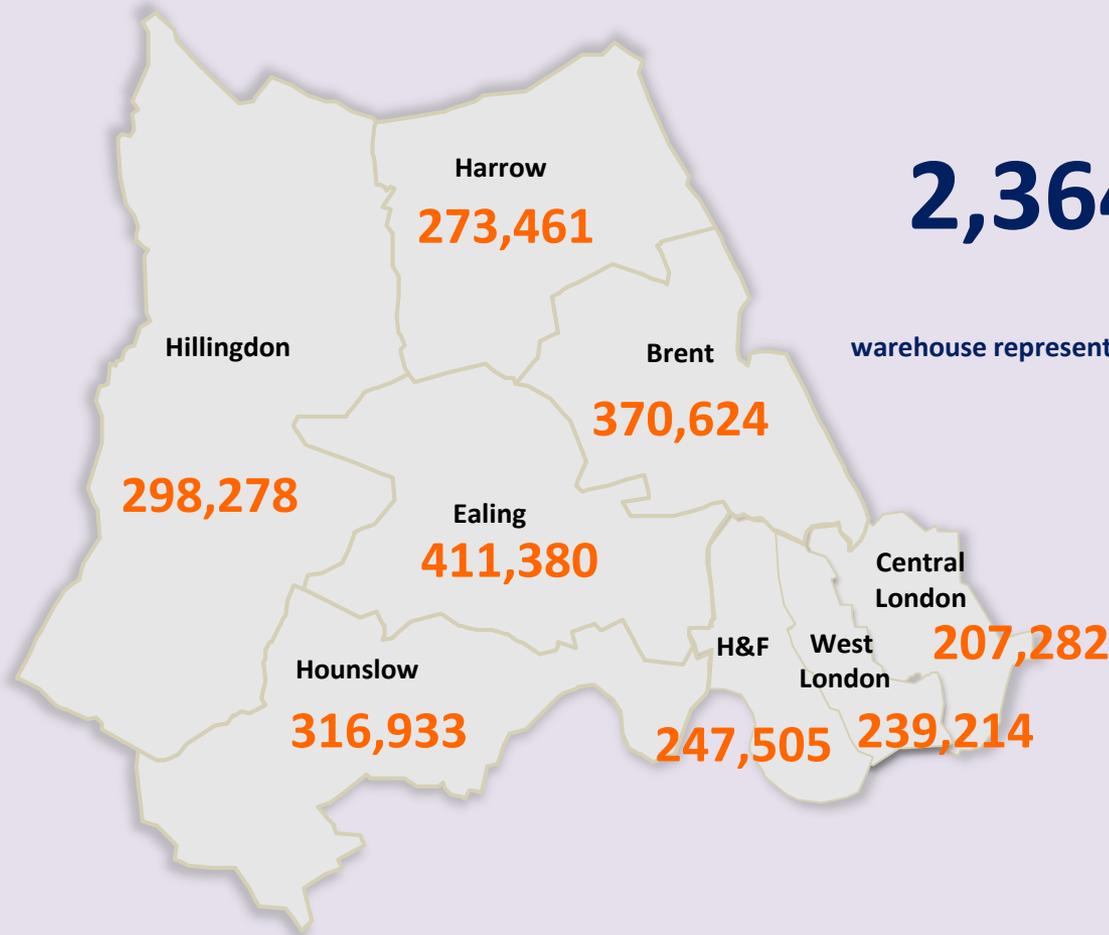
- **Care Planning Purpose** - any Provider Partner providing Direct Care to a patient who has consented to access that patient's Individual Integrated Care Record electronically for the purpose of providing Direct Care.
- **Case Finding Purpose** - Provider Partners to access information from the Whole Systems Integrated Care Record about their own patients, to support their identification of patients suitable for targeted care.
- **De-identification Purpose** - the Host of the arrangement to de-identify shared information so that it may be used for the commissioning purposes of CCG Partners.
- **Patient Access Purpose** - the development of Patient Access Services to enable patients and their carers to access their records.
- **Maintenance Purpose** - the Host of the arrangement to maintain the Whole Systems Integrated Care Record, including by human intervention where required to ensure data integrity.



Patients CAN OPT OUT of data sharing

ISA being re-written in 2019

WSIC Data Warehouse Population



2,364,677 patients in the WSIC data

warehouse representing **94.8%** of the patient population in
NWL*

*2,493,521 patients registered at a GP practice in NWL (1/01/19)

<https://app.powerbi.com/view?r=eyJrIjoiaWJkMTI5NTF0YzlkNi00MzljLWV0OGItNGVjM2QwNjAzZGQ0liwidCI6IjUwZjYwNzFmLWJiZmUtNDAxYS04ODAzLTY3Mzc0OGU2MjllMjllMmMiOih9>



Direct Care

“Care professionals will be at the centre of organising and coordinating peoples care so that care is accessible and in the most appropriate settings”.

Whole systems integrated care toolkit

Integrated Patient summary – Activity Timeline

Care Professionals View | Activity timeline

Track this patient's activity across all care settings for the chosen time period

Financial values represent commissioner costs and include estimates or averages where payments are not linked to specific patients

Use the drop down menu below to choose your time period and hover over a bar to see more information...

View time period

View costs

Last 2 years

Yes

Latest available data ranges from to .
Hover over the "i" button below for more detail.

Patient 295793
295 793 5793
84, female

Long term condition(s):

Anxiety Asthma CKD Dementia
Depression Hypertension
Hypothyroidism

Key outcomes

Days not in hospital: 631 / 730

Total spend: £66,972

Has Care Plan ●

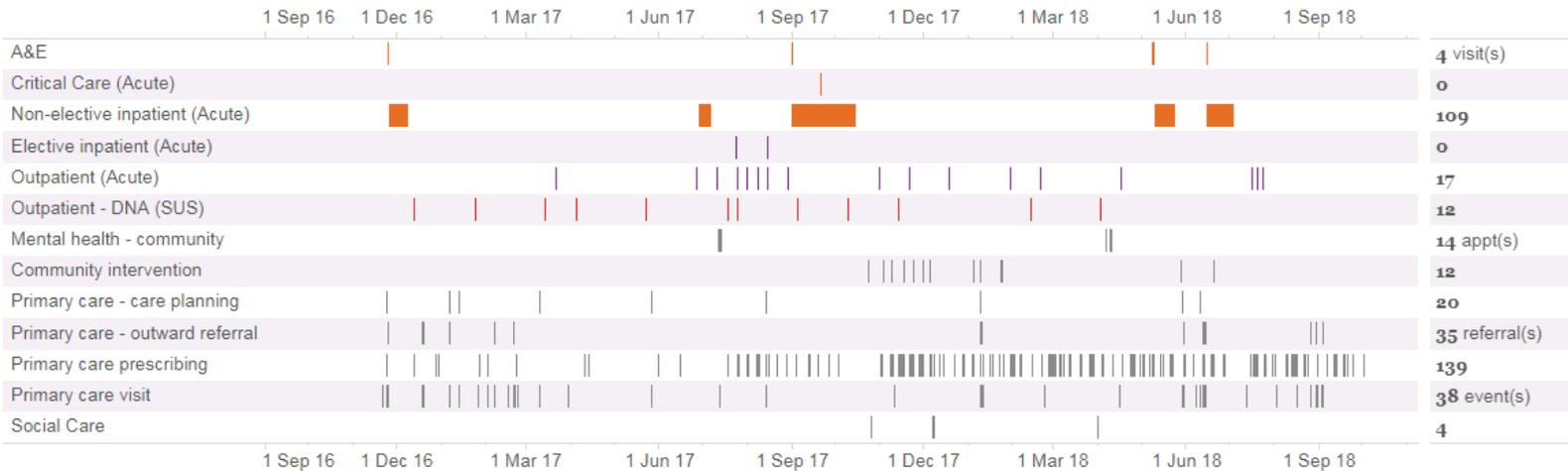
Care Plan up to date ●

Community Care User ●

Mental Health User ●

Social Care User ●

➔ eFI: 0.44 (Severe Frailty)



Care Type
█ Emergency support
█ Planned acute hospital care
█ Planned care outside acute hospital
█ Potential warning signs



Dx



Integrated Patient summary – Patient profile

Activity Summary | Patient Spend | GP Activity | Prescriptions | Social Care Services | Acute Diagnoses | Acute Procedures | Patient Profile

Care Professionals View | Patient profile

See a summary of this patient's spend, activity, current medications and other key information

Financial values represent commissioner costs and include estimates or averages where payments are not linked to specific patients



Use the drop down menu below to filter the time period for which to show.

View time period: Last 2 years
View costs?: Yes

Latest available data ranges from to .
Hover over the "i" button below for more detail.

Patient 295793
295 793 5793
84, female

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- Care Plan up to date ●
- Community Care User ●
- Mental Health User ●
- Social Care User ●

→ eFI: 0.44 (Severe Frailty)

Activity by care setting

A&E	4 visit(s)	£704
Non-elective inpatient (Acute)	109	£37,756
Outpatient (Acute)	17	£2,700
Outpatient - DNA (SUS)	12	-
Mental health - community	14 appt(s)	£30
Community intervention	12	£45
Primary care visit	38 event(s)	£386
Primary care prescribing	139	-
Primary care - outward referral	35 referral(s)	-
Primary care - care planning	20	-
Critical Care (Acute)	0	£15,041
Elective inpatient (Acute)	0	£1,778
Social Care	4	£8,531

Emergency support

Planned acute hospital care

Planned care outside acute hospital

Potential warning signs



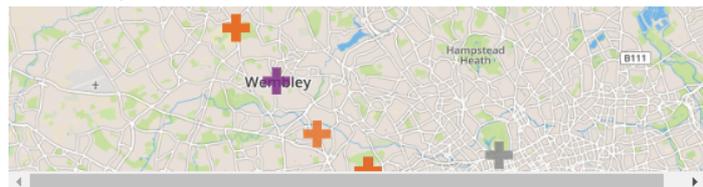
Dx



Drugs prescribed within last 3 months: 20

Alfacalcidol 500nanogram capsules
Budesonide 200micrograms/dose / Formoterol 6micrograms/dose dry powder inhaler
Buprenorphine 10micrograms/hour transdermal patches
Co-trimoxazole 80mg/400mg tablets
Diprobace cream (Bayer Plc)
Docusate 100mg capsules
Folic acid 5mg tablets
Furosemide 40mg tablets

Click on the map to see detail



Asthma: Introduction

The UK National Review of all asthma deaths in the UK concluded that

Over 60% of the deaths had major preventable risk factors.

Risks were not recognised by the clinicians – and included :

- Patients were prescribed excess reliever medication – more than 4 puffs of a reliever in a week is an indication of poor asthma control (this equates to more than 1 ½ blue inhalers a year.

- Insufficient preventer inhalers were prescribed for most of those who died.

- 10% had been discharged from hospital after treatment for an asthma attack without follow up, in the four weeks before they died; and

- About a fifth had been treated in A&E in the year before they died.

An asthma attack means that something serious has gone wrong with the management of a patient. This may be related to drug treatment, inability to use inhalers, lack of education of patients about the disease, their medication, to recognize danger and take action, and when to call for help.

Risk factors for asthma attacks and deaths are well known and have been published in Table 11 of the BTS/ SIGN British Asthma Guidelines and table 2-2 of the Global Asthma Strategy (GINA).

Traditionally, mainly driven by QoF, asthma reviews are only done once a year in the UK. As asthma is an on-going, chronic disease, this isn't really logical. As asthma attacks and exacerbations signify that something serious has gone wrong, it is important to do a post attack review before the patient runs out of oral corticosteroids. After an attack, patients need to be assessed to determine whether the attack is over, and to act appropriately if not; and to establish what went wrong and take action to optimize the treatment. Furthermore, the presence of any risk factors should result in action by a clinician.

As there are a number of risk factors for asthma attacks, it is difficult for clinicians to check for each one during consultations. The Asthma Radar has been designed to classify risks into 'Red Flag' status, to help clinicians easily identify those patients at risk, whose care needs optimising. Patients with any of the risk factors identified should have a review by a doctor, or a nurse with training in asthma care.

Asthma Radar

Whole Systems Integrated Care | Asthma Radar

Identify patients with asthma who may be at high risk and/or in need of review

Click on a traffic light to view details of the selected patient



GP Practice

Patient Segment

RCP Review Filter

Sort by...

(All)

(All)

No filter selected

Number of Red Flags

70,596 patients on list

Patient Name	Age	Number of Risk Factors	Number of A&E/UCC Attendances (past 12 months)	Number of Prescriptions (past 12 months)			Asthma Care				Lung Function	
				Exacerbations	Short-Acting β-Agonists	Inhaled Corticosteroids	Asthma Review	Inhaler technique	Symptom Control Test	Personal asthma plan	Peak Flow	FEV ₁
	76	5.2	1	9	9	2	●	●		●		●
	47	4.2	1	3	11	1	●	●	●	●	●	●
	36	3.1	0	2	12	0	●	●		●	●	●
	5	2.1	1	2	7	3	●	●		●		
	3	1	2	2	18	2	●	●		●		
	3	0	1	2	7	1	●	●		●		
	75	6.1	1	2	8	2	●	●		●	●	●
	37	4.2	0	3	9	2	●	●		●	●	●
	57	2.1	1	2	8	0	●	●		●	●	●
	71	6.2	7	5	7	0	●	●	●	●	●	●
	69	6.2	1	6	12	11	●	●	●	●	●	●
	55	6.2	2	7	28	0	●	●	●	●	●	●

Click to highlight traffic lights of that colour

- Green Flag
- Amber
- Red Flag
- Neutral/Unknown



Click and hover over a patient to view links to their **Integrated Patient Summary**

Whole Systems Integrated Care | Asthma Radar

DEMO

Identify patients with asthma who may be at high risk and/or in need of review

Click on a traffic light to view details of the selected patient



GP Practice: (All) | Patient Segment: (All) | RCP Review Filter: No filter selected | Sort by...: Number of Red Flags | Top patients to show: 100

39,395 patients on list

Patient Name	Age	Number of Risk Factors	Number of A&E/UCC Attendances (past 12 months)	Number of Exacerbations				Number of Prescriptions (past 12 months)				Asthma Care				Lung Function	
				Exacerbations	Short-Acting β-Agonists	Inhaled Corticosteroids	LABA	Asthma Review	Inhaler technique	Symptom Control Test	Personal asthma plan	Peak Flow	FEV ₁				
Patient 7250852	56	7.2	0	10	18	0	16	●	●	●	●	●	●	●	●	●	●
Patient 6272385	54	5.2	0	12	12	11	11	●	●	●	●	●	●	●	●	●	●
Patient 102380	50	5.1	1	5	14	12	12	●	●	●	●	●	●	●	●	●	●
Patient 13078939	63	4.2	7	10	16	6	6	●	●	●	●	●	●	●	●	●	●
Patient 15495396	10 items selected · SUM(Prescription/Exacerbation Count): 38					12	12	●	●	●	●	●	●	●	●	●	●
Patient 6028008	Patient 13078939					10	10	●	●	●	●	●	●	●	●	●	●
Patient 28079037	Go to Patient Summary Page					0	0	●	●	●	●	●	●	●	●	●	●
Patient 23247368	37	1	1	3	7	1	1	●	●	●	●	●	●	●	●	●	●
Patient 26912678	20	1	0	3	14	10	10	●	●	●	●	●	●	●	●	●	●
Patient 6973561	67	6.2	1	4	14	0	10	●	●	●	●	●	●	●	●	●	●
Patient 4573680	61	3.1	0	2	8	1	1	●	●	●	●	●	●	●	●	●	●
Patient 5871391	73	8.3	1	3	2	2	2	●	●	●	●	●	●	●	●	●	●
Patient 739037	56	8.2	0	4	11	11	11	●	●	●	●	●	●	●	●	●	●
Patient 4412992	62	7.2	16	2	19	1	0	●	●	●	●	●	●	●	●	●	●

Click to highlight traffic lights of that colour
 ● Green Flag ● Amber ● Red Flag ● Neutral/Unknown



- Select a patient to reveal more information below about that individual
- A missing traffic light indicates that no data is available for the indicator
- Hover over traffic lights to see when an item was last recorded and the most recent result

Whole Systems Integrated Care | Asthma Radar

Identify patients with asthma who may be at high risk and/or in need of review

Click on a traffic light to view details of the selected patient

GP Practice: (All) Patient Segment: (All) RCP Review Filter: No filter selected Sort by...: Number of Red Flags 70,596 patients on list

Patient Name	Age	Number of Risk Factors	Number of A&E/UCC Attendances (past 12 months)	Number of Exacerbations		Number of Prescriptions (past 12 months)		Asthma Care			Lung Function	
				Exacerbations	Short-Acting β_2 -Agonists	Inhaled Corticosteroids	Asthma Review	Inhaler technique	Symptom Control Test	Personal asthma plan	Peak Flow	FEV ₁
	76	5.2	1	9	9	2						
	47	4.2	1	3	11	1						
	36	3.1	0	2	12	0						
	5	2.1	1	2	7	3						
	3	1	2	2	18	2						
	3	0	1									

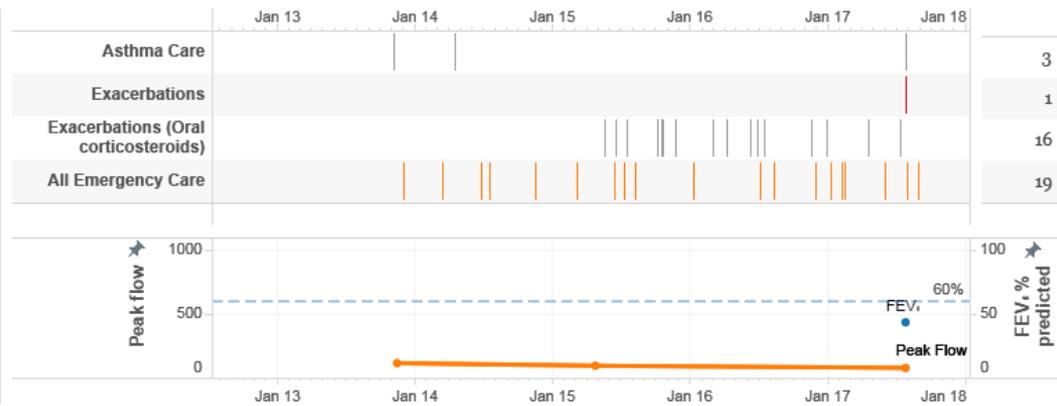
Patient Name, 71
NHS #:

Risk Factors

COPD Inhaler technique poor Obesity Smoker
FEV₁ < 60% predicted Multiple courses of oral corticosteroids

Click to highlight traffic lights of that colour

Green Flag Amber Red Flag Neutral/Unknown



Asthma Radar – Patient Summary



- Patient level radar showing patients diagnosed with Asthma, prescriptions, number of asthma admissions and date of last Asthma review
- Use to identify asthma patients who are having exacerbations and require a review of care and prescriptions

Using WSIC Dashboard to aid complex patient care

CC4C Hub MDTs - Asthma

Case Hunting

- Foundation doctor used the Dashboard Asthma Radar to pro-actively identify 'at risk' paediatric asthma patients within the CC4C hub population to discuss in their MDT meeting.
- The most 'at risk' patients were identified and ranked according to number of red flags and number of exacerbations.
- Further information was gathered from their Asthma Radar profile, hospital notes and clinic letters.
- These were summarised and sent to the Paediatric consultant facilitating the MDT meeting who finalised case selection.

The Patient

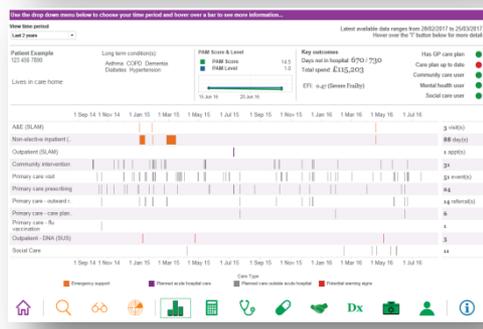
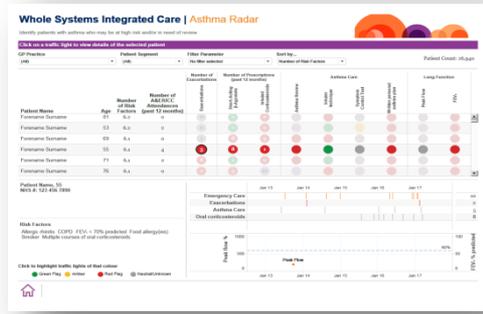
- An 11-year-old girl was selected due to having 5 asthma exacerbations in the last 12 months, 2nd highest in the CC4C hub population. Her symptoms interfered with her daily activities and sports. She had multiple GP attendances and up to 30 courses of oral steroids, which was associated with an increase in appetite and difficulty losing weight.
- She was known to CAMHS for ADHD and attachment disorder and previously on the Children Protection Register for neglect. Her mother had depression and was a full-time carer for her uncle. She was recently bereaved of her father and grandmother.

MDT

- The patient was discussed at the specialist Paediatric and GP MDT. Updates were shared on her current clinical status and shared details of her extensive management, including practice nurse counselling and inhaler technique sessions.
- Due to her complex social situation, the practice manager arranged to follow-up the patient.
- The GP team had referred her to the General Paediatricians at St Mary's Hospital. The paediatric consultant offered to instead see her in the outreach CC4C GP hub clinic which would provide the same service in a more convenient and familiar location.

Outcome

- As a result of being identified using the Dashboard as an 'at risk' asthma patient, they were discussed by a MDT consisting of specialist paediatricians, asthma clinical nurse specialists and GPs.
- This allowed for clarity of the patient's current clinical status and complex social issues, achieving shared understanding of the wider patient picture and their management, and therefore improved continuity of care.
- The patient would be followed up by the GP practice and receive specialist paediatric service in the comfort and convenience of their local CC4C GP hub.



Using WSIC Dashboard to aid GP practices

Case Hunting

- WSIC dashboard was used to identify patients with poorly controlled Asthma based at a GP practice. This was based on 'red flags' pointed out by WSIC such as frequency of ED attendances

The Patient

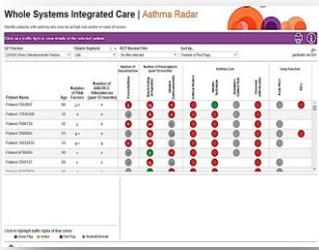
- This identified 12 most 'at risk patients'. Further factors such as compliance to Inhaler therapies and regularity of annual asthma reviews was explored for these patients on System-1

Intervention

- Discussion with nurses & GPs at the practice led to the recommendation of initiating group consultations at the practice. This was seen as a better choice for patients as opposed to the conventional asthma review clinic and an opportunity for patients and children alike to meet with families going through similar issues

Outcome

- A framework for the group consultation model was created and the practice is now in the process of recruiting patients to attend. We will also be using the Practice Champions (patient volunteers) and Integrated Care fellows from the local hospital, for assistance in non-clinical facilitation of the consultations.



Asthma: CYP Key indicator outcomes for YTD 17/18 and 18/19

Under 18 YTD 17/18

Numbers of patients who have an asthma management plan- **1,385**

Numbers of patients who have been shown how to use inhaler effectively – **1,680**

Numbers of patients of have had an Annual review – **2,665**

Number of patients prescribed ≥ 4 ICS Prescriptions – **5,184**

Number of patients prescribed ≤ 6 SABA Prescriptions – **9,759**

Number of patient who have not had an asthma review since their last exacerbation **1,126**

How many have had an symptom control test completed – **3,374**

ACT = 642

ACQ = 2

RCP = 2,730

Under 18 YTD 18/19

Numbers of patients who have an asthma management plan- **5,247**

Numbers of patients who have been shown how to use inhaler effectively – **4,179**

Numbers of patients of have had an Annual review – **8,454**

Number of patients prescribed ≥ 4 ICS Prescriptions – **3,869**

Number of patients prescribed ≤ 6 SABA Prescriptions – **12,059**

Number of patient who have not had an asthma review since their last exacerbation - **636**

How many have had an symptom control test completed – **9,604**

ACT = 1208

ACQ = 0

RCP = 8,396

Asthma: (Adults) Key indicator outcomes for YTD 17/18 and 18/19

18 and over YTD 17/18

Numbers of patients who have an asthma management plan- **6,906**

Numbers of patients who have been shown how to use inhaler effectively – **9,379**

Numbers of patients of have had an Annual review – **13,330**

Number of patients prescribed ≥ 4 ICS Prescriptions – **35,495**

Number of patients prescribed ≤ 6 SABA Prescriptions – **40,854**

Number of patient who have not had an asthma review since their last exacerbation **5,967**

How many have had an symptom control test completed – **16,691**

ACT = 3,304

ACQ = 26

RCP = 13,361

18 and over YTD 18/19

Numbers of patients who have an asthma management plan- **26,695**

Numbers of patients who have been shown how to use inhaler effectively – **21,450**

Numbers of patients of have had an Annual review – **46,133**

Number of patients prescribed ≥ 4 ICS Prescriptions – **28,977**

Number of patients prescribed ≤ 6 SABA Prescriptions – **52,743**

Number of patient who have not had an asthma review since their last exacerbation – **3,408**

How many have had an symptom control test completed – **59,887**

ACT = 13,704

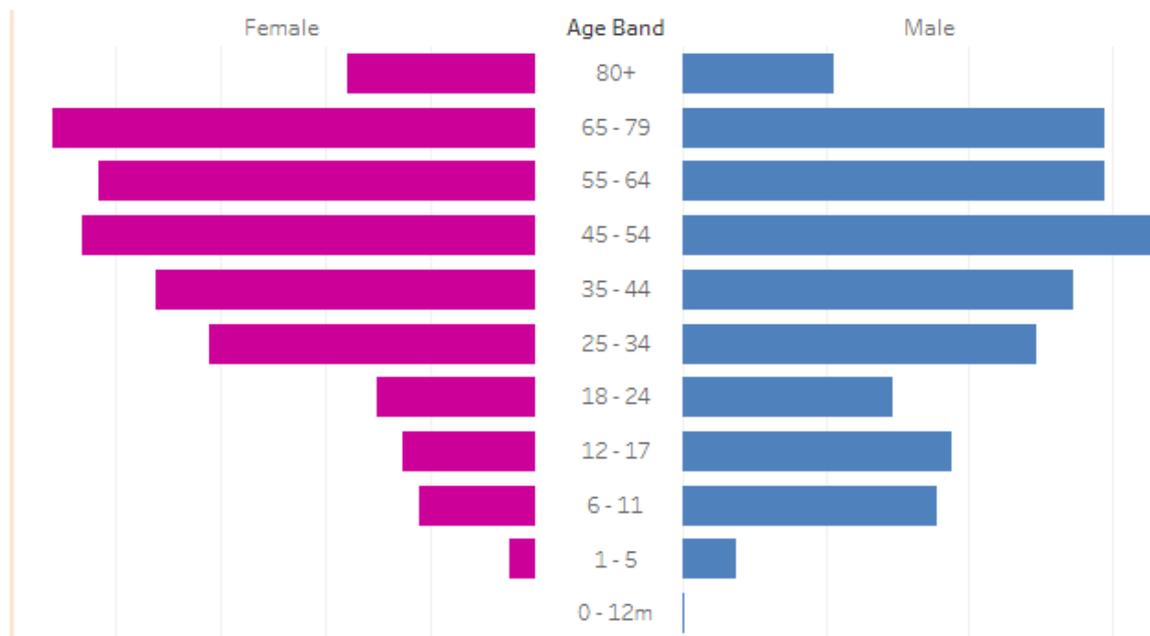
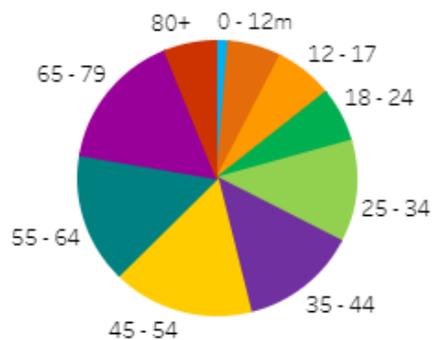
ACQ = 11

RCP = 46,172

Asthma: NWL WSIC population

CCG Name	0 - 12m	1 - 5	6 - 11	12 - 17	18 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 79	80+	Grand Tot..
BRENT CCG		8	14	30	724	1,530	1,871	2,351	2,354	2,546	1,034	12,462
CENTRAL LONDON CCG		60	293	377	463	814	847	998	933	981	379	6,145
EALING CCG		330	1,494	1,514	1,108	1,904	2,502	2,896	2,631	2,765	1,000	18,144
HAMMERSMITH AND FULHAM ..	1	67	458	514	618	1,717	1,228	1,391	1,181	1,161	436	8,772
HARROW CCG	5	199	912	1,065	762	1,199	1,367	1,787	1,922	2,229	911	12,358
HILLINGDON CCG		197	1,116	1,238	1,019	1,460	1,923	2,252	2,030	2,041	779	14,055
HOUNSLOW CCG		291	1,115	1,056	801	1,475	1,859	2,137	1,870	1,977	656	13,237
WEST LONDON CCG		74	365	491	448	1,038	1,069	1,402	1,264	1,366	502	8,019
Grand Total	6	1,226	5,767	6,285	5,943	11,137	12,666	15,214	14,185	15,066	5,697	93,192

Age



*Brent Children's data currently being loaded into WSIC