Manchester City Council
Report for Information

Report to: Health Scrutiny Committee - 4 December 2018

Subject: Adult Respiratory

Report of: Dr Manisha Kumar, Clinical Director, Manchester Health and Care Commissioning

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Summary

Manchester Health and Care Commissioning (MHCC) is working collaboratively with partners on a respiratory work programme. The aims are to:

Improve health outcomes and quality of life for patients, support self-management, personalisation and early intervention in the community; and strengthen the quality of end of life care.

Tools and standards have been developed to support achievement of the aims. The programme links with other existing programmes of work e.g. smoking cessation and lung health checks and cross sector collaboration will continue to benefit the people of Manchester.

We will provide a separate report on the work on children's respiratory health in Manchester at a future Health Scrutiny Committee meeting.

Recommendations

The Health Scrutiny Committee is asked to note the content of this report and provide comments on the respiratory work programme.

Wards Affected: All

Alignment to the Our Manchester Strategy Outcomes (if applicable)

Manchester Strategy outcomes	Summary of how this report aligns to the OMS
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	The development of community Health Development Coordinators and support to community based solutions will support recruitment from within and for local populations

A highly skilled city: world class and home grown talent sustaining the city's economic success	Patient education is a theme throughout the respiratory work programme. This will empower the respiratory cohort to manage their disease effectively and to know what to do and who to contact in a crisis. Clinician education and upskilling of staff via formal events or clinics as well as informal arrangements are as a direct result of this collaborative programme of work.
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	This paper demonstrates work streams which will lead to improved health outcomes, reduce health inequalities and reduce unwarranted variation.
A liveable and low carbon city: a destination of choice to live, visit, work	Providing excellent respiratory health care closer to home for patients. Developing and delivering high quality local services for local people. Leading the way on innovation for respiratory management.
A connected city: world class infrastructure and connectivity to drive growth	Learning from models elsewhere (Coventry – see Breathe Better Manchester) and sharing the Manchester approach with Greater Manchester and beyond.

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Background documents (available for public inspection):

The following documents disclose important facts on which the report is based and have been relied upon in preparing the report. Copies of the background documents are available up to 4 years after the date of the meeting. If you would like a copy please contact one of the contact officers above.

None

1. Introduction

1.1 In 2017 Manchester Health and Care Commissioning (MHCC) identified respiratory as one of the key long term conditions to address poor health outcomes in Manchester. Manchester has **641,098** registered patients.

1.2 The below table shows the number of patients who are on the General Practice Quality Outcomes Framework (QOF) disease registers with Asthma and Chronic Obstructive Pulmonary Disease (COPD) as at 1 April 2018.

	MHCC patients	MHCC prevalence	Greater Manchester prevalence	England prevalence
Asthma	36,688	5.77%	6.41%	5.93%
COPD	12,647	1.97%	2.31%	1.91%

- 8,424 (23%) of asthma patients currently smoke
- 6,187 (48%) of COPD patients currently smoke
- 13,398 (11%) of current smokers have a respiratory condition

1.3 From the below data we can see an increase in emergency admissions for people with respiratory problems (this is for ALL respiratory problems not just asthma and COPD).

Year	Emergency Admissions	Number of unique patients	Emergency Admissions Cost	Total registered MHCC population
15/16	7555	6074	£9,554,251	603,419
16/17	8399	6742	£11,620,540	627,081
17/18	10240	8287	£14,928,827	641,098

2. Background

2.1 RightCare

The NHS RightCare teams work locally with systems to present a diagnosis of data and evidence across that population. NHS RightCare Delivery Partners and their teams work collaboratively with systems to look at the evidence to identify opportunities and potential areas where quality can be improved. This collaborative working arrangement helps systems to make improvements in both spend and patient outcomes.

2.2 The data benchmarks Clinical Commissioning Groups against ten similar CCGs based on various indicators (e.g. deprivation/ population demographic profile). The Manchester RightCare report can be found in appendix 1.

2.3 Rightcare Baseline data is from the January 2017 Commissioning for Value (CFV) packs (2015/6 information). RightCare showed Manchester at a variance of £10 million spend on respiratory diseases compared to the

Manchester top 5 peers; a high percentage being spent on emergency admissions.

2.4 It was recognised that in order to address respiratory inequalities we need to have a system wide approach to change. To facilitate this, health commissioners set up the Manchester Adult Respiratory Steering Group in May 2017. Membership of the group includes representatives from primary, community and secondary care, Population Health and Wellbeing, RightCare, British Lung Foundation and patient representation.

2.5 Through integrated working this steering group coordinates the implementation of the respiratory work programme. It acts as the 'formal body' to hold groups and organisations to account to oversee the system wide change to the delivery and management of respiratory care. Working on the principles of 'Our Manchester' we are looking at both an asset based approach across the city and a 'lifetime' approach across the life course of respiratory disease.

2.6 By following the programme of work the impact will be:

- Increased life expectancy
- Improve the patient's experience of care
- Decrease the number of lung cancer related deaths
- Decrease the number of lung cancers diagnosed through Accident & Emergency
- Enable people to manage their disease more confidently and know what to do when in crisis
- Decrease the number of smokers in Manchester
- Reduce the high number of respiratory emergency admissions

3. Approach

3.1 The Manchester Adult Respiratory Steering Group membership developed the Respiratory Plan on a Page (see appendix 2), the logic framework (see appendix 3) and the rainbow diagram for Our Healthier Manchester (respiratory disease) (see appendix 4). This identified work streams that the programme of work would need to focus.

4. Data – Overview

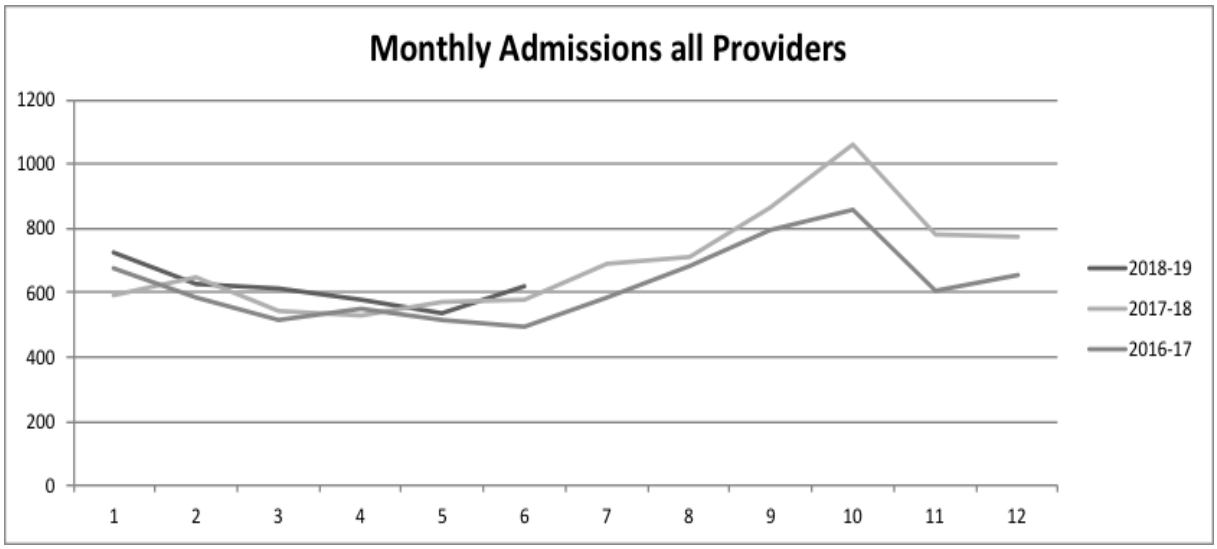
4.1 MHCC has produced a data analysis looking at respiratory emergency admissions for the first 6 months of 17/18 compared to the first 6 months of 18/19. In doing this MHCC is looking to try and identify possible shifts in demands on the system and identify pressure points across the system;

- Adult respiratory admissions are up 6.7% (+234) comparing month six 2018/19 against 2017/18
- 30.7% of respiratory emergency admissions in 2018/19 were for pneumonia*
- 28.9% were for chronic lower respiratory diseases

- 43% of the chronic lower respiratory diseases were due to COPD

*There are ongoing issues with a national shortage of the pneumococcal vaccination supply. However, practices continue to vaccinate all eligible patients, prioritising the high risk cohorts. MHCC advice is to order stock throughout the year and not align with giving the flu vaccine. This will help to ensure demand for the vaccine is more consistent across the year.

4.2 The analysis is clearly showing considerable pressure in emergency admissions for respiratory patients. As stated above there is already a 6.7% growth in the first 6 months of 2018/19. Based on previous years this early increase is concerning as we enter the second half of the year that historically for respiratory admissions sees the greatest demand. This second half increase can clearly be seen in the graph below looking at the last 3 years of data for Manchester patients.



4.3 It is worth noting that across the main providers we are seeing shifts around the number of respiratory emergency admissions.

Provider	Length of stay	2016-17	2017-18	2018-19	16/17 17/18 Variance	17/18 18/19 Variance
Pennine	Zero Days LOS	180	285	306	58.3%	7.4%
	1 Day LOS	151	160	236	6.0%	47.5%
	2+ Day LOS	545	505	560	-7.3%	10.9%
MFT Central	Zero Days LOS	264	336	348	27.3%	3.6%
	1 Day LOS	202	247	192	22.3%	-22.3%
	2+ Day LOS	875	891	879	1.8%	-1.3%
MFT South	Zero Days LOS	139	157	176	12.9%	12.1%
	1 Day LOS	144	159	171	10.4%	7.5%
	2+ Day LOS	657	568	592	-13.5%	4.2%
Other Providers	Zero Days LOS	42	40	70	-4.8%	75.0%
	1 Day LOS	31	42	39	35.5%	-7.1%
	2+ Day LOS	103	79	134	-23.3%	69.6%

4.4 The information in the above table is showing some interesting shift in demand and how providers are managing respiratory emergency admissions;

- Pennine is showing huge growth in 1 day length of stay, +47.5% in the first 6 months of 18/19 compared to the first 6 months of 17/18. MHCC has identified that the provider has opened more beds for emergency admissions and is working on flow improvements through the department.
- Manchester University NHS Foundation Trust (MFT) Central is showing a -22.3% decrease in respiratory 1 day length of stay. MHCC is in discussion with MFT to understand the reason for this shift when we can see overall growth in all emergencies at the trust.
- Manchester University NHS Foundation Trust (MFT) South however is seeing continuing growth across all length of stays for respiratory admissions and is in stark contrast compared to the central site.

4.5 MHCC recognises that there is considerable pressure in the area of adult respiratory emergency admissions across the providers, but it is evident that there are substantial variances in how the providers are managing these patients. MHCC is currently working with the providers and Population Health to further understand this data and will develop some in-depth patient level analysis to try and identify possible areas of improvements moving forward.

5. Primary Care Respiratory Standards

5.1 MHCC developed a set of Manchester wide standards, based on the Greater Manchester Standards for primary care. Respiratory is one area of focus. This is an 'offer' to Manchester patients and the public. All Manchester practices have agreed to deliver the standards to their registered population. This supports a standardised level of provision across the city and improves the quality of the service offer to Manchester patients. The current respiratory

standards will run from 2018 to 2020. The Manchester Respiratory Primary Care Standards focus on:

1. Chronic Obstructive Pulmonary Disease (COPD) patient reviews
2. Review of COPD patients following an exacerbation
3. Asthma reviews in adults
4. Asthma reviews in children
5. COPD Virtual Clinic for 2019/20
6. Pharmacotherapy for smoking cessation 2019/20

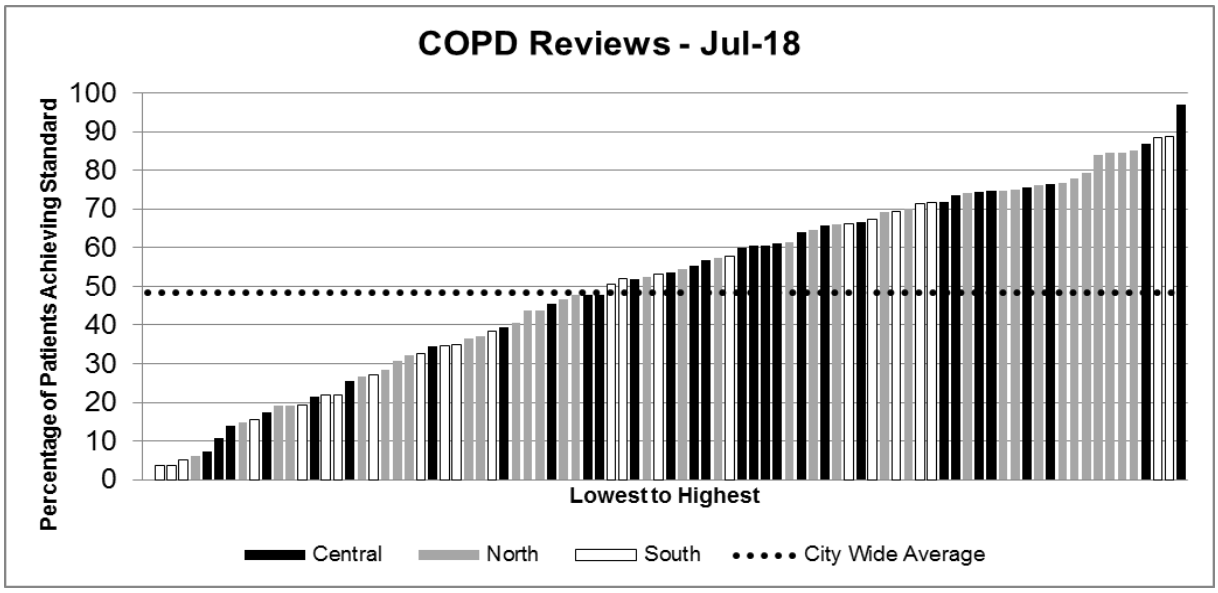
5.2 Manchester Standards are supported by EMIS (practice clinic system) templates, pre-populated forms, which support the elements of Quality Outcomes Framework (QOF) and the Standards together with appropriate coding. These templates also have embedded supporting documentation e.g. flare up plans for patients with COPD so that they know what to do when their condition is deteriorating. This continues the emphasis on enablement and self- care.

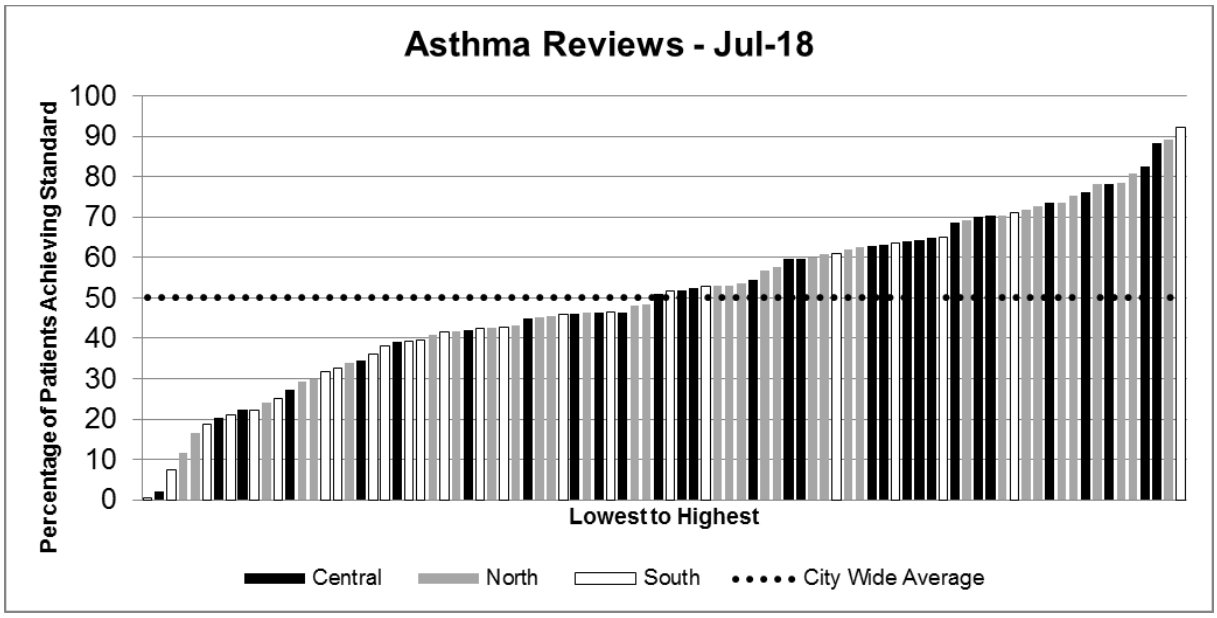
5.3 **Impact**

From the table below we can see the impact of increased primary care intervention on emergency admission rates for COPD patients. A higher level of intervention (see table below) leads to reduced emergency admission rates, reduced admission cost and a shorter hospital stay.

Intervention Level	Emergency Admission Rate (per 1,000 patients)	Cost per admission	Average Length of Stay
0 - None	113	£2,107	6
1 - Basic QoF	163	£2,089	5
2 – Primary Care Standards not delivered in full	78	£2,050	5
3 - Primary Care Standards delivered in full	85	£1,770	4

5.4 The following two graphs provide a citywide view of the percentage of adult patients who have had a COPD review or an asthma review. The neighbourhood view can be found in appendix 5.





5.5 It should be noted that there is some variation across the city and part of the work this year will be to analyse practice level achievement / variance, to learn from best practice and encourage appropriate coding of interventions carried out in primary care. There has, however, been citywide improvement since the roll out of standards.

5.6 Data to date shows that **24 per cent** more COPD patients received a review in the past twelve months.

5.7 Data to date shows that **15 per cent** more asthma patients received a review in the past twelve months.

6. Homecare

6.1 Data analysis completed for the recent Homecare procurement identified respiratory to the largest secondary care cost for people in receipt of Homecare. Further analysis showed that for this cohort (people receiving homecare between April 17 and March 18) there were 402 emergency admissions to hospital for respiratory at a cost of £1.35m. Broken down by description this showed that the largest reason for admission was for pneumonia (48%), followed by COPD (19%) and lower respiratory infection (12%).

6.2 Further work is currently under way to establish what percentage of this cohort are receiving a review as part of the Primary Care Respiratory Standards, which will inform us whether this cohort is sufficiently being targeted proactively within Primary Care.

7. COPD Virtual Clinic

7.1 The COPD Virtual Clinic model is an evidence-based multi-disciplinary approach to respiratory care, underpinned by a recognition that in order to change long-term outcomes, transformation of Primary Care management of respiratory conditions is needed with greater integration of specialist services with general practice. Primary and secondary care clinicians work together to ensure that patients receive optimal management and proactively manage those patients identified by pre-determined searches. The model supports and mentors practice respiratory prescribing and holistic management of patients as well as a focus on education and relationship-building.

7.2 A COPD Virtual Clinic involves case discussions between respiratory Consultants, Senior Pharmacists and primary care clinicians. It is regarded as a clinical session with a focus on patient management and education.

7.3 MHCC has worked with clinical colleagues at MFT to co-host the COPD Virtual Clinic. Ten clinics were held as a pilot across Manchester. The evaluation report has demonstrated the benefit in terms of education and training (for both primary and secondary care) as well as cost savings linked to medicines optimisation. By ensuring patients are on the best inhalers to manage their symptoms we can reduce medicines waste and long term side effects of treatment. In addition, patient care is optimised resulting in a direct improvement on management of their respiratory condition.

7.4 This model is now a product promoted by Health Innovation Manchester on a Greater Manchester footprint.

7.5 **Impact**

- Reduce respiratory management variation in Primary Care
- Upskilling of primary care clinicians
- Improved holistic management of patients
- Prescribing cost savings
- Focus on cost-effective non-pharmacological therapies

8. Spirometry

8.1 Quality assured spirometry is one of the main investigations used for diagnosing respiratory diseases such as chronic obstructive pulmonary disease (COPD) and asthma.

8.2 Recent investments have included the purchase of 36 spirometers which were distributed to practices who requested a machine. MHCC also funded spirometry education and training for primary care clinicians (35 places on a two-day course / 35 places on a refresher course).

8.3 **Impact**

- Early and accurate diagnosis of lung disease is absolutely vital in improving respiratory health.
- Improving the quality of spirometry will improve clinical diagnosis and the long term monitoring of those affected by respiratory disease.

9. Manchester Integrated Lung Service

9.1 Over the past few months MHCC has been working with respiratory colleagues across primary, community and secondary care and this work has culminated in the development of a co-produced service specification for the Manchester Integrated Lung Service (MILS).

9.2 The service is run by the community respiratory teams across the city, now known as the MILS Team. The service will manage COPD patients mainly during 2018/19 with a view to extending to other long term respiratory illness areas (bronchiectasis, interstitial lung disease and patients on oxygen) from April next year.

9.3 Key performance indicators (KPIs) have been jointly agreed and reporting is expected to start in January 2019.

9.4 **Impact**

Moving to community based models of care from a hospital-centric model:

- Team-based community care from doctor led out-patient clinics.
- Continuous community support from episodic management of crisis.
- Integrated seamless pathways of care from current disjointed care between providers.
- Proactive / preventative care from reactive care.
- 'Patients as partners' from 'patients as recipients'.
- Carers being valued and supported from carers being unsupported.
- High-tech integrated data systems and use of technology from low-tech paper based systems.

10. Referral Management

10.1 Primary, Community and Secondary Care collaboratively produced the Manchester Respiratory Referral Criteria (see appendix 6). This covers the minimum information which should be contained in ALL respiratory referral

letters to improve quality of referrals and ensure that patients are directed to the most appropriate service on triage.

10.2 **Impact**

- Reduce variation in primary care
- Upskill primary care clinicians
- Patients attend community / acute services appropriately worked up
- Reduce new to follow-up ratio
- Reduce hospital activity and costs
- Improved patient experience (attend the right clinic first time)
- Right place, right person, right time, first time.

11. Pulmonary Rehabilitation (PR)

11.1 PR is a programme of exercise and education for people with long-term lung conditions. It combines physical exercise sessions with discussion and advice on lung health and is designed to help patients to manage the symptoms of their condition, including getting out of breath.

11.2 The referral process for PR has been reviewed and revised to streamline the process. All referrals into the community (including for PR) are processed under a referral to MILS. MHCC Communications and Engagement Team plan to work with the community services to produce a local video promoting pulmonary rehabilitation as well as using the opportunity to highlight health messages e.g. flu vaccination etc. Posters have been produced for display in general practice encouraging patients to seek a referral to PR.

11.3 **Impact**

- Increased awareness of PR by clinicians and patients
- Increased referrals to PR
- Improved patient understanding of COPD
- Patients feel better and breathe easier (everyday activities will become easier with improved fitness)
- An opportunity for patients to make new friends and learn from others who know what it is like to live with a lung condition
- Patients learn how to manage their condition better

12. Health Innovation Manchester (HIM)

12.1 All of the Greater Manchester's NHS trusts, Clinical Commissioning Groups and Councils are part of the Health Innovation Manchester network. HIM provide the skills and expertise to adopt an innovation from scoping the product to full implementation and delivery. MHCC is to work collaboratively with HIM on the priorities listed below.

12.2 **COPD Virtual Clinic**

A pilot has been carried out as documented in this paper and will continue under the Manchester Respiratory Standards for 2019/20.

12.3 **RightBreathe**

This is an app / website available to put on a desktop which clinicians can use in consultation or 'on the go' to demonstrate the appropriate inhaler technique. With so many inhalers on the market it can be difficult for a clinician to remember how every inhaler is taken, the app or website clearly demonstrates this. HIM are currently in discussions with RightBreathe creators to have the app / website localised to include the Greater Manchester Medicines Management Group (GMMMG) COPD pathway.

12.4 MHCC will work with HIM on the use of other digital technologies to support the work programme moving forward.

12.5 **Virtual Learning Hub**

This is a COPD virtual online learning hub hosted by the GP Excellence website and will be available to all healthcare professionals. This will include videos of COPD expert clinicians speaking about optimum management of the condition, with links to resources and frequently asked questions. There aims to be an online discussion forum and information about the GMMMG COPD pathway. This is scheduled to go live in January 2019.

12.6 **MyCOPD**

This is one of the few apps available that has been through the NHS Digital Accelerator Programme and is a comprehensive self-management tool for patients. The app has NHS England approved status and has a Medicines and Healthcare products Regulatory Agency (MHRA) license. Tiles on the app include pulmonary rehabilitation (useful for those who would find it difficult to attend a weekly session for 6 – 8 weeks), inhaler technique demonstration, management of anxiety, another useful tile is a weather report. MHCC has signed up to receiving the free licenses (20% of COPD register) available. Implementation of the free licenses and further scoping work will take place next year.

12.7 **Accident & Emergency (A&E) Audit**

MHCC is working with The NHS Utilisation Management Unit, part of Health Innovation Manchester, to design and carry out an audit of A&E attendances. The aim will be to look at a cohort of patients attending A&E at the Royal Manchester Children's Hospital and at Manchester University NHS Foundation Trust (MFT).

12.8 The aim of the audit is to understand why patients have chosen to attend A&E and if that attendance could have been clinically managed elsewhere e.g. primary or community care.

12.9 The audit is now underway and the results will be complete by January 2019 and the findings shared across the system.

12.10 Key findings of a similar audit carried out elsewhere found 4 broad reasons for presentation:

1) Reluctance to call for medical help then the decision was often made by others.
2) Learned experience to turn directly to A&E for breathlessness crisis.
3) If reviewed by a Primary Care clinician, directed to present to A&E for test / treatment / advice.
4) Primary Care clinician was unavailable.

12.11 MHCC has also requested that this work includes a retrospective audit in North Manchester where we have seen a 21.5% increase in respiratory admissions (at month 4). We do know that North Manchester General Hospital has opened more beds since last year but MHCC needs to understand further what is driving the high activity. The North Manchester community service (MILS – North) is a well-established, well led service who are proactive with patients.

13. Breathe Better – Community Respiratory Model

13.1 In order to address the long standing poor respiratory health outcomes across Manchester the need to deliver respiratory services in a radically different way has been recognised. There is good evidence emerging around the benefits of social prescribing in respiratory disease showing that in those who engage in groups integrated with respiratory services have better outcomes, including significant reductions in hospital admissions and GP contacts that those who do not.

13.2 Manchester's model is based on the 'Making Waves' Programme in Coventry which was described by the founder as 'throwing a party every month for patients, but having healthcare professionals involved'.

13.3 The proposed model is a community based model where patients would attend for social activities (e.g. bingo, quizzes) but receive Respiratory Consultant / other healthcare professionals review at the same time. There is a great opportunity to work alongside housing and Citizens Advice, and incorporate exercise, singing, British Lung Foundation Breathe Easy support groups etc. This model has delivered huge benefits for patients in Coventry including:

- Reduced unplanned COPD admissions
- Improvement in confidence
- Reduced social isolation
- Improved self-management and understanding of what to do in a crisis
- Improved mental health

13.4 The British Lung Foundation (BLF) Integrated BreatheEasy (IBE) study, a commissioned patient-led peer support model, found similar outcomes for patients, but in addition a health economic analysis showed:

- For every pound invested in the IBE groups there is a return of a minimum of £5.36, i.e. £4.36 in net gain through better health outcomes of participants.
- For every pound invested in the IBE groups, there is a net gain of £22.70 made up of the value of better health outcomes, the NHS cost savings and a range of wider social benefits.

13.5 Population Health colleagues have said that "this model would be a great project for the Health Development Coordinators to facilitate at neighbourhood level once they are in post and fits nicely with the objectives of the prevention programme. It is really important to get a 'neighbourhood conversation' going about this from the outset so it is owned and developed by the neighbourhood rather than a group that sits elsewhere."

13.6 The model will act as an alternative option to long-term hospital clinic follow-up and be a place that patients from the hospital can be safely 'discharged to', but it will also be open to direct referrals from GP practices and other healthcare professionals.

13.7 This work is at an early stage across the city. Dr Binita Kane is working closely with Wythenshawe Community Housing Group and a 'test' session was held on 29th November.

13.8 It is anticipated that the model will work with Galen Research (who help to improve healthcare through scientifically-based research outcome measures) looking at clinical and community based interventions for people with respiratory disease. It is important that services are evaluated in terms of value gained by patients as well as with regards activity and finance.

13.9 **Impact**

- Improving quality of life for people with breathing conditions.
- Improving knowledge and confidence of patients in managing their respiratory disease through better understanding of the disease.
- Improving health outcomes in people with respiratory disease.
- Improving mental health and reducing social isolation in people with respiratory disease.

14. Smoking / Air Quality

14.1 The Manchester Tobacco Plan has recently been published outlining our ambitions to decrease smoking prevalence in the city. We are working closely with Greater Manchester to support the CURE project and also planning community services to deliver tobacco addiction treatment.

C - CONVERSATION: have the right conversation every time
U - UNDERSTAND: understand the level of addiction
R - REPLACE: replace nicotine to prevent withdrawal
E - EXPERTS & BEST EVIDENCE-BASED TREATMENT: for all patients

14.2 Dr Murugesan Raja, MHCC Respiratory Clinical Lead, has appeared in communication videos raising awareness of the dangers of shisha smoking. One hour of shisha smoking can be as damaging as 100 cigarettes; other promotions includes awareness of the risks of poor air quality and what we can do to improve it. MHCC supports the Making Smoking History /smoke free spaces work programme, Stoptober, and to promote clean air in the city.

15. Partnership work in Greater Manchester

15.1 MHCC has been supporting Trafford Commissioners who are keen to adopt the approach Manchester has taken particularly with regards developing a community specification based on the Manchester Integrated Lung Service.

15.2 MHCC is also represented at the Greater Manchester Respiratory meetings for adults and children. A number of areas which have been developed in Manchester are being looked at for roll out across Greater Manchester in particular the Paediatric Management Plans and influenza outbreak in an adult care home - GP guide. Work carried out in central Manchester in 2015/16 to identify patients with COPD early in a GP setting is now also being looked at for possible roll out across Greater Manchester.

15.3 MHCC led the work with GMMMG on developing the Tobacco Addiction Pharmacotherapy Pathway and Tobacco Addiction Treatment – additional prescribing notes. MHCC also contributed to the development of their COPD and asthma management pathways.

15.4 This paper is to provide assurance to the Health Scrutiny Committee that MHCC and partners are continuing to lead on collaborative working across the system in managing the rising demand for respiratory health care.

16. Recommendation

16.1 The Health Scrutiny Committee is asked to note the content of this report and provide comments on the respiratory work programme.