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2 Respiratory disease

2.1 Introduction

As defined by the World Health Organization, respiratory diseases are ‘diseases of the airways and other structures of the lungs’ and a major cause of morbidity and premature mortality. [1] In the UK, close to one in five people has been diagnosed with lung disease of some form and respiratory conditions are also the third largest cause of death after heart disease and non-lung cancers. [2]

Understanding respiratory disease in Hackney and the City is important because of the high prevalence of key risk factors for disease – including smoking and socio-economic disadvantage (see Section 2.2). [3] Hackney remains one of the most deprived local authorities in the country and there are pockets of high deprivation in the east of the City of London (see the ‘Society and environment’ JSNA chapter).

There are a broad range of diseases that affect the respiratory system, including both infectious diseases and chronic conditions. The main focus of this chapter is on non-communicable, chronic lung conditions, primarily asthma and chronic obstructive pulmonary disease (COPD) (see Box 1). Infectious diseases of the lungs (such as tuberculosis (TB), pneumonia and influenza) are considered separately in the JSNA. Asthma among children and young people is covered in the ‘Children and young people’ chapter.

Many people diagnosed with respiratory disease also suffer from comorbidities and approximately 80% of people with COPD have at least one other long-term condition. [4] Chronic respiratory conditions can increase the risk of mortality from cardiovascular disease and experiencing depression and/or an anxiety disorder. [4] Both COPD and asthma are commonly under-diagnosed, which results in poorer outcomes due to delayed treatment and care.

Box 1: Definitions used in this section

Chronic lower respiratory diseases – any chronic disease affecting the lower respiratory tract, including COPD and asthma. [5]

Asthma – a common, chronic lung disease that manifests itself in episodic, and often sudden, spells of breathlessness caused by tightening of the airways. An ‘asthma attack’ is caused by swelling of the lining of the bronchial tubes, which can severely reduce air flow to and from the lungs. The condition often first appears in childhood but can affect people of all ages. [6]

Chronic obstructive pulmonary disease (COPD) – a progressive lung disease caused by reduced airflow into the lungs that is very rarely reversible. The key characteristics of the condition are a persistent cough and wheezing, breathing problems that progressively become more severe over time, repeated chest infections and excessive production of phlegm in the respiratory tract. [7] [8]

2.2 Causes and risk factors

Smoking damages the respiratory system and, in young people, stunts lung growth and development (see ‘Lifestyle and behaviour’ chapter of the JSNA). It is also the leading cause of COPD (about 85% of cases are among smokers or ex-smokers) [9]. Moreover, both smoking and indirect exposure to cigarette smoke can exacerbate asthma in the long term by causing damage to lung tissue, and in the short term by triggering an asthma attack. [10]

Other external agents that can damage the respiratory system when breathed in, and so increase the risk of respiratory illness or death, include air pollution (see section in the ‘Society and environment’ chapter) and workplace exposure to particulate matter, gases and fumes. [11] Poor quality housing can also increase exposure to pollutants that increase the risk of lung disease. A report written by the European Lung Foundation has highlighted that dampness and mould at home can increase the chance of asthma-related problems by 30% to 50%. [12] (see the ‘Society and environment’ chapter for more detail on the impact of poor quality housing on health).

Genetic mutations can also contribute to respiratory disease. Around 1% of people with COPD are deficient in alpha-1-antitrypsin, a protective substance in the lungs; if insufficient quantities are produced, this can lead to lung damage. [8] Genetic mutation for COPD is most likely to play a part when the disease is developed at younger ages. Genetic predisposition, in combination with exposure to substances that irritate the respiratory tract, is also likely to play a role in developing asthma. [13]

2.3 Local data and unmet need

2.3.1 Numbers affected – known to services

Across Hackney and the City there are 3,208 people recorded by their GP as having COPD, and 11,783 with ‘active asthma’ (Table 1). The term ‘active asthma’ describes patients registered at GP practices who have received medication to manage their condition within a predetermined timeframe.

Table 1: Percentage and number of Hackney and the City adult (resident) GP patients with a recorded respiratory condition (age 18+, 2017)

Prevalence	City of London		Hackney	
	Number	Percentage of population (%)	Number	Percentage of population (%)
COPD	50	0.7	3158	1.4
Active asthma	250	4.0	11,533	5.2

Source: Extracted from the local GP register by Clinical Effectiveness Group (CEG), Blizard Institute, April 2017.

Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

2.3.2 Numbers affected – deaths from respiratory disease

Over the five-year period from 1 January 2012 to 31 December 2016, there were on average four deaths from respiratory disease in City of London residents each year, and 131 in Hackney residents. [14] Table 2 shows that the major causes of death within this category were chronic lower respiratory diseases, influenza and pneumonia (the latter two are addressed in detail in the 'Infectious disease' JSNA chapter).

Table 2: Percentage and average annual number of deaths among Hackney and the City residents from respiratory conditions (all ages, 2012 – 2016)

Underlying cause of death	City of London		Hackney	
	Number	Percentage of respiratory deaths (%)	Number	Percentage of respiratory deaths (%)
Chronic lower respiratory diseases (including COPD)	1.6	40	62	47
Influenza and pneumonia	1.6	40	47	36
Other respiratory disease	0.8	20	22	17

Source: Primary Care Mortality Database.

2.3.3 Unmet need

According to one estimate, three quarters (75%) of people (of all ages) with COPD in Hackney and the City are undiagnosed. [15] Nationally, 43% of people are estimated to be undiagnosed, highlighting poor relative performance locally on this measure. For asthma, in Hackney and the City only 50% of the total population affected (all ages) are estimated to be diagnosed, which also falls short of the England average diagnosis rate of 65%. [15]

Some caution needs to be exercised when drawing conclusions from these data, however. For example, the data used to create these estimates are not current (2011/12 for the COPD data and 2008/09 for asthma), which is of particular relevance to somewhere like Hackney and the City, which has seen significant population change in recent years. The data are also only available for all ages and not over-18s specifically.

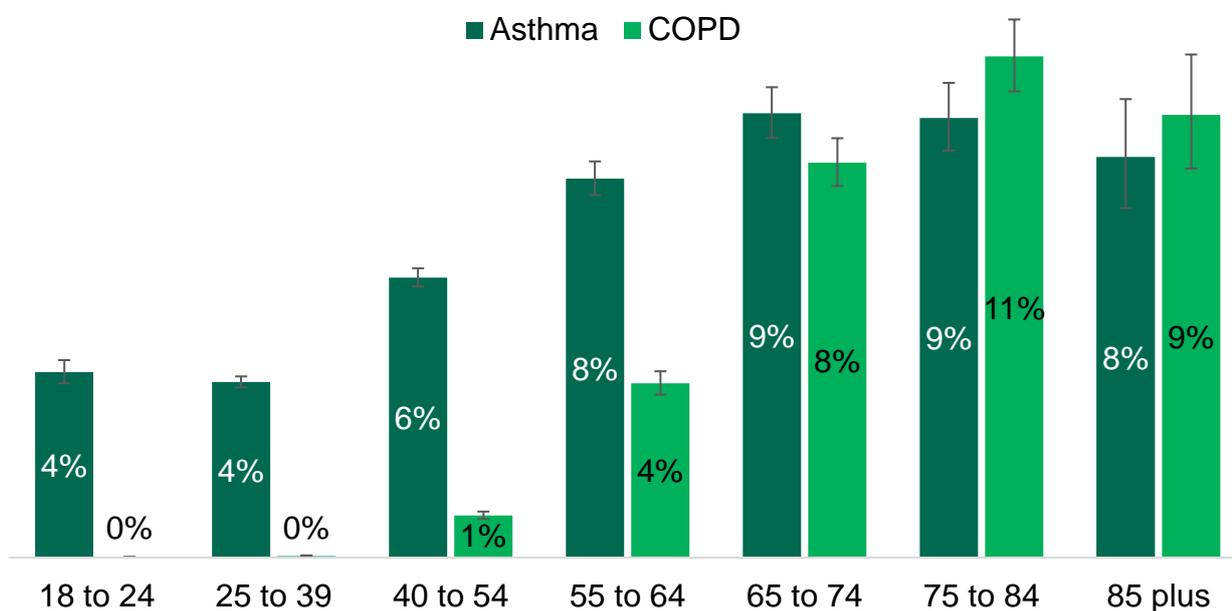
Further, the data have also been assessed as 'amber' for accuracy, indicating that these may not be the most reliable source of evidence on local unmet need.

2.4 Inequalities

2.4.1 Age

Although asthma is prevalent at younger ages, many lung conditions are characterised by a gradual deterioration of the lungs, which is why COPD is rare under the age of 65. Figure 1 shows that the adult prevalence of both asthma and COPD increases with age in Hackney and the City.

Figure 1: Prevalence of respiratory conditions in Hackney and City of London (resident) GP patients, by age group (18+, 2017)



Source: Extracted from the local GP register by CEG, Blizard Institute, April 2017.

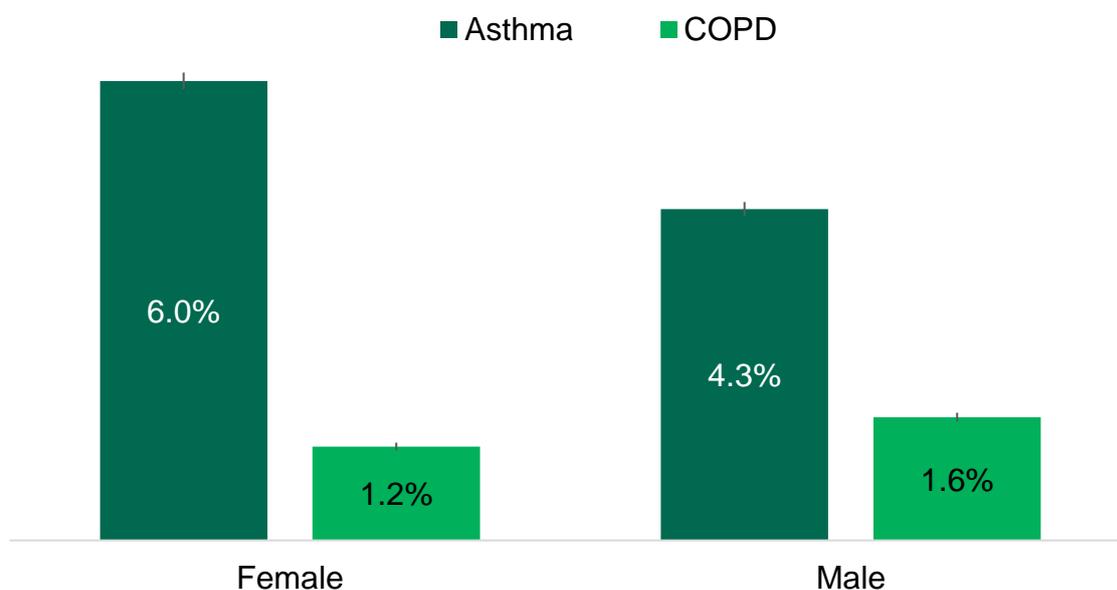
Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

2.4.2 Gender

Figure 2 shows that the GP-recorded prevalence of asthma is notably higher among women than men in Hackney and the City. This is consistent with national observations that asthma symptoms often appear or worsen around the time of puberty for young girls. [16]

In the Hackney and the City population, as is the case nationally, COPD is more prevalent among men compared to women. This is likely to reflect historical differences in smoking habits and exposure to harmful substances in the workplace.

Figure 2: Prevalence of respiratory conditions in Hackney and City of London (resident) GP patients, by gender (18+, 2017)



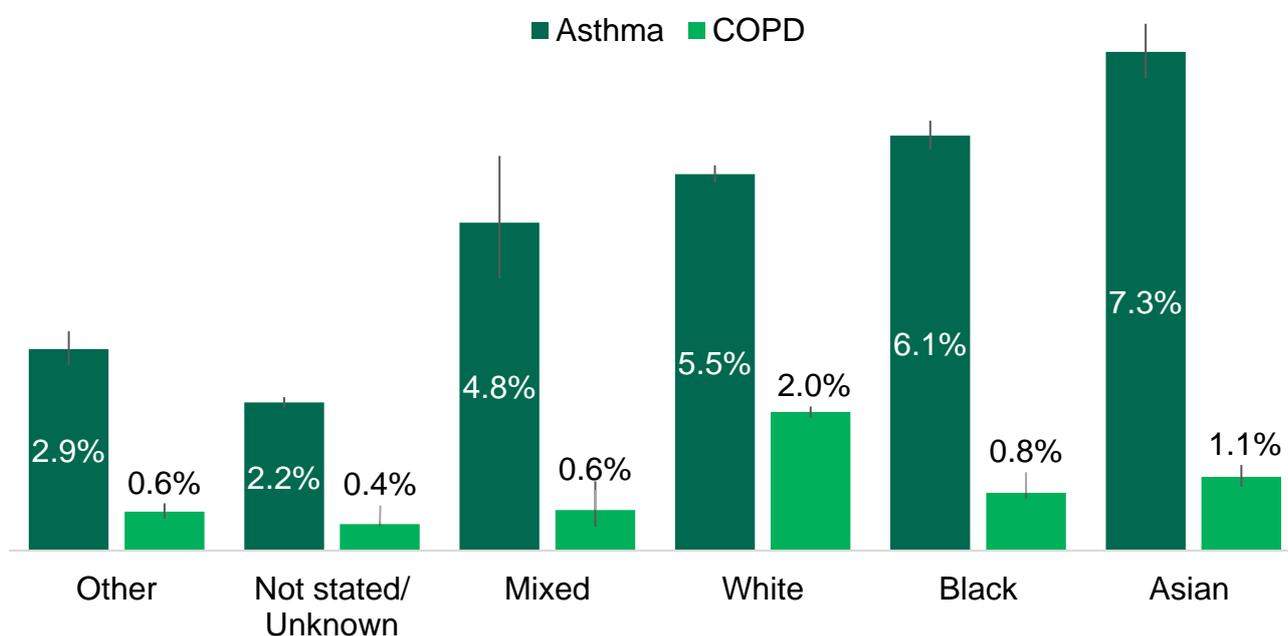
Source: Extracted from the local GP register by CEG, Blizard Institute, April 2017.

Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

2.4.3 Ethnicity

Figure 3 shows that GP patients in Hackney and the City who are classified as Asian or Asian British have the highest rate of active asthma. Patients of White ethnicity have the highest rate of COPD, which reflects the older age profile of this ethnic group locally.

Figure 3: Prevalence of respiratory conditions in Hackney and City of London (resident) GP patients, by broad ethnic group (18+, 2017)



Source: Extracted from the local GP register by CEG, Blizard Institute, April 2017.

Note: Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham.

2.4.4 Disability

COPD can have a significant impact on people's ability to carry out activities of daily living. People with COPD are at increased risk of a range of comorbidities, including osteoporosis and heart disease, which may further affect their ability to undertake basic daily tasks.

Anxiety and depression are common conditions affecting people with COPD, often due to limited physical capability. It is also the case that nationally 40.5% of people with serious mental illness are reported to smoke, a major risk factor for respiratory disease (see Section 2.2). [17] In Hackney and the City specifically the figure is higher still, with 43.4% of people with serious mental illness being smokers. [17]

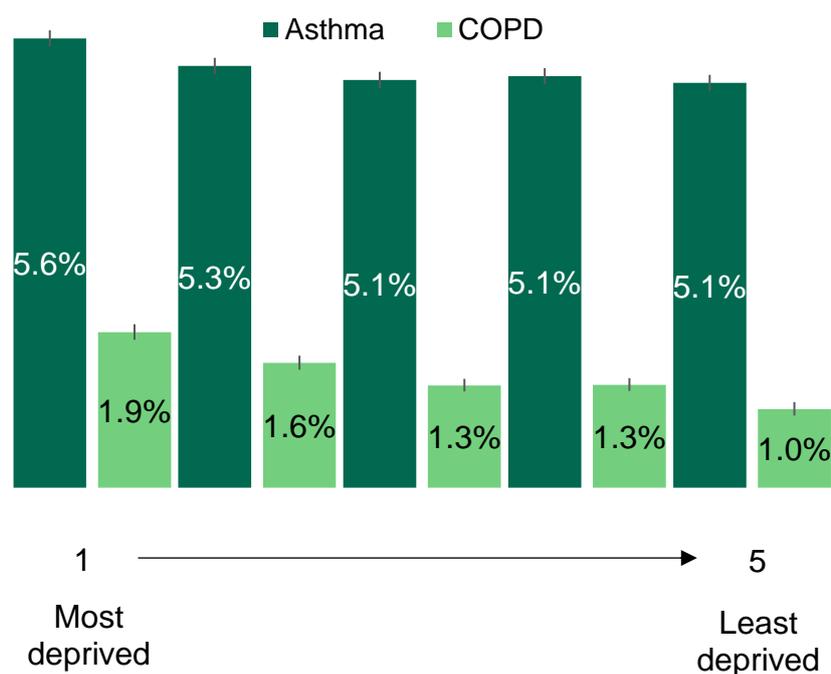
2.4.5 Sexual identity

Lesbian, gay, bisexual, transgender and other sexual and gender minority (LGBT+) people are more likely to smoke than average, which increases their risk of developing respiratory disease (see 'Smoking' section of the 'Lifestyle and behaviour' JSNA chapter). [3]

2.4.6 Socio-economic disadvantage

Nationally, there is an association between deprivation, prevalence of lung disease and rates of emergency admissions. [18] Across the UK, prevalence of COPD is 2.5 times higher in the most deprived compared with the least deprived areas, and similar patterns are observed locally. [2] Figure 4 shows a clear socio-economic gradient in both asthma and COPD prevalence in Hackney and the City.

Figure 4: Prevalence of respiratory conditions in Hackney and City of London (resident) GP patients, by deprivation quintile (18+, 2017)



Source: Extracted from the local GP register by CEG, Blizard Institute, April 2017. Data cover residents of Hackney and the City registered with a GP in Hackney, the City of London, Tower Hamlets and Newham. [19]

Note: Deprivation is defined using the Index of Multiple Deprivation 2015 (IMD). IMD is a measure of relative deprivation for small areas that combines 37 separate indicators, each reflecting a different aspect of deprivation experienced by individuals living in an area. Deprivation groupings are reported from 1 (most deprived) to 5 (least deprived). [20]

Many of the risk factors for COPD (such as smoking, exposure to pollution, harmful substances in the workplace and indoor pollution) are positively associated with lower socio-economic status. [21] The 'Lifestyle and behaviour' chapter of the JSNA highlights that: [3]

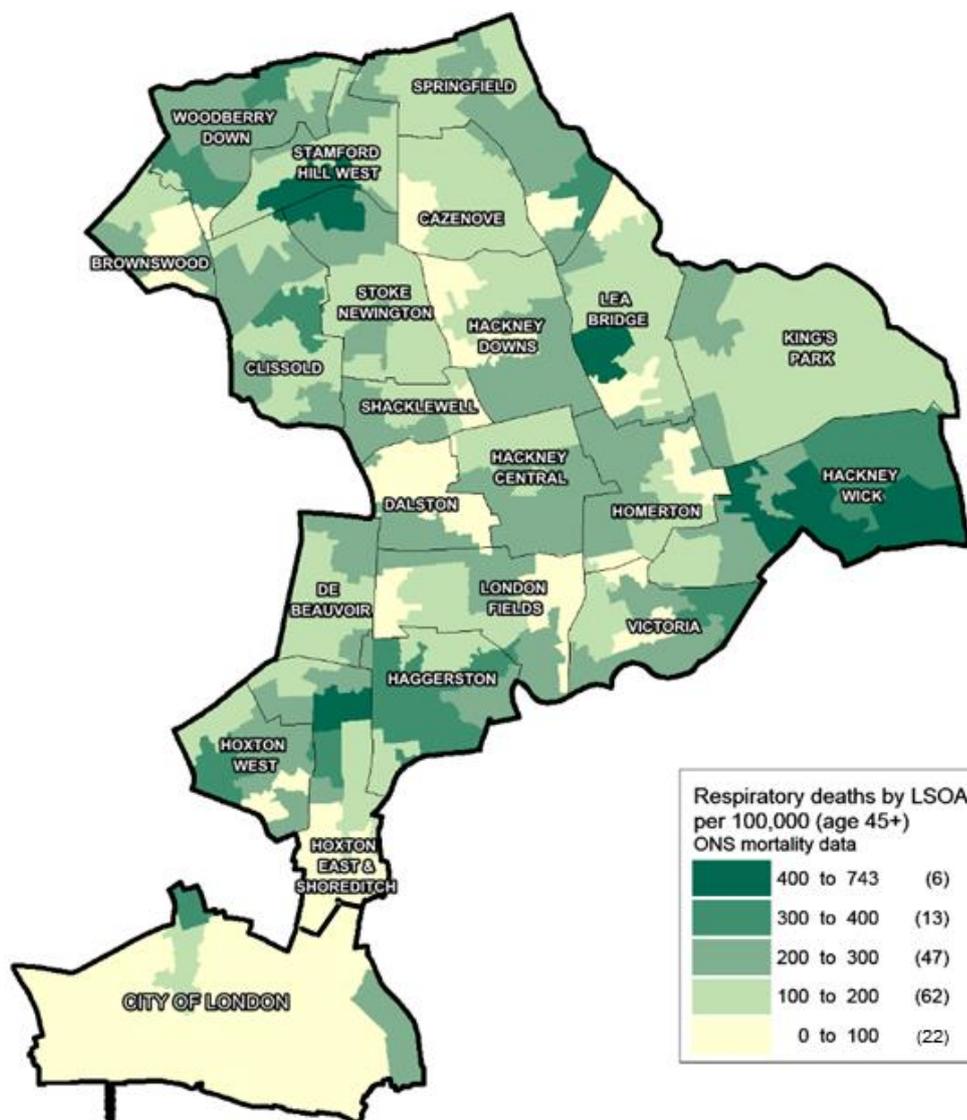
- people in routine and manual occupations are more than twice as likely to smoke as people in managerial and professional occupations
- almost 40% of unemployed people are smokers
- more than 70% of people who are homeless or in prison are smokers
- higher rates of smoking are observed across many other indicators of social disadvantage (including low-level qualifications, living in rented housing and receiving income support).

Asthma prevalence is also higher in more deprived areas, with sub-standard housing and exposure to allergenic substances being possible drivers. [22]

2.4.7 Location within Hackney and the City

Figure 5 shows how the rate of death from respiratory disease (in people age 45+) varies across Hackney and the City. These patterns broadly reflect the age and deprivation profile of the local area.

Figure 5: Rate of death from respiratory disease in Hackney and City of London residents by lower layer super output area (LSOA)¹ per 100,000 population (age 45+, January 2006 – May 2014)



Source: Office for National Statistics. [14]

¹ LSOAs are geographic areas that are part of a hierarchy designed to report small area statistics in England and Wales. One LSOA contains an average population of 1,000 people.

2.5 Comparisons with other areas and over time

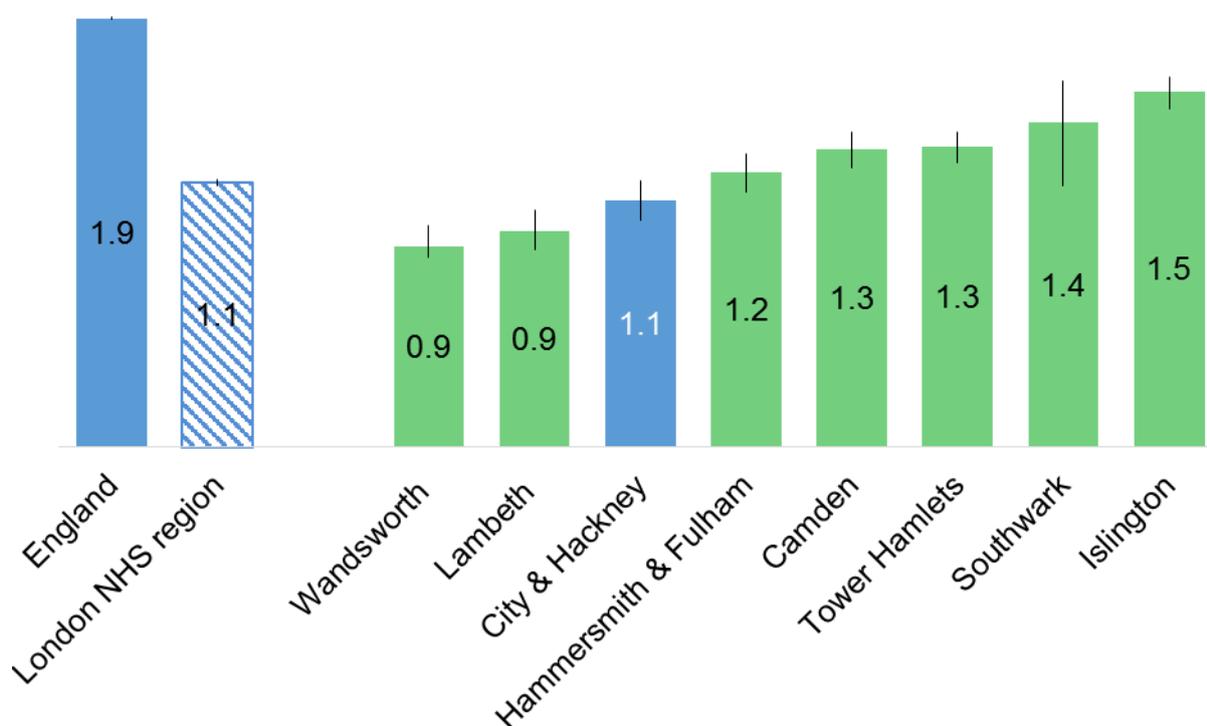
The data presented below are taken from INHALE (INteractive Health Atlas of Lung conditions in England), published by Public Health England (PHE). This is a different source to the local data reported so far. Separate data for Hackney and the City are not available from this source. It should also be noted that INHALE data include people of all ages.

2.5.1 Prevalence

Figure 6 shows that there is a slightly lower recorded prevalence of COPD in Hackney and the City than most similar areas and London as a whole. Local recorded prevalence is also lower than the average for England, reflecting the younger population profile in Hackney and the City.

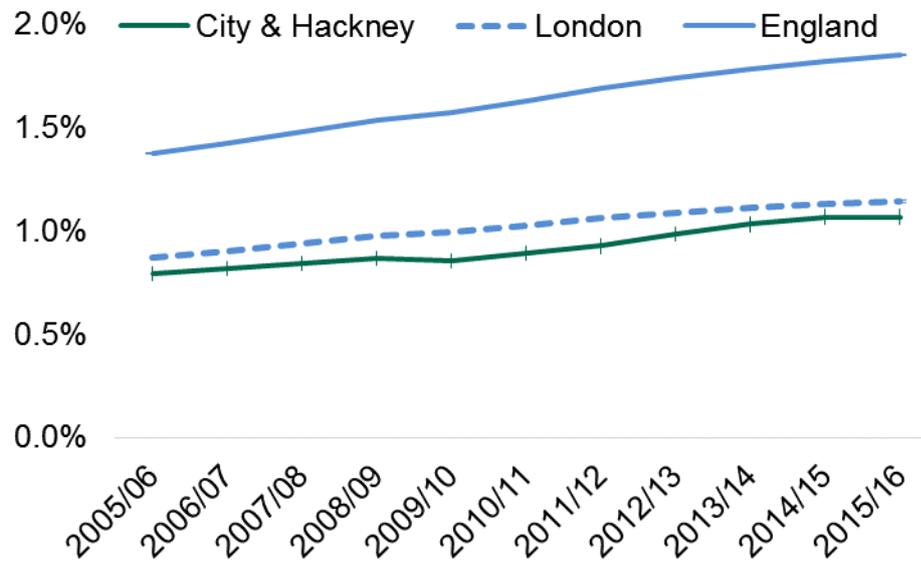
Recorded prevalence of COPD has increased in Hackney and the City between 2005/06 and 2015/16, albeit at a slower rate than for England (Public Health England, INHALE profiles. Figure 7).

Figure 6: Percentage of GP patients diagnosed with COPD (all ages, 2015/16)



Source: Public Health England, INHALE profiles. [15]

Figure 7: Percentage of GP patients diagnosed with COPD (all ages, 2005/06 — 2015/16)



Source: Public Health England, INHALE profiles. [15]

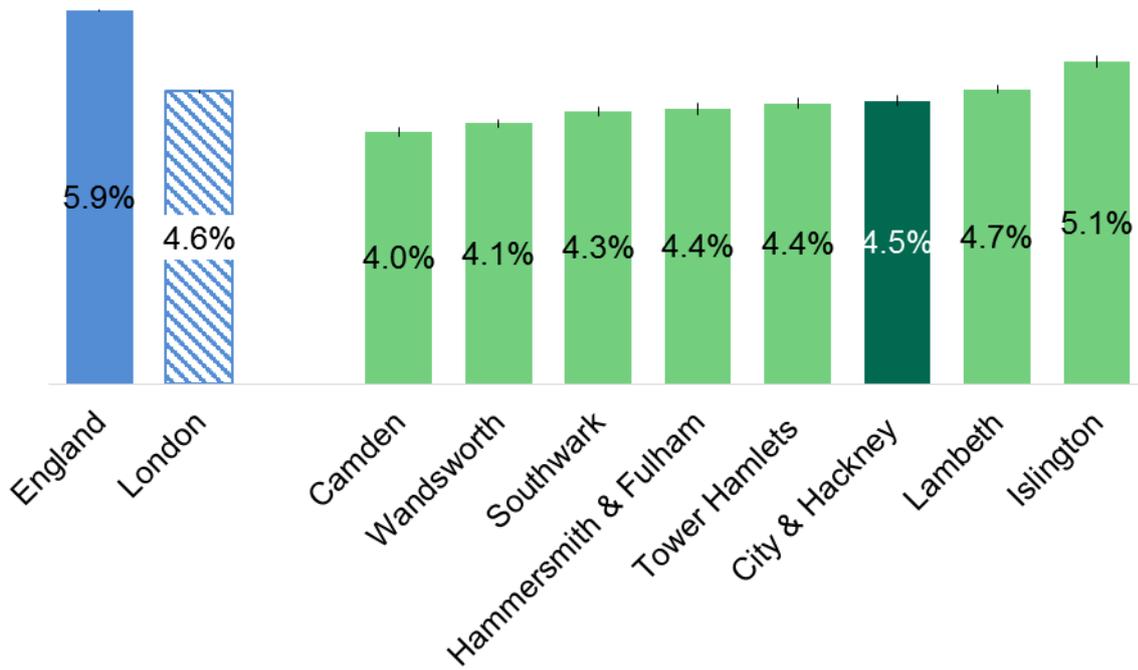
Note: Confidence intervals not available for London before 2013/14.

Figure 8 demonstrates that Hackney and the City are significantly below the national average in terms of recorded prevalence of asthma (along with other similar areas and London as a whole).

Given the relatively high levels of deprivation in Hackney and parts of the City (even compared with ‘similar’ areas) and the strong association between deprivation and respiratory disease (see Section 2.4), these data provide further evidence of potentially significant under-diagnosis of both asthma and COPD locally (see Section 2.3.3 for a discussion of unmet need).

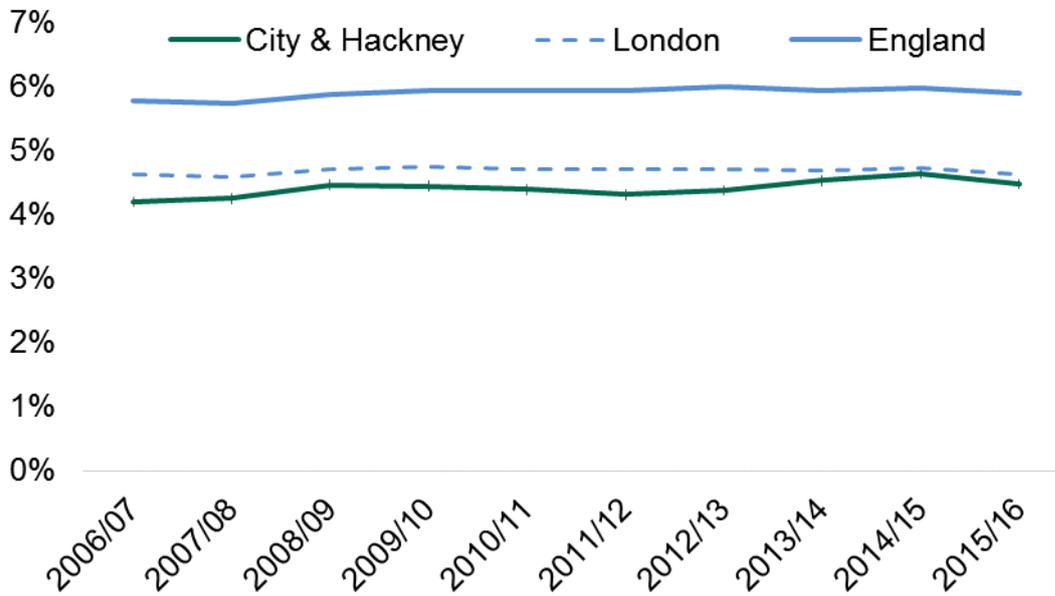
Locally, across London and nationally, asthma prevalence has remained fairly constant over the last decade (Figure 9).

Figure 8: Percentage of GP patients diagnosed with asthma (all ages, 2015/16)



Source: Public Health England, INHALE profiles. [15]

Figure 9: Percentage of GP patients diagnosed with asthma (all ages, 2006/07 — 2015/16)



Source: Public Health England, INHALE profiles. [15]

Note: Confidence intervals not available for London before 2013/14.

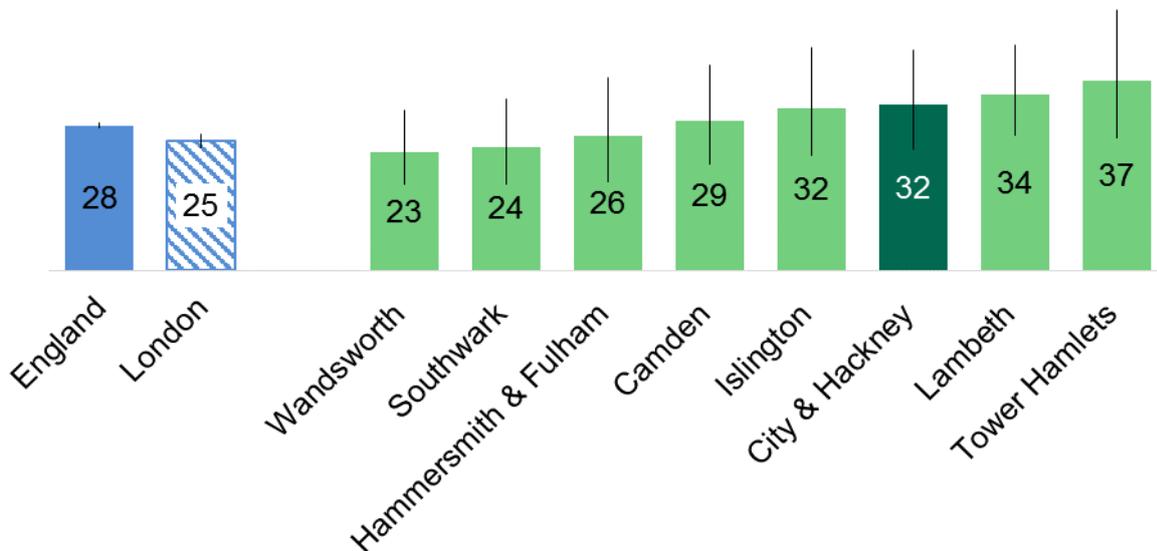
2.5.2 Outcomes

Figure 10 and Figure 11 below present comparative data on under-75 mortality from respiratory disease. Due to the small numbers involved (reflected in the wide confidence intervals shown), it is difficult to draw reliable conclusions based on these data.

Figure 10 shows that when adjusted for age and sex, the under-75 mortality rate from respiratory disease in Hackney and the City is not statistically different from England, London or any of Hackney’s statistical peers.

Over time, local under-75 mortality rates from respiratory disease are consistently, but not generally statistically, higher than London and England (Figure 11).

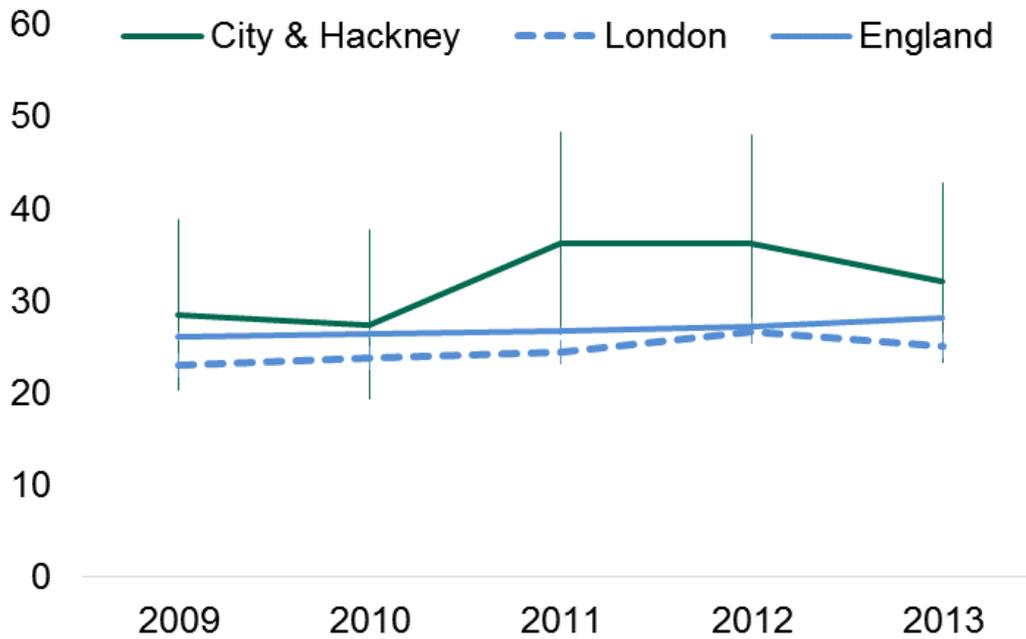
Figure 10: Age standardised respiratory disease mortality rate (per 100,000 people under 75, 2013)



Source: Public Health England, INHALE profiles. [15]

Note: Rates are age and sex standardised.

Figure 11: Age and sex standardised respiratory disease mortality rate (per 100,000 people under 75, 2009 — 2013)



Source: Public Health England, INHALE profiles. [15]

The rate of emergency admissions is a potential indicator of unmet need in patients diagnosed with respiratory disease.

Figure 12 shows that emergency COPD admission rates are similar in Hackney and the City compared to London and England, but at the lower end of Hackney's statistical peers. In the seven years between 2005/06 and 2012/13, rates of COPD emergency admissions fell locally, regionally and nationally (Figure 13).

Figure 12: Emergency hospital admissions per 1,000 patients with COPD recorded (18+, 2012/13)



Source: Local analysis based on Public Health England INHALE profiles. [15]

Figure 13: Emergency hospital admissions per 1,000 patients with COPD recorded (18+, 2005/06 — 2012/13)

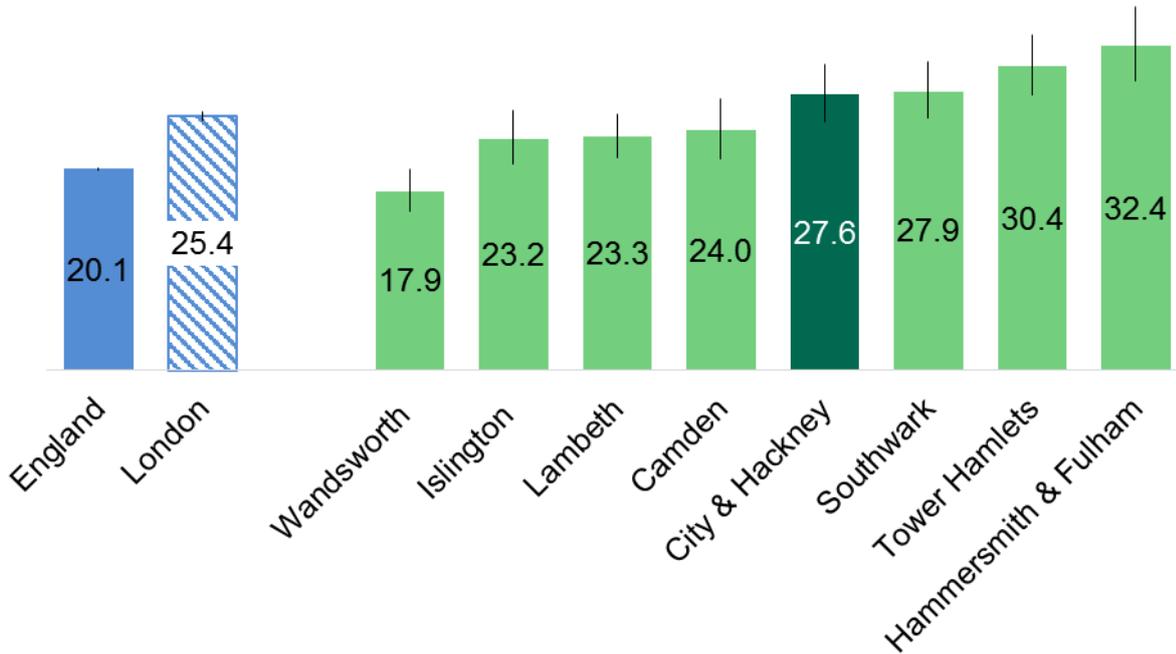


Source: Local analysis based on Public Health England INHALE profiles. [15]

The rate of emergency admissions for asthma patients locally is not statistically different to London or many of Hackney’s statistical peers (Figure 14). However, it is significantly above the national average.

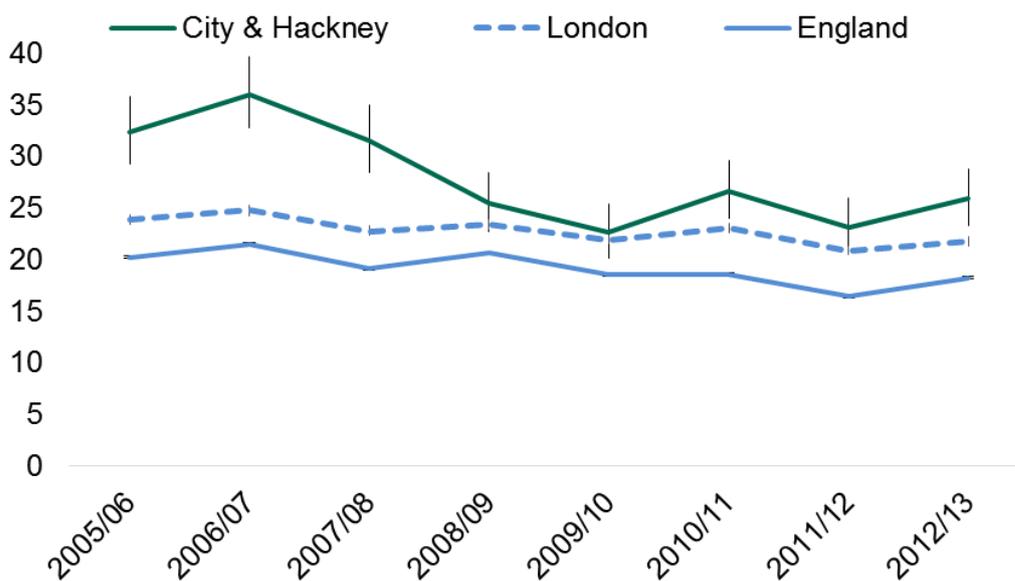
Figure 15 shows that rates of emergency asthma admissions fell sharply in Hackney and the City between 2006/07 and 2009/10, and levelled out thereafter. Local emergency admission rates are now much closer to the London and national average, although still statistically higher.

Figure 14: Emergency hospital admissions per 1,000 patients with asthma recorded (all ages, 2012/13)



Source: Local analysis based on Public Health England INHALE profiles. [15]

Figure 15: Emergency hospital admissions per 1,000 patients with COPD recorded (all ages, 2005/06 — 2012/13)



Source: Local analysis based on Public Health England Inhale profiles. [15]

2.6 Evidence and good practice

The National Institute for Health and Care Excellence (NICE) has produced a wealth of guidance relating to the identification and treatment of major respiratory conditions, including asthma and COPD. [23] [24] Best practice guidance includes information relating to:

- prevention
- diagnosis and management of stable conditions
- managing exacerbations.

Good management of COPD and asthma relies on early diagnosis so that patients can benefit from effective treatment options to manage their symptoms, prevent exacerbations and stay healthy for longer.

With both asthma and COPD, as well as other respiratory conditions, NICE advocates that an integrated and coordinated management approach is essential if patients are to receive high-quality care.

2.6.1 Prevention

As with most lung conditions, the opportunities for primary prevention of chronic respiratory disease are centred on quitting smoking and reducing exposure to air pollution.

In Hackney, rates of smoking are high compared to the national average. In 2015/16, over 47,000 Hackney adult residents (23%) and just over 600 City of London adult residents (10%) were recorded as current smokers by their GP (see 'Lifestyle and behaviour' chapter of the JSNA). Most people start smoking as teenagers, with very few taking up the habit thereafter. It is known that there are certain risk factors associated with the likelihood of starting smoking, including having family members and peers who already smoke and also lower socio-economic status. There may also be cultural reasons for certain groups having higher rates of smoking; within Hackney, there are higher rates of smoking within Turkish, Vietnamese and Black Caribbean communities. The 'Lifestyle and behaviour' chapter provides further detail, as well as a summary of evidence and best practice to tackle the harms of smoking.

Air pollution disproportionately affects people who live on or near busy main roads, often in areas of high relative deprivation (see 'Society and environment' chapter). In addition to young children, people over 65 are most susceptible to the effects of air pollution on respiratory health, which can lead to exacerbations of existing conditions. *Box 2* summarises NICE guidelines on improving outdoor air quality and, in so doing, supporting better respiratory health. Interventions to improve housing conditions also play a role in prevention of respiratory disease (again, see 'Society and environment' chapter).

Box 2: NICE recommendations on improving outdoor air quality [25]

NICE guidance advises that there is benefit to taking a multi-faceted approach to tackling air quality as the cumulative benefits are likely to outperform any single intervention. Recommended measures include:

- integrating considerations of air pollution into planning at all levels
- introducing clean air zones that place restrictions in pollution hotspots
- reducing emissions from public sector transport services and vehicle fleets
- identifying opportunities to implement speed reduction and smooth driving policies
- making greater use of alternative modes of transport, including walking and cycling
- raising awareness among the public and health professionals of the impact of air pollution and beneficial steps that can be taken.

It is also important to maximise the uptake of influenza (flu) vaccination among people with COPD and asthma, as inflammation of the lungs caused by flu can further exacerbate both conditions. [26] For patients with COPD, also encouraging uptake of the pneumococcal vaccination is important in preventing further ill health. [27] Patients with asthma are not considered to be an at-risk group for the purposes of the pneumococcal vaccination.

2.6.2 Identification and early intervention

Many people with COPD, asthma or other respiratory conditions remain undiagnosed, in part because gradual development of symptoms can make them feel unremarkable, being out of breath becomes normal, and healthcare professionals may fail to identify underlying disease when a patient presents to them. [28]

Early identification is important because often, while there are treatments available to manage symptoms, damage to the lungs cannot be reversed. [29] Early diagnosis, particularly of COPD, can lead to better long-term management and fewer exacerbations that tend to worsen lung function.

Diagnosis of COPD relies upon clinical judgement to consider patient history and symptoms alongside testing by post-bronchodilator spirometry.² NICE recommends that spirometry be used to confirm diagnosis of COPD and to understand the severity of obstruction in the lungs. Without the use of spirometry, the incidence of COPD is often over-estimated by as much as 25%. [30]

Asthma diagnosis involves clinical assessment of symptoms and commonly co-existing conditions (including eczema and hay fever) and, where appropriate, breathing tests (including spirometry and peak flow test). NICE recommends that measuring the amount of nitric oxide in exhaled breath, known as FeNO (fractional exhaled nitric oxide) testing, may help to identify asthma where it has proven difficult

² Spirometry involves the use of a small device that measures the amount (volume) and/or speed (flow) of air that someone can inhale and exhale.

to diagnose. Higher levels of FeNO in the breath can indicate inflammation of the lungs and aid in asthma diagnosis. [31]

2.6.3 Treatment, care and support

The damage caused by COPD is permanent, but treatment can slow down the progression of the condition.

Treatment for lung conditions is most effective when it takes the form of an integrated approach between primary and secondary care clinicians, as well as patient behaviour change and self-care. [28] Supporting patients to take steps to stop smoking as well as minimising exposure to harmful substances at home and in the workplace are important to managing lung conditions. In addition, maintaining a healthy weight by eating a balanced diet will improve the quality of life for those suffering from COPD and the symptoms of breathlessness that are experienced as a result.

Exercise is important in maintaining lung function and there is a positive relationship between higher levels of physical activity and reduced severity of COPD. [32] Regular exercise, appropriate to an individual's capability, can improve symptoms and quality of life. [8]

2.7 Services and support available locally

2.7.1 Prevention

Stopping smoking is the best thing a patient can do to prevent the onset of COPD, as well as improving outcomes in those with disease. Both Hackney Council and the City of London Corporation commission evidence-based stop smoking services (SSS) in a range of different locations (for more information see the 'Smoking' section of the 'Lifestyle and behaviour' JSNA chapter).

Hackney and the City of London have also recognised the need for local action, complemented by national and regional efforts, in tackling air pollution. The London Borough of Hackney has produced an air quality scrutiny report that makes recommendations for how traffic and planning decisions can support ambitions for cleaner air. [33] The City of London, which (due to its location) has some of the highest levels of air pollution in the country, has similarly developed an air quality strategy (for 2015 to 2020). [34] For more information see the 'Society and environment' chapter of the JSNA.

With regards to influenza vaccination, rates of uptake in Hackney and the City among those with COPD are similar to the London average, but below the England average. [15]

2.7.2 Identification and early intervention

While estimates suggest significant under-diagnosis of COPD in Hackney and the City (Section 2.3), local performance in identifying COPD by spirometry is significantly above Hackney's statistical peers, as well as the London and England

averages. [15] As highlighted in Section 2.6.2, spirometry is important for the accurate detection and diagnosis of COPD.

In response to high numbers of COPD admissions, a service was set up at Homerton University Hospital NHS Foundation Trust in 2009 to support early diagnosis (as well as improved case management). This is called the Adult Cardiorespiratory Enhanced and Responsive Service (ACERS). The ACERS team works closely with primary care to reduce variation in COPD diagnosis between GP practices and support more effective management of patients in the community (including home visits). The service includes a 24-hour primary care referral and advice line.

The ACERS team also supports self-management by:

- helping patients and their carers to identify warning signs earlier
- regularly reviewing medication
- educating patients on use of inhalers and oxygen
- tackling non-compliance with medication
- monitoring progress on an ongoing basis.

A similar model has been developed for detection and management of asthma patients (see Section 2.7.3).

To support early intervention, there are incentives within the long-term conditions contract that the City and Hackney Clinical Commissioning Group (CCG) holds with the local GP Confederation for GPs to offer extended consultations for people with newly diagnosed COPD.

2.7.3 Treatment, care and support

City and Hackney CG provides incentives (through the long-term conditions contract with City & Hackney GP Confederation) for stop smoking advice and referral to SSS in primary care for people with a range of conditions, including respiratory disease.

To support effective local management of COPD patients, ACERS (described in Section 2.7.2) provides a multi-disciplinary team of respiratory specialist nurses and respiratory physiotherapists, plus a consultant respiratory physician, who provide integrated care for patients. This comprises the following components:

- hospital at home
- admission avoidance
- early supported discharge from hospital
- case management for complex situations
- pulmonary rehabilitation
- end-of-life care
- psychology input, including family support.

The ACERS team works closely with GP practices to help support and manage cases of COPD within primary care. This is supported through the CCG's long-term conditions contract with the local GP Confederation, which includes incentives around care planning and referral to pulmonary rehabilitation, as well as referral to

stop smoking services for people with diagnosed conditions (including respiratory disease).

Mental health problems, notably depression and anxiety, are observed to correlate with chronic respiratory conditions. The ACERS team also includes a COPD psychology specialist to support patients who may suffer from mental health problems associated with their physical symptoms. This has led to reduced A&E attendance and admissions among previously high attenders. To further support the mental health needs of patients with chronic respiratory disease, the capacity of the local IAPT (Improving Access to Psychological Therapies) service has been expanded for people with physical long-term conditions.

In addition, ACERS runs a joint palliative care clinic at St Joseph's Hospice, offering respiratory symptom management for end-stage COPD.

A review of ACERS revealed that, despite a national upward trend in COPD admissions, locally there has been a reduction in admissions since the service was established – falling from 1.38 admissions per 1,000 population in 2010, to 1.24 per 1,000 in 2015. This same period also saw a reduction in the number of bed days for COPD patients. [35] Importantly, patient satisfaction with the service is also reported to be high.

A similar model has been established within ACERS to support high-quality management of asthma patients, including the following elements.

- Avoid hospital admissions and emergency attendances by ensuring all relevant healthcare professionals work with patients to develop an asthma action plan to enable them to effectively self-manage their condition.
- Ensure robust pathways between A&E and primary care for follow-up and review.
- Develop tailor-made education packages for asthma patients focusing on annual reviews and self-management advice.
- Undertake visits to GP practices to provide expert input to the identification and review of complex asthma patients within primary care.

A specialist respiratory pharmacy service has also been established to support patients with high inhaler use, such as people with severe asthma. A specialist asthma nurse can also work with GP practices to support those at the highest need.

2.8 Service gaps and opportunities

The new City and Hackney integrated commissioning system provides an opportunity to bring a fresh approach to the prevention, detection and management of respiratory disease risk factors and disease. A key focus of the new system is to shift activity and resources towards prevention, and redesign health and care services to support people to better manage their own health and keep them out of hospital. This will help to build on the successes of ACERS in supporting the early diagnosis and effective management of patients with chronic respiratory disease.

Through the NHS England RightCare programme, further local action is being taken to identify opportunities to improve services and outcomes across the following areas: [36]

- improving access to smoking cessation support to reduce the prevalence of smoking and the prevalence and severity of respiratory disease
- improving the diagnosis of COPD and asthma
- improving the effectiveness of respiratory prescribing
- increasing access to psychological therapies for people with asthma and COPD, improving quality of life and ability to self-manage
- continuing to monitor COPD admissions, with the aim of further reducing these admissions.

2.9 References

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