



**Joint Strategic  
Needs Assessment:**

***Adult asthma and chronic obstructive  
pulmonary disease (COPD)***

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# 1. Introduction

This joint strategic needs assessment focuses on two chronic respiratory diseases in adults – chronic obstructive pulmonary disease (COPD) and asthma.

## **Chronic obstructive pulmonary disease (COPD) at a glance**

COPD is a progressive lung disease characterised by a persistent reduction of airflow, resulting in breathlessness and predisposing to exacerbations and serious illness.<sup>1</sup> Most cases of COPD in the UK (~90%) are caused by tobacco smoke (including passive exposure) and are preventable by avoidance or early cessation of smoking.<sup>2</sup> Although COPD is not curable, early detection and treatment can relieve symptoms, improve quality of life, prevent exacerbations (and hospital admissions) and reduce the risk of premature death. There are an estimated 1.2 million people living with a diagnosis of COPD in the UK, however it is known to be severely under-diagnosed and there is the opportunity to diagnose up to three times as many people.<sup>3</sup> COPD is the fifth most common cause of death in the UK, responsible for almost 30,000 deaths per year.<sup>4</sup> Premature mortality (that is, deaths occurring under the age of 75) from COPD in the UK is almost twice as high as the European average (EU-15).<sup>5</sup> Furthermore COPD is the second leading cause of emergency hospital admission in the UK – in fact, COPD accounts for more than one million ‘bed days’ each year in UK hospitals.<sup>6</sup>

## **Asthma at a glance**

Asthma is a chronic lung disease characterised by recurrent attacks of breathlessness and wheezing, which vary in severity from person to person.<sup>7</sup> Unlike COPD, asthma is reversible (that is, the characteristic airflow obstruction diminishes with medications such as salbutamol) and there is no single ‘cause’ – rather individuals with a combination of genetic predisposition and environmental exposures are at risk, both throughout childhood and adult life. Exacerbations are often triggered by indoor and outdoor allergens, tobacco smoke, chemical irritants and air pollution. The National Asthma Campaign reports that there are 5.4 million people in the UK currently receiving treatment for asthma.<sup>\*18</sup> Premature mortality from asthma in the UK is much higher than the European average<sup>5</sup> and, although deaths from asthma have plateaued in recent years (to around 1,300 deaths per year),<sup>4</sup> it is estimated that at least two thirds of these deaths are preventable.<sup>11</sup>

It is also important to note that a small group of patients have risk factors for, and clinical features of, both asthma and COPD and so an ‘overlap’ syndrome also exists. These patients often experience frequent exacerbations, have worse quality of life, a more rapid decline in lung function and higher mortality.<sup>12,13</sup>

## **This Joint Strategic Needs Assessment (JSNA) at a glance**

Respiratory disease is an important topic warranting this needs assessment, partially because crude indicators would suggest Lewisham is performing poorly compared to comparable London boroughs. For example, there is a higher than expected premature mortality from respiratory disease in the borough and excess deaths are occurring in the acute hospital setting. However, there are also many opportunities for improvement – for example in supporting residents with long-term conditions, reducing health inequalities and achieving efficiencies in the local health and care economy.

This JSNA aims to systematically review information about the adult population in Lewisham living with asthma and COPD. The JSNA is focussed on adult asthma and COPD specifically

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\* 5.4 million people in the UK are currently receiving treatment for asthma: 1.1 million children (1 in 11) and 4.3 million adults (1 in 12).

because:

- Asthma and COPD can reasonably be considered together as they share some physiological commonalities (both are chronic, obstructive airways diseases, and characterised by exacerbations) and share some risk factors (most importantly smoking)
- Asthma and COPD were highlighted early in the development of this needs assessment as priority areas (from clinical and commissioning leads in the borough)
- It was felt that combining childhood asthma with adult asthma would result in a less in-depth and meaningful needs assessment (as adult and paediatric asthma are quite distinct in terms of population needs, as well as service provision and design)

### **How to use this JSNA**

This JSNA aims to paint a comprehensive picture of adult asthma and COPD in Lewisham and can be used to support decision making that will ultimately lead to improved health and wellbeing in the local population as well as reduced inequalities. This JSNA may be useful:

- To inform funding proposals, business cases and strategies
- To aid planning, commissioning, and delivering services for residents
- As an evidence base to make decisions about service provision
- For forecasting future demand for specific services.

Although the JSNA has been developed to be considered in its entirety, readers may find it helpful to navigate to particular chapters for specific references. [Chapter 2](#) outlines the general profile and broad determinants of respiratory disease in Lewisham. Important data is summarised with regards to asthma and COPD outcomes (including historical trends and benchmarking with comparable boroughs) and key inequalities are highlighted. Readers can locate important national and local strategies in [Chapter 3](#) and evidence about what works in terms of treatments for asthma and COPD in [Chapter 4](#). [Chapter 5](#) presents the current activities and services on offer for people living with asthma and COPD in Lewisham and assesses their access, performance and outcomes in relation to the needs identified in this JSNA. Changes on the horizon which are relevant to asthma and COPD are detailed in [Chapter 6](#), followed by a brief outline of local views gathered from consultation with service-users in [Chapter 7](#). Key gaps, in terms of both knowledge and services for asthma and COPD, are presented in [Chapter 8](#) – with corresponding recommendations on how to address them outlined in [Chapter 9](#)'s JSNA action plan.

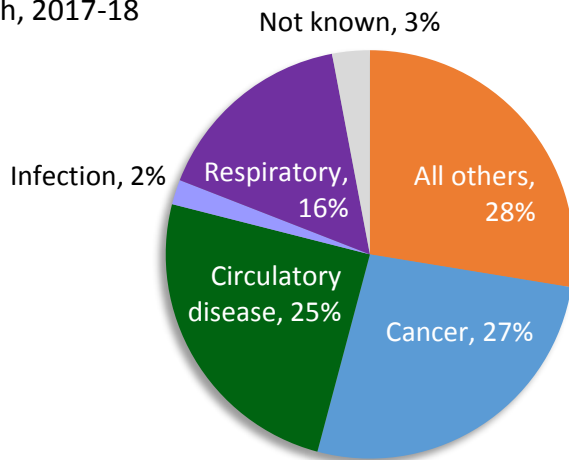
## 2. Respiratory disease in Lewisham

This chapter outlines the respiratory profile of Lewisham – first, in broad consideration of mortality from and risk factors for respiratory disease in the borough, and then the specific profiles of asthma and COPD.

### 2.1. Respiratory mortality

Respiratory diseases are the third leading causing of death in Lewisham (behind cancer and cardiovascular disease, as shown in **Figure 1**) and claimed the lives of 1,979 people in 2017-18.<sup>10</sup>

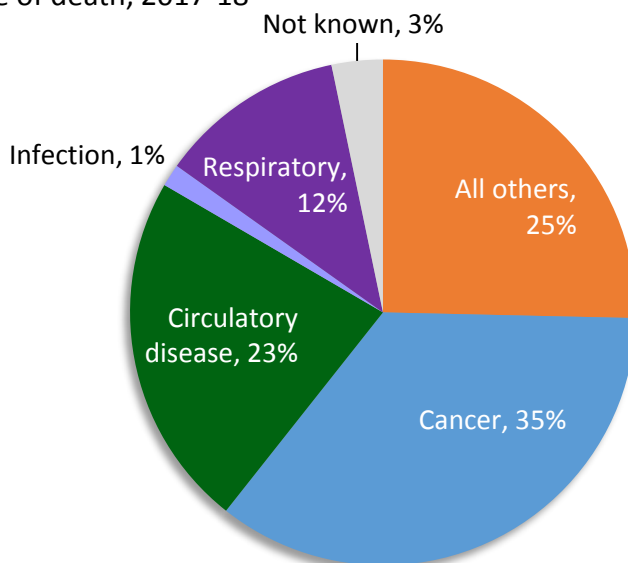
**Figure 1.** All age mortality in Lewisham by broad cause of death, 2017-18



Source: Primary Care Mortality Database (local analysis)

Respiratory diseases are also the third leading cause of premature mortality (**Figure 2**) in Lewisham and claimed the lives of 765 people under the age of 75 in 2017-18.

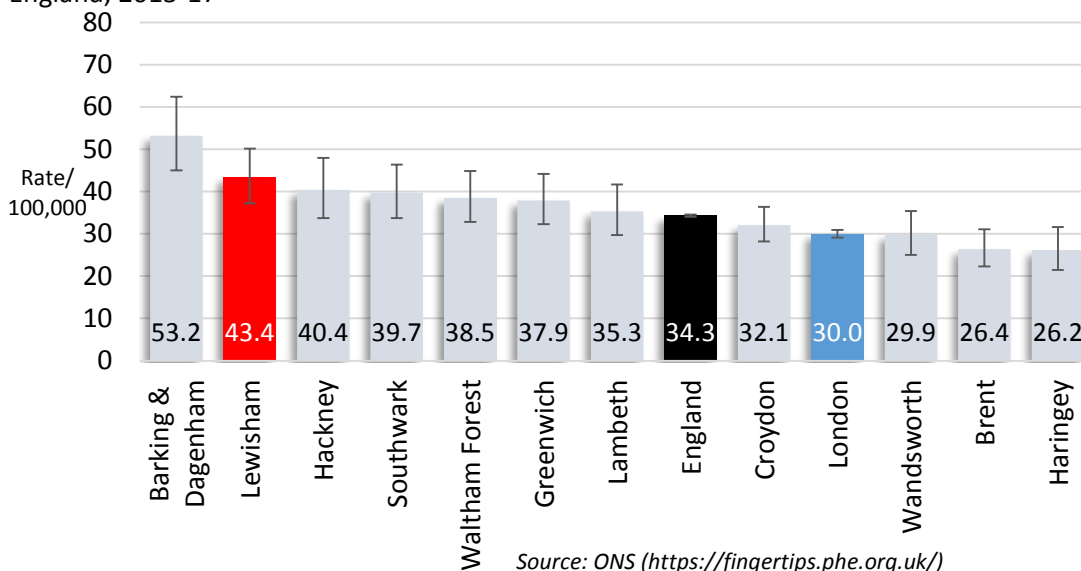
**Figure 2.** Premature mortality in Lewisham by broad cause of death, 2017-18



Source: Primary Care Mortality Database (local analysis)

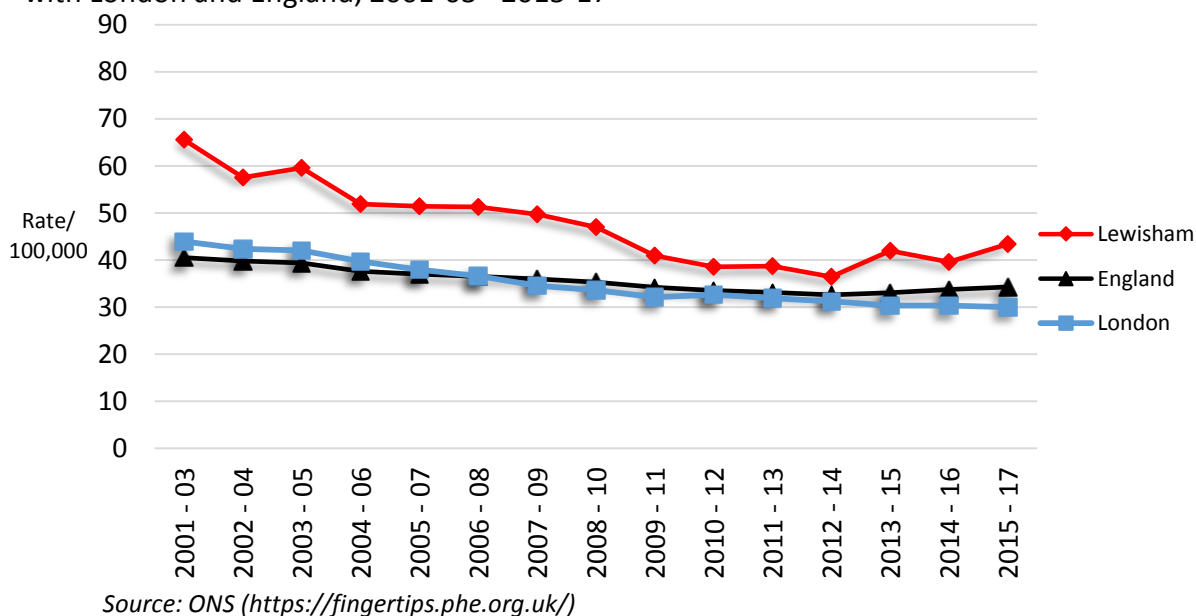
The rate of premature mortality from respiratory disease in Lewisham is the second highest in London (behind Barking & Dagenham only), at 43.4 per 100,000 (**Figure 3**).<sup>11</sup>

**Figure 3.** Under 75 mortality from respiratory disease. Directly age-standardised 3 year average rates/100,000 persons with 95% confidence Intervals. Lewisham compared with its statistical neighbours, London and England, 2015-17



As shown in **Figure 4**, premature mortality from respiratory disease was in decline from 2001 until 2012-14 but has since plateaued and, more worryingly, may even be increasing – going against the trend witnessed in England and other London boroughs.

**Figure 4.** Under 75 mortality from respiratory disease. Directly age-standardised 3 year average rates/100,000 persons. Lewisham compared with London and England, 2001-03 - 2015-17



It should be noted that the data referred to in figures 1-4 refer to all-respiratory mortality and therefore encompass a heterogeneous group of diseases, which may or may not be preventable. Public Health England also provide mortality estimates by borough for

respiratory diseases that are considered preventable, and it would appear that preventable premature mortality in Lewisham is increasing in men but not in women. Further information about inequalities in respiratory outcomes by sex can be found [here](#) in the JSNA.

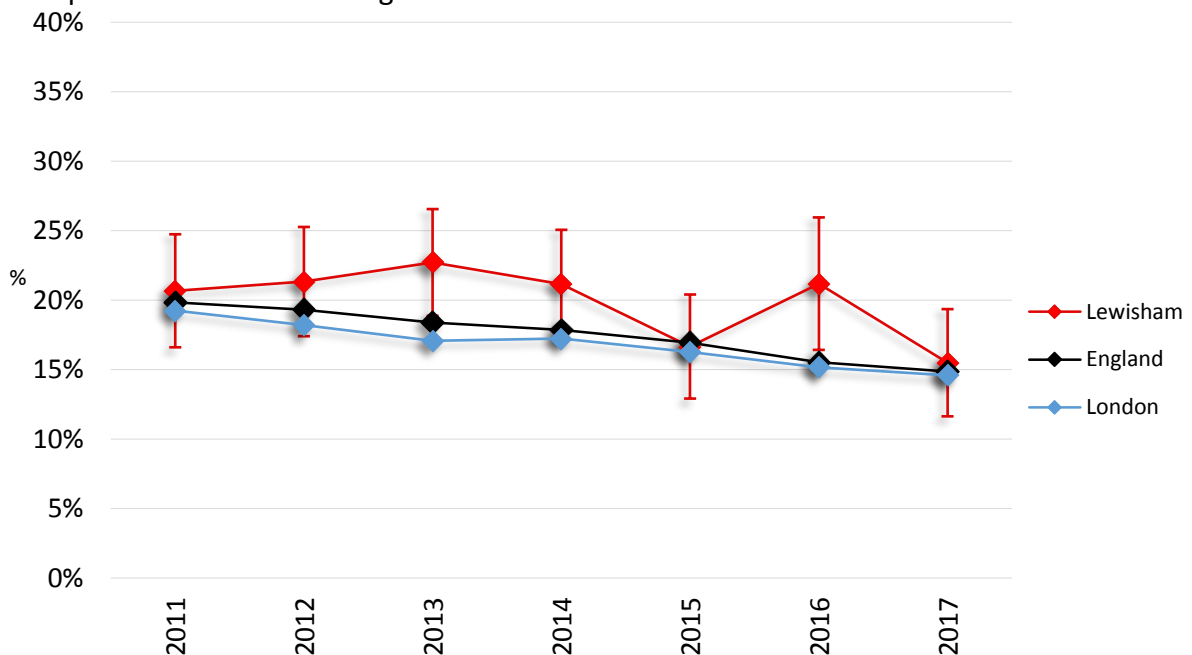
## 2.2. Risk factors for respiratory disease

### 2.2.1. Smoking

Smoking, as the cause of around 90% of COPD cases and a leading cause of asthma exacerbations in the UK, is the single most important risk factor for respiratory diseases. Further, tobacco use is the biggest single contributor to the gap in healthy life expectancy between Lewisham and England. In Lewisham, the prevalence of smoking among adults is 15.5%, which equates to 35,780 current smokers (**Figure 5**).

The burden of smoking-related ill health is particularly great in Lewisham, as indicated by many of the commonly cited measures of public health impact (such as hospital admissions and cause-specific mortality) which show a relatively greater impact of smoking in our borough as compared to the London and national averages. For example, in 2017-18, there were an estimated 1,750 per 100,000 hospital admissions attributable to smoking in Lewisham – a much higher proportion than in our neighbouring boroughs of Lambeth and Southwark or London as a whole. The high burden of smoking in Lewisham is also demonstrated by the high level of smoking-attributable mortality, which is statistically significantly higher than the national or London average at 310.7 per 100,000 (and the second highest in London, **Figure 6**).

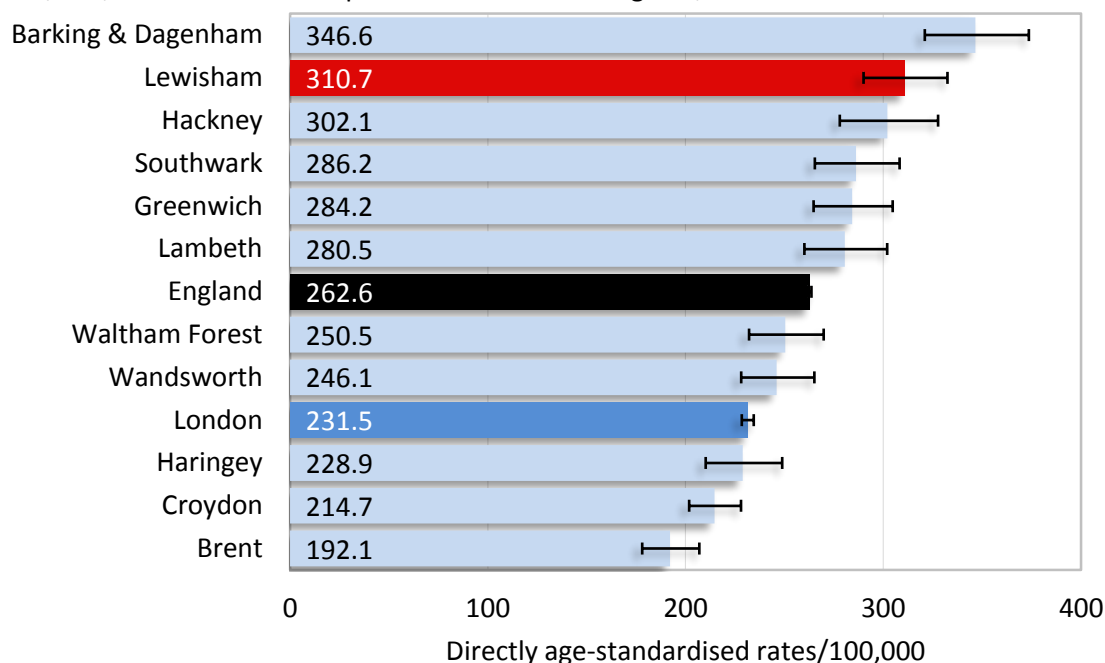
**Figure 5.** Smoking prevalence aged 18+: current smokers. Lewisham compared to London and England. Annual trends



Source: Annual Population Survey (<http://www.tobaccoprofiles.info>)



**Figure 6.** Smoking attributable mortality. Directly aged-standardised rates/100,000. Lewisham compared to London and England, 2015-17



Source: ONS (<http://www.tobaccoprofiles.info>)

Further information about smoking in Lewisham can be accessed [here](#), in a recent JSNA on tobacco control.

### 2.2.2. Air quality

Poor air quality is a significant public health issue and people with chronic respiratory diseases such as COPD and asthma are especially vulnerable to the detrimental effects of air pollutants. Air pollution can induce the acute exacerbation of COPD and onset of asthma, as well as increase morbidity and mortality more generally. The health effects of air pollution depend on the components and sources of pollutants, which vary by geography, time and season.

#### Short-term health impacts of air pollution on respiratory disease:

- Short-term exposure to air pollution can worsen respiratory symptoms in those with pre-existing lung disease and asthma in particular.<sup>14</sup>
- Gaseous pollutants (such as NO<sub>2</sub>, SO<sub>2</sub>, O<sub>3</sub>), particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>) and traffic-related air pollution have all been implicated in increased respiratory morbidity and mortality.
- How these pollutants result in increased morbidity and mortality of people with asthma and COPD is multi-factorial, including via immunological pathways increasing susceptibility to respiratory infection.<sup>15,16</sup>
- Use of health services often spikes during and after periods of strong air pollution. For example, Public Health England's Real Time Surveillance System Team found an increase in GP consultations for respiratory problems immediately following an episode of worsened air pollution in 2014.<sup>17</sup>

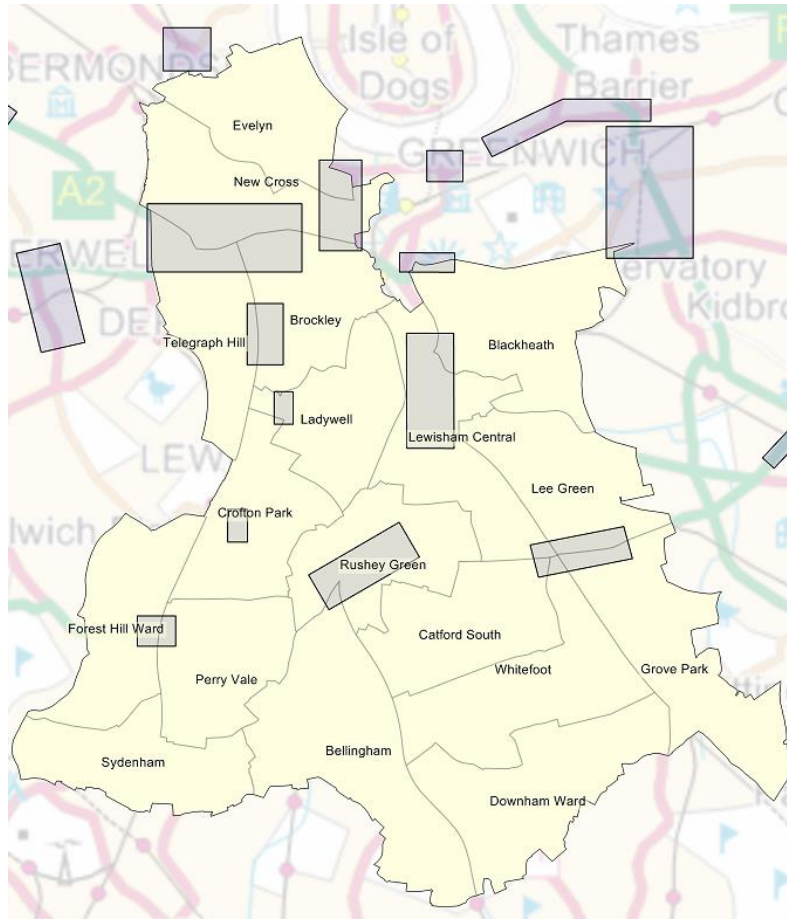
### Long-term health impacts of air pollution on respiratory disease:

- Air pollution has been demonstrated to reduce normal lung function development in children;<sup>18</sup>
- In adults, there is emerging evidence that air pollution accelerates decline in lung function.<sup>19,20</sup>
- The evidence-base for air quality's contribution to COPD onset is inconclusive,<sup>21,22</sup> however studies have shown that exposure to air pollution increases risk of progression to "asthma-COPD overlap syndrome" three-fold.<sup>23</sup>
- A recent meta-analysis reviewing the effect of traffic-related air pollution on asthma in children concluded that increased exposure to NO<sub>2</sub> was associated with a higher prevalence and incidence of childhood asthma.<sup>24</sup>

In 2011 the Greater London Authority (GLA) identified Air Quality Focus Areas within in Lewisham, these which are depicted in **Figure 7** (by the shaded areas of the map). Air quality focus areas have been selected by the GLA as areas where there is the most potential for improvements in air quality within London, and should therefore act as strategic priorities for action on air pollution in the borough. These areas have been selected through an analysis of the following factors:

- Baseline air quality for NO<sub>2</sub> and PM<sub>10</sub> by 20m grid resolution
- Locations where air pollution limit values have been exceeded
- Level of human exposure
- Local geography and topography
- Local sources of air pollution
- Traffic patterns
- Future predicted air quality trends

**Figure 7. Lewisham Air Quality Focus Areas**

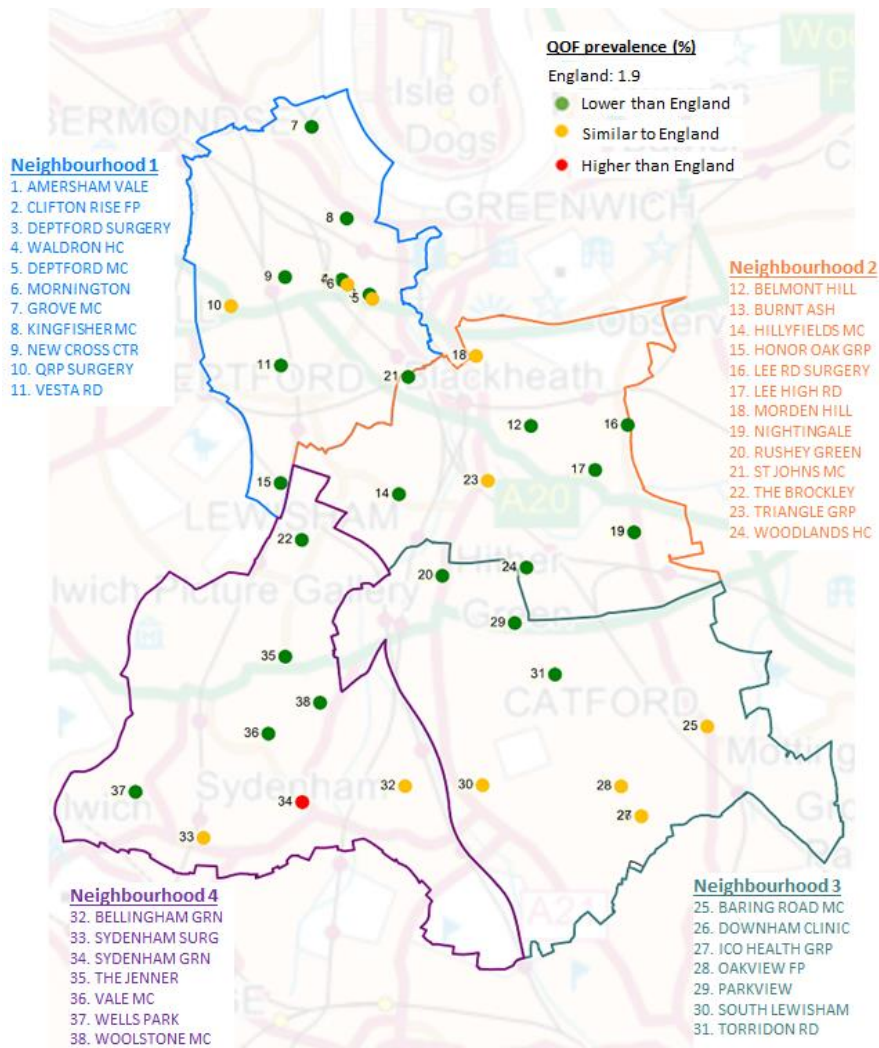


Air quality in Lewisham was the topic of a recent JSNA, and further information can be accessed [here](#).

### **2.3. Chronic obstructive pulmonary disease in Lewisham**

According to the GP register, there are 4,308 people in Lewisham with a diagnosis of COPD, which equates to a prevalence of 1.3%. **Figure 8** depicts the prevalence of diagnosed COPD by GP practice, and shows that the majority of practices diagnose less COPD than the national average.

**Figure 8.** COPD (QOF) prevalence in patients of all ages by Lewisham GP practice and neighbourhood, 2017-18



Source: QOF

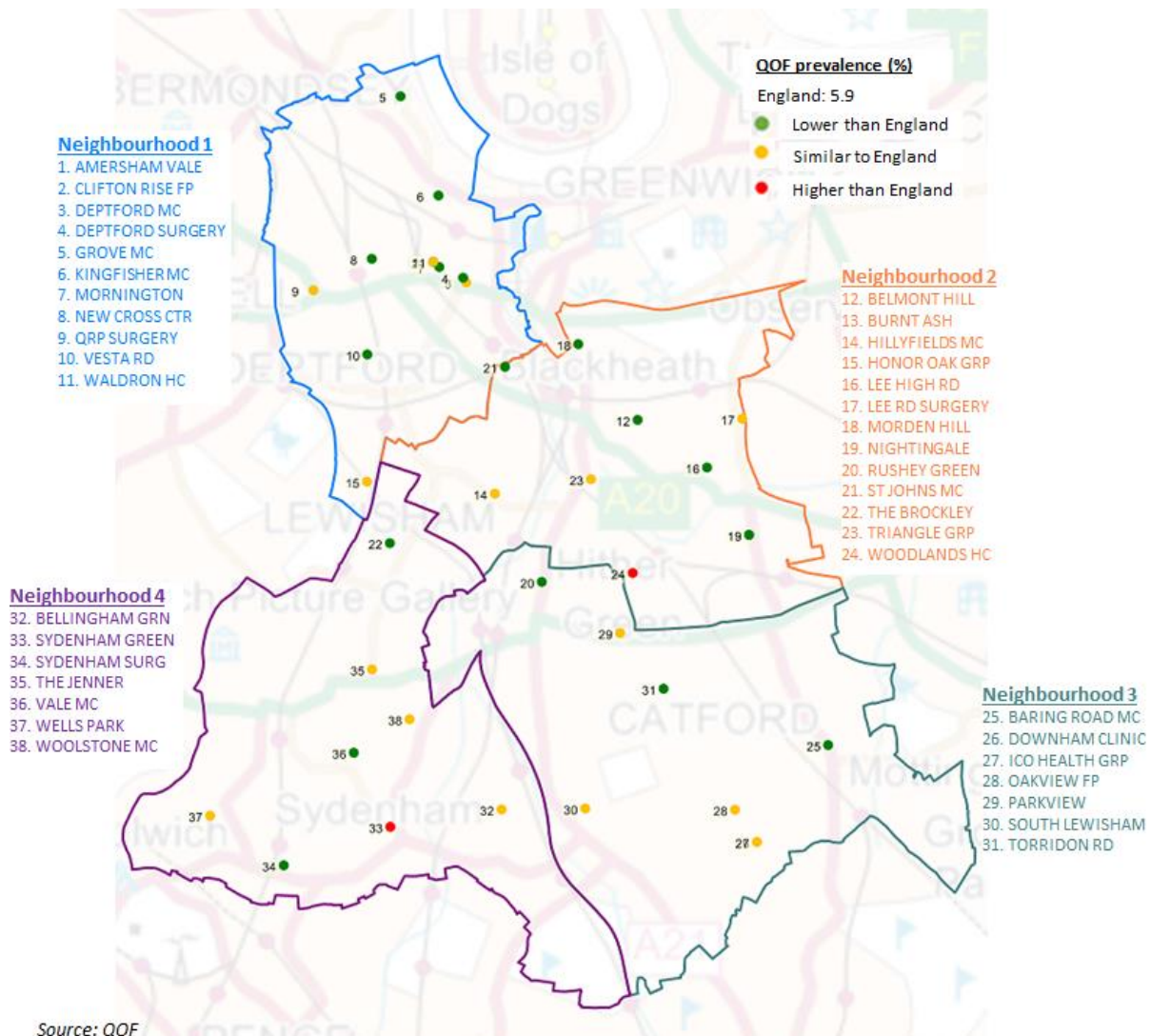
It is well-established that COPD is underdiagnosed in the UK, as it is worldwide,<sup>25-28</sup> and is partially due to people dismissing their early symptoms of COPD as a ‘smoker’s cough’ and therefore not seeking medical care. Many patients with COPD remain undiagnosed in the community and are only identified at the point of hospital admission. This is such an important problem as early detection of COPD is necessary to initiate effective ‘treatments’ (namely smoking cessation, pulmonary rehabilitation and inhaled medications) which can slow decline in lung function and lengthen the period of time in which someone can enjoy an active life. Additionally, early diagnosis can achieve efficiencies in the local health and care economy – through prevention of emergency hospital admissions and enhanced productivity of persons with COPD.

Public Health England modelled the expected prevalence of COPD in 2011 and estimated that there were 8,088 people in Lewisham living with COPD (including those undiagnosed).<sup>29</sup> This estimate should be interpreted with caution, as it is based on incomplete and now outdated data, however it does provide some insight into how under-diagnosed COPD may be in the borough. According to this PHE estimate, there are 3,780 undiagnosed people in Lewisham with COPD.

## 2.4. Asthma in Lewisham

According to the GP register, there are 17,121 people (children and adults) in Lewisham with a diagnosis of asthma (that have been prescribed asthma-related medications in the preceding 12 months). **Figure 9** depicts the prevalence of diagnosed asthma in Lewisham (overall 5.9%), broken down by GP practice. It shows that the majority of practices in Lewisham diagnose asthma at a rate less than or similar to the national average.

**Figure 9.** Asthma (QOF) prevalence in patients of all ages by Lewisham GP practice and neighbourhood, 2017-18



It is important to note some challenges in interpreting the variations in number of diagnosed asthma and COPD patients per GP practice, namely:

- It is difficult to establish how much of this variation is attributable to the true burden of chronic disease and how much is related to GP diagnosis patterns.
- Drawing any meaningful conclusions on any effect of air quality on diagnosis or presence of disease is challenging.

It should be noted that most prevalence estimates of asthma exclude people that haven't been prescribed asthma-related medications as is the case in **figure 9** (on the assumption

that they are well in the community), however this may be missing people that are unwell with asthma but not seeking medical care (or at least not in the community). The total number of adults (i.e. 18+) with a diagnosis of asthma (including those not prescribed any medications) in Lewisham was 25,702.

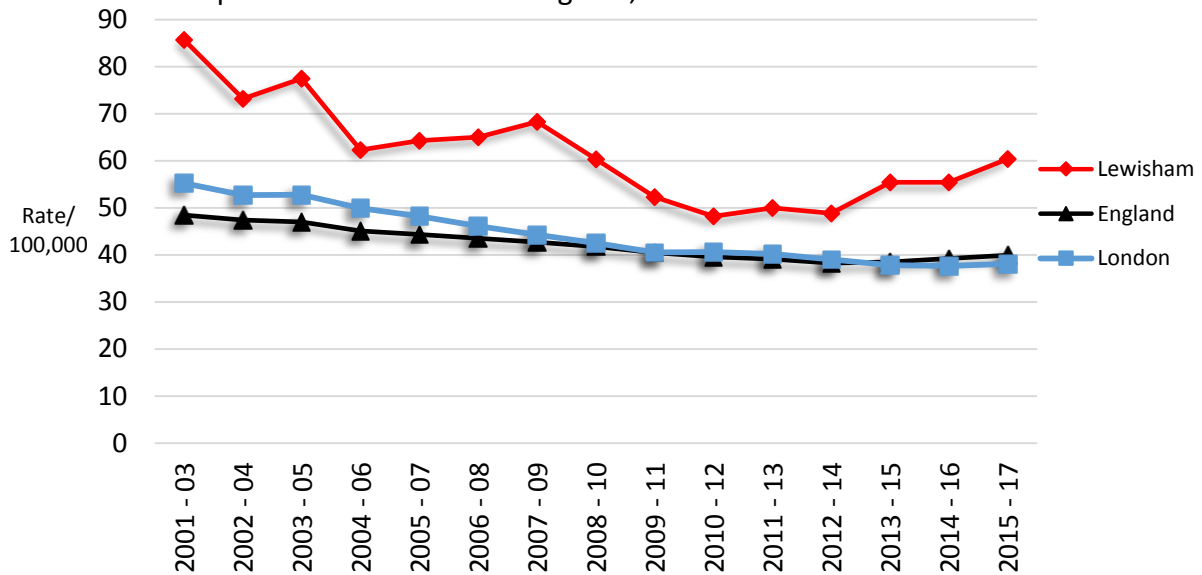
## 2.5. Key inequalities

### Sex

In Lewisham, respiratory mortality (**figures 10 & 11**), and especially premature mortality considered preventable (**figures 12 & 13**), is higher in men than women. As was previously discussed in chapter 1, there was a general declining trend in respiratory mortality in Lewisham up until around 2012, at which point it started to plateau in women and increase in men.

**Figure 10.** Under 75 (premature) mortality from respiratory disease. Directly age-standardised 3 year average rates/100,000 **males**.

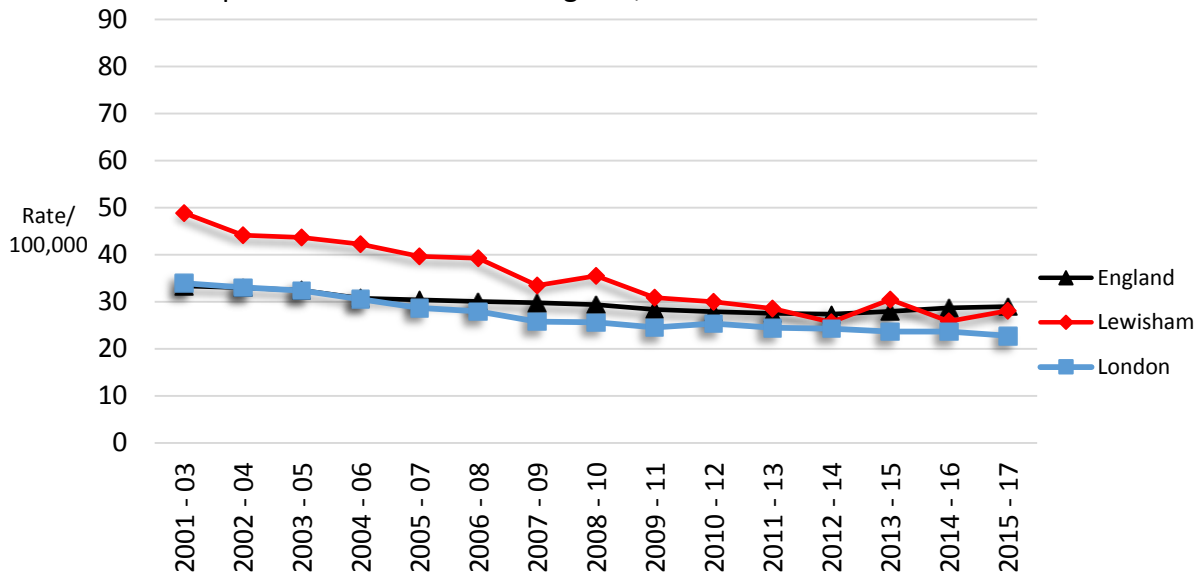
Lewisham compared with London and England, 2001-03 - 2015-17



Source: ONS (<https://fingertips.phe.org.uk/>)

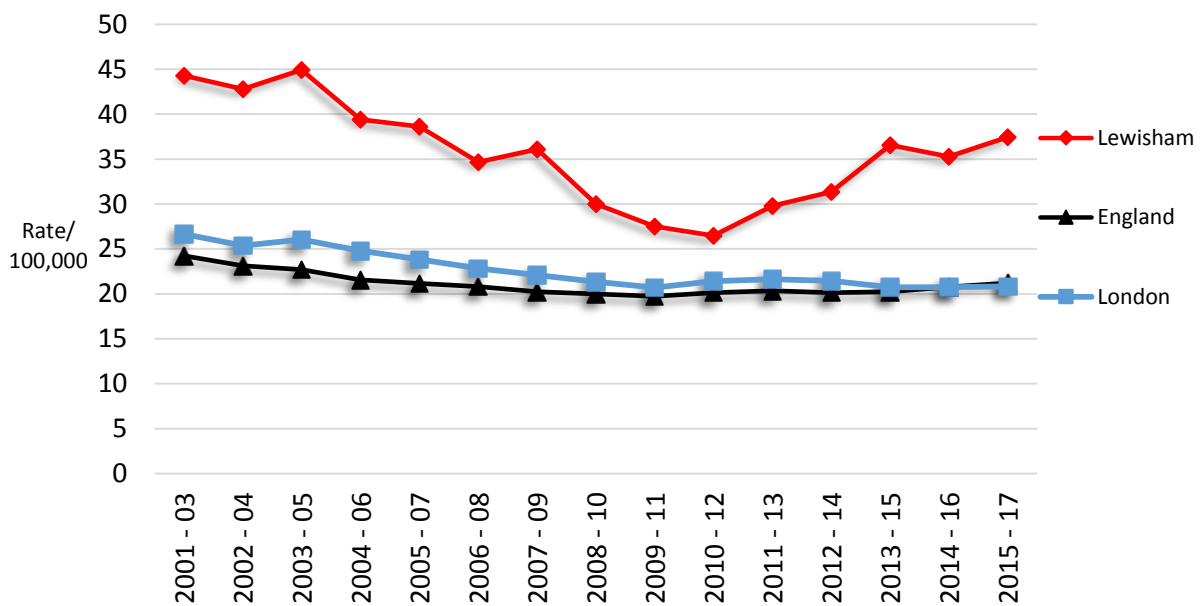


**Figure 11.** Under 75 (premature mortality) from respiratory disease. Directly age-standardised 3 year average rates/100,000 **females**. Lewisham compared with London and England, 2001-03 - 2015-17



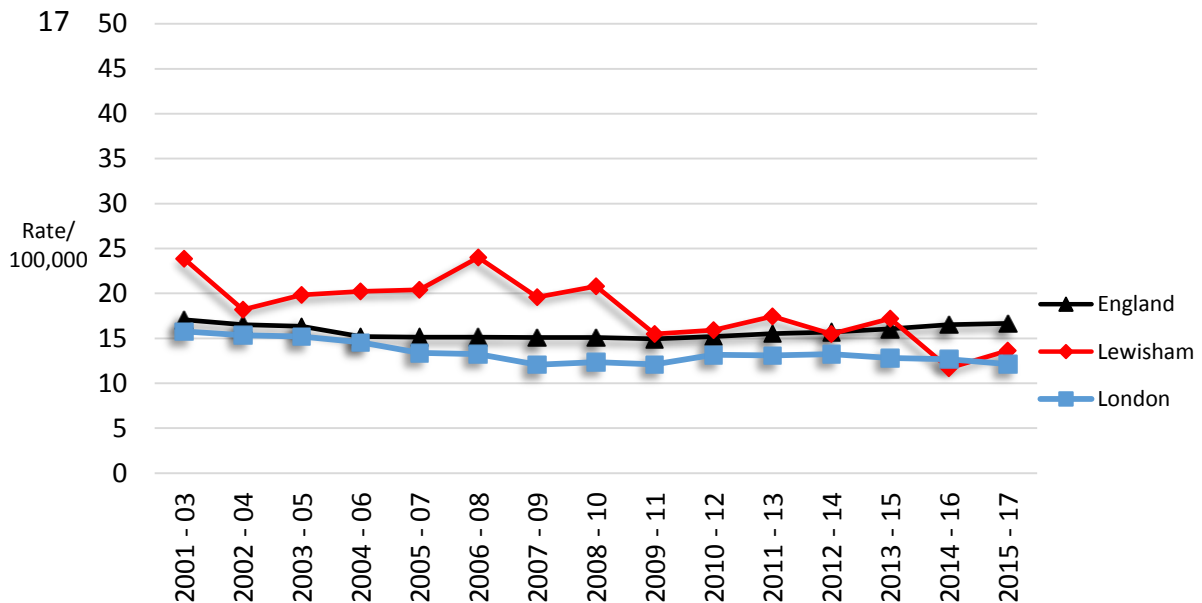
Source: ONS (<https://fingertips.phe.org.uk/>)

**Figure 12.** Under 75 mortality from respiratory disease considered preventable. Directly age-standardised 3 year average rates/100,000 **males**. Lewisham compared with London and England, 2001-03 2015-17



Source: ONS (<https://fingertips.phe.org.uk/>)

**Figure 13.** Under 75 mortality from respiratory disease considered preventable. Directly age-standardised 3 year average rates/100,000 females. Lewisham compared with London and England, 2001-03-2015-17



Source: ONS (<https://fingertips.phe.org.uk/>)

Some, but not all, of the difference in respiratory mortality in Lewisham between men and women can be explained by differences in smoking habits (namely the lag in health impacts from men previously smoking in greater quantity than women). However the inequality in respiratory mortality by sex may also be due to other factors such as:

- Differences in the way men and women access care (both for diagnosis and ongoing management)
- Healthcare-professional bias, for example some studies show that men are more likely to be diagnosed with COPD and therefore their deaths coded as due to respiratory disease
- Differences in smoking cessation rates among men and women once diagnosed with a respiratory disease
- Differences in access and compliance with interventions such as medications and pulmonary rehabilitation

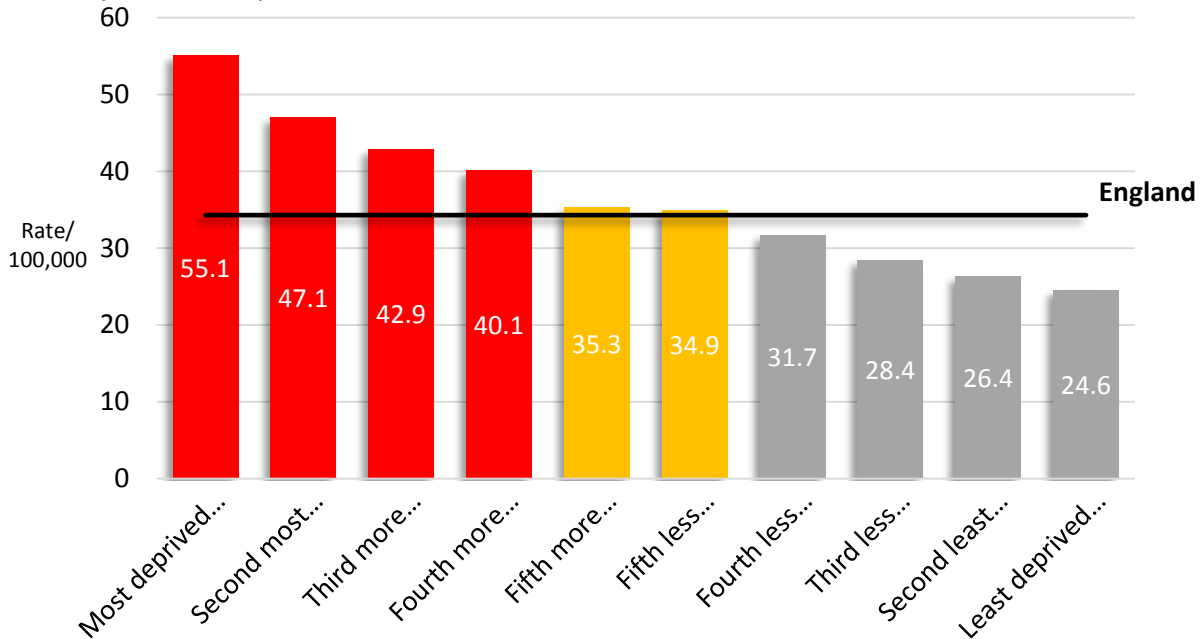
### Deprivation

Premature mortality from respiratory disease is almost perfectly correlated with deprivation. As shown in **figure 14** (which depicts mortality by decile of deprivation), the premature mortality rate of the most deprived in England is over double that of the least deprived. Smoking is responsible for more than half of the difference in premature death rates between people on high incomes and those on low incomes. The following smoking-behavioural patterns which are associated with deprivation all increase the risk of respiratory disease as a whole, as well as disease progression, frequency and severity of exacerbations and overall mortality:

- Smoking prevalence is higher in lower socio-economic groups (e.g. people on low incomes are twice as likely to smoke than the more affluent)<sup>30</sup>
- People in deprived circumstances are more likely to start smoking younger
- The number of cigarettes smoked per day is higher in lower socio-economic groups
- People in deprived circumstances are less likely to quit smoking



**Figure 14.** Premature mortality from respiratory disease in England (2015-2017) by decile of deprivation. Rate/100,000



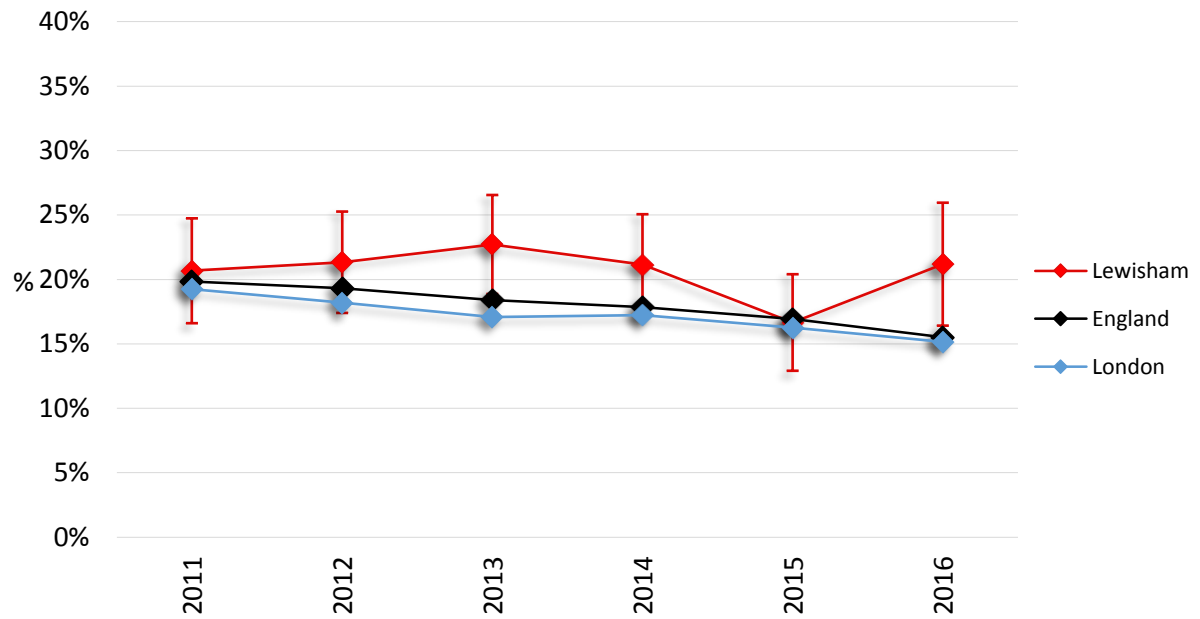
Source: ONS (<https://fingertips.phe.org.uk/>)

### Other smoking-related inequalities

The majority of the inequalities seen in respiratory mortality are attributable to smoking (and we have previously presented how smoking is an important mediator for the difference in outcomes by sex and deprivation). Other ways in which smoking-related respiratory consequences widen existing inequalities are:

- People in routine and manual occupations are more likely to smoke than others in society (see **figure 15**). Cigarette smoking is higher among households classified as routine and manual (26%) than those classified as professional and managerial (15%)<sup>31</sup>
- Smoking rates amongst people with a mental health condition are significantly higher than in the general population<sup>32</sup>
  - Over 70% of psychiatric inpatients smoke
  - 76% of people with first episode of psychosis smoke
- Smoking rates also differ significantly by ethnicity, with people of Mixed and White ethnicity most likely to smoke (at 20.5% and 15.4% respectively)<sup>33</sup>

**Figure 15.** Smoking Prevalence (%) aged 18-64 in routine and manual jobs: current smokers (APS). Lewisham compared to London and England. Annual trends



Source: Annual Population Survey (<http://www.tobaccoprofiles.info>)

### 3. National and local strategies

The following national and local strategies relevant to adult asthma and COPD were identified. Please follow the links for further information. A summary of the relevant strategies from the NHS long-term plan has been provided as an example (box A) and the two local guidelines are included in the appendix (A and B).

#### **National**

- [NHS long-term plan](#)
- [Department of Health: An Outcomes Strategy for Chronic Obstructive Pulmonary Disease and Asthma in England](#)
- [COPD prevention and Early Identification toolkit, NHS Improvement](#)
- [NHS Commissioning Toolkit for COPD pathway](#)
- [Good practice guide for adults with asthma, Primary Care Commissioning](#)
- [NICE guidance and quality standards on asthma](#)
- [NICE guidance and quality standards on COPD](#)
- [British guideline on management of Asthma – British Thoracic Society](#)
- [Pulmonary rehabilitation - IMPRESS](#)
- [Pulmonary rehabilitation following exacerbations of chronic obstructive pulmonary disease, Cochrane Collaboration](#)

#### **Local**

- [South East London Integrated Guideline for the Management of COPD \(appendix A\)](#)
- [South East London Integrated Guideline for the Management of Adult Asthma \(appendix B\)](#)

**Box A.** Respiratory disease priority areas from the NHS long-term plan

- **Earlier detection and diagnosis** of respiratory disease
- Expand **access to pulmonary rehabilitation**
- Support those with respiratory disease to receive and use the **right medication**
- Enable people with **heart and lung disease** to complete a programme of **education and exercise** based rehabilitation

## 4. What works locally and elsewhere?

### COPD

Table 1. Evidence that supports the management of Stable COPD

Intervention	Further details on Intervention	Reference
Smoking Cessation	Smoking cessation counselling plus either nicotine replacement therapy or an antidepressant are effective ways to help patients to stop smoking.	Link A: <a href="https://www.nice.org.uk/guidance/ng115/evidence/evidence-update-pdf-134515693">https://www.nice.org.uk/guidance/ng115/evidence/evidence-update-pdf-134515693</a>
Inhaled Therapy	Link highlights evidence on the various inhaled therapies which are beneficial for COPD management. Long-acting beta-agonists plus inhaled corticosteroids (ICS) reduce moderate exacerbations. ICS alone may be associated with a risk of pneumonia. See Link A for further information.	Link A Link C <a href="https://www.nice.org.uk/guidance/gs10/chapter/Quality-statement-2-Inhaler-technique">https://www.nice.org.uk/guidance/gs10/chapter/Quality-statement-2-Inhaler-technique</a>
Oral therapy	Options available with supporting evidence includes corticosteroids, prophylactic antibiotics, mucolytics, theophylline.	Link H <a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-index&amp;path=view%3A/pathways/chronic-obstructive-pulmonary-disease/stable-copd-oral-therapy.xml">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-index&amp;path=view%3A/pathways/chronic-obstructive-pulmonary-disease/stable-copd-oral-therapy.xml</a>
Oxygen therapy	Long term oxygen therapy is beneficial, NOT short term burst therapy in breathless people with COPD or ambulatory therapy.	Link I <a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-index&amp;path=view%3A/pathways/chronic-obstructive-pulmonary-disease/stable-copd-oxygen-therapy.xml">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-index&amp;path=view%3A/pathways/chronic-obstructive-pulmonary-disease/stable-copd-oxygen-therapy.xml</a> <b>See Table 3 (below) for further evidence and details.</b>
Lung volume therapy	Bullectomy, lung volume reduction procedures, lung transplantation.	Link J <a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-node%3Anodes-lung-volume-reduction-procedures&amp;path=view%3A/pathways/chronic-obstructive-pulmonary-disease/stable-copd-lung-volume-reduction.xml">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-node%3Anodes-lung-volume-reduction-procedures&amp;path=view%3A/pathways/chronic-obstructive-pulmonary-disease/stable-copd-lung-volume-reduction.xml</a>

Pulmonary Rehabilitation	<p>Pulmonary rehabilitation offers potential benefits even in patients with the most severe COPD.</p> <p>Current evidence seems unable to define an optimal programme length</p>	<p>Link A Link B <a href="https://www.nice.org.uk/guidance/gs10/chapter/Quality-statement-4-Pulmonary-rehabilitation-for-stable-COPD-and-exercise-limitation">https://www.nice.org.uk/guidance/gs10/chapter/Quality-statement-4-Pulmonary-rehabilitation-for-stable-COPD-and-exercise-limitation</a> <b>See Table 4 (below) for overview of pulmonary rehabilitation in the management of COPD.</b></p>
Chest physiotherapy	<p>If patients have excessive sputum, they should be taught:</p> <ul style="list-style-type: none"> <li>- How to use positive expiratory pressure devices.</li> <li>- Active cycle of breathing techniques.</li> </ul>	<p>Link K <a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-node%3Anodes-chest-physiotherapy">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-node%3Anodes-chest-physiotherapy</a></p>
Vaccination and anti-viral therapy	<p>Recent evidence appears to suggest that pneumococcal vaccination in patients with COPD may not reduce the risk of pneumonia, exacerbations or mortality. Large, well-designed trials of newer polyvalent vaccines are needed.</p>	<p>Link A</p>
Multidisciplinary management	<p>Complex patient education programmes may be more effective than simpler interventions particularly in patients with more severe COPD. Further investigation of long-term outcomes in wider patient groups may be useful.</p>	<p>Link A</p>
Anxiety and depression	<p>Be alert for anxiety and depression in people with COPD. Consider whether people have anxiety or depression if they: have severe breathlessness, are hypoxic or have been seen at or admitted to a hospital with an exacerbation of COPD. See link for appropriate management.</p>	<p>Link L <a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-node%3Anodes-anxiety-and-depression">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-node%3Anodes-anxiety-and-depression</a></p>

Table 2. Evidence that supports the management of Exacerbations of COPD

Intervention	Further details on Intervention	Reference
Oral therapy	Antibiotic therapy. Steroid therapy.	<p>Link M  <a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/exacerbations-of-copd#content=view-index&amp;path=view%3A/pathways/chronic-obstructive-pulmonary-disease/antibiotics-for-treating-exacerbations-of-copd.xml">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/exacerbations-of-copd#content=view-index&amp;path=view%3A/pathways/chronic-obstructive-pulmonary-disease/antibiotics-for-treating-exacerbations-of-copd.xml</a></p> <p>Link P  <a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/exacerbations-of-copd#content=view-node%3Anodes-corticosteroids">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/exacerbations-of-copd#content=view-node%3Anodes-corticosteroids</a></p>
Oxygen therapy	Titration of oxygen therapy to an appropriate target is associated with better outcomes than administering high flow oxygen.	<p>Link A            Link C  <a href="https://www.nice.org.uk/guidance/qs10/chapter/Quality-statement-3-Assessment-for-longterm-oxygen-therapy">https://www.nice.org.uk/guidance/qs10/chapter/Quality-statement-3-Assessment-for-longterm-oxygen-therapy</a></p> <p>Link N  <a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/exacerbations-of-copd#content=view-node%3Anodes-oxygen-therapy">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/exacerbations-of-copd#content=view-node%3Anodes-oxygen-therapy</a>  <b>See Table 3 (below) for further evidence and details.</b></p>
Physiotherapy	Consider physiotherapy using positive expiratory pressure devices for selected people with exacerbations of COPD, to help with clearing sputum.	<p>Link O  <a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/exacerbations-of-copd#content=view-node%3Anodes-physiotherapy">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/exacerbations-of-copd#content=view-node%3Anodes-physiotherapy</a></p>
Pulmonary Rehabilitation	For those patients who have recently experienced an exacerbation, this may reduce hospital admissions and possibly mortality.	<p>Link A            Link B            Link D  <a href="https://www.nice.org.uk/guidance/qs10/chapter/Quality-statement-5-Pulmonary-rehabilitation-after-an-acute-exacerbation">https://www.nice.org.uk/guidance/qs10/chapter/Quality-statement-5-Pulmonary-rehabilitation-after-an-acute-exacerbation</a></p> <p>Link E  <a href="https://www.nice.org.uk/guidance/qs10/chapter/Quality-statement-6-Emergency-oxygen-during-an-exacerbation">https://www.nice.org.uk/guidance/qs10/chapter/Quality-statement-6-Emergency-oxygen-during-an-exacerbation</a></p>

		<p>Link R</p> <p><a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-node:nodes-pulmonary-rehabilitation">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/managing-copd#content=view-node:nodes-pulmonary-rehabilitation</a></p> <p><b>See Table 4 (below) for overview of pulmonary rehabilitation in the management of COPD.</b></p>
Non-Invasive Ventilation	For people with an acute exacerbation of COPD and persistent acidotic hypercapnic ventilatory failure that is not improving after 1 hour of optimal medical therapy, evidence advises non-invasive ventilation has a role.	<p>Link F</p> <p><a href="https://www.nice.org.uk/guidance/gs10/chapter/Quality-statement-7-Noninvasive-ventilation">https://www.nice.org.uk/guidance/gs10/chapter/Quality-statement-7-Noninvasive-ventilation</a></p> <p>Link Q</p> <p><a href="https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/exacerbations-of-copd-treatments-only-delivered-in-hospital#content=view-node%3Anodes-non-invasive-ventilation-and-doxapram">https://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease/exacerbations-of-copd-treatments-only-delivered-in-hospital#content=view-node%3Anodes-non-invasive-ventilation-and-doxapram</a></p>
Hospital discharge care bundle	There is currently a lack of evidence-based guidance about the details that should be included in these care bundles.	<p>Link G</p> <p><a href="https://www.nice.org.uk/guidance/gs10/chapter/Quality-statement-8-placeholder-Hospital-discharge-care-bundle">https://www.nice.org.uk/guidance/gs10/chapter/Quality-statement-8-placeholder-Hospital-discharge-care-bundle</a></p>

Table 3. Long-term Oxygen Therapy in the management of COPD

<b>Intervention</b>	<b>Further details on intervention</b>	<b>Reference</b>
Long term oxygen therapy	Who to assess the need for oxygen therapy, how to assess the need, who to consider issuing long-term oxygen therapy.	Link Y <a href="https://www.nice.org.uk/guidance/ng115/chapter/Recommendations#oxygen">https://www.nice.org.uk/guidance/ng115/chapter/Recommendations#oxygen</a> Please refer to section 1.2.51 – 1.2.69 in the above link. See Link I, which gives further evidence for management of stable COPD. See link A, C and N, which gives further evidence for management in acute exacerbation COPD.
Ambulatory oxygen therapy	Consider ambulatory oxygen in people with COPD who have exercise desaturation and are shown to have an improvement in exercise capacity with oxygen, and have the motivation to use oxygen.	Link Y Section 1.2.63 to 1.2.68
Short term oxygen therapy	Do not offer short-burst oxygen therapy to manage breathlessness in people with COPD who have mild or no hypoxaemia at rest.	Link Y Section 1.2.69

Table 4: Pulmonary Rehabilitation in the management of COPD

<b>Intervention</b>	<b>Further details on intervention</b>	<b>Reference</b>
Pulmonary Rehabilitation	This is a multidisciplinary programme of care for people with chronic respiratory impairment. It is individually tailored and designed to optimise each person's physical and social performance and autonomy.	Link Y <a href="https://www.nice.org.uk/guidance/ng115/chapter/Recommendations#oxygen">https://www.nice.org.uk/guidance/ng115/chapter/Recommendations#oxygen</a> Section 1.2.77 – 1.2.81



## Asthma

Table 5. Evidence that supports the management of Asthma

Intervention	Further details on intervention	Reference
Pharmacological therapy	Inhaled therapy and oral therapy	<p>Link S  <a href="https://www.nice.org.uk/guidance/ng80/evidence/full-guideline-chronic-asthma-management-pdf-4656179345">https://www.nice.org.uk/guidance/ng80/evidence/full-guideline-chronic-asthma-management-pdf-4656179345</a></p> <p>Link T  <a href="https://www.nice.org.uk/guidance/ng80/Chapter/Recommendations#principles-of-pharmacological-treatment">https://www.nice.org.uk/guidance/ng80/Chapter/Recommendations#principles-of-pharmacological-treatment</a></p> <p>Link U  <a href="https://pathways.nice.org.uk/pathways/asthma#path=view%3A/pathways/asthma/managing-asthma.xml&amp;content=view-node%3Anodes-person-aged-17-or-over">https://pathways.nice.org.uk/pathways/asthma#path=view%3A/pathways/asthma/managing-asthma.xml&amp;content=view-node%3Anodes-person-aged-17-or-over</a></p> <p>Link V  <a href="https://pathways.nice.org.uk/pathways/asthma/managing-asthma#content=view-node%3Anodes-difficult-and-severe-asthma">https://pathways.nice.org.uk/pathways/asthma/managing-asthma#content=view-node%3Anodes-difficult-and-severe-asthma</a></p> <p>Link W  <a href="https://www.sign.ac.uk/assets/sign153.pdf">https://www.sign.ac.uk/assets/sign153.pdf</a></p>
Asthma self-management plan	Evidence for personal asthma action plans and what to include.	<p>Link S. page 270</p> <p>Link X  <a href="https://pathways.nice.org.uk/pathways/asthma#path=view%3A/pathways/asthma/managing-asthma.xml&amp;content=view-node%3Anodes-self-management">https://pathways.nice.org.uk/pathways/asthma#path=view%3A/pathways/asthma/managing-asthma.xml&amp;content=view-node%3Anodes-self-management</a></p>
Breathing exercises	Dysfunctional breathing is common in people with asthma. Information on clinical and cost effectiveness of breathing exercises is discussed in Link s, pg 317.	Link S. page 317
Monitoring asthma control		Link T

Table 6. Evidence that supports the management of Acute Asthma Exacerbations

Intervention	Further details on intervention	Reference
Oxygen therapy	Supplementary oxygen should be given urgently to hypoxaemic patients, using a face mask, Venturi mask or nasal cannulae with flow rates adjusted as necessary to maintain SpO <sub>2</sub> of 94–98%, <sup>571</sup> taking care to avoid over oxygenation which may be detrimental.	Link W <a href="https://www.sign.ac.uk/assets/sign153.pdf">https://www.sign.ac.uk/assets/sign153.pdf</a>
Oral therapy	Antibiotics, corticosteroids and further pharmaceuticals.	Link W
Pharmacological inhaled therapy (not including oxygen therapy – see above)		Link W
Non-invasive ventilation		Link W
Asthma care bundle at discharge		Link W
Dysfunctional breathing	It remains unclear what is the best mechanism of identifying and managing this problem.	Link W

### **An example of good practice of our neighbours: Lambeth and Southwark Community Integrated Respiratory Team**

Lambeth and Southwark community integrated respiratory team (IRT) provide all community elements of respiratory care across Lambeth and Southwark. The integration enables close communication between primary care and secondary care. The overlap into secondary care is enabled by Dr Irem Patel who is the Consultant Chest Physician at Kings College Hospital and Guys and StThomas'. There are also several other chest physicians who lead from their respective base hospitals (see Table 7 for link to key contacts). The team is multi-disciplinary and includes, in addition to chest physicians, GPs, nurses, physiotherapists and other allied health professionals.

The team currently offer the following referral services (see table below) for patients within their catchment that have respiratory pathology.

After choosing the appropriate service to refer the patient to, the referral is made via the “choose and book service” or by using the single point referral email. The referral is assessed within 48 hours and contact made with the referrer within this time to advise of the most appropriate next step in patient management pathway.

The locations where patients can be seen for the services are: Kings College Hospital, Guy's Hospital, St Thomas' Hospital, St George's Hospital / Wandsworth community team (home oxygen service only), Mayday Hospital / Croydon community team (home oxygen service only).

The aim is to provide patients with a better patient journey through the NHS from primary through to secondary care. The IRT believe that most chronic respiratory care can be managed optimally at the primary care level, with the aim to reduce hospital admissions and outpatient referrals.

Table 7. The referral services offered by the Community Integrated Respiratory Team (IRT)

Service	Description of Service	Reference
Smoking cessation for sick smokers (Tier 3)	This is a specialist stop smoking service for people with any long term condition. The service will provide intensive clinic and home based support in combination with appropriate pharmacotherapy.	Link Z <a href="https://www.kch.nhs.uk/Doc/RF%20-%20094.1">https://www.kch.nhs.uk/Doc/RF%20-%20094.1</a>
Spirometry and Lung Function Service (advanced lung function service where diagnosis is not conclusive in primary care)	This service can provide diagnostic standard spirometry where practice case finding has suggested a diagnosis of COPD or asthma. They can also help with difficult spirometry and can review patients where past spirometry results do not fit with the suspected clinical diagnosis or results sit outside usual diagnostic parameters.	Link Z.1 <a href="http://guysstthomashospital.newsweaver.co.uk/Connect/1jjzvr1i8gi?a=1&amp;p...t...">guysstthomashospital.newsweaver.co.uk/Connect/1jjzvr1i8gi?a=1&amp;p...t...</a>
Pulmonary Rehabilitation	Any patient with COPD and MRC3 breathlessness or more should be offered referral to pulmonary rehabilitation. The service will also accept people with MRC 2 scores and accepts breathless people with any respiratory disease as long as any cardiac disease is stable.	
HOSAR – Home oxygen assessment and review	Any patient requiring long term oxygen therapy needs to be seen by a specialist in oxygen therapy. This service will see any new patient who the referrer feels may benefit from oxygen and would also like to see patients currently on oxygen who haven't had a review in the last year. When referring it is useful to provide at least one pulse oximetry reading.	
Respiratory Specialist opinion (chest clinic referrals)	The referral pathway will forward the patient to the most appropriate respiratory specialist and venue. <b>The service does not handle 2WW and TB referrals.</b> Virtual clinics have been delivered to practice since April 2013.	
Link to refer to the IRT (integrated respiratory team)		<a href="http://nww.southwarkehealth.nhs.uk/local_referral_pathways/referral_forms">http://nww.southwarkehealth.nhs.uk/local_referral_pathways/referral_forms</a>
Link to Key IRT Lambeth and Southwark contacts		<a href="http://www.gstvtvs.co.uk/website/IGP545/files/Lambeth%20and%20Southwark%20Integrated%20Respiratory%20Service%20GP%20VTS%20attachment.pdf">http://www.gstvtvs.co.uk/website/IGP545/files/Lambeth%20and%20Southwark%20Integrated%20Respiratory%20Service%20GP%20VTS%20attachment.pdf</a>



## 5. Current activities and services in relation to need

### Services and activities on offer for adults with asthma and COPD in Lewisham

**Table 1** provides a high-level overview of the current services and activities that are available to adult patients with asthma and COPD and has been presented approximately in order of the natural history of respiratory disease – from prevention through to diagnosis, community management and finally escalation to specialist hospital services.

<b>Table 1.</b> Services and activities for adults with asthma and COPD in Lewisham		
<b>Community</b>	<b>Outpatient</b>	<b>Inpatient</b>
Smoking cessation services		
GP diagnosis & management		
Spirometry		
Prescribing		
Pulmonary rehabilitation		
Peer-support group		
Respiratory nursing team		
Assessments, spirometry interpretation, clinic/ward/home reviews & home oxygen		
	Respiratory consultant	
	Clinic	Ward review

\* In addition to the above, some Lewisham residents with complex asthma/COPD will be referred for specialist services outside the borough (e.g. COPD patients with non-invasive ventilation at home, patients for consideration of surgical management of COPD, and those with 'brittle' (severe) asthma).

Each of the broad service/activity areas outlined in **table 1** will be reviewed in relation to:

- The local needs of the population as outlined in [chapter 2](#)
- The priority areas of the national and local strategies referenced in [chapter 3](#)
- The evidence of what works (locally and elsewhere) in [chapter 4](#)

This review comprises data from multiple sources (e.g. service data, performance data, targets and hospital admission data) which are often incomplete and not collected for the purpose of a needs assessment. Although the data presented gives some insight into how services are accessed in relation to need, readers should exercise caution in interpretation for the aforementioned data quality issues.

#### Smoking cessation/tobacco control activities

Smoking cessation is the single-most effective prevention against the development of COPD and asthma exacerbations. There are a number of different tobacco control measures in Lewisham, which are fully outlined in a recent tobacco control JSNA, accessed [here](#). The tobacco control measures can be summarised as follows:

- Stopping the inflow of young people recruited as smokers through trading standard's inspections of tobacco trading premises
- Lewisham's Stop Smoking Service provided at GP practices, pharmacies, University Hospital Lewisham, community centres, maternity services and digital services
- Supporting trading standards to ensure compliance with the restrictions on tobacco advertising at the point of retail sale
- Taking action on illicit tobacco / counterfeit tobacco seizures

## Spirometry

Spirometry, alongside a careful clinical history and physical examination, is the main diagnostic test for both asthma and COPD. There is currently a Quality and Outcomes Framework (QOF) around spirometry performance soon before or after a COPD diagnosis is made. As shown in table 2, 87% of patients with COPD in Lewisham have their diagnosis confirmed by post-bronchodilator spirometry between 3 months before and 12 months after entering onto the register.

Table 2. Percentage of COPD patients in Lewisham in whom the diagnosis has been confirmed by post bronchodilator spirometry between 3 months before and 12 months after entering the register	
Year	Percentage of patients (%)
2016	89.4
2017	88.5
2018	87.1

There is one full-time spirometry technician who performs spirometry at UHL and supports the performance of spirometry in primary care. In the 2017/18 reporting period, a total of 125 visits were made to primary care to support the competence and confidence in spirometry in the community.

## Primary care

Table 3. Lewisham QOF COPD outcomes by year	2016	2017	2018
1. Percentage of COPD patients* in whom the diagnosis has been confirm by post bronchodilator spirometry between 3 months before and 12 months after entering onto the register	89.4	88.5	87.1
2. Percentage of COPD patients who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the MRC dyspnoea scale in the preceding 12 months	90.4	88.8	91.4
3. Percentage of COPD patients with a record of FEV1 in the preceding 12 months	83.6	82.8	85.2
4. Percentage of patients with COPD and MRC dyspnoea score $\geq 3$ at any time in the preceding 12 months, with a record of oxygen saturation value within the preceding 12 months	95.3	95.7	95.6

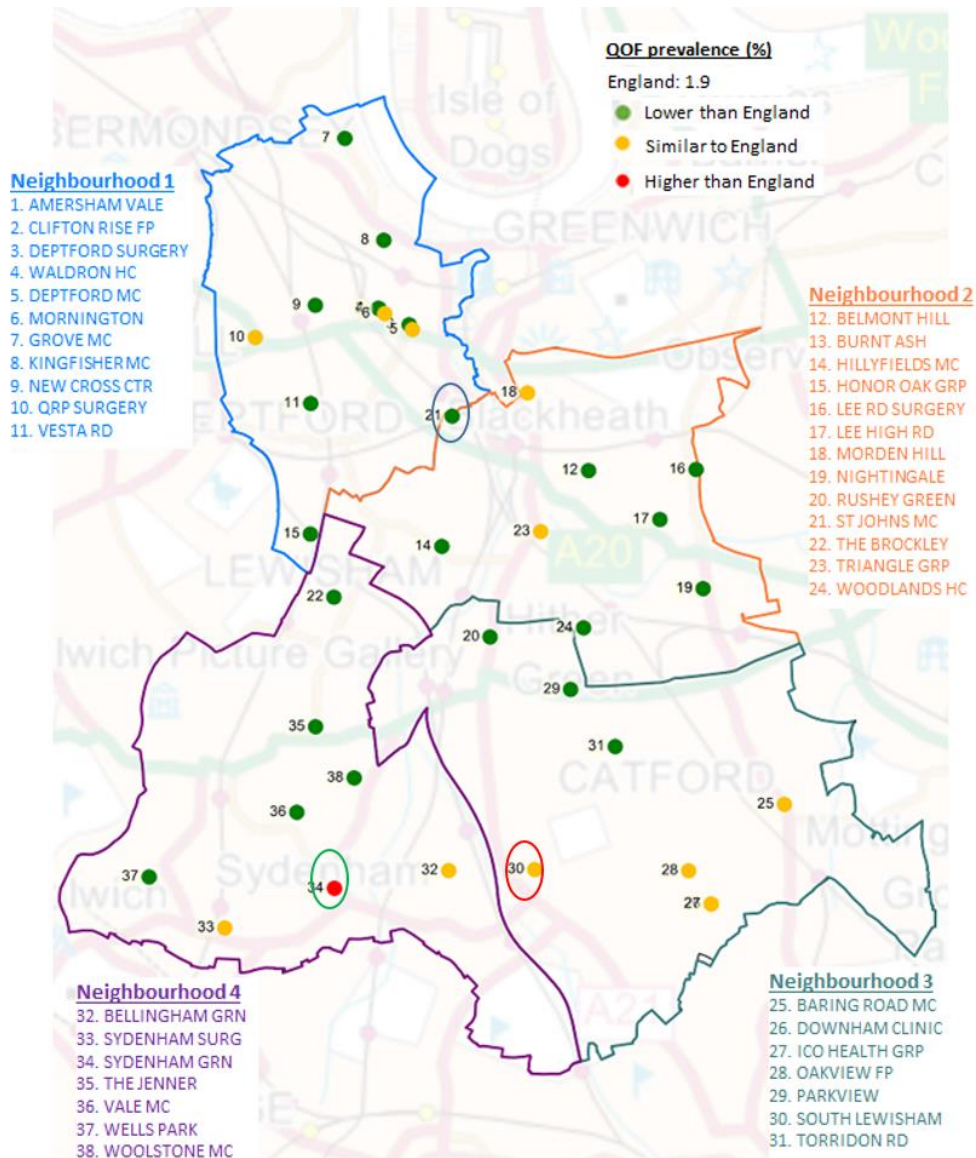
5. The percentage of patients with COPD who have had influenza immunisation in the preceding 1 Aug to 31 March	95.3	95.0	96.4
*diagnosed on or after 1 <sup>st</sup> April 2011			

<b>Table 4. Lewisham QOF asthma outcomes by year</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
The percentage of patients aged 8 or over with asthma (diagnosed on or after 1 April 2006), on the register, with measures of variability or reversibility recorded between 3 months before and any time after diagnosis	88.4	88.8	89.3
The percentage of patients with asthma, on the register, who have had an asthma review in the preceding 12 months that includes an assessment of asthma control using the 3 RCP questions	75.8	74.6	74.8
The percentage of patients with asthma, aged 14-19, on the register, in whom there is a record of smoking status in the preceding 12 months	88.3	86.5	89.4

### **Pulmonary rehabilitation**

A pulmonary rehabilitation programme is offered to all patients with respiratory disease (of all severity) in Lewisham, called the Lung Exercise and Education Programme (LEEP). It is a six week (12 session) programme, delivered on a rolling basis at 3 locations in the borough, which are depicted in **figure 16**. Further information about LEEP can be accessed [here](#).

**Figure 16.** Locations (circled) where Lung Exercise and Education programme (LEEP) is available in Lewisham



Source: QOF

### Referrals

In 2017/18, 587 people were referred to LEEP:

- 24 (4%) of these referrals were deemed 'inappropriate'
- 266 (45%) of these people had an initial assessment/first appointment
- 189 (32%) of the people referred started LEEP, of whom 124 (66%) completed the course
- All of the people that completed LEEP and responded to the feedback request (n=73) would recommend the service

A more in-depth analysis of referral patterns over a 3-month period (Oct-Dec '18) showed that almost 70% of referrals came from GP practices, with the remainder from inpatient



hospital stays. Of all of the people sent an invitation letter, only 42% responded. It was anecdotally noted by the service provider that many GPs in Lewisham have never referred to the service.

### *Outcomes*

Patients that attend LEEP are accessed pre- and post- the rehabilitation programme on the following outcomes:

- Incremental shuttle walking test (ISWT) – the patients that completed LEEP in 2017-18 improved by 20.6%
- Hospital anxiety and depression score (HAD) – patients reported a mixture of increased and decreased anxiety and depression post-rehabilitation with the overall average % change (in absolute HAD score) of -0.2%, suggesting a very mild improvement on average
- Community assessment tool (CAT) improved by 5.3% on average

### **Respiratory nursing team**

The respiratory nursing team in Lewisham comprises one respiratory nurse consultant and two respiratory specialist nurses who perform a vast range of clinical duties both in the community and the hospital, including:

- **Providing advice to clinicians**
  - In 2017/18, 1,252 requests for email/telephone advice were received
- **Home reviews**
  - In 2017/18, 70 patients with acute exacerbations of COPD were treated at home by the respiratory nursing team (each avoiding hospital admission)
- **Clinic reviews (currently 2 sessions/week)**
  - In 2017/18, 736 clinic appointments with the respiratory nursing team were available (332 for new patients and 404 for follow-up patients)
  - 20% of patients did not attend their appointments (28% for new patients, 14% for follow-up)
- **Home oxygen reviews**
  - The respiratory nursing team review all patients starting on home oxygen from UHL and are responsible for ongoing review of all patients in the borough on home oxygen (even those started on oxygen outside of Lewisham, for example in other London hospitals)
  - There are 262 adult patients on home oxygen in Lewisham in total, of whom 135 have an underlying diagnosis of COPD. Many patients receive home oxygen for non-respiratory purposes (e.g. palliative care/cluster headaches)
  - 181 appointments were available for home oxygen reviews in 2017-18 (and only 1 patient did not attend)
  - 135 domiciliary visits were made in 2017-18 that were related to home oxygen

The respiratory nursing team additionally made 98 referrals to stop smoking services in 2017-18. Of the 995 patients that responded to a request for feedback, 92% would recommend the respiratory nursing team in Lewisham.

### **Respiratory consultant-led outpatient clinics**

There is one respiratory consultant based at University Hospital Lewisham who is the lead specialist on asthma and COPD. Although the clinic sessions held in the chest clinic are

mixed (for all respiratory conditions), the approximate capacity for asthma and COPD patients is two clinics per week. In 2017/18, in these two clinic sessions there were 1,122 clinic appointments available.

- 939 clinic appointments were attended (32% with new patients and 68% with follow-up patients)
- 16% of patients did not attend their clinic appointments (26% for new patient appointments and 10% for follow-up)

A breakdown of new patients attending outpatient appointments at Lewisham’s chest clinic (in 2017-18) by sex and ethnicity is shown in **table 5**, which gives us an idea about how different groups are accessing specialist cares. We can see that:

- Men are slightly under-represented (45% of new patients seen in clinic are male, compared the 50% male Lewisham’s population as a whole).
- Black, Asian and minority ethnic (BAME) groups are slightly under-represented. 41% of the new patients seen in the chest clinic were BAME, compared to 48% of the Lewisham population

There are a few important limitations/quality issues to the data presented in table 5:

- Outpatient data is not coded by diagnosis (unlike inpatient data) and so the data refer to all adult respiratory patients, not only asthma and COPD
- The data refer only to new appointments, not follow-up appointments
- The characteristics (e.g. sex and ethnicity) are only collected for patients that attend their appointments. We do not know the profile of the ~26% of new patients that did not attend their appointment in 2017-18.

	Male	Female	Total
White British	471	534	1005
White Irish	18	15	33
White other	75	110	185
Mixed, white & black Caribbean	9	9	18
Mixed, white & black African	5	6	11
Mixed, white & Asian	1	3	4
Mixed, any other background	8	17	25
Indian	28	25	53
Pakistani	5	5	10
Bangladeshi	7	4	11
Any other Asian	61	50	111
Black, Caribbean	67	120	187
Black, African	92	119	211
Black, any other	29	60	89
Chinese	15	13	28
Any other ethnic group	37	40	77
Not stated	73	86	159
<b>Total</b>	<b>1001</b>	<b>1216</b>	<b>2217</b>

## Hospital admissions

### Asthma

The number of hospital admissions for asthma has been increasing in the last three years, from 328 admissions in 2015-16 to 403 in 2017-18 (**table 6**) – nb. Referring to admissions in people aged 15+ (due to way data is grouped).

	2015-16	2016-17	2017-18
	328	377	403

Reviewing the hospital admissions for asthma from 2015-2018, we can see that:

- 71% of these hospital admissions were for female patients
- 51% of patients were white (any), 49% BAME
- For females only, 55% patients were white (any), 45% BAME
- For males only, 42% patients were white (any), 58% BAME

	Male	Female	Total
White British	93	350	443
White Irish	2	7	9
White other	18	40	58
Mixed, white & black Caribbean	7	15	22
Mixed, white & black African	2	5	7
Mixed, white & Asian	1	0	1
Mixed, any other background	13	19	32
Indian	1	15	16
Pakistani	2	2	4
Any other Asian	21	24	45
Black, Caribbean	32	115	147
Black, African	26	60	86
Black, any other	21	34	55
Chinese	4	4	8
Any other ethnic group	27	35	62
Not stated	49	64	113
<b>Total</b>	<b>319</b>	<b>789</b>	<b>1108</b>

### COPD

There were 910 hospital admissions for COPD in 2017-18 (up 72% from 2015-16 when there were 532 admissions). It is possible that some of this increase may be due to coding inconsistencies, however coding alone is unlikely to explain the whole increase.

<b>Table 8.</b> Hospital admissions for COPD in Lewisham by sex and ethnicity, 2017-18			
	<b>Male</b>	<b>Female</b>	<b>Total</b>
White British	249	376	625
White Irish	12	24	36
White other	27	11	38
Mixed, white & black Caribbean	1	8	9
Mixed, white & black African	0	0	0
Mixed, white & Asian	0	3	3
Mixed, any other background	0	7	7
Indian	7	0	7
Pakistani	2	0	2
Any other Asian	5	2	7
Black, Caribbean	21	43	64
Black, African	4	0	4
Black, any other	5	2	7
Chinese	4	0	4
Any other ethnic group	10	40	50
Not stated	14	33	47
<b>Total</b>	<b>361</b>	<b>549</b>	<b>910</b>

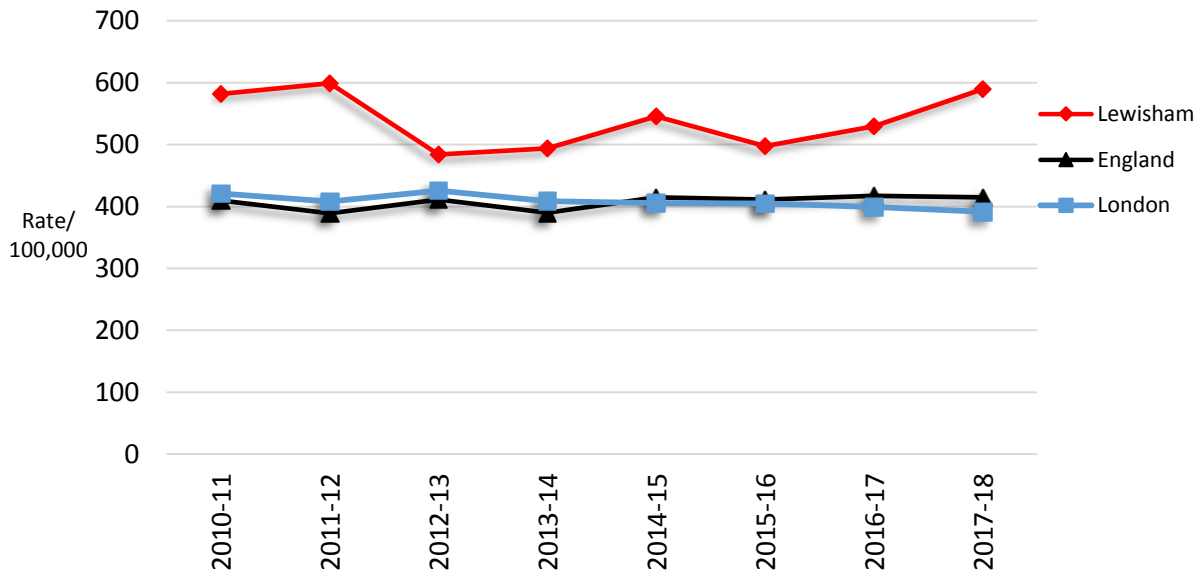
The breakdown of hospital admissions for COPD (in 2017-18) by sex and ethnicity is shown in table 8. We can see that:

- 60% of hospital admissions were for female patients
- 81% of COPD-related hospital admissions were for white (any) patients, 19% BAME
- For males only, 83% of COPD-related hospital admissions were for white (any) patients, 17% BAME
- For females only, 80% of COPD-related hospital admissions were for white (any) patients, 20% BAME

**Figures 17 and 18** show the trends in emergency hospital admissions for COPD in Lewisham compared to England, London and other London boroughs. Emergency hospital admissions for COPD in Lewisham have been:

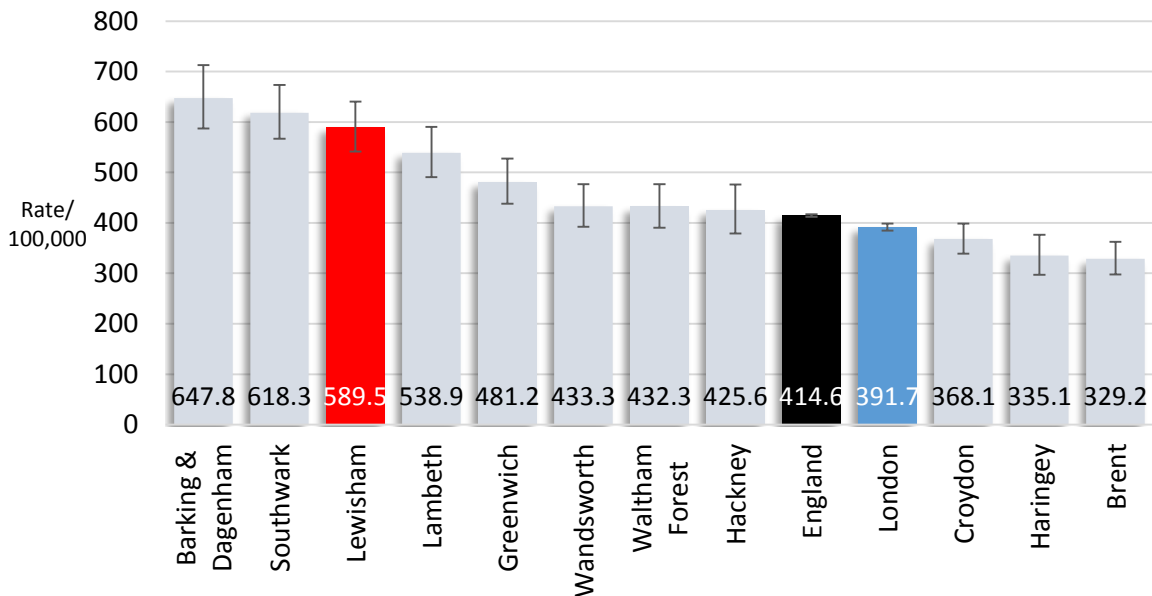
- Fluctuating between ~500 and ~600 per 100,000 population over the past decade, but increasing since 2015
- Higher than the London and England average
- The third highest in London, although similar to neighbouring boroughs Southwark and Lambeth

**Figure 17.** Emergency hospital admissions for COPD. Directly age-standardised rates/100,000 population aged 35+. Lewisham compared with London and England. Annual trends



Source: HES (<https://fingertips.phe.org.uk/>)

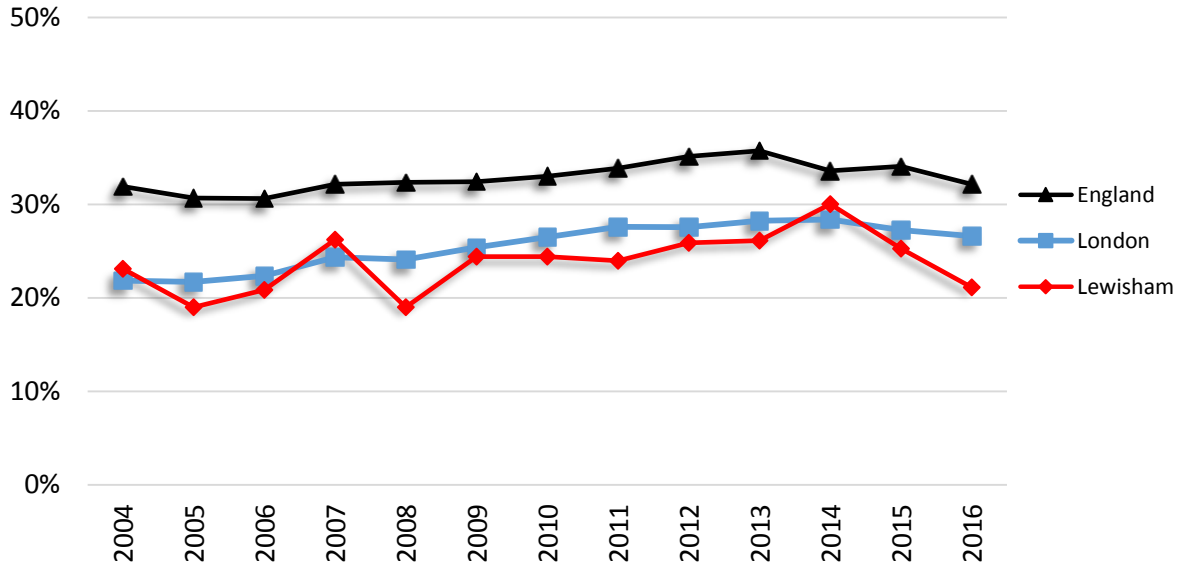
**Figure 18.** Emergency hospital admissions for COPD in persons aged 35+. Directly age-standardised rates/100,000 with 95% confidence Intervals. Lewisham compared with its statistical neighbours, London and England, 2017-18



Source: HES (<https://fingertips.phe.org.uk/>)

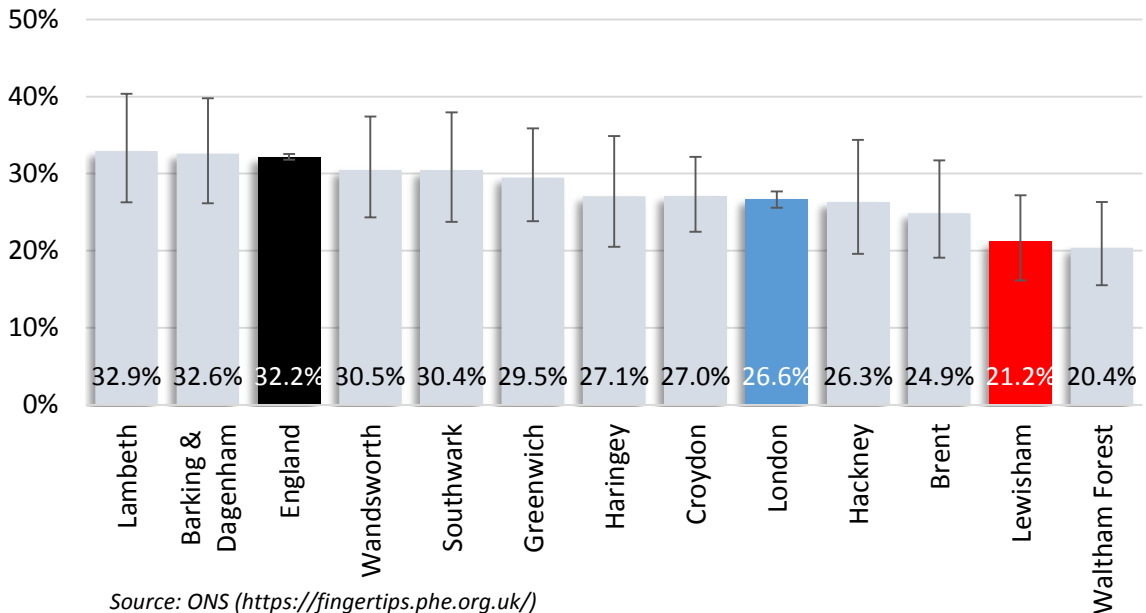
21% of Lewisham's respiratory deaths in 2016 occurred at individuals' usual place of residence – lower than the London or England average, as well as neighbouring boroughs Lambeth and Southwark.

**Figure 19.** Percentage of deaths with underlying cause of respiratory disease that occur in usual place of residence for persons of all ages. Lewisham compared with London and England. Annual trends



Source: ONS (<https://fingertips.phe.org.uk/>)

**Figure 20.** Percentage (with 95% confidence intervals) of deaths with underlying cause of respiratory disease that occurred in usual place of residence for persons of all ages. Lewisham compared with its statistical neighbours, London and England, 2016



Source: ONS (<https://fingertips.phe.org.uk/>)

## 6. Changes on the horizon

### **New guidelines on spirometry performance, interpretation and reporting (ARTP, 2021)**

On the 12th September 2016 there was the launch of a competency assessment framework 'Quality Assured Spirometry', and this document sets the minimum competency standards for healthcare practitioners performing spirometry. The ARTP spirometry qualifications are now the recognised competency assessment qualifications for all practitioners performing spirometry. The ARTP are now also responsible for holding the national register of spirometry accredited practitioners at all levels. The document can be accessed via [this link](#). The framework will be phased in commencing 1st April 2017 with full implementation by 31st March 2021.

- Essentially, the change means that by March 2021, anyone performing or reporting on spirometry will need to complete an assessment – around 3 months' online training and 3,000 word assessment.
- Further information available at: <http://www.artp.org.uk/en/spirometry/>

### **New community respiratory clinic (including spirometry)**

At the time of writing this JSNA, the CCG were considering commissioning a new community respiratory clinic which would include spirometry.

### **New South East London integrated asthma and COPD guidelines expected Q4/Q1. Colour/flag system.**

- For asthma, this will combine BTS and NICE guidelines which currently differ with regards to leukotriene receptor antagonists (recommended by NICE but not BTS)
- For COPD, the guidelines will be more 'phenotypic' i.e. separate management pathways for patients with and without exacerbations and patients with asthma-crossover

### **Reduction in smoking cessation services**

- A reduced smoking cessation service has been commissioned through the local authority for a 3 further years.
- At the time of writing this JSNA, a digital smoking cessation platform was being promoted by the smoking cessation service.

### **Pneumonia pilot starting soon**

- A pilot programme of management of pneumonia was being planned at the time of writing this JSNA.
- The pilot programme will involve trialling the use of 4 portable ultrasound units in primary care for the diagnosis of pneumonia in order to better triage patients requiring secondary care input. Three of ultrasound units will be in three practices in the borough, with one in the GP assessment unit. .
- The pilot also involves training ~12 clinicians (10 GPs, 2 nurses) in ultrasonography.

### **Changes to QOF**

- An additional QOF measure will include offering pulmonary rehabilitation to all patients with COPD.

## 7. Local views

It is important to consider how local residents and communities view the issues raised about adult asthma and COPD in Lewisham. A consultation was held with the attendees of 'Breathe-Easy', Lewisham's peer support group for people with chronic respiratory disease.

### **Consultation with Breathe-Easy (Lewisham peer-support group), March 2019**

The following themes and concerns were identified:

- Lack of information about diagnosis, spirometry, inhalers, end-of-life care
  - Discussion with practice nurse of respiratory nurse preferred for information
- Difficulty accessing GP appointments
- LEEP very well-regarded
  - although most people asked to be referred themselves or were referred from hospital (none proactively from GP)
- Aware of services/activities available in other boroughs
  - Community respiratory teams, COPD choir in Dulwich

### **National Outcomes Strategy for respiratory disease (DOH), 2011**

A consultation was held with the public, people with COPD and asthma, their carers and clinicians on what they want from services.

The general public concluded that their needs are for:

- Information and advice on how to reduce their risk of respiratory disease;
- Timely access to services which can help them reduce their risk of respiratory disease or of making it worse;
- Information on the symptoms and signs of respiratory disease to help them seek help early;
- The reassurance that if they or their relatives develop respiratory disease they have rapid access to high quality services that can meet their immediate healthcare need.

People with COPD and asthma and their carers want:

- Timely access to comprehensive quality assured assessment and diagnostic services;
- Information related to their condition and how it is managed to be available to all practitioners involved in their care irrespective of the setting;
- Access to reliable information about their condition which sets out all the options so that they can make choices which are appropriate for them;
- Easy access to comprehensive information about the services available to them and the outcomes achieved by these services;
- To be empowered to make choices about their care where these are clinically appropriate and to be supported in decision making to the extent that they wish;
- To know that they will receive the support they need whilst living with their condition and to be supported to remain in work and play an active role in society and local communities;
- To be treated as a whole person, often with a range of other conditions;
- To know that everyone involved in their care has the necessary skills, training and expertise and be reassured that everyone involved in their care will work effectively



together, so that their care will feel seamless even when delivered in different locations;

- To be able to access specialist services without delay should they need to do so; and to be assisted where necessary to remain at home;
- To know that if they are approaching the end of life their preferences for care will be discussed with them and every effort will be made to meet their needs and their preferences;
- To be treated as a whole to enable them to fully undertake activities of daily living and for the care providers to act as one team.

Health and social care professionals want:

- The training, support and information they need to deliver high quality care and deliver good outcomes;
- To work in a service which is well managed, so that their time is used effectively and so that care is streamlined for people with COPD and Asthma;
- To be able to compare the outcomes they achieve with those achieved elsewhere in this country and in other countries;
- To be free to make the choices which they feel will benefit their patients the most
- To be recognised for the specialist skills and knowledge that they possess and for this to be fully utilised to deliver better outcomes for people;
- To be able to work across traditional boundaries of care and to be supported to be innovative and to deliver care differently;
- To have information about the people they care for, that is shared and easily accessible across the whole health system;
- To be supported in creating the evidence on which models of care needs to be based.

## 8. Key gaps in knowledge and services

Key gaps in knowledge and services have been discussed in previous chapters, but can be summarised as follows:

### **Gaps in knowledge and data**

- Throughout this JSNA, we have highlighted the limited availability of data about protected characteristics, especially in terms of access to services.
- There is specifically a lack of data specific to prevention, including whether smoking cessation advice has been offered to patients throughout the respiratory pathway.
- In the development of this JSNA, some coding inconsistencies were mentioned from the hospital (e.g. issues with hospital admission coding and lack of outpatient coding by diagnosis).
- A gap in this JSNA itself was that it did not cover paediatric asthma services (and the transition to adult services).

### **Prevention**

- Smoking cessation services shrinking.
- No local asthma/COPD exacerbation guidelines, which may be helpful in preventing hospital admissions/re-admissions.

### **Under-diagnosis of COPD**

- Spirometry access patchy across the borough.
- No active case-finding for COPD.

### **No dedicated community respiratory team**

- A lack of integration between community and chest clinic services was identified.
- An integrated community team would be able to consider the more holistic role of care e.g. including:
  - Dietician
  - Palliative/end-of-life care
  - Psychologist
  - Social advice, re. work/housing etc.
  - Smoking cessation
  - Social prescribing
- No integration with drug & alcohol services.
- Individuals with severe asthma or COPD are often seen by a specialist outside the borough.

### **Pulmonary rehabilitation (LEEP)**

- Referrals low across the borough and some GPs not referring to LEEP at all.
- Accessibility in all parts of borough (and no information on protected characteristics)
- Inequalities in accessing care and support - by sex and ethnicity, and limited information about accessing care for house-bound patients who may be better served by an integrated community team.

## 9. JSNA action plan

**The following recommendations are based on:**

- *Addressing gaps identified*
- *Impact on equalities*
- *Opportunities for savings*
- *Commissioning priorities*

### **Prevention**

*Smoking cessation services/very brief advice*

- To continue to invest in stop smoking services and to encourage more Lewisham residents to quit smoking.

### **Early and accurate diagnosis**

- To identify and diagnose new cases of COPD and asthma in primary care.
- To ensure there is active case finding that is effective in closing the gap between recorded and expected prevalence.
- Active case-finding measures could involve population health management systems, opportunities at health checks and walk-in/drop-in clinics.
- To ensure that there is adequate access to spirometry in Lewisham to support early diagnosis of COPD.

### **Pulmonary rehabilitation**

- To commission sufficient pulmonary rehabilitation services to meet local need.
- To promote the LEEP service and increase referrals into the service from all GPs across the borough.

### **Managing exacerbations**

- Clear exacerbation-pathways separate for asthma/COPD to be developed.
- The use of virtual/digital services or group consultations could be considered in the management of exacerbations.
- Higher visibility respiratory leadership in primary care networks may be beneficial.
- Promotion of self-management

### **Integrated/community respiratory team**

An integrated community respiratory team would be beneficial in terms of consideration of more holistic care. For example, respiratory patients may benefit from the following types of input:

- Dietician
- Palliative/end-of-life care
- Psychologist
- CAB – work/housing advice
- Smoking cessation
- Social prescribing
- Drug & alcohol services

### **Chronically unwell**

- A further needs assessment on house-bound patients/end-of-life patients would provide much needed information on this population.

#### **Home oxygen service**

- A dedicated home oxygen service could be considered and may work well across boroughs as has been commissioned in other regions.

#### **Opportunities for savings**

The current pattern of service utilisation, featuring as it does high spend for non–elective treatment, is not the most cost effective and there are opportunities to improve outcomes for patients whilst reducing costs, these include;

- Ensuring a more systematic evidence based approach to care management in primary care in line with NICE guidance and identified local areas of need
- Further developing accessible community based respiratory services;
- Establishing alternative assessment and treatment services which are able to offer alternatives to emergency hospital admission for this group of patients.
- Smoking cessation services / tobacco control initiatives

#### **Potential further needs assessments**

- Paediatric asthma / transitioning from paediatric to adult services for chronic diseases
- House-bound patients / nursing home residents / end-of-life care.

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