

# CAMDEN JSNA: FOCUS ON

## CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

■ APRIL 2017

Chronic obstructive pulmonary disease (COPD) is a long-term condition which causes gradually increasing difficulties with breathing. It includes disorders such as emphysema and bronchitis and it is characterised by progressive narrowing of the airways and premature ageing of the lungs. COPD is preventable. The primary cause of COPD is smoking (including second-hand or passive exposure). When fully established, this lung damage is irreversible, leading to severe breathlessness, reduced mobility, chronic cough, repeated chest infections and eventually death. The early symptoms can be mild and hence neglected by the individual. COPD may therefore remain undiagnosed for years and significant lung damage may be present before treatment is sought.

### Facts and figures

- 3,301 people diagnosed with COPD in Camden<sup>1</sup>
- An estimated 3,673 people living with undiagnosed COPD in Camden<sup>1,4</sup>
- 463 people newly diagnosed in 2014/15<sup>2</sup>
- 57% of people with COPD in Camden are men<sup>2</sup>
- 2,722 emergency hospital admissions (all causes) in 2014/15 in people with a COPD diagnosis<sup>2</sup>
- 67 deaths from COPD in Camden in 2015<sup>6</sup>

### Measures for reducing inequalities

- Enhance the integration of COPD care for patients in Camden
- Tackling the wider determinants of health
- Accessible smoking cessation services to target population groups with high smoking rates i.e. manual working groups and less affluent population groups

### Population groups

- Smoking is the biggest modifiable risk factor for COPD
- The risk of developing COPD increases with age
- Deprivation and environment are risk factors for COPD

### National & local strategies

- North Central London Sustainability and Transformation Plan, 2017<sup>14</sup>
- Camden's Joint Health and Wellbeing Strategy, 2016-19<sup>13</sup>
- Camden Local Care Strategy 2016
- NHS Five Year Forward View, 2014<sup>15</sup>
- Outcomes Strategy for COPD and Asthma, 2011<sup>8</sup>
- London Clinical Senate: Helping Smokers Quit, 2014-16

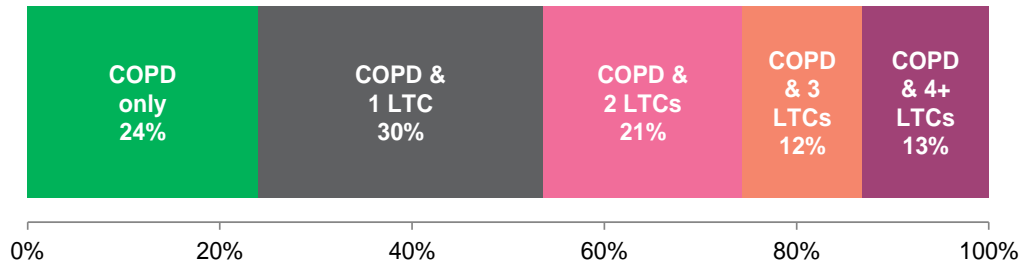
# SETTING THE SCENE: THE CAMDEN PICTURE

## Who has COPD?

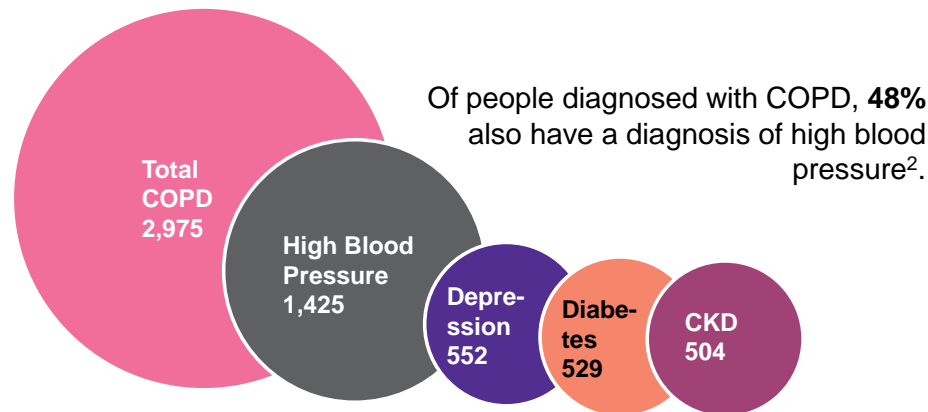
In Camden, **1.3%** of people are living with diagnosed COPD<sup>1</sup>.

## What other conditions do people with COPD have?

Approximately **30%** (884) of people diagnosed with COPD also have one other diagnosed long-term condition (LTC). A further **21%** (615) have two other diagnosed LTCs and **13%** have four other LTCs<sup>2</sup>.



Source: GP PH Dataset, 2015

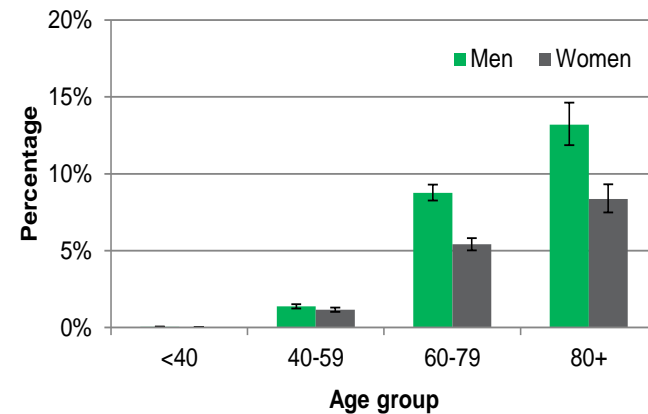


Source: GP PH Dataset, 2015

## Inequalities in COPD

**1.8%** Of White people have COPD. This is significantly higher than in other ethnic groups<sup>2</sup>. The prevalence of COPD is 0.6% in Asian people and 0.5% in Black and Mixed/Other ethnic groups.

## COPD prevalence by age and gender, Camden, 2015

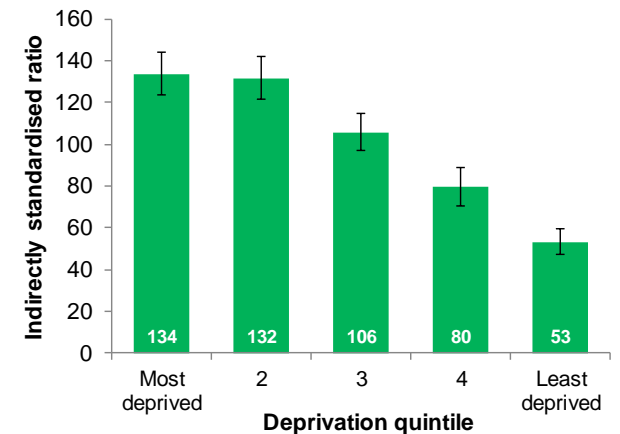


The prevalence of COPD increases with age<sup>2</sup> and is more prevalent in men in all age groups.

Source: GP PH Dataset, 2015

## Indirectly standardised ratio of COPD, by deprivation quintile, Camden, 2012

The prevalence of COPD is 34% higher in the most deprived areas and 47% lower in the least deprived areas compared to the expected prevalence across Camden. These figures are adjusted for age using indirectly standardised ratios.



Source: GP PH Dataset, 2012

# SETTING THE SCENE: THE CAMDEN PICTURE

## Case finding

Disease modelling suggests that there are many people with COPD who do not know that they have the disease. Early diagnosis of COPD can ensure patients receive effective treatment to slow down progression of the disease (e.g. smoking cessation), and help improve management of symptoms.

2.7%

**Expected prevalence**

1.3%

**Diagnosed prevalence**

3,301

**Numbers diagnosed**

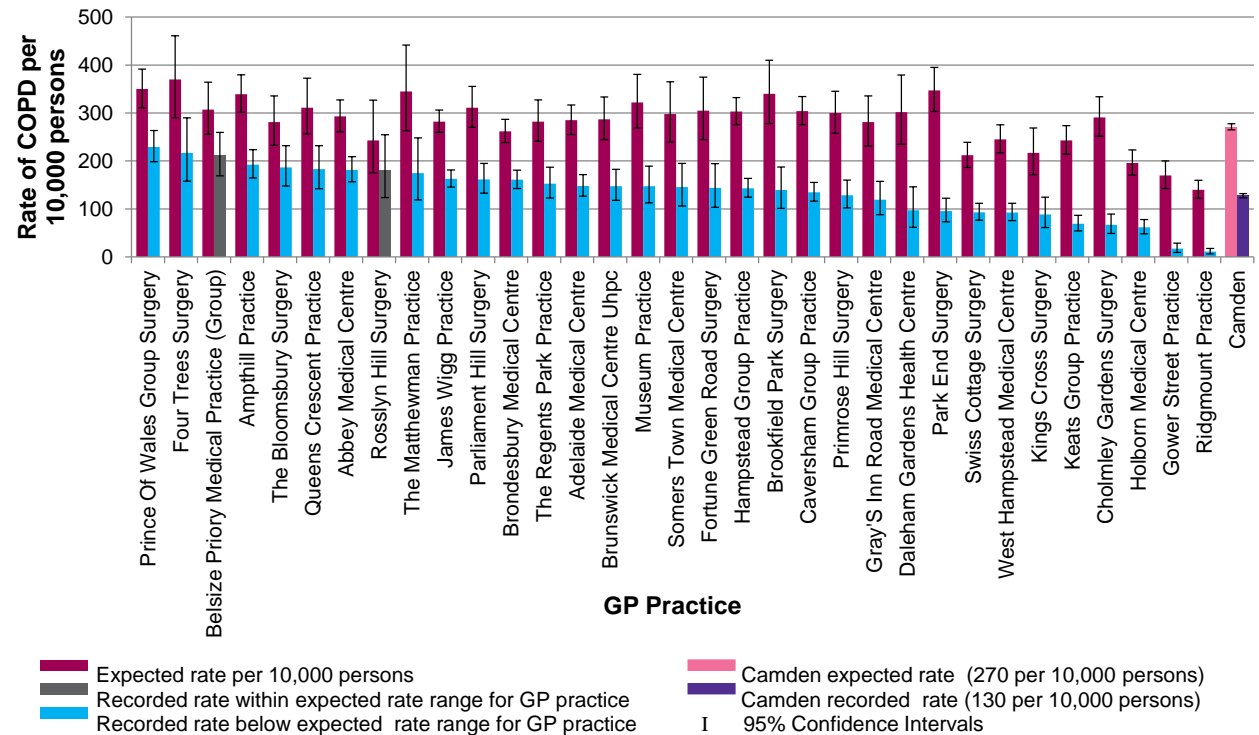
3,673

**Estimated numbers undiagnosed**

Source: QOF 2015/16, PHE 2011

The prevalence of diagnosed COPD varies between Camden practices from 0.1% to 2.3%. In most Camden practices the diagnosed prevalence is significantly lower than the expected prevalence. Nationally, it has been estimated from previous research that up to two-thirds of people with COPD remain undiagnosed<sup>9</sup>.

**Expected and recorded rate of COPD per 10,000 persons, by GP practice, Camden's registered population, all ages, 2016**

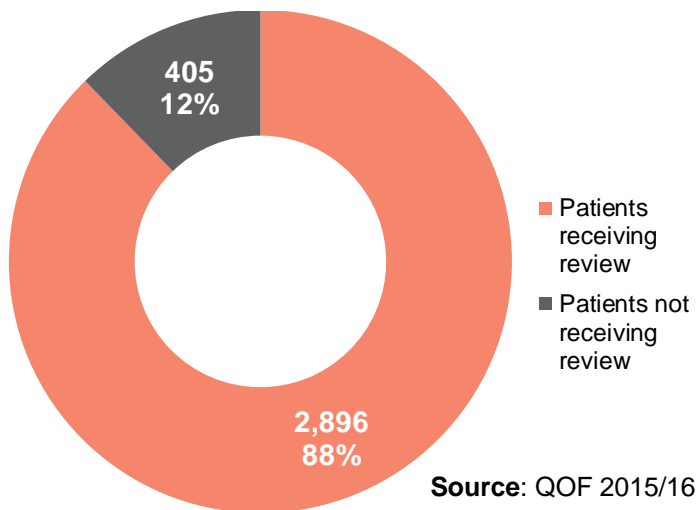


Source: QOF 2015/16, APHO 2011

# SETTING THE SCENE: THE CAMDEN PICTURE

## Management

The percentage of patients with COPD who have had a review undertaken by a healthcare professional in the preceding 12 months, Camden, 2015/16



The clinical management of patients with COPD focuses on helping them to self-manage their condition. Periodic reviews with health professionals can support this.

When COPD is not managed effectively, complications can develop that threaten health<sup>10</sup>. These can be in the form of exacerbations, which refers to sudden increase in severity of symptoms. Exacerbations are responsible for much of the poor health and deaths associated with COPD.

Interventions such as support to stop smoking, specialist exercise programmes, in particular pulmonary rehabilitation are measures to reduce the likelihood of exacerbations.

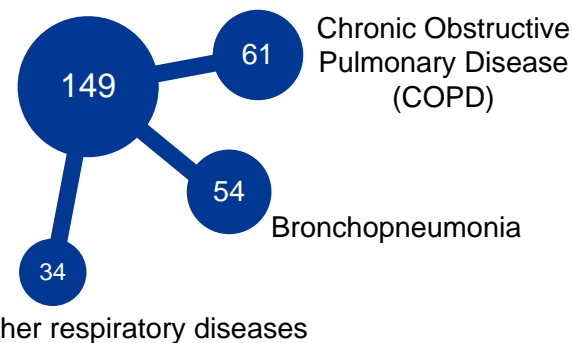
**44%** of COPD patients were offered **pulmonary rehabilitation** in 2015/16<sup>7</sup>.

## In Camden there were...

- 2,722** emergency hospital admissions (*all causes*) in people with a COPD diagnosis in 2014/15<sup>2</sup>
- 21,660** outpatient appointments (*all causes*) in people with a COPD diagnosis in 2014/15<sup>2</sup>
- 67** deaths from COPD in 2015<sup>6</sup>
- 5.4** days was the average length of stay for those who had an emergency admission for COPD in 2014/15. This is not significantly different to the best 5 CCGs nationally (5.2 days)<sup>5</sup>. "Best five" is a term used in the NHS Right Care Packs to refer to five of ten CCGs that are similar to Camden that have the lowest average length of stay following an emergency admission for COPD.

### Deaths from respiratory diseases, Camden resident population, all ages, 2013-15 (yearly average)

#### RESPIRATORY DISEASES



Source: NHS Digital, 2015

Between 2013-15, respiratory deaths were the 4<sup>th</sup> highest cause of death in Camden and accounted for 13% of all deaths. 4 in 10 respiratory deaths were attributable to COPD<sup>6</sup>.

## FUTURE NEED

### Prevalence

There is no robust model available to help us project future prevalence of COPD in Camden.

We do know that at a national level, the prevalence of diagnosed COPD has increased over past years<sup>9</sup>. In Camden, we have also seen an increase in diagnosed prevalence, from 1% to 1.3% between 2010-11 and 2015-16<sup>1</sup>.

The 'Respiratory Health of the Nation' project report suggests that some of this could be attributed to factors such as more people with undiagnosed COPD being diagnosed, or to changes in record-keeping, but that it is also likely that COPD is becoming more common over time<sup>9</sup>.

### Other trends



#### Age

Locally, the number of over 65 year-olds is expected to increase by nearly a quarter by 2026<sup>16</sup>. COPD is far more prevalent in older age groups, so we may see a rise in COPD prevalence driven by this.



#### Smoking

At a local level, smoking prevalence in Camden is forecast **to remain stable** over the next decade. However, there has been a drop in the number of people quitting over the past four years. In addition, generally people in lower socio-economic groups appear to be less successful at quitting<sup>17</sup>.

# WHAT INFLUENCES THIS TOPIC?



## Risk factors and associations of COPD

<b>Smoking</b>	The primary cause of COPD is tobacco smoke (including second-hand or passive exposure) <sup>9</sup> .
<b>Age</b>	COPD is more prevalent in older age groups. This is closely related to the level of smoking among older age groups <sup>9</sup> .
<b>Deprivation</b>	Deprivation is a key risk factor for respiratory disease; smoking is also more common in lower socioeconomic groups, and deprived populations have the highest prevalence and under-diagnosis of COPD is also higher in deprived populations <sup>8</sup> .
<b>Environmental factors</b> <u>Air pollution</u>	Air pollution, both indoor (such as second hand and tobacco smoke) and outdoor (traffic pollution) can affect COPD in two ways: by increasing risk of developing COPD, and by initiating exacerbations in those with the condition <sup>18</sup> .
<u>Harmful substances in the workplace</u>	Exposure to harmful substances in some workplaces can increase the risk of COPD <sup>10</sup> .

**Smoking** is the biggest cause of COPD.

It accounts for **80%** of the risk of COPD across the population.

# WHAT WORKS?

We know what works in terms of preventing COPD, and interventions for those with established COPD, by looking at published research and local experience.

## Population level interventions (which reach or are available to the wider population)

### Policies

- National and local policies that focus on tobacco-use prevention and cessation
- Tobacco control initiatives

### Health promotion interventions

- Smoking cessation
- Reducing smoking initiation among young adults
- Promoting smokefree homes and cars
- Diet and exercise

### Physical environment

- Healthy workplace can reduce occupational exposure to dusts and chemicals
- Reducing other indoor and outdoor air pollutants

## Earlier diagnosis

### Case finding

- Identification and assessment of patients at risk of COPD (e.g. smokers)
- Accurate timely diagnosis

## Secondary prevention

### Management of COPD

- Lifestyle advice
- Referral to stop smoking services
- Diet and exercise
- Flu vaccination,
- Prescribing appropriate medications
- Pulmonary rehabilitation
- Self management advice
- Specialist advice as needed

## ASSETS AND SERVICES

### Prevention



- **Stop Smoking Service**

- Stop smoking services are provided in four different settings in Camden: specialist community clinics, GP practices, pharmacies, and hospitals. More information can be found at: <https://www.smokefreelifecamdenandislington.co.uk/>

### Detection



- **Screening Service**

- GPs refer patients presenting with symptoms consistent with COPD to community clinics to confirm diagnosis



- **Admission Avoidance and Supported Discharge**

- Identify appropriate acute exacerbation of COPD patients for discharge and coordinating a bundle of services to follow-up post-hospital

### Management



- **Respiratory community clinics**

- Community clinics provide advice on management of patients with frequent exacerbations, spirometry and education/learning opportunity for primary care and other healthcare professionals.



- **Pulmonary Rehabilitation**

- Group exercise and education tailored to the individual patient offered to all patients who are limited by their breathlessness.



- **Home oxygen Service**

- Assess, review and provide ambulatory service for those using home oxygen

- **Domiciliary Care Pathway**

- Visits to housebound patients with COPD, aimed at patients with frequent exacerbations, providing personalised self-management plan and signposting for when patient exacerbates.

- **Camden Long Term Condition Local Commission Service and care navigation**

- GPs manages the patients' COPD after diagnosis and coordinates the patient's social care, and care in the community.



## TARGETS & OUTCOMES

Target	Related document or strategy	Timeframe to meet target
<p><b>Quality and Outcomes Framework</b></p> <p>There are five indicators within QOF that relate directly to COPD including:</p> <ul style="list-style-type: none"> <li>• The percentage of patients with COPD (diagnosed on or after 1 April 2011) in whom the diagnosis has been confirmed by post bronchodilator spirometry between 3 months before and 12 months after entering on to the register</li> <li>• The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the Medical Research Council dyspnoea scale in the preceding 12 months</li> <li>• The percentage of patients with COPD with a record of FEV1 in the preceding 12 months</li> <li>• The percentage of patients with COPD and Medical Research Council dyspnoea grade <math>\geq 3</math> at any time in the preceding 12 months, with a record of oxygen saturation value within the preceding 12 months</li> <li>• The percentage of patients with COPD who have had influenza immunisation in the preceding 1 August to 31 March</li> </ul>	The Quality and Outcomes Framework, 2016-17	Annual (end of March)
<p><b>Camden's Planned Care Locally Enhanced Service</b></p> <ul style="list-style-type: none"> <li>• Annual review with development of care plan for high risk patients</li> <li>• Percentage of patients on COPD Register who have had influenza vaccination in the last 12 months and Pneumococcal vaccination (ever)</li> </ul>	Planned Care LES	Annual until March 2019
<p><b>NHS Health Checks</b></p> <ul style="list-style-type: none"> <li>• 100% of the eligible population offered an NHS Health Check over five years</li> </ul>	NHS Health Check Best practice guidance, 2017	N/A

### Other targets which influence COPD

The Camden and Islington Smokefree Strategy 2016–2021 sets ambitious targets for the number of people smoking and accessing the smoking cessation services in the borough including

- Reduce health inequalities by reducing smoking prevalence in all key **target groups** with above-average smoking prevalence by at least 25% by **2021**

# THE VOICE: WHAT DO LOCAL PEOPLE THINK ABOUT THIS ISSUE?

## Better COPD Care review

Understanding peoples' views and experiences of COPD and its treatment is important for its prevention and management. In 2015, a service review took place in order to understand and evaluate the types of care and services that COPD patients were receiving in Camden. The review involved the development of a survey questionnaire which was sent to patients with a diagnosis of COPD to help provide an insight into the types of services people were receiving, how they were accessing these and how they felt about these services. This was followed with a qualitative review consisting of two focus groups, the first with a mix group of British and Irish patients and the second with a male group of Bangladeshi patients. In addition, staff members were also asked about options to improve health outcomes for COPD. Ideas for service improvement were collected in two main themes: planned and unplanned care<sup>11</sup>.

### What residents think about COPD



The majority of patients reported positively on the care and support they received to manage their condition

2/3



of patients reported receiving enough information to help manage their condition<sup>11</sup>.



People in the Bangladeshi community reported they want to receive more information about COPD and the management of COPD at home<sup>12</sup>.

### What staff members felt was important in supporting people with COPD

#### Planned care

- Empowering patients for better self management
- Medicine optimisation
- Smoking cessation
- Learn from international best practice
- Finding the 'missing million' (undiagnosed COPD)
- Consider other relevant conditions e.g. asthma
- Screening programmes to enhance case findings
- Spirometry standards and correct diagnosis

#### Un-planned care

- Shared IT/Information governance across providers
- Advice & education re. early detection of exacerbations
- Specialist input to healthcare @home supported schemes
- Care navigation and follow up<sup>11</sup>.

# GAPS: UNMET NEEDS

## What are the gaps



A proportion of COPD care is **reactive** and **unplanned**, causing poor patient experience and placing a high working and financial burden on acute and secondary care



Finding the **'missing millions'**. Particularly among vulnerable groups who are less likely to be in contact with services, including the homeless, those with psychiatric co-morbidity and BME populations



There is less awareness of COPD and services amongst the Bangladeshi patients, many of whom had previously mistook their condition to be asthma



People with COPD do not always understand their condition and could sometimes benefit from more information to support their management<sup>11</sup>



Some groups such as smokers with COPD are likely to require more intensive smoking cessation support if they are to successfully quit smoking<sup>17</sup>

## What we are doing

Commissioning a new COPD model of care in Camden with the vision: "world-class, patient-centred, evidenced based and cost effective multi-disciplinary care for people living with COPD in Camden, from diagnosis to death"

Primary care will remain the foundation for COPD care. This is aligned with current NHS strategic initiatives both in COPD and more widely and notably, the Five Year Forward View and Future Hospital Commission.

The new COPD model will address key areas for improvement including earlier and more effective case finding, quality assurance of care pathways to reduce variation in care, better access to COPD services for both people living with COPD and health and social care professionals and the establishment of a formal Home Oxygen Service for Camden<sup>11</sup>.

## FURTHER INFORMATION

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14. North Central London Sustainability and Transformation Plan (2017) Available online: <http://www.candi.nhs.uk/about-us/north-central-london-sustainability-and-transformation-plan>

## About Camden’s JSNA

Camden Data brings together information held across different organisations into one accessible place. It provides access to evidence, intelligence and data on the current and anticipated needs of Camden’s population and is designed to be used by a broad range of audiences including practitioners, researchers, commissioners, policy makers, Councillors, students and the general public.

This factsheet was produced by **Polly Kwok, Assistant Public Health Strategist**, **Samantha Warnakula, Intelligence and Information Analyst** and **Gabrielle Emanuel, Assistant Public Health Information Officer**. It was approved for publication by **Charlotte Ashton, Public Health Consultant**.

Contact: [JSNA@camden.gov.uk](mailto:JSNA@camden.gov.uk)

## FURTHER INFORMATION

### References:

15. NHS Five Year Forward View (2014) Available online: <https://www.england.nhs.uk/five-year-forward-view/>
16. Camden Council (2017) Camden Commission - Focus on older people. Available online: [https://www.camden.gov.uk/ccm/cms-service/stream/asset/?asset\\_id=3550993&](https://www.camden.gov.uk/ccm/cms-service/stream/asset/?asset_id=3550993&)
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18. Camden Council (2016) Camden's Clean Air Action Plan 2016-2018. Available online: [https://www.camden.gov.uk/ccm/cms-service/stream/asset/?jsessionid=2709A5E0952908857576DD653212C3BB?asset\\_id=3478895&](https://www.camden.gov.uk/ccm/cms-service/stream/asset/?jsessionid=2709A5E0952908857576DD653212C3BB?asset_id=3478895&)

### Further information:

National Institute for Health and Care Excellence (2010) Chronic Obstructive pulmonary disease.in over 16s: Diagnosis and management. Available online: <https://www.nice.org.uk/guidance/cg101>

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