Respiratory conditions

Introduction
Respiratory tract diseases are diseases that affect the air passages, including the nasal passages, the bronchi and the lungs. They range from acute infections, such as pneumonia and bronchitis, to chronic conditions such as chronic obstructive pulmonary disease (COPD) and asthma. This section covers COPD and asthma.

COPD is the name given to conditions related to difficulty breathing and long term damage of the lungs. It is a disabling illness which affects people in different ways such as breathlessness, bad cough and repeated chest infections and also impacts upon quality of life when the disease is advanced. Asthma is an obstructive lung disease and is a common condition which causes the airways to become narrower. People with asthma have difficulty breathing, often wheezing, coughing and a tightness feeling in their chest. Unlike COPD, asthma symptoms of airflow obstruction are reversible with clinical interventions.

Respiratory diseases are the most common single cause for emergency admissions in the United Kingdom accounting for 12% of all admissions. Respiratory diseases are one of the main factors contributing to reduced life expectancy, and are the third (14.5%) leading cause of deaths in Luton after circulatory disease and cancer, see Sections 10.3 and 10.5.

Risk factors and vulnerable groups
Higher levels of deprivation and smoking are generally linked with higher prevalence rates of COPD. Smoking is the most significant risk factor for developing COPD and is responsible for over 85% of COPD cases. Generally, lower educational attainment and household income are related to greater disease severity, poorer lung function and greater physical function limitations.

What is the evidence base?
For asthma, there are a number of NICE guidelines for therapeutic agents delivered by inhaler. Further guidance on diagnosis and monitoring, and management will be published in July 2015 and June 2017 respectively.

Services for people with COPD are published as a NICE Commissioning Guide (CMG43). An updated Quality Standard will be published in January 2016.

Effective interventions that can assist in preventing the development of respiratory disease or reducing its impact include:

- Immunisation against seasonal flu, pandemic flu and pneumonia.
- Prevention and cessation of smoking.
- Smoke free environments.
- Low levels of air pollution.
- Warm, well-maintained homes that are not damp.
Local picture
In 2013/14, Luton CCG spent £14.8m or 6.4% of its budget on problems of the respiratory system. The majority of this spend is split between primary care prescribing and pharmaceutical services (23.8%) and non-elective admissions (35.9%).

Data for 2012/13 indicates that Luton is statistically significantly worse than its closest 10 CCG comparators for:

- Percentage of COPD patients with a record of Forced Expiratory Volume in 1 second (FEV1) in the preceding 15 months.
- Percentage of COPD patients having had a review in the previous 15 months.
- Spend on non-elective (emergency and other non-elective) admissions for Obstructive Airways Disease per 1,000 populations.
- Percentage of patients aged 8 years and over diagnosed as having asthma from 1 April 2006 with measures of variability or reversibility.
- Percentage of asthma patients who have had a review in the preceding 15 months.

COPD prevalence
In 2013/14, there were 2,626 people recorded on the primary care COPD disease register. This was a recorded prevalence of 1.2%. The prevalence is ranked within the lowest fifth of all CCGs across the country (33 of 211). The prevalence between 2009/10 to 2013/14 increased at a slightly faster pace than England (19% compared with 17%). Modelling of prevalence suggests that there are approximately 1,987 people with undiagnosed COPD across Luton. There remains a wide variation between practices ranging from 0.24 to 2.18, which suggests that some practices are better at identifying COPD patients than others.

COPD mortality
From 2011/2013, there were approximately 167 premature deaths in Luton related to a respiratory disease. This was a rate of 45.4 per 100,000 persons. Although, the rate is higher than 2007/09, it is no longer significantly higher than England. Mortality from causes related to respiratory disease has reduced by more than a fifth compared with 2007/09 (highest reduction amongst Luton’s comparators).

From 2008/10 to 2010/12, England saw an increase in premature COPD mortality rates by as much as 48% whereas Luton saw a relatively modest increase of 4%. The most recent figure from 2010/12 shows Luton had a rate of 12.19 per 100,000 persons. This was 2nd lowest amongst its five other comparators. In 2008/10, Luton was higher than England (but not significantly so). In 2010/12, Luton is now significantly lower than England.

Premature mortality from COPD is more common amongst males than females. In 2010/12, across England the figure was 33% higher for males compared with females - a figure that has remained consistent since 2007/09. However, for Luton the figure has now gone from 50% higher for males in 2007/09 to 59% higher for males in 2010/12.
**Asthma prevalence**

In 2013-14, there were 11,823 people recorded on the primary care asthma disease register. This was a recorded prevalence of 5.38%. The prevalence was ranked within the lowest fifth of all CCGs across the country (42 of 211). From 2009-10 to 2013-14, the prevalence for Luton has increased from 5.33% to 5.38% whereas for England it has reduced.

The Luton respiratory pathway involves the care of patients with all forms of respiratory disease. Care is given by multidisciplinary respiratory teams involving doctors, specialist respiratory nurses, community respiratory teams, respiratory physiotherapists and specialist respiratory technicians as well as other general medical staff in the Luton and Dunstable Hospital and the community services teams.

Previous work has been undertaken by Luton PCT and CCG on improving the patient pathway by:

- Introducing a COPD commissioning for quality and innovation payment (CQUIN) for discharge with care bundles.
- Introducing risk stratification in primary care.
- Commissioning pulmonary rehabilitation in the community services and the acute hospital.

The CCG is now undertaking a review of all respiratory services in Luton.
References


