Chronic Obstructive Pulmonary Disease (COPD) describes a group of conditions which include emphysema and chronic bronchitis. 100,000 people in Yorkshire and the Humber, or 1.9% of the population, are diagnosed with COPD. However, there are an estimated 177,000 people with COPD, suggesting that 43% of people with the disease are not currently diagnosed.

COPD is the fifth largest killer disease in England. In Yorkshire and the Humber more people die from COPD (31.1 per 100,000) than from colorectal cancer (17.4 per 100,000), breast cancer (16.7 per 100,000), lung cancer (16.3 per 100,000) or chronic liver disease (10.4 per 100,000).

A progressive illness, COPD is disabling and the number of people dying as a result of COPD increases with age.

The direct cost of COPD to the health system in Yorkshire and the Humber is £77m: or an average of £5m a year for every PCT. The broader economic cost of COPD has been put at £3.8 billion for lost productivity in the UK economy as a whole. 25% of people with COPD are prevented from working due to the disease with at least 20 million lost working days a year among men and 3.5 million lost days among women every year.

A recent national audit showed that readmission rates in Yorkshire were 32% and that the average length of stay a day longer than the national average (Yorkshire 6 days, England 5 days).

The information below summarises key indicators relating to the prevalence, care and outcomes for people with Chronic Obstructive Pulmonary Disease (COPD) within NHS Leeds PCT. Each section of the report is designed to broadly follow a COPD clinical pathway.

This information is designed to allow the identification of differences in service provision and the potentially related variation seen at primary care/provider trust level in outcomes and service usage for those with COPD. It is hoped that this information will generate discussion as to the drivers of any variation reported and encourage identification and adoption of best practice. Many indicators provide links to more detailed sources of information which the user can follow in order to investigate both local and national comparisons.

A summary of key indicators across the Yorkshire and Humber region is available to accompany the profiles available for each Primary Care Trust.

Chart 1: Prevalence of COPD, all ages, 2009-10

Chart 1a: Prevalence of COPD, all ages, 2006-07 to 2009-10

The recorded prevalence of COPD as a proportion of the total population in NHS Leeds on the QOF register is 1.7% (13,574 people). This is lower than the regional average of 1.9%. The 13,574 people is equivalent to 2.1% of the population who are aged 16+. It is estimated that there are an additional 2.4% (15,430 people) aged over 16 who are undiagnosed with COPD.

The predicted prevalence of COPD (both diagnosed and undiagnosed) in those aged over 16 in NHS Leeds is modelled to rise to 4.5% by 2020, an increase of 3,584 cases.
Smoking prevalence as reported in the Integrated Household Survey for NHS Leeds is 24.1%, which is higher than the regional average. The number of people within NHS Leeds who set a quit date with NHS Stop Smoking Services during 2009-10 was 6,641.

**Chart 3:** Smoking prevalence as reported in the Integrated Household Survey, this information is sourced from a Yorkshire and Humber Public Health Observatory report and based on Office of National Statistics surveys.

**Table 1:** Responses from the Yorkshire and the Humber SHA COPD Resources Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
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<tbody>
<tr>
<td>Is there an agreed care pathway for managing across your Primary Care Organisation (PCO)?</td>
<td>Yes</td>
</tr>
<tr>
<td>Is a community pulmonary rehabilitation programme currently provided within your PCO?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do COPD patients within your PCO currently have access to an early discharge scheme?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do COPD patients within your PCO currently have access to an admissions avoidance scheme?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do you have access to an oxygen assessment service for Long Term Assessment Oxygen Therapy (LTOT)?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do you have access to an oxygen assessment service for ambulatory oxygen?</td>
<td>No</td>
</tr>
<tr>
<td>Do you have access to an oxygen assessment service for short burst oxygen therapy/intermittent oxygen therapy?</td>
<td>No</td>
</tr>
<tr>
<td>Are there formal arrangements for patients with COPD to receive palliative care in your area?</td>
<td>No</td>
</tr>
</tbody>
</table>
In 2009-10 there were 1,790 admissions for COPD in NHS Leeds (131.9 admissions per 1,000 people with COPD). The total admissions equate to a PbR tariff of £3.9 million for 2009-10 (or £290,043 per 1,000 people with COPD).

Chart 5: Total admissions in 2009-10 per 1,000 people on the QOF COPD patient register, taken from NHS Comparators, for admissions which are for ICD-10 codes between J40-J44, which are ordinary admissions or day cases.

https://www.nhscomparators.nhs.uk/NHSComparators/Login.aspx

Chart 5a: Total admissions in 2009-06 to 2009-10 per 1,000 population, taken from NHS Comparators, for admissions which are for spells in hospital under the programme budgeting category for COPD. These include all ordinary admissions and day cases. The denominator here varies from that used in chart 5, in order to negate the effect of a changing COPD QOF register over time.

https://www.nhscomparators.nhs.uk/NHSComparators/Login.aspx

Chart 6: Standardised average length of stay for patients admitted with COPD, 2006-07 to 2009-10

Chart 6a: Standardised average length of stay for patients admitted with COPD, 2005-06 to 2009-10

Chart 7: Sum of PbR tariffs for admissions for COPD per 1,000 people on the COPD QOF register, 2009-10

Chart 7a: Sum of PbR tariffs which are for ordinary or day case admissions under programme budgeting category 11A, COPD, per 1,000 people on the QOF COPD patient register, taken from NHS Comparators for 2009-10.

https://www.nhscomparators.nhs.uk/NHSComparators/Login.aspx
Chart 8: Emergency readmission rates for those with COPD within 30 days of a previous admission

Chart 9: Emergency readmission rates for those with COPD within 72 hours of a previous admission

Chart 10: Admissions for COPD by hospital provider trust, Q3 2008/09 to Q2 2010/11

Chart 11: Standardised average length of stay for patients admitted with COPD by hospital provider trust, Q3 2008/09 to Q2 2010/11

Chart 10: The number of admissions for COPD during 2009-10 for the main hospital provider trusts in the PCT region. Taken from NHS Comparators, provided by the NHS Information Centre for Health and Social Care.

https://www.nhscomparators.nhs.uk/NHSComparators/Login.aspx

Chart 11: The standardised average number of nights spent in hospital per COPD admissions during 2009-10 for the main hospital provider trusts in the PCT region. Taken from NHS Comparators, provided by the NHS Information Centre for Health and Social Care.

https://www.nhscomparators.nhs.uk/NHSComparators/Login.aspx

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The information presented in Chart 12 has been derived from Yorkshire Ambulance Service data and shows the number of callouts for 'breathing difficulties' by the location of the callout (not necessarily the location of residence). These breathing difficulties may be due to a much wider range of conditions that just COPD but present a useful geographical guide to the pressures on ambulance services.

No attempt to standardise the results by the size of the ward have been undertaken as the callouts do not relate to any resident population of the ward.

Wards with under 50 callouts in the period have been omitted for data security.
Charts 13 & 14: These show the proportion of those on the 2009-10 COPD QOF register who meet the criteria for the four COPD outcome measures detailed below:

**COPD 8:** The percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March.

**COPD 10:** The percentage of patients with COPD with a record of FeV1 in the previous 15 months.

**COPD 12:** The percentage of all patients with COPD diagnosed after 1st April 2008 in whom the diagnosis has been confirmed by post bronchodilator spirometry.

**COPD 13:** The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the MRC dyspnoea score in the preceding 15 months.

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Chart 16: This indicator is the directly standardised COPD mortality rate per 100,000 of the population. The standardisation allows a meaningful comparisons between regions with differing age profiles. This information is reproduced from information in the National Clinical and Health Outcomes Knowledge Base maintained by the NHS Information Centre for Health and Social Care:

http://www.nchod.nhs.uk/

Expenditure on those with COPD

Source: National Centre for Health Outcomes Development, the NHS Information Centre for Health and Social Care

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July 2011
Table 3: 2009-10 Quality and Outcomes Framework percentage of COPD patients with an FEV1 reading in the last 15 months for all practices within NHS Leeds.

<table>
<thead>
<tr>
<th>Name of Practice</th>
<th>Percentage of Practice Registered Patients who are on the COPD Register (% COPD Prevalence)</th>
<th>Percentage of COPD Register with an FEV1 Reading</th>
<th>Percentage of COPD Register including Exceptions with an FEV1 Reading</th>
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<tr>
<td>GRANGE MEDICARE S H P</td>
<td>1.7%</td>
<td>2.5%</td>
<td>2.4%</td>
</tr>
<tr>
<td>GRANGE MEDICARE N C S</td>
<td>1.2%</td>
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