COPD RESOURCE PACK
SECTION 2

Initiating a COPD Clinic: Protocol & Assessment

In this section:

1. Initiating a chronic disease management clinic
2. Equipment for a COPD clinic
3. Primary care chronic obstructive pulmonary disease (COPD) protocol
4. COPD structured care appointments
5. Quality Outcome Framework Indicators for Chronic Obstructive Pulmonary Disease 2009/10

Appendix 1 - Nurse involvement in COPD Clinics
Appendix 2 - Annual Respiratory Review
Appendix 3 - Paul Jones 5 Questions
1. INITIATING A COPD CLINIC

Identify Key Personnel

- A lead GP with a special interest should be identified for the nurse to refer to on clinical issues. In a nurse led clinic, the nurse should be qualified or working towards qualification in the relevant area.

- Establish the staff to be involved. This should be a multidisciplinary team including GP, nursing and administration staff. In some areas additional members of staff may be required. (1,2,3,4)

Planning and Logistics

The size of the register will determine the frequency and the duration of the clinics and also the resources required in terms of staff, equipment and space. It is important that the clinic should be held on the same day and time, allowing for continuity.

Each member of the team needs to be aware of their specific responsibilities and training requirements. The clinic must be time protected and staff not be expected to perform other duties whilst it is taking place. Time should be set aside for communication between involved staff.

Clinical information should be recorded on computer. On EMIS record data on existing templates or build your own. On Vision the COPD GMS template should be used. A standardised minimum dataset of information should be collected. On EMIS/Vision the reporting database allows searches on all data for audit purposes. Clinical information should be recorded on computer and a standard dataset should be collected. Fife Respiratory MCN has created templates for this purpose.

Equipment – will vary depending on which area of chronic disease management to be undertaken. Facilities for height, weight, blood pressure recording are common to all areas of chronic disease management.

Space – Is there a room available?

Audit

This is a valuable tool for assessing how well you are doing. Audit is about deciding what standards you are hoping to achieve and the process by which it can be done. Deciding on which area to be audited is a decision for the team. Time should be set aside for this process.
2. EQUIPMENT FOR A COPD CLINIC

- Spirometer- including servicing, calibration and maintenance programme (see Section 3-Spirometry – of the COPD Resource Pack for information on calibration of equipment)
- Disposable mouthpieces with filter
- Copy of current COPD guidelines:
  - NICE Clinical Guideline 101 (June 2010)
  - GOLD COPD Diagnosis, Management and Prevention
- Respiratory assessment sheet
- European Respiratory Society 1993 - Standardised lung function testing tables
- Height measure
- Scales
- Pulse Oximeter
- Calculator
- Standardised education materials
- Fife COPD action plans
- Placebo devices
- Beta₂ agonist inhaler and nebuliser vials
- Large volume spacer/other spacer device
3. PRIMARY CARE COPD PROTOCOL

PRIMARY CARE
CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) PROTOCOL

NAME OF PRACTICE

Date of protocol

Date for review

Person responsible for review of protocol
PRIMARY CARE COPD PROTOCOL

DEFINITION

COPD is characterised by airflow obstruction. The airflow obstruction is usually progressive, not fully reversible and does not change markedly over several months. The disease is predominately caused by smoking. (Nice 2010).

This protocol should be used where the care of a patient with COPD is shared between the general practitioner (GP) and the nurse. The level of the nurse involvement will be commensurate with her level of training and expertise. The protocol is based on the National Institute for Clinical Excellence (NICE 2010) - Management of Chronic Obstructive Pulmonary Disease,

There is no single test for COPD. Making a diagnosis relies on clinical judgement based on a combination of history, physical examination and confirmation of the presence of airflow obstruction using spirometry. (NICE 2010)

REGISTER

Number of patients on COPD register

% Practice population

PRACTICE PERSONNEL INVOLVED IN COPD CLINIC

NURSE(s)

•

•

•

GP(s)

•

•

•

Administrative Support

•

•
PRACTICE IMPLEMENTATION OF STRUCTURED COPD CARE

The practice will implement structured COPD care by:

<table>
<thead>
<tr>
<th>Specified COPD Clinic</th>
<th>TICK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic day and time:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Combined respiratory clinic (with asthma)</th>
<th>TICK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic day and time:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunistically as patients present</th>
<th>TICK</th>
</tr>
</thead>
</table>

PATIENT IDENTIFICATION

The practice will identify patients for structured COPD care as follows:

<table>
<thead>
<tr>
<th>Patients with diagnosed COPD</th>
<th>TICK</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Patients &gt;35 years with a smoking history who are on regular bronchodilator therapy</th>
<th>TICK</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Patients &gt;35 years with a smoking history with symptoms of cough/wheeze/increasing shortness of breath and/or recurrent URTI's</th>
<th>TICK</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>&gt;35 years old smokers with &gt;20 pack year history of smoking</th>
<th>TICK</th>
</tr>
</thead>
</table>
**RECORD KEEPING**

The practice will use a standardised minimum data set that will include:

**Computerised Records**

<table>
<thead>
<tr>
<th></th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First and annual review appointments</strong></td>
<td></td>
</tr>
<tr>
<td>EMIS</td>
<td>MCN COPD template</td>
</tr>
<tr>
<td>VISION</td>
<td>MCN COPD template</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

**Written Records**

<table>
<thead>
<tr>
<th></th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Appointment</strong></td>
<td></td>
</tr>
<tr>
<td>Completion of initial respiratory assessment sheet</td>
<td>TICK</td>
</tr>
<tr>
<td>Additional information recorded in patient notes</td>
<td>TICK</td>
</tr>
<tr>
<td>Other</td>
<td>TICK</td>
</tr>
</tbody>
</table>

**Follow Up Appointments**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Information recorded in patient notes</td>
<td>TICK</td>
</tr>
<tr>
<td>Other</td>
<td>TICK</td>
</tr>
</tbody>
</table>

**Annual Review**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of annual respiratory review sheet</td>
<td>TICK</td>
</tr>
<tr>
<td>Additional information recorded in patient notes</td>
<td>TICK</td>
</tr>
<tr>
<td>Other</td>
<td>TICK</td>
</tr>
</tbody>
</table>
4. COPD STRUCTURED CARE APPOINTMENTS

First appointment – initial and new patient assessment

The practice will allow 45-60 minutes for an initial assessment, which will include:

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full medical and respiratory history – taken using initial respiratory assessment sheet</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Measure and record height, weight and BMI</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Measure and record BP and pulse</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Perform post bronchodilator baseline spirometry – record on initial respiratory assessment sheet</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Perform a reversibility test only if diagnostic doubt remains after history and baseline Spirometry</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Appropriate review of spirometry and history to reach diagnosis</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Pulse oximetry</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Check inhaler technique and concordance</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Implementation of appropriate regular treatment based on Fife Formulary/ NICE 2010</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Register for annual influenza vaccine, check pneumococcal vaccine status</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Referral for chest X-ray if none in previous 3 years (to exclude other pathologies and for baseline measure)</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Referral for blood tests e.g. FBC, U&amp;E, alpha 1 anti-trypsin, if indicated</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Education – patient, spouse, carer, family e.g. Smoking cessation /nutrition/exercise. Consider referral to Pulmonary Rehab (MRC score 3 or more) or Active Options</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Screen for depression/ quality of life using e.g. PHQ9 questionnaires -consider further assessment dependant on result. Biopsychosocial where appropriate</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Complete COPD databases/written records/ add to COPD register</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Set review date as appropriate</td>
<td>GP/PN/Both</td>
</tr>
</tbody>
</table>
**Second and follow up appointments**

The practice will allow 20 minutes for second and follow up appointments, which will include:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record symptoms</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Assess and record patient outcomes and personal targets (using for example the COPD Assessment Tool; ‘Paul Jones 5 questions’ etc.)</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Record MRC score</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Record short acting ß₂ usage</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Record antibiotic usage, oral steroid usage, and use of out of hours services or hospital admissions</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Issue Fife COPD Action plan with or without home supply of rescue treatment</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Check inhaler technique and concordance; appropriateness of medication for symptoms / severity of disease; and compliance with Fife Formulary. <a href="http://www.fifeadtc.scot.nhs.uk/">http://www.fifeadtc.scot.nhs.uk/</a> (&gt;formulary appendices &gt; 3B)</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Assess if treatment still effective and implement appropriate regular treatment based on Fife Formulary guidelines</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Pulse Oximetry</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Record BMI</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Reinforce quality of life and personal targets achieved</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Reinforce dietary and exercise advice</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Monitor smoking status and reinforce smoking cessation advice</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Refer to appropriate specialists (e.g pulmonary rehabilitation, Active Options, physiotherapist, dietician, chest consultant) if necessary. Standard referral form or SCI -gateway for Pul Rehab referral. Standard referral form for Active Options</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Review any chest X-ray/ blood test results and take appropriate action</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Complete appropriate COPD databases and written records</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Set review date as appropriate</td>
<td>GP/PN/Both</td>
</tr>
</tbody>
</table>
### Annual review appointment

Allow 30 minutes and include:

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full respiratory review – taken using the annual respiratory review sheet or MCN COPD Consultation Review Software in EMIS/Vision</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Assessment of current lung function by spirometry</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Assess and record patient outcomes and personal targets (e.g. using the COPD Assessment Tool; ‘Paul Jones 5 questions’ etc.)</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Assess if treatment still effective and implement appropriate regular treatment based on Fife Formulary</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Have a low threshold for further x-rays if symptoms are not consistent with anticipated disease progression</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Record short acting $\beta_2$ usage</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Record MRC score</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Record antibiotic usage, oral steroid usage, and use of out of hours services or hospital admissions</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Check inhaler technique and concordance</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Pulse Oximetry</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Screen for depression/ quality of life using Depression screening questions consider further assessment dependant on result.</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Measure and record height, weight and BMI, any weight loss</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Education – patient spouse, carer, family e.g. nutrition, exercise</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Monitor smoking status and reinforce smoking cessation advice</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Refer to appropriate specialists (e.g. pulmonary rehabilitation, physiotherapist, dietician, chest consultant) if necessary. Refer to Active Options if appropriate</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Check had annual influenza vaccine and single pneumococcal vaccine - refer for vaccine as appropriate</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Complete appropriate COPD databases and written records</td>
<td>GP/PN/Both</td>
</tr>
<tr>
<td>Set review date as appropriate</td>
<td>GP/PN/Both</td>
</tr>
</tbody>
</table>
5. Quality Outcome Framework Indicators for Chronic Obstructive Pulmonary Disease


The practice records agreed diagnostic READ codes for patients diagnosed with Chronic obstructive pulmonary disease and provides appropriate lifestyle advice at the time of diagnosis.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Points</th>
<th>Achievement thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COPD002. 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.</td>
<td>5</td>
<td>45–80%</td>
</tr>
<tr>
<td>Ongoing management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COPD003(S). 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 15 months.</td>
<td>9</td>
<td>50–90%</td>
</tr>
<tr>
<td>COPD005(S). The percentage of patients with COPD and Medical Research Council dyspnoea grade=3 at any time in the preceding 15 months, with a record of oxygen saturation value within the preceding 15 months. NICE 2012 menu ID: NM63</td>
<td>5</td>
<td>40-90%</td>
</tr>
<tr>
<td>COPD007(S). The percentage of patients with COPD who have had influenza immunisation in the preceding 1 August to 31 March.</td>
<td>6</td>
<td>50-90%</td>
</tr>
</tbody>
</table>

COPD – rationale for inclusion of indicator set

COPD is a common disabling condition with a high mortality. The most effective treatment is smoking cessation. Oxygen therapy has been shown to prolong life in the later stages of the disease and has also been shown to have a beneficial impact on exercise capacity and mental state. Some patients respond to inhaled steroids. Many patients respond symptomatically to inhaled beta-agonists and anticholinergics. Pulmonary rehabilitation has been shown to produce an improvement in quality of life.

The majority of patients with COPD are managed by GPs and members of the primary care team with onward referral to secondary care when required. This indicator set focuses on the diagnosis and management of patients with symptomatic COPD.
A diagnosis of COPD is considered in any patient who has symptoms of a persistent cough, sputum production, or dyspnoea and/or a history of exposure to risk factors for the disease. The diagnosis is confirmed by post bronchodilator spirometry.

See COPD002.1

Where patients have a long-standing diagnosis of COPD and the clinical picture is clear, it would not be essential to confirm the diagnosis by spirometry in order to enter the patient onto the register. However, where there is doubt about the diagnosis contractors may wish to carry out post bronchodilator spirometry for confirmation.

NICE clinical guideline CG101 recommended a change to the diagnostic threshold for COPD in 2010.

Table 2. Gradation of severity of airflow obstruction

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Post bronchodilator</td>
<td>FEV1 %</td>
<td>Severity of airflow obstruction</td>
<td>Post bronchodilator</td>
<td>Post bronchodilator</td>
</tr>
<tr>
<td>FEV1/FVC</td>
<td>predicted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 0.7</td>
<td>&gt; 90%</td>
<td>Mild</td>
<td>Stage 1 – Mild*</td>
<td>Stage 1 – Mild*</td>
</tr>
<tr>
<td>&lt; 0.7</td>
<td>50-79%</td>
<td>Mild</td>
<td>Stage 2 – Moderate</td>
<td>Stage 2 – Moderate</td>
</tr>
<tr>
<td>&lt; 0.7</td>
<td>30-49%</td>
<td>Moderate</td>
<td>Stage 3 – Severe</td>
<td>Stage 3 – Severe</td>
</tr>
<tr>
<td>&lt; 0.7</td>
<td>&lt; 30%</td>
<td>Severe</td>
<td>Stage 4 – Very severe**</td>
<td>Stage 4 – Very severe**</td>
</tr>
</tbody>
</table>

* Symptoms present to diagnose COPD in patients with mild airflow obstruction (see recommendation 1.1.1.1).
** Or FEV1 (forced expiratory volume in one second) < 50 per cent with respiratory failure.

Where patients have co-existing COPD and asthma they should be coded for both diseases. Approximately 15 per cent of patients with COPD will also have asthma.

Coding and Lifestyle

There is considerable evidence to support the positive impact of physical activity, smoking cessation, reducing unsafe alcohol consumption and improving diet on many long term conditions, particularly cardiovascular health.

The health of patients with Chronic obstructive pulmonary disease can be improved by the provision of appropriate lifestyle advice.
It is recommended that contractors refer to recognised guidance on advising patients on lifestyle risk.

Further information


http://www.healthscotland.com/topics/health/alcohol/resources.aspx


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COPD indicator 002

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.

**COPD 002.1 Rationale**

A diagnosis of COPD relies on clinical judgement based on a combination of history, physical examination and confirmation of the presence of airflow obstruction using spirometry.

The NICE clinical guideline on COPD\(^\text{87}\) provides the following definition of COPD:

- airflow obstruction is defined as a reduced FEV\(_1\)/FVC ratio (where FEV\(_1\) is forced expired volume in one second and FVC is forced vital capacity), such that FEV\(_1\)/FVC is < 0.71;

- if FEV\(_1\) is greater than or equal to 80 per cent predicted normal a diagnosis of COPD would only be made in the presence of respiratory symptoms, for example breathlessness or cough.

The NICE clinical guideline requires post bronchodilator spirometry for diagnosis and gradation of severity of airways obstruction. Failure to use post bronchodilator

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readings has been shown to overestimate the prevalence of COPD by 25 per cent\textsuperscript{88}. Spirometry is to be performed after the administration of an adequate dose of an inhaled bronchodilator (e.g. 400 mcg salbutamol).

Prior to performing post bronchodilator spirometry, patients do not need to stop any therapy, such as long-acting bronchodilators or inhaled steroids.

Routine reversibility testing is not recommended. However, where doubt exists as to whether the diagnosis is asthma or COPD, reversibility testing may add additional information to post bronchodilator readings alone and peak flow charts are useful. It is acknowledged that COPD and asthma can co-exist and that many patients with asthma who smoke will eventually develop irreversible airways obstruction. Where asthma is present, these patients would be managed as asthma patients as well as COPD patients. This will be evidenced by a greater than 400mls response to a reversibility test and a post bronchodilator FEV\textsubscript{1} of less than 80 per cent of predicted normal as well as an appropriate medical history.

Patients with reversible airways obstruction will be included on the asthma register. Patients with coexisting asthma and COPD will be included on the register for both conditions.

The guideline on COPD recommends that all health professionals involved in the care of patients with COPD have access to spirometry and be competent in the interpretation of the results. Quality statement 1 (diagnosis) in the NICE quality standard for COPD in adults\textsuperscript{86}, states that patients with COPD have the diagnosis confirmed by post bronchodilator spirometry carried out on calibrated equipment by healthcare professionals competent in its performance and interpretation.

From April 2011 the diagnostic codes for this indicator were updated to include new codes for post bronchodilator spirometry. The previous codes for reversibility testing will not be acceptable for QOF purposes.

COPD 002.2 Reporting and verification
See indicator wording for requirement criteria.

COPD indicator 003(S)

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 15 months.

COPD 003.1(S) Rationale
COPD is increasingly recognised as a treatable disease with large improvements in symptoms, health status, exacerbation rates and even mortality if managed appropriately. Appropriate management is based on NICE clinical guideline CG101 and international GOLD guidelines in terms of both drug and non-drug therapy.

\textsuperscript{88} Johannessen et al. Thorax 2005; 60(10): 842-847
\textsuperscript{86} NICE quality standard on COPD 2011.
http://www.nice.org.uk/guidance/qualitystandards/chronicobstructivepulmonarydisease/copdqualitystandard.jsp
In making assessments of the patient’s condition as part of an annual review and when considering management changes it is essential that health care professionals are aware of:

1. current lung function.
2. exacerbation history.
3. degree of breathlessness (Medical Research Council (MRC) dyspnoea scale).

A tool such as the Clinical COPD Questionnaire\(^\text{90}\) could be used to assess current health status.

Additionally there is evidence that inhaled therapies can improve the quality of life in some patients with COPD. However, there is evidence that patients require training in inhaler technique and that such training requires reinforcement. Where a patient is prescribed an inhaled therapy their technique is to be assessed during any review.

The MRC dyspnoea scale gives a measure of breathlessness and is recommended as part of the regular review. It is available in the NICE clinical guideline on COPD, section 1.1, diagnosing COPD table one.

**COPD 003.2(S) Reporting and verification**
See indicator wording for requirement criteria.

**COPD indicator 005(S) (NICE 2012 menu ID: NM63)**

The percentage of patients with COPD and Medical Research Council dyspnoea grade ≥3 at any time in the preceding 15 months, with a record of oxygen saturation value within the preceding 15 months.

**COPD 005.1(S) Rationale**
As COPD progresses, patients often become hypoxaemic. Many patients tolerate mild hypoxaemia well, but once the resting partial pressure of oxygen in arterial blood (PaO\(_2\)) falls below 8 KPa patients begin to develop signs of right-sided HF (cor pulmonale), principally peripheral oedema. The prognosis is poor and if untreated the five year survival is less than 50 per cent.

In stable COPD, patients use oxygen therapy for long periods during the day and night. Long-term oxygen therapy can improve survival in patients with COPD who have severe hypoxaemia, where PaO\(_2\) is less than 8 KPa. It can also reduce the incidence of polycythaemia (that is, raised red cell count), reducing the progression of pulmonary hypertension and improving psychological wellbeing.

NICE clinical guideline CG101 recommends that patients with oxygen saturations of 92 per cent or lower when breathing air, be considered for oxygen therapy. Pulse

\(^{90}\) Clinical COPD Questionnaire. [http://www.ccq.nl/](http://www.ccq.nl/)
oximetry (SpO2) provides an estimate of arterial oxygen saturation (SaO2) and is non-invasive.

Pulse oximetry allows practitioners to assess patients' level of oxygen saturation to determine if whether referral for clinical assessment and long-term oxygen therapy is appropriate. Pulse oximetry is a valuable screening tool for identifying patients who are appropriate for referral for long-term oxygen therapy. A normal pulse oximetry reading (SpO2 greater than 92 per cent) can reliably identify patients who do not need referral. However, pulse oximetry cannot predict which patients with an abnormal reading (SpO2 of 92 per cent or lower) have sufficiently severe hypoxaemia to require long-term oxygen therapy, therefore these patients require further assessment.

COPD 005.2(S) Reporting and verification
See indicator wording for requirement criteria.

The Business Rules require that a record that pulse oximetry has been performed AND the resulting oxygen saturation value are recorded to meet the requirements for this indicator.

COPD indicator 007(S)
The percentage of patients with COPD who have had influenza immunisation in the preceding 1 August to 31 March.

COPD 007.1(S) Rationale
This is a current recommendation from the CMO and the JCVI.

Further information

COPD 007.2(S) Reporting and verification
See indicator wording for requirement criteria.
Appendix 1: Nurse involvement in COPD Clinics

Skill levels for delivering high quality respiratory care by nurses in primary care, as recommended by the PCRS/UK.

Minimum level where the patient is managed and followed up by the GP

- Respiratory patients seen by this nurse or AHP already have a diagnosis made
- Routine review may be undertaken where inhaler technique, spirometry are checked
- A basic understanding of the disease process is required
- Basic history taking as per recognised respiratory template
- Checking concordance with prescribed medication
- Smoking status and cessation advice where appropriate – refer to specialist smoking cessation service as required
- Problem identification and referral

Training needs

- In house training
- Local study evenings in COPD and smoking cessation
- Basic COPD workshop
- Basic smoking cessation workshop

Medium level where patient is cared for jointly by the GP and the practice nurse

As for minimum involvement plus:

- Take a basic respiratory history
- Carry out diagnostic procedures such as spirometry and reversibility testing
- Update the COPD register
- Establish a regular follow up procedure for COPD patients
- Provide basic information and advice on diet and exercise

Training needs

- Spirometry training – caring for equipment, achieving technically acceptable results and basic interpretation
- An assessed diploma level course in COPD management

Maximum level where the patient is managed and followed up by the nurse, with GP support and advice

As for medium involvement plus:

- Take a full respiratory history
- Perform a basic examination of the patient to assess for hyperinflation, central cyanosis and oedema
- Be able to recognise abnormal spirometry
- Suggest further investigations – chest X-ray, ECG, full blood count
- Assess disability and handicap
- Instigate therapeutic trials and evaluate their effectiveness
- Prescribe appropriate therapeutic regimes in accordance with Fife Formulary COPD Guidelines and national guidelines (Independent/Supplementary Nurse Prescribers only)
- Assess need for pulmonary rehabilitation and refer/instigate as necessary
- Advise patients on self management
- Liaise with other appropriate health professionals
- Provide regular follow-up and support for patients and their families

Training needs

- Spirometry interpretation course
- Assessed COPD training – preferably at degree level

Adapted from: Chronic Obstructive Pulmonary Disease, Degree Module. 6th Edition. Education for Health, formerly National Respiratory Training Centre. Unit 10
## Annual Respiratory Review

### Date of Review:

**Name:**

**DOB/CHI:**

**Sex:**

**Address:**

**Tel:**

**GP:**

### Breathlessness and Exercise Tolerance

MRC Dyspnoea Score: 1 2 3 4 5 (previous score = )

Exercise Tolerance: Same/ better/ worse  

Exercise advice given: Yes/No

Comments:

### Health Status

Current Screen Score:  

Previous Screen Score:  

Comments:

HADS necessary: Yes/No  

Score =  

Action Necessary: Refer to GP/No

### Exacerbations

No of antibiotic courses:

No of steroid courses: Yearly total dose of steroids:

No of GP appts:

No of GP home visits:

No of Out of Hours appts:

No hospital admissions:

No of bed days:

No of OPD appts:

### Current Respiratory Medication

Inhaler Technique Checked: Yes  No  Good/ Moderate/ Needs attention

Change To Medication Necessary: Yes  No  Comments:

Necessary to check U&E's: Yes/No  If so: Taken now / refer to P/N

### Smoking

Current Smoker: Yes/No/Ex  Date stopped:  

Smoking Quit Status:

Cessation Advice Given: Yes/No

### Spirometry

**Previous:** (actual & %)  

**FEV₁**  

**FVC**  

**VC**

**Current Actual:**  

(In Litres)  

**FEV₁**  

**FVC**  

**VC**

**% Predicted:**  

**FEV₁**  

**FVC**  

**VC**
### NUTRITIONAL STATUS
- Height: 
- Weight: 
- BMI: 
- Weight Loss In Last Year: Yes/ No/ Intentional
- Referral to Dietitian Necessary: Yes/No
- Dietary Advice Given: Yes/No Verbal/ Written
- Comments:

### VACCINATIONS
- Flu Vac in last year: Yes/No Date
- Pneumo Vac: 
- If no to above - flu vac given: Yes/No/Declined Date:

### OXYGEN THERAPY
- SaO$_2$ measured: Yes/No Figure: %
- Referral for Assessment for LTOT necessary (SaO$_2$ ≤92%): Yes/No Comments:

### OTHER SPECIALIST REFERRAL
- Referral to Pulmonary Rehab necessary: Yes/No Comments:
- Referral to Active Options: Yes/No Comments:
- Referral to Chest Clinic necessary: Yes/No Comments:
- Referral to Occupational Therapy necessary: Yes/No Comments:
- Referral to Social Services necessary: Yes/No Comments:

### FOLLOW UP
- Next surgery appt due: 
- Attends Chest Clinic: Yes/No Date of next appt: 

### ADDITIONAL INFORMATION
Fold back this page before administering this questionnaire

INSTRUCTIONS FOR USE
for doctor or healthcare professional use only

PHQ-9 QUICK DEPRESSION ASSESSMENT

For initial diagnosis:

1. Patient completes PHQ-9 Quick Depression Assessment on accompanying tear-off pad.
2. If there are at least 4 ✓/s in the blue highlighted section (including Questions #1 and #2), consider a depressive disorder. Add score to determine severity.

3. Consider Major Depressive Disorder
   —if there are at least 5 ✓/s in the blue highlighted section (one of which corresponds to Question #1 or #2)

   Consider Other Depressive Disorder
   —if there are 2 to 4 ✓/s in the blue highlighted section (one of which corresponds to Question #1 or #2)

Note: Since the questionnaire relies on patient self-report, all responses should be verified by the clinician and a definitive diagnosis made on clinical grounds, taking into account how well the patient understood the questionnaire, as well as other relevant information from the patient. Diagnoses of Major Depressive Disorder or Other Depressive Disorder also require impairment of social, occupational, or other important areas of functioning (Question #10) and ruling out normal bereavement, a history of a Manic Episode (Bipolar Disorder), and a physical disorder, medication, or other drug as the biological cause of the depressive symptoms.

To monitor severity over time for newly diagnosed patients or patients in current treatment for depression:

1. Patients may complete questionnaires at baseline and at regular intervals (e.g., every 2 weeks) at home and bring them in at their next appointment for scoring or they may complete the questionnaire during each scheduled appointment.
2. Add up ✓/s by column. For every ✓: Several days = 1 More than half the days = 2 Nearly every day = 3
3. Add together column scores to get a TOTAL score.
4. Refer to the accompanying PHQ-9 Scoring Card to interpret the TOTAL score.
5. Results may be included in patients’ files to assist you in setting up a treatment goal, determining degree of response, as well as guiding treatment intervention.

PHQ-9 SCORING CARD FOR SEVERITY DETERMINATION
for healthcare professional use only

Scoring—add up all checked boxes on PHQ-9

For every ✓: Not at all = 0; Several days = 1; More than half the days = 2; Nearly every day = 3

<table>
<thead>
<tr>
<th>Interpretation of Total Score</th>
<th>Total Score</th>
<th>Depression Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>5-9</td>
<td>Mild depression</td>
<td></td>
</tr>
<tr>
<td>10-14</td>
<td>Moderate depression</td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>Moderately severe depression</td>
<td></td>
</tr>
<tr>
<td>20-27</td>
<td>Severe depression</td>
<td></td>
</tr>
</tbody>
</table>
### Paul Jones ‘5 Questions’

<table>
<thead>
<tr>
<th>Questions</th>
<th>Y/N</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has your treatment made a difference to you?</td>
<td></td>
<td>How?</td>
</tr>
<tr>
<td>Is your breathing easier in any way?</td>
<td></td>
<td>How?</td>
</tr>
<tr>
<td>Can you do some things now that you couldn’t do at all before, or do the same things faster?</td>
<td></td>
<td>What?</td>
</tr>
<tr>
<td>Can you do the same things as before, but are you now less breathless when you do them?</td>
<td></td>
<td>What?</td>
</tr>
<tr>
<td>Has your sleep improved?</td>
<td></td>
<td>How much?</td>
</tr>
</tbody>
</table>

ref: Jones PW. Thorax 2001: 56: 880-887

### COPD Assessment Tool

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