3.19 THE CLINICAL EXAMPLE ON
Respiratory Health

This statement is part of the curriculum produced by the Royal College of General Practitioners (RCGP) which defines the learning outcomes for the discipline of general practice and describes the skills you require to practise medicine as a general practitioner in the National Health Service (NHS) of the United Kingdom. Although primarily aimed at the start of independent work as a general practitioner, it must also prepare the doctor beyond the training period and provide support for a professional life of development and change.
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key messages</td>
<td>3</td>
</tr>
<tr>
<td>Case illustration</td>
<td>4</td>
</tr>
<tr>
<td>Learning outcomes</td>
<td>7</td>
</tr>
<tr>
<td>The RCGP areas of competence</td>
<td>7</td>
</tr>
<tr>
<td>1 Primary care management</td>
<td>7</td>
</tr>
<tr>
<td>2 Person-centred care</td>
<td>7</td>
</tr>
<tr>
<td>3 Specific problem-solving skills</td>
<td>8</td>
</tr>
<tr>
<td>4 A comprehensive approach</td>
<td>8</td>
</tr>
<tr>
<td>5 Community orientation</td>
<td>8</td>
</tr>
<tr>
<td>6 A holistic approach</td>
<td>9</td>
</tr>
<tr>
<td>The essential features of you as a doctor</td>
<td>9</td>
</tr>
<tr>
<td>1 Contextual features</td>
<td>9</td>
</tr>
<tr>
<td>2 Attitudinal features</td>
<td>10</td>
</tr>
<tr>
<td>3 Scientific features</td>
<td>10</td>
</tr>
<tr>
<td>Learning strategies</td>
<td>11</td>
</tr>
<tr>
<td>Learning resources</td>
<td>12</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>15</td>
</tr>
<tr>
<td>KEY MESSAGES</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>• Respiratory diseases are amongst the most common long-term conditions affecting patients in the UK</td>
<td></td>
</tr>
<tr>
<td>• The identification, assessment, diagnosis and treatment of most respiratory diseases is a primary care issue</td>
<td></td>
</tr>
<tr>
<td>• Socio-economics, ethnicity, age and gender have a significant impact on both the development of respiratory disease and its impact</td>
<td></td>
</tr>
<tr>
<td>• The impact of respiratory disease on patients, families, health services and society is significant</td>
<td></td>
</tr>
<tr>
<td>• When dealing with respiratory patients there are key skills you need as a general practitioner (GP) to interpret investigations, identify co-morbidity and effectively manage resources</td>
<td></td>
</tr>
<tr>
<td>• Respiratory disease affects patients of all ages. It also brings specific challenges in the diagnosis and treatment of various groups including children, some occupational and ethnic groups, those with social and mental health challenges, and those nearing the end of their life</td>
<td></td>
</tr>
</tbody>
</table>
CASE ILLUSTRATION

Mrs Evelyn James is a 49-year-old woman who presents in your surgery complaining of increasing breathlessness over the past year. She is a smoker, having started smoking when she was 15 years old, although she gave up during her three pregnancies. She usually smokes one pack of cigarettes per day. She works part-time as a spinner in a local textile mill and is the primary carer for her mother, who has emphysema.

On further discussion, she describes deteriorating dyspnoea, to the point where she can no longer keep up with her husband when walking on the flat. She has also had chest infections during the last two winters, for which she received antibiotic treatment. During these events she had increasing breathlessness and mucopurulent sputum production. On examination you assess her cardiorespiratory system, as well as looking for peripheral signs of respiratory disease. You find that she has a BMI of 31, normal cardiovascular signs, but widespread low-pitched rhonchi throughout both lung fields. She has no lymphadenopathy. Her peak expiratory flow rate (PEFR) is 200 litres per minute and her pulse oximetry (SpO₂) is 95%. You arrange for your practice nurse to perform spirometry, which shows acceptable technical quality and an obstructive FEV₁/FVC ratio of 61%, and an FEV₁ of 49% against predicted. Her chest x-ray reports that the heart is enlarged and the lung fields are hyperinflated, with widespread signs of airways inflammation consistent with chronic bronchitis. There are no obvious focal lesions.

On the basis of your findings so far, you confirm a diagnosis of chronic obstructive pulmonary disease (COPD). You discuss her treatment options with the practice nurse, who also sees Mrs James and later confirms that the patient’s inhaler technique with the two devices you propose to give her is satisfactory. Mrs James says she is hoping to stop smoking with the help and support offered to her.

When you review Mrs James three months later, she tells you she hasn’t smoked since last seen and describes some improvement in managing activities of daily living, although she is still too breathless to keep up with her friends when out walking. You decide to refer her for pulmonary rehabilitation at the local community centre.

The next winter, Mrs James is brought to the surgery by her husband. She is distressed, breathless, cyanosed and tachycardic, with an SpO₂ of 89%, having been unwell for the previous five days. Her husband tells you she didn’t want to bother anyone and thought she could ride out this episode using her inhalers. You admit her to hospital, where she does very well, returning home with the support of the Hospital at Home team and the practice-attached community nurses.
To help you understand how the GP curriculum can be applied to this case, ask yourself the following questions:

<table>
<thead>
<tr>
<th>Category</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care management</td>
<td>What specific knowledge of clinical assessment and data interpretation do I need for managing patients with respiratory disease? What are the specific indications for the various treatments and how can I monitor their effectiveness?</td>
</tr>
<tr>
<td>Person-centred care</td>
<td>On what occasions in Mrs James’ case could her worries and responsibilities have been addressed, and by whom? What is the role of self-management in respiratory disease?</td>
</tr>
<tr>
<td>Specific problem-solving skills</td>
<td>What elements of the primary care assessment and treatment of patients with respiratory disease are unique to this group of patients? What clinical skills do I need to assess different patients with respiratory disease including children, the elderly and those with mental health problems?</td>
</tr>
<tr>
<td>A comprehensive approach</td>
<td>What are the common co-morbidities associated with respiratory disease? How do co-morbidities or systemic problems impact on respiratory illness or its treatment? What impact does the patient’s lifestyle, ethnicity, education and occupation have on their respiratory health and their future treatment?</td>
</tr>
<tr>
<td>Community orientation</td>
<td>What is the impact of health and social inequality on respiratory disease, its prevalence, diagnosis, prognosis and treatment? What support services might be available to Mrs James and her carers? What is the relevance of social, ethnic and gender issues to the prevention and treatment of respiratory disease, in particular smoking and inhaler use? How does Mrs James’ smoking impact on the services she needs, and where they are provided?</td>
</tr>
<tr>
<td>A holistic approach</td>
<td>What is the impact of respiratory disease on patients, physically, psychologically and socially (including occupation and employability)? What impact does respiratory disease have on families?</td>
</tr>
<tr>
<td>Contextual features</td>
<td>What are the challenges facing me as a GP in delivering effective care in this case? What support for patients with significant respiratory disease can I access and from where?</td>
</tr>
<tr>
<td>Attitudinal features</td>
<td>What are my personal feelings about smoking-related illnesses? If health inequality, occupation, smoking and illicit drug use influence respiratory illness, and its treatment, how does patient autonomy influence my joint decision-making?</td>
</tr>
<tr>
<td>Scientific features</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>What is the evidence base for the early identification of patients with chronic lung disease and subsequent health education or therapeutic interventions?</td>
<td></td>
</tr>
<tr>
<td>At what stages of disease progression and patient symptoms do additional treatments come in?</td>
<td></td>
</tr>
<tr>
<td>What is the role of the generalist and the specialist in diagnosis and management?</td>
<td></td>
</tr>
</tbody>
</table>
LEARNING OUTCOMES

The following learning outcomes or objectives relate specifically to the management of respiratory health. These learning outcomes are in addition to those detailed in the core statement, Being a General Practitioner. In order to demonstrate the core competences in the area of respiratory health, you will require knowledge, skills and attitudes in the following areas:

The RCGP areas of competence

1 Primary care management

This area of competence is about how you manage your contact with patients, dealing competently with any and all problems that are presented to you. (This area of competence is not limited to dealing with the management of the practice.)

This means that as a GP you should:

1.1 Be able to function as both diagnostician and respiratory team leader
1.2 Know the diagnostic and treatment guidelines for common respiratory diseases (asthma, COPD, lung cancer) in primary care
1.3 Know the boundaries of primary care management and the role of specialist services in supporting the patient

2 Person-centred care

This area of competence is about understanding and relating to the context of your patients as individuals, and developing the ability to work in partnership with them.

This means that as a GP you should:

2.1 Understand the potential impact of the patient’s family history, lifestyle and occupation on the subsequent development of respiratory disease
2.2 Explain, encourage and support self-management strategies for different respiratory diseases, according to the differing wishes and expectations of patients
2.3 Be able to explain to patients (and their carers) why they are breathless, the progression of their disease, benefits and limitations of treatments and how to recognise and treat exacerbations
2.4 Recognise the risk of co-morbid mental health problems in people with long-term respiratory problems, such as asthma and COPD, and the effect of these on morbidity and mortality
3 Specific problem-solving skills

This area of competence is about the context-specific aspects of general practice, dealing with early and undifferentiated illness and the skills you need to tolerate uncertainty, and marginalise danger, without medicalising normality.

This means that as a GP you should:

3.1 Know the key points in your history-taking and examination with respect to specific respiratory diseases, e.g. in relation to occupation, smoking, ‘red flag’ symptoms, family history, clubbing, lymphadenopathy
3.2 Know how to interpret lung function measurements as performed in primary care, e.g. peak expiratory flow (PEF), spirometry, pulse oximetry, and know the expected impact of bronchodilators on such measurements
3.3 Ensure that patients can use the inhaled medication they are prescribed, both routinely and in an emergency

4 A comprehensive approach

This area of competence is about how you as a general practitioner must be able to manage co-morbidity, co-ordinating care of acute illness, chronic illness, health promotion and disease prevention in the general practice setting.

This means that as a GP you should:

4.1 Understand the importance of lifestyle changes (particularly smoking) and pulmonary rehabilitation
4.2 Recognise the impact of co-morbidity such as muscle wasting, osteoporosis, anxiety, cardiovascular disease or bronchiectasis

5 Community orientation

This area of competence is concerned with the physical environment of your practice population, and the need to understand the interrelationship between health and social care, and the tensions that may exist between individual wants and needs and the needs of the wider community.

This means that as a GP you should:

5.1 Understand the current population trends for lung disease with respect to age, ethnicity, occupation and socio-economic status
5.2 Know about the support available to your patient and their carers from health, social services and specific respiratory charities (see also Web Resources below)
5.3 Appreciate the importance of exercise, and the benefits of peer group support in all types of lung disease
6 A holistic approach

This area of competence is about your ability to understand and respect the values, culture, family structure and beliefs of your patients, and understand the ways in which these will affect the experience and management of illness and health.

This means that as a GP you should:

- 6.1 Seek to identify patients who, for complex personal reasons, often tend to present late in the progress of their condition
- 6.2 Be able to support patients who perceive that they have brought their illness upon themselves
- 6.3 Help patients whose illness can have a significant impact on their life choices
- 6.4 Be able to support patients with different cultural or ethnic perceptions of what are acceptable forms of treatment (e.g. inhalers)\(^1\)

The essential features of you as a doctor

The three essential features (EFs) below are concerned with the features of you as a doctor that may influence your ability to apply the core competences to real life in the work setting.

EF1 Contextual features

This essential feature is about understanding your own context as a doctor and how it may influence the quality of your care. Important factors are the environment in which you work, including your working conditions, community, culture, financial and regulatory frameworks.

Examples of this are:

- EF1.1 Your surgery’s location, parking, appointment times, stairs and the impact this has for the way you work with these patients

\(^1\) Davidson E, Liu JJ, Sheik A. The impact of ethnicity on asthma care Primary Care Respiratory Journal 2010; 19(3): 202–08. This is a superb review article specifically about asthma and ethnicity that also makes reference to the relevant sections of the Global Initiative for Asthma (GINA) guidelines and to some Cochrane reviews
**EF2 Attitudinal features**

This essential feature is about your professional capabilities, values, feelings and ethics and the impact these may have on your patient care.

Examples of this are:
- **EF2.1** Your attitude towards ‘lifestyle’ disease and towards diseases where interventions may have real but limited benefit
- **EF2.2** Your own experience of respiratory symptoms or disease

**EF3 Scientific features**

This essential feature is about the need to adopt a critical and evidence-based approach to your work, maintaining this through lifelong learning and a commitment to quality improvement.

Examples of this are:
- **EF3.1** The evidence base for different respiratory diseases and for different parts of the care pathway
- **EF3.2** The difficulties of blinded research using inhaled agents
- **EF3.3** The evidence base that demonstrates the impact of culture and beliefs on the management of respiratory problems
LEARNING STRATEGIES

Work-based learning – in primary care and secondary care

As a GP specialty trainee, the principal component of your work-based learning around respiratory disease involves meeting, assessing and helping to manage patients with respiratory disease. Learning from the training team, and specifically from the respiratory lead GP and practice nurse, as well as colleagues within the practice is also important.

Specific learning around the performance and interpretation of lung function testing, as commonly performed in general practice, should reflect the needs and responsibilities of the generalist, and should cover:

- patient selection and preparation
- health and safety
- infection control
- equipment selection and calibration
- interpretation of results for validity and clinical patterns
- the role of bronchodilators in lung function testing
- the limits of lung function assessment in patient management, and the value of other available patient-related outcome measures.

With respect to patients with respiratory disease, the modern GP should learn the roles and responsibilities of the primary care team, in its widest sense, including community staff and secondary care outreach, charities and self-help groups, physiotherapists and exercise trainers. In addition, as the impact of the patient’s environment on their disease and their ability to manage it effectively is important, you will find it useful to visit schools and workplaces.

You should understand the importance of organising care within the practice for both acute and chronic presentations, as well as the risks and benefits of ‘at risk registers’ and the tools needed to provide effective 24-hour care for patients. You should also look for opportunities to learn from local respiratory consultants, physiotherapists and multidisciplinary groups.

Non-work-based learning

There are a number of disease-specific learning modules available for learning about respiratory disease from organisations such as RCGP online learning, Education for Health and Respiratory Education UK. These include updates, diplomas and degree modules.

Other organisations offering education and support include: Asthma UK, British Lung Foundation, British Society of Allergy and Clinical Immunology, British Thoracic Society, and the Primary Care Respiratory Society UK. (See Web Resources below for further information on all these organisations.) Look out too for the range of clinical conferences, both regionally and nationally, that offer clinical education and the opportunity to present your own work.
LEARNING RESOURCES

Examples of relevant texts and resources


Web resources

British Society of Allergy and Clinical Immunology
Professional society of allergy and clinical immunology specialists, dedicated to improving allergy management.
www.bsaci.org

British Thoracic Society (BTS)
For guidelines on the management of asthma.
www.brit-thoracic.org.uk/guidelines/asthma-guidelines.aspx
For guidelines on emergency oxygen use in patients (2008).
For BTS/Society of Cardiothoracic Surgeons (SCTS) guidelines on the radical management of patients with lung cancer (quick guide).
www.brit-thoracic.org.uk/Portals/0/Guidelines/Lung%20Cancer/Guidelines/LungCancerQRG.pdf

Charitable organisations
Asthma UK
The Asthma UK website provides a wealth of information and resources about asthma.
www.asthma.org.uk
British Lung Foundation
The aims of the British Lung Foundation include supporting people affected by lung disease and promoting greater understanding of lung disease.
www.lunguk.org

Chest Heart & Stroke Scotland (CHSS)
The Chest Heart & Stroke Scotland website provides a range of resources for healthcare professionals.
www.chss.org.uk

Education for Health
Education for Health is a charity focusing on the education of health professionals as a key factor in improving patient health and quality of life. They are a specialist provider of pioneering cardiovascular and respiratory education and training courses.
www.educationforhealth.org

Healthcare Improvement Scotland (HIS) Standards for COPD and Children’s Asthma Scotland
Healthcare Improvement Scotland COPD Service: Standards and Evaluation.
www.healthcareimprovementscotland.org/programmes/long_term_conditions/copd_implementation/copd_service_standards.aspx
Healthcare Improvement Scotland Asthma Services for Children and Young People: Standards and Evaluation.
www.healthcareimprovementscotland.org/previous_resources/standards/asthma_services_for_children_a.aspx

National Institute for Health and Care Excellence (NICE)
NICE guidance on chronic obstructive pulmonary disease (update), CG101.
http://guidance.nice.org.uk/CG101

Primary Care Respiratory Society
The Primary Care Respiratory Society UK (PCRS-UK) represents primary care health professionals interested in delivering the best standards of respiratory care. The website includes a range of resources.
www.pcrs-uk.org

Respiratory Education UK
Respiratory Education UK (REUK) is an educational charity promoting excellence in respiratory care for patients and professionals across both primary and secondary care settings.
www.respiratoryeduk.com
Online course in respiratory health
This comprehensive e-learning course, developed in partnership with the Primary Care Respiratory Society and Education for Health, has been designed to cover many of the key outcomes and primary care topics identified in this curriculum statement, including the assessment and investigation of patients with respiratory symptoms, the diagnosis and management of commonly encountered conditions such as asthma and COPD, and the role of the GP in the management of less common respiratory conditions. It is available on the RCGP Online Learning Environment (OLE).

www.elearning.rcgp.org.uk/respiratory

Respiratory care resources
This section of the website includes resources to support care of patients with respiratory disease.

www.rcgp.org.uk/clinical-and-research/clinical-resources/respiratory-care.aspx
ACKNOWLEDGEMENTS

This curriculum statement is based on the original statement 15.8 Respiratory Problems in the 2007 version of the RCGP Curriculum. It has drawn on various national guidelines and policies, current research evidence and the expertise and clinical experience of practising general practitioners.

The authors and contributors of this version of the statement are:

Authors:        Dr Iain Small
Editors:        Dr Frances Peck, Dr Charlotte Tulinius
Date of this version: May 2014

The 2007 version of the statement and subsequent updates can be found on the RCGP website. The Royal College of General Practitioners would like to express its thanks to all the individuals and organisations who have contributed so generously to past and present versions of this statement.