

IPCRG Users' Guide to COPD "Wellness" Tools

As well as being a lung disease, chronic obstructive pulmonary disease (COPD) is an illness with complications that are experienced in different ways by patients. There are over 80 tools that have been developed to measure different aspects of COPD. This users' guide reviews nine of the more than 42 tools that measure the illness or wellness experience of the patient with COPD. It includes tools that measure health status or quality of life as well as tools that measure COPD features such as dyspnoea and breathing problems.

It has been produced by the International Primary Care Respiratory Group (IPCRG) as a practical guide for healthcare professionals working in their everyday clinical practice rather than for academic research use. Another guide which is currently in preparation contains the tools for assessing the disease severity and the third guide in the series will contain tools that measure associated features such as depression in COPD.

In the "Wellness in COPD" tool table/grid (see page 2), there are nine tools named on the left that we, as international primary care clinicians, judged likely to be most useful in routine management of our patients with COPD. Each of the vertical columns refers to a desirable criterion for choosing a wellness tool for use in primary care. How each tool performs for that criterion is shown by the "smiley face" in that square. (The key for the faces is given above the grid.)

These criteria are:

1. **Validity/Reliability:** Does this tool have face and content validity – has it been shown to actually measure what it is designed to measure? Is it sufficiently reliable?
2. **Responsive:** Is it adequately responsive to changes in the patient's condition – does it indicate deterioration when the patient's condition deteriorates clinically?
3. **Primary Care Population:** Is it applicable to a primary care population that includes people with the full range of mild to very severe COPD?
4. **Practical/Easy to Administer:** Is it practical for daily clinical assessment? Does it have scores that are easy to use for reassessment in follow-up? Is it easy to use by interview or telephone? Can it be self-completed in the waiting room, by post or e-mail? Is it sufficiently economical of time to be used in daily practice?
5. **Tested in Practice:** Have the IPCRG authors of this review used the tools in their practice – what was their experience? Is it applicable in daily primary care clinical practice? Is it easy to complete within a routine primary care consultation?
6. **Other languages:** Has it been translated and validated in other languages? Is it easy for busy clinicians to find those translations in websites?

Time to complete the tools was considered extremely important, and has been taken into consideration and incorporated in criterion four.

Which tool to select?

Depending on which criterion is most important for your particular need at the time of choosing, the guide will assist your choice. We did not weight these criteria but you could do that. You are advised to read the notes at the bottom of the table before choosing your tool. With this guide our intention is to give suggestions but not recommendations on tools. The purpose is to offer the reader our analysis of what could be considered by a practising clinician, and of how the tools perform against a set of criteria.

In the notes on each of the tools provided on pages 3 and 4, there is information on where to obtain the tools and conditions for using them.

For further information, please see: www.theipcr.org/resources/resources_copd.php



The International Primary Care Respiratory Group (IPCRG) is a charity registered in Scotland working internationally (SC No: 035056) and a company limited by guarantee (Company number 256268)

Authors: Drs Andrew Cave and Ioanna Tsiligianni with contributions from the IPCRG Research Network including Drs Niels Chavannes, Jaime Correia de Sousa and Hakan Yaman.




























































Researcher: Lana Atkinson

Editors: Lynn Danzig and Dr Hilary Pinnock

Date tools last reviewed: May 2010

Date of publication: September 2010

"Wellness in COPD" tool table/grid

KEY						
 Very poor	 Not good enough, if this criterion is important	 Good enough	 Recommended	 Highly recommended		
Tool/ Criteria	Validity/ Reliability	Responsive	Primary Care Population	Practical/ Easy to Administer	Tested in Practice	Other Languages
AQ20						
BPQ-S						
CARS						
CAT						
CCQ						
CRQ						
MRC-D						
RIQ-MON10						
SGRQ						

All of the tools reported above need no training or equipment to complete. Some questionnaires require you to request permission before you use them, and some may be subject to charges. Unless specified, please contact the authors if you wish to use any of these tools in your routine practice or for research. We have provided email addresses correct at the time of printing.

Tool Description and Limitations

AIRWAYS QUESTIONNAIRE (AQ20)

Correlates well with SGRQ and has only 20 items (yes/no). Short and easy to complete in 2 minutes. Useful in a clinical setting. Self-administered. Responds to changes, less discriminating in mild COPD. Spanish and Japanese versions available. High score indicating poor QOL.

Where you can get this tool:

Professor Paul Jones, Professor of Respiratory Medicine, Head of Division of Clinical Sciences, St. George's University of London. Email: pjones@sgul.ac.uk

See also: Yvonne Forde, Academic Secretary, Cardiac and Vascular Sciences, St. George's University of London. Email: yforde@sgul.ac.uk

Cost/Conditions of use:

Permission must be obtained from the authors.

For more information, see American Thoracic Society at:

<http://qol.thoracic.org/sections/instruments/ae/pages/airquest.html>

BREATHING PROBLEMS QUESTIONNAIRE - SHORT (BPQ-S)

Short form of the BPQ. Not COPD specific. Self-administered, used in mild to moderate COPD. The BPQ-S is more discriminating for COPD than the longer form.

Where you can get this tool:

M.E. Hyland at: mhyland@plymouth.ac.uk. For a direct link to the questionnaire, visit:

<http://www.psy.plymouth.ac.uk/research/mhyland/> or

<http://www.psy.plymouth.ac.uk/research/mhyland/bpq.pdf>

Cost/Conditions of use:

Permission must be obtained from the authors.

COPD ACTIVITY RATING SCALE (CARS)

Measures life-related activities in COPD. Validity and reliability tested but discriminating power not tested. 4 factors (self-care, domestic activities, outdoor activities and social interaction) with 12 items. Easy three-point scale. Limited literature/studies available. Higher scores indicate less impairment.

Where you can get this tool:

Michiko Morimoto, Faculty of Health Science, Okayama University Medical School, 5-2-1 Sikata-cho Okayama-shi, Okayama 700-8558, JAPAN. Email: mmichiko@md.okayama-u.ac.jp

Cost/Conditions of use:

Permission must be obtained from the authors.

For more information, see American Thoracic Society at:

<http://qol.thoracic.org/sections/instruments/ae/pages/cars.html>

COPD ASSESSMENT TEST (CAT)

Short, simple questionnaire for monitoring long-term follow-up of COPD. Aimed at primary care practice. Validated in 3 international studies. 8 items, six-point scale, responds to exacerbations. Self-administered. Covers a wide range of symptoms. Not been widely used yet as only published in 2009. Available in many translations, although not all validated. Total score can be calculated on the website. Higher scores represent worse health.

Where you can get this tool:

<http://www.catestonline.org/>

Cost/Conditions of use:

Free for use by professionals and patients in daily clinical practice. It requires permission if organisations wish to use it for academic or commercial use or other professional reasons.

CLINICAL COPD QUESTIONNAIRE (CCQ)

Well validated and reliable. Responds to stopping smoking and detects mild from moderate and severe states. Measures functional and mental capacities as well as symptoms. Specific to COPD, as it measures COPD-related health status. Self-administered in daily practice. 10 items on previous week's symptoms are easy to apply. Also available in a 24h version. Practical and widely used. More than 53 translations: not all are validated. Higher scores represent worse health.

Where you can get this tool:

www.ccq.nl

Cost/Conditions of use:

The use of the questionnaire in daily clinical practice is free of charge. Copyright: not to be altered, sold, translated, and used in international research without the approval of the author.

Tool Description and Limitations

<p>CHRONIC RESPIRATORY DISEASE QUESTIONNAIRE (CRQ)</p>	<p>Well validated and reliable in testing. Responds to changes over time and long-term use as well as changes in condition after Emergency Department treatment of exacerbations. 20 items, 4 domains: Dyspnoea, fatigue, emotional function, mastery. Has been used by interviewer, telephone or self-administered. Many translations. Higher scores indicate better health-related quality of life.</p> <p>Where you can get this tool: Contact for all matters relating to the CRQ is Mr Sunita Asrani: Email: asranis@mcmaster.ca</p> <p>Cost/Conditions of use: Permission must be obtained from the authors. For more information and to request permission and use: http://milo.mcmaster.ca/questionnaires/qol-request</p>
<p>MEDICAL RESEARCH COUNCIL, DYSPNOEA (MRC-D)</p>	<p>Widely used to assess how symptom (dyspnoea) limits activities of daily living. Well validated. Five simple items but ONLY measures dyspnoea, not other outcomes. Portuguese version validated in Brazil.</p> <p>Where you can get this tool: For online access, visit: http://www.nice.org.uk/usingguidance/commissioningguides/pulmonaryrehabilitationserviceforpatientswithcopd/mrc_dyspnoea_scale.jsp Since this is a long link, you may need to re-type it to ensure the link is not broken.</p> <p>Cost/Conditions of use: Information not available.</p>
<p>10 ITEM RESPIRATORY ILLNESS QUESTIONNAIRE - MONITORING (RIQ-MON10)</p>	<p>A reduced tool from the 55 item QoL RIQ tool. Well-validated against SF-36 and MRC scales. Sensitive to change in stable and improving mild to moderate patients. 2 factors (physical + emotional complaints and physical + social limitations) five items each. Not COPD specific. Tested in primary care.</p> <p>Where you can get this tool: J.E. Jacobs. Radboud University Medical Centre, 114 IQ healthcare, PO Box 9101, 6500 HB Nijmegen, The Netherlands. Email: j.jacobs@iq.umcn.nl</p> <p>Cost/Conditions of use: Permission should be obtained from the authors.</p>
<p>ST. GEORGE'S RESPIRATORY DISEASE QUESTIONNAIRE (SGRQ)</p>	<p>The most widely used quality-of-life instrument in the literature especially the "symptoms" domain that can be used alone. Compares to the AQ20 and CRQ. A gold standard but long, not simple enough for daily use. It takes 8-10 minutes to be completed. Scores are calculated for three domains: symptoms, activity and impact (psychosocial), and also for total score. Telephone or self-administered. Sensitive to changes in the patient's condition. Many translations. Not COPD specific. Scores range from 0 to 100, with higher scores indicating poor health.</p> <p>Where you can get this tool (and the spreadsheet needed to calculate the score) Professor Paul Jones, Professor of Respiratory Medicine, Division of Physiological Medicine, St. George's Hospital Medical School, London SW17 0RE, United Kingdom Email: pjones@sghms.ac.uk</p> <p>See also: Yvonne Forde, Academic Secretary, Cardiac and Vascular Sciences, St. George's University of London. Email: yforde@sgul.ac.uk For direct access, visit: http://www.healthstatus.sgul.ac.uk</p> <p>Cost/Conditions of use: No cost for use. Copyrighted, permission required. For more information, see American Thoracic Society at: http://qol.thoracic.org/sections/instruments/pt/pages/george.html</p>