

EDITORIAL

Translating guidelines into community practice: signs and symptoms are not enough

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***Barbara Yawn^a**

^a Director of Research, Olmsted Medical Center and Adjunct Professor, Department of Family and Community Health, University of Minnesota

***Correspondence:**

Professor Barbara Yawn,
Director of Research,
Olmsted Medical Center, and
Adjunct Professor, Department of
Family and Community Health,
University of Minnesota,
210 Ninth St SE,
Rochester, MN 55904
USA
Tel: +1 507 287 2758
Fax: +1 507 287 2722
E-mail: BYawn@olmmed.org

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Few guidelines provide sufficient information or tools to allow recommendations to be implemented immediately into everyday practice. In this issue of the *PCRJ*, Upton and colleagues¹ highlight the gap in the various national and international COPD guidelines (www.thoracic.org/clinical/copd-guidelines/resources/copddoc.pdf and www.copdgold.com). They attempt to provide additional guidance for the modification of treatment for people whose COPD is gradually progressing, a decision physicians make regularly with limited guidance. In translating evidence from bench to bedside to guideline to community practice, guideline developers often fail to consider the final step. Publishing a 400- or even a short 20-page document of recommendations is not enough; guidelines must be accompanied by tools to incorporate recommendations into daily practice.²⁻⁵ Upton *et al.*'s paper is among the small group of publications to address the gap from guidelines to community practice – the major strength of their study.

The authors chose to tackle the gap using the Delphi method.¹ Developed in the 1950s by the RAND Corporation (not the Delphi Oracle...), this method was devised for making predictions in topics with limited evidence and seems appropriate for this work. (http://www.unido.org/fileadmin/import/16959_DelphiMethod.pdf). Three rounds of linked surveys were used with feedback to experts after each round. The outcome is a list of criteria to be considered for modifying COPD treatment.¹ Receiving all comments from all participants allowed each expert the opportunity to reconsider and change their opinions anonymously from round to round. The anonymous nature of the interactions may remove subtle or not so subtle attempts to influence the final product by those considering themselves the "most expert", and it is interesting to speculate how this anonymous process might change existing expert opinion-based recommendations in published guidelines.

The authors suggest that these are "evidence-based" recommendations.¹ Evidence-based practice recommendations are the integration of clinical expertise, patient values, and the best research evidence.⁶ They state that little if any research evidence exists and that it is not possible to include patient values when patients are not included in the deliberation. Therefore, that leaves evidence from clinical expertise – an important type of evidence but one that seems to stretch the credibility of labelling these criteria as "evidence-based".⁷ It is unclear whether or not hospital-based physicians and nurses have clinical expertise related to COPD management in the context of no recent exacerbations. In many health care systems, hospital-based nurses and physicians care for complex patients and particularly those with exacerbations. Decreased oxygen saturation and increased wheezing (as endorsed by hospital-based professionals) would seem to be more relevant to assessment of an acute exacerbation than a gradual change in COPD status. The specific type of clinical expertise of the participants is not explained in Upton *et al.*'s paper.¹ If the opinion from the primary care COPD experts (the health professional most likely to work in the context of the question) were to be considered in isolation, the list would be reduced to four criteria: increased breathlessness; decreased exercise tolerance; impaired quality of life; and increased sputum.

Identifying criteria to be monitored is a step forward, but a modest one. Just as the authors suggest, guideline recommendations leave the physician or any other clinician

without clear next steps: so too do these recommendations.¹ The most highly endorsed item for deciding to modify therapy is increased or increasing breathlessness at rest or on exertion. For most COPD patients without a current or recent exacerbation this will be a gradual change.⁸⁻¹⁰ One of the common and consistently expressed beliefs of both the average primary care clinician (or respiratory expert) is that COPD diagnoses are often delayed because the patients and physicians fail to appreciate slow increases in breathlessness or slow decline in exercise or activity capabilities due to breathlessness (Yawn and others¹⁰). Without some scale to assess the level of breathlessness or activity or exercise limitation, it is not evident that this type of assessment will be any clearer or easier to make after a COPD diagnosis is made compared to before the COPD was identified. A tool to assess levels of breathlessness and magnitude of change is available in the MRC dyspnoea scale. However, the group failed to endorse its use when defined as MRC score >3. Perhaps the MRC scale was considered to have insufficient discriminatory ability or not to be clinically useful? The Delphi method is not designed to have experts explain their choices...

“Decreased exercise tolerance” is equally difficult to assess when changes are less than overt. This criterion suggests that the physician or health professional has a metric for exercise tolerance that is assessed and documented repeatedly over time. “Increase in sputum” is vague and most commonly an acute increase in volume or tenacity of sputum is associated with an exacerbation. Subtle changes – especially changes that might occur over years – are difficult to identify. The other three endorsed items do have tools for quantification: the ability to perform activities of daily living; COPD-related quality of life; and oxygen saturation levels. It is interesting to note that primary care physicians were less likely to endorse these items – possibly because the patients with moderate to severe COPD who do not have an exacerbation are unlikely to have a low oxygen saturation, and that quality of life and activities of daily living scales are rarely used in clinical primary care given the limited reported work on short and straightforward quantification tools.¹¹⁻¹³

The work of Upton and her colleagues is an interesting beginning. However, this work is not ready for direct implementation into practice or quality metrics, and it requires more than empirical research to assess the validity and reliability of a list of symptoms. Even when limited to the criteria endorsed by primary care COPD experts, more work and perhaps a different type of expertise is required to develop the final step in the translation from bench to bedside to guidelines to community practice – i.e. the average practicing physician or nurse who can help design tools to make the criteria useful in daily practice. Until we have metrics or

tools to help assess and quantify the criteria and their change over time¹⁻⁴ we are little further along than guidelines that simply suggest we look at changes in signs and symptoms. We now need to develop tools to tell us how to assess changes in the level of symptoms, and at what point or level of change modifications in therapy should be considered.

Conflict of interest

None.

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