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patients with poor physical health, any contribution from impaired vision is difficult to distinguish from that of comorbid disorders. Health utility measures such as the standard gamble and time trade-off techniques are also inappropriate. Elderly people have problems understanding the hypothetical concepts of the percentage of risk of death that they would be prepared to accept to avoid chronic ill health or the number of years of life they would be prepared to trade for a perfect cure for their medical condition. Also such questions would be difficult for elderly people to answer given their shorter life expectancies.

Most visual functioning questionnaires assess the impact of visual loss on daily living but do not measure social or psychological functioning. Though some questionnaires—such as the National Eye Institute visual functioning questionnaire—do measure psychological aspects of visual impairment, they are unresponsive to small differences in visual acuity. The authors of the review recommend their own instrument the MacDQoL, which measures the impact of age related macular degeneration on quality of life and can discriminate between mild and moderate disease. The usefulness of this tool is difficult to assess, however, as what constitutes mild or moderate age related macular degeneration is not defined.

Vision is a complex neurosensory task mediated by both eyes, so that wet macular degeneration in one eye does not necessarily affect quality of life. The commonly measured surrogate marker visual acuity also correlates poorly with the severity of retinal changes. Many people develop adaptive strategies over time that cannot be captured in cross sectional studies and are difficult to control for even in longitudinal studies. Thus, the criticism that most existing visual functioning questionnaires lack the sensitivity to differentiate severity of disease would appear to be unduly harsh, as appropriately designed large longitudinal studies have not yet been undertaken.

Mitchell and Bradley state that despite the development of promising new treatments, none has used an effective measure of quality of life to evaluate benefit. Treatments that are unpleasant, need repeated administration, and cause adverse effects are likely to reduce quality of life even though they may improve visual acuity. An ideal instrument for use in wet macular degeneration will be responsive to changes in visual function and quality of life as well as capture satisfaction with treatment. Such an instrument is needed now.

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Spirometry in chronic obstructive pulmonary disease
Is available, yet underused in general practice

Chronic obstructive pulmonary disease affects about 1% of the total UK population and is a major cause of disability and mortality worldwide. Timely diagnosis and subsequent staging of severity of disease both require spirometry, which in theory can be performed by trained general practitioners (GPs) and their practice staff. However, numerous barriers impede the implementation of spirometry in primary care.

Several guidelines exist for the management of patients with chronic obstructive pulmonary disease, including those from the UK National Institute for Health and Clinical excellence (NICE) and the Global Initiative for Chronic Obstructive Lung Disease (GOLD; www.goldcopd.com). All guidelines stress the central role of spirometry in diagnosing and managing the disease in primary care, but this does not guarantee that GPs will use this technique consistently in the care of patients with respiratory symptoms.

Several models to provide spirometry test results exist, depending on local circumstances; these include regional primary care diagnostic services and hospital based lung function laboratories with open access for primary care patients. However, the most practical and timely solution is for GPs to have their own spirometer in the practice. In the United Kingdom about 80% of general practices own a spirometer, but these instruments are still scarce in large parts of the world.
even though prices have dropped considerably in the past few years. Trained practice staff who have the skills and time to fit and maintain spirometry of sufficient quality into the daily practice routine may also be in short supply. In addition to the practical issues, GPs' lack of confidence in their ability to interpret the test results is a crucial barrier—often neglected in the guidelines to effective implementation of spirometry. Many GPs view spirometry as a complex diagnostic tool, like electrocardiography. This fact was clearly illustrated in a recent UK study that reported low levels of self confidence in interpreting spirometric tests in 160 general practices where GPs and nurses had been trained for half a day—only a third of these professionals trusted their own interpretative skills. Confidence about how to proceed once the test results are available is a crucial part of building GPs' confidence in their capacity to diagnose and manage the disease.

Ideally once GPs have had initial spirometry training they should receive continuous advice and support. This could be done in various ways—by another GP with a special interest in respiratory diseases in the same practice or in another practice nearby; by means of a computerised clinical decision support system (SpiidaXpert software; www.spirxpert.com); or by consultation or feedback from a chest physician. Although intuitively a promising idea, empirical studies on the effects of ongoing expert support on the interpretative capacity and self confidence of GPs are lacking.

So what needs to happen next? For guidelines on chronic obstructive pulmonary disease to be implemented, concrete working agreements between GPs and chest physicians need to be developed. Chest physicians can act as coaches for their local primary care colleagues in two ways—through patient oriented support (specific feedback for specific patients) or through practice oriented support (as teachers in postgraduate training programmes). This will be beneficial for both parties, as referrals will be more structured and based on agreed criteria. GPs who have performed spirometry will have better insight into the patient's lung function, and chest physicians will benefit from having the results at the initial consultation. More broadly, coordinated efforts by health policy makers and the medical profession will be needed to provide the right equipment, training for staff who use it, and continuing quality assurance and support for test interpretation. The burden of chronic obstructive pulmonary disease is sufficiently large to warrant such an approach.

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