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relevant diagnostic investigations—that is, patients in whom treatment is likely to be initiated in everyday practice.

In conclusion, several easily obtained clinical parameters and a few additional diagnostic investigations—notably, natriuretic peptide and electrocardiography—may improve the detection of concomitant heart failure in primary care patients with COPD. The use of these parameters should increase confidence about the diagnosis of heart failure and will help GPs to decide about the need for additional echocardiography or treatment in patients with COPD.

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8 Moom KG, Grobbee DE. When should we remain blind and when should our eyes remain open in diagnostic studies? J Clin Epidemiol 2002;55:633-6.

We measured long term illness and functional limitation due to long term illness by the two standard survey questions: “Do you have any long standing illness, disability, or infirmity?” and, if yes, “Does this illness limit your activities in any way?”

Our outcome variable was quality of life at older ages, as measured by a 19 Likert item scale summed as an index—CASPI-19. This new measure accesses the domains of control, autonomy, self realisation, and pleasure. Its emphasis on the more positive aspects of quality of life at older ages has led recently to its use in several of the main international studies of ageing. High scores correspond to higher quality of life.

To estimate the impact of long term illness on quality of life, we dichotomised the CASPI-19 scores at their median value and, using logistic regression, calculated

Quality of life is the most desired patient centred outcome of medical care. In older patients with long term illness, without any cure, it might be the only outcome achievable. Most clinicians are aware of the importance of quality of life for functional limitation, but lack an estimate of the size of its impact compared with long term illness in itself. We aimed to fill this gap in knowledge, using new data from a large national sample of older people in England.

Participants, methods, and results
Our participants were 9298 people aged 50 years or older with complete data on the relevant variables in wave 1 of the English longitudinal study of ageing; a follow-up of the appropriately aged respondents to the health surveys of England in 1998, 1999, and 2001.

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the odds ratios of poor quality of life (less than median CASP-19 score) for long standing illness without and with functional limitation. People without long standing illness were the reference group. As a precaution against response bias (poor psychological health affecting the self reports of both functional limitation and quality of life), we repeated the analyses after excluding all study subjects who were clinically depressed on the Center for Epidemiological Studies Depression Scale. The mean CASP-19 score in this sample was 42.5, with a standard deviation of 8.6 and a range of 7-57. After controlling for age and sex, the odds ratio of long standing illness without functional limitation was 1.25 (95% confidence interval 1.12 to 1.39) and that of long standing illness with functional limitation was 3.34 (4.80 to 5.94; figure). These ratios attenuated somewhat when we excluded people with depression (odds ratios of 1.05 and 3.47).

Comment
In older patients, the impact on quality of life of functional limitation due to long term illness is more than four times greater than long term illness by itself; a difference which is affected little by response bias. Patients place high value on their quality of life. If the General Medical Services contract wishes to recognise the patient’s perspective, it needs to be amended to include functional limitation due to chronic disease. This conclusion adds to, rather than challenges, the medical perspective of the present contract. Monitoring, and trying to alleviate, functional limitation should become normal parts of patient care. This apparently simple recommendation has implications for consultations on the General Medical Services contract, the role of non-medical support in the care of patients with chronic disease, the training of primary care staff and the National Service Framework for Older People.

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