LETTER

Authors' reply

We thank Challen *et al* for their interest in the guidelines and for raising an important discussion point. In describing disease severity, mortality is the main outcome measure used in the majority of studies of community acquired pneumonia (CAP). The largest evidence base therefore relates to this very specific outcome. In contrast, criteria for admission to critical care units vary across units and from country to country and, in practice, only a proportion of patients with CAP are usually considered suitable for admission.

As Challen *et al* suggest, no prognostic model is perfect. The CURB65 score is comparable to more complicated models such as the Pneumonia Severity Index that takes into account 20 different variables. Studies of the CURB65 score in patients from different cohorts and different countries indicate that the score is valid for the majority of patients with CAP, and use of the CURB65 score is included in the Infectious Diseases Society of America/American Thoracic Society CAP guidelines[1] as well as the European Respiratory Society guidelines for CAP.[2] There will always be situations that fall outside any prognostic model and examples are given in the guidelines, together with further examples offered by Challen *et al*. The example they give of an elderly patient with mental confusion and chronic renal impairment and a 'mild chest infection' allows us to emphasise again the point that we made so strongly in the guidelines—the BTS CAP guidelines are for the management of patients with pneumonia (which in the hospital setting is confirmed by a chest x-ray) and should not be applied to patients with other respiratory tract infections such as non-pneumonic lower respiratory tract infections or with a vague diagnosis of 'chest infection'.[3] If such a patient had pneumonia, existing data indicate that he/she would be at higher risk of death than an age-matched patient without the same comorbid illnesses. The appropriateness of any management decision must take into account a variety of factors. This requires sound clinical judgement by the attending physician and adequate supervision of more junior staff. Guidelines cannot cover every eventuality. In practice, prognostic models offer an objective complementary assessment of disease severity and are not recommended for exclusive use. If a prognostic model matches the clinician's assessment of disease severity, it provides for greater confidence to the decision-making process. When there is a mismatch between a prognostic model and a clinician's assessment, this should serve as a prompt for a closer evaluation of the situation which may include involvement of a second or senior opinion. The exercise of careful clinical judgement does not obviate the value of the prognostic model.

Disease severity assessment is an iterative process keeping pace with changes in a patient's condition. The guidelines uphold the use of 'track and trigger' tools such as the Early Warning Score (EWS) for the monitoring of patients' progress in the hospital setting (section 7.3 of the guidelines, Monitoring in hospital). This is consistent with the fact that the main validation of EWS is in regard to changing situations after hospital admission rather than as a single 'snapshot' at presentation for which disease-specific tools such as the CURB65 score have been shown to be better than generic tools such as the standardised EWS.[4] Generic track and trigger tools are therefore seen as complementary to disease-specific prognostic models.

Indications for transfer to critical care are given in section 7.4 of the guidelines. These are not proscriptive but reflect general principles. Clinical judgement, preferably by a senior clinician, remains paramount.

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