FIGURE 1. Receiver-operating characteristics (ROC) curve for admission to hospital. Diagonal segments are produced by ties. Data are presented as area under ROC curve (95% confidence interval for area under ROC curve). —: pandemic medical early warning score (PMEWS) 0.953 (0.927–0.978); ----: PMEWS without transcutaneous oxygen saturation 0.937 (0.906–0.967); - · - ·: CURB-65 (confusion, urea >7 mmol·L⁻¹, respiratory rate ≥ 30 ·min⁻¹, low blood pressure, and aged ≥ 65 yrs) 0.858 (0.806–0.909); · · · ·: CRB-65 (confusion, respiratory rate ≥ 30 ·min⁻¹, low blood pressure, and aged ≥ 65 yrs) 0.818 (0.760–0.877).

FIGURE 2. Receiver-operating characteristics (ROC) curve for admission to level 2/3 care. Diagonal segments are produced by ties. Data are presented as area under ROC curve (95% confidence interval for area under ROC curve). —: pandemic medical early warning score 0.856 (0.768–0.943); - · - ·: CURB-65 (confusion, urea >7 mmol·L⁻¹, respiratory rate ≥ 30 ·min⁻¹, low blood pressure, and aged ≥ 65 yrs) 0.667 (0.549–0.785); ----: CRB-65 (confusion, respiratory rate ≥ 30 ·min⁻¹, low blood pressure, and aged ≥ 65 yrs) 0.631 (0.497–0.765).

dependency or ICU care amongst 91 patients admitted with community-acquired pneumonia to our 855-bed secondary and tertiary care hospital from February to December 2005. A further number of patients (n=19) were omitted from this analysis as invasive care and cardiopulmonary resuscitation were deemed inappropriate.

We suggest that as the pandemic medical early warning score is not disease specific, it can provide a more accurate assessment of need for hospital admission, clinical deterioration and improvement, and will be a valuable track and triage

tool in the event of an influenza pandemic. Further validation is ongoing.

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From the authors:

We welcome the contribution from K. Challen and co-workers concerning their pandemic medical early warning score (PMEWS) compared with CURB-65 (confusion, urea >7 mmol·L⁻¹, respiratory rate ≥ 30 ·min⁻¹, low blood pressure, and aged ≥ 65 yrs) and CRB-65 (confusion, respiratory rate ≥ 30 ·min⁻¹, low blood pressure, and aged ≥ 65 yrs) as measures to determine hospital and intensive care unit admission for patients with lower respiratory tract infection (LRTI) and community-acquired pneumonia (CAP), but would urge caution before deciding which test to use in either CAP or pandemic influenza.

CURB-65 and CRB-65 have been developed for the assessment, at hospital admission, of patients with CAP and have now been validated in widely different populations [1]. Draft UK guidelines for the clinical management of pandemic influenza (www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4121753&chk=ZXXkus) have used these scores as examples of how a severity scoring tool might be used in the light of this evidence base. However, neither the CURB scores nor PMEWS have actually been tested in patients with seasonal, let alone pandemic influenza where their operational characteristics may be different.

Other important issues are that CURB scores have been assessed in large patient populations compared with the 195 LRTI and 99 CAP patients described by K. Challen and co-workers. Important information is omitted by K. Challen and co-workers including: the definition of LRTI used; the proportion of LRTI patients admitted to hospital; and how many patients had missing variables. Without scrutiny of such information, we would not agree with these authors that they have shown that PMEWS can provide a more accurate assessment of need for hospital admission.

Importantly, K. Challen and co-workers fail to mention that PMEWS is a graded score for each parameter, rather than the categorical scores used in CURB, making PMEWS inherently more complex to use, especially outside the hospital. In addition, CRB-65 can be calculated without any laboratory or oximetric results.

The medical early warning score has the potential advantages of not being disease specific, and familiarity of use in some UK hospitals at least, for the assessment of patients already admitted to hospital. However, we know of no studies reporting its use as a tool for the hospital admission decision.

More detailed and prospective assessment will be required before pandemic medical early warning scores can be recommended in preference to a score validated in a number of populations and now adopted in a number of international community-acquired pneumonia guidelines (www.brit-thoracic.org/guidelines) [2–4].

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Video-assisted thoracic surgery and extramedullary haematopoiesis

To the Editors:

We read with interest the article by KÜGLER *et al.* [1] on paravertebral intrathoracic extramedullary haematopoiesis (EMH). Intrathoracic EMH was first noted by Guizetti as early as 1912 during an autopsy, and is typically located in the lower retropleural paravertebral region [2]. In addition to the congenital haemolytic anaemias, myeloproliferative syndromes and bone marrow insufficiencies described, EMH can also occur as a reactive process to chronic anaemic conditions, such as pernicious anaemia, B₁₂ folate deficiency and Gaucher's disease.

The diagnosis of intrathoracic EMH can be difficult, and clinicians should have a high index of suspicion if the patient has a history of chronic anaemia. Neurogenic tumours (particularly neurolemmoma) remain the most common cause of a posterior mediastinal mass [3]. Other possibilities include hydatid cysts, liposarcoma, lateral meningocele, cartilaginous tumours, lymphoma and azygous lobes. On computed tomography scanning, intrathoracic EMH is well circumscribed and has smooth borders, it is homogeneous in character, generally noncalcified and may have adipose tissue within the mass. Magnetic resonance imaging may be useful in some cases to demonstrate adipose components in the mass and adjacent bone cortex integrity [3]. When the target site is situated away from the reticulo-endothelial organs, radioactive ^{99m}Tc sulphur colloid or iron-52 marrow scans can be used to demonstrate areas of haematopoietic activity, and thereby

FIGURE 1. Intra-operative photo of a video-assisted thoracic surgery biopsy of intrathoracic paravertebral extramedullary haematopoiesis.