

and consider critical care admission.<sup>5</sup> Even though qSOFA and CURB-65 variables overlap, the qSOFA score was derived and validated with multiple national and international databases, respectively, and does not require laboratory data, which lends credibility and simplicity for use in the ED population.

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*In reply:*



We appreciate the insightful comments by Patel et al<sup>1</sup> in regard to our study<sup>2</sup> exploring the performance of the confusion, uremia, respiratory rate, blood pressure, and aged 65 years or older (CURB-65) score in predicting critical care interventions in patients admitted to the hospital with community-acquired pneumonia.

Patel et al suggest that the quick Sequential [Sepsis-related] Organ Failure Assessment (qSOFA) may be superior to CURB-65 in assigning disposition to

community-acquired pneumonia patients in the emergency department (ED). Much like CURB-65, however, qSOFA is limited because of its calibration to the outcome of mortality.<sup>3</sup> As we have demonstrated here with respect to CURB-65<sup>2</sup> and previously with qSOFA,<sup>4</sup> patients triaged to lower levels of care by low predicted mortality have unacceptably high rates of receiving critical care interventions. This was highlighted in our previous study describing the relationship of qSOFA to critical care intervention and mortality in patients with acute infection, in which 23.5% of patients with a qSOFA score of 1 received a critical care intervention, although only 6.1% died. This problem is endemic to the derivation methodology used for CURB-65 and qSOFA and is not ameliorated by a large derivation or validation cohort.

In addition, qSOFA has a low sensitivity in predicting mortality in community-acquired pneumonia. This is problematic for a score used to triage patients, in which timely intervention and appropriate disposition are vital. Recent investigations comparing CURB-65 with qSOFA in community-acquired pneumonia have found that a qSOFA score greater than or equal to 2 has a substantially lower sensitivity for predicting mortality than CURB-65 score greater than or equal to 2, despite a similar overall discrimination.<sup>5,6</sup> We agree that the need for laboratory testing adds to the complexity of CURB-65; however, it is an unlikely barrier in most EDs, where measuring chemistries is commonplace. In resource-limited settings, this is certainly a consideration and may limit CURB-65 utility.

We agree with Patel et al that the decision to admit to the ICU depends on multiple factors. We addressed this issue by using critical care intervention as the outcome, which we believe is more independent of nonpatient-related factors than ICU admission. In fact, only 54.4% of patients admitted to the ICU received a critical care intervention within 48 hours.<sup>2</sup> Although an imperfect solution, critical care intervention provides both a proximal and objective endpoint. That the CURB-65 score is not more predictive of critical care intervention reflects the need for new prediction tools calibrated to proximal endpoints.

There were a number of limitations, as outlined by Patel et al and acknowledged in the article. Given data set constraints, we were unable to exclude patients presenting from nursing facilities. Although this may have resulted in a population with data skewed toward greater illness, our mortality rates were far lower than those in the original CURB-65 derivation cohort. Similarly, given our low in-hospital mortality rates compared with the original 30-day mortality rates, it is unlikely that including 30-day mortality would have

markedly changed our results. Finally, we identified “confusion” by using a combination of administrative codes and the chief complaint. Although we may have underestimated rates of confusion, especially in individuals with less overt signs, we do not believe a more precise method for characterizing confusion would substantially change our central findings.

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## Diagnosing and Treating a Mindset: The Intersection Between Patient and Physician Needs



*To the Editor:*

It is 3 AM, and after surviving the evening influx, you settle in to begin documenting when a new patient checks in for 3 months of X. But why? we ask. We can weigh down this encounter with our perceptions of the patient, the diagnosis, and even the futility. This can devalue our role in the patient’s care and lessen “meaning.” Answering the patient’s “why”—evaluating needs—could free us from these anchors.

As a practicing emergency physician responsible for the care and education of patients, as well as students and residents, I have been troubled by this issue. Gerolamo et al<sup>1</sup> explore the underlying patient needs driving diagnosis and care. By highlighting the intersection of a diagnostic label with psychological and sociologic factors, further significance is given to “why” but as a needed anchor to reframe motivations and deliver effective care. I argue that to answer their call, we need to transition from the fixed mindsets that accompany many encounters in the emergency department (ED).

Fixed mindsets, the chains of our anchors, set the expectations for our patient interactions. Up front, we decide that our patient has an ulterior motive, that we cannot catch a break, or that we will not find the answer. The latter leaves little room for consideration of our patient’s needs, lessens motivation, and, at an extreme, lessens effort. In reality, patients see accessibility, convenience, treatment, reassurance, and limited access to other care as reasons for ED use.<sup>1-3</sup> Acknowledging these needs and others highlighted in the article by Gerolamo et al is taking Dweck’s<sup>4</sup> so-called growth mindset step as a transition from a fixed outlook to a solution. Asking what both the patient and physician can learn from this experience validates our presence and changes the meaning of the why.