Re: Cross-sectional audit on the relevance of Elevated National Early Warning Score in medical patients at a Model 2 hospital in Ireland.

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The article by Lobo et al. [1] has the potential to produce confusion surrounding the use of the terms ‘National Early Warning Score’ and ‘NEWS’. Similar confusion elsewhere in the

literature has beset research into the Modified Early Warning Score (MEWS), where numerous 'alternative' iterations have been described, each inappropriately using the generic term 'MEWS' [2]. The early warning score used throughout Ireland is actually the VitalPAC Early Warning Score (ViEWS) [3] and not NEWS [4,5]. Table 2 of the paper by Lobo et al. [1] describes the weightings of ViEWS, not NEWS. There are several differences in the weighting bands of the physiological variables used in the two systems (specifically, for supplemental oxygen, pulse and BP), which inevitably have an impact on the sensitivity/specificity of the two systems. ViEWS allocates three points for patients receiving supplemental oxygen, rather than the two points assigned in NEWS. It follows that those receiving supplemental oxygen are more likely to trigger with ViEWS than with NEWS.

The escalation protocol employed in Ireland [6] also differs markedly from that recommended for NEWS [4]. Inevitably, this leads to different workloads for bedside nurses and responding staff. Specifically, the trigger for recommending the patient is reviewed by a doctor is lower in Ireland (ViEWS 3 vs NEWS 5). Additionally, the Irish Health Service Executive recommends an augmented clinical response, when three points are allocated to a single physiological parameter – this was not suggested nor modeled in the original description of ViEWS [3] and may not necessarily be advantageous [7].

Perhaps these differences contribute to the finding in the study by Lobo et al. that 51/79 (65%) cases with ViEWS values $\geq$ 7 had no change in clinical management for their first episode [1]. They go on to state that NEWS values $\geq$ 7 *"…had a positive predictive value of 35.4 % in predicting a change in clinical management…"*, when really they are referring to the performance of ViEWS, and, specifically, ViEWS as used in Ireland. It is perhaps worth emphasising that neither ViEWS nor NEWS was designed to predict a change in clinical management, merely to identify that a patient was sick.

Finally, although one conclusion of Lobo et al.'s findings could be that ViEWS (as used with the Irish Health Service Executive escalation protocol) does not work well in a Model 2 hospital, this must be balanced by the fact that the performance of any early warning score

depends upon the presence of timely and appropriate monitoring, escalation, and clinical response [8].

References

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