

# Modifications to predefined rapid response team calling criteria: prevalence, characteristics and associated outcomes

Qin Ting Chen and Felicity Hawker

**To the Editor:** In their article, Ganju and colleagues<sup>1</sup> concluded that modifications to predefined rapid response team calling criteria were common, did not prevent repeat calls, and seemed to be associated with increased mortality and, therefore, should be made with caution.

We studied a group of patients with modifications to medical emergency team (MET) calling criteria recruited between 1 December 2017 and 28 February 2018. The study was approved by the Cabrini Human Research Ethics Committee (Approval No. 09-22-01-18). We identified 74 patients with modifications to MET criteria. The median age was 75.5 years (interquartile range [IQR], 62–88 years) and the median hospital stay was 9 days (IQR, 4–18 days), which was similar to that reported by Ganju and colleagues. We identified four common scenarios in which modifications to MET criteria were charted. These modifications were to facilitate discharge from the intensive care unit and the emergency department to hospital wards (Group 1), to facilitate discharge from the post-anaesthesia care unit (Group 2), for ward patients with chronic conditions or other reasons to accept an abnormal parameter (Group 3), and for a palliative group (Group 4). Twenty-nine patients (39%) had a MET call despite having modified criteria, 22 (28%) were documented “not for cardiopulmonary resuscitation (CPR)” and 19 patients (26%) died in hospital. One patient in both Group 1 and Group 2 died in hospital (mortality rate 8% for each), whereas mortality rates for Group 3 and Group 4 were 23% and 89% respectively. There were 79 modifications in the 74 patients. The most common parameters modified were systolic blood pressure in 50 patients (63%), heart rate in 16 (20%), and respiratory rate in seven patients (9%). The extent of the modifications from baseline was a median 11.1% (IQR, 5.6–16.7%).

Using logistic regression analysis, we found that the independent predictors of death were, not surprisingly, having a “not-for CPR” order ( $P = 0.008$ ), being allocated to the palliative group ( $P = 0.02$ ), and having a MET call ( $P = 0.043$ ). The parameter modified, the number of modifications, and the extent of the modification did not predict outcome.

This is a much smaller study than the one by Ganju and colleagues. It is set in the private rather than the public sector and has a different methodology. However, the conclusions are very similar to those of Ganju et al. In our study, patients with modified criteria who go on to have a MET call have a higher risk of death. This may be because deterioration is advanced before the MET call is triggered. The findings suggest that the parameters chosen for modifications of MET criteria should be carefully selected and individualised for each patient and support the suggestion made by Ganju and colleagues that there should be specialist input into these decisions.

## Competing interests

None declared.

## Author details

Qin Ting Chen<sup>1,2</sup>  
Felicity Hawker<sup>1,3</sup>

1 Cabrini Health, Melbourne, VIC, Australia.

2 Monash Health, Melbourne, VIC, Australia.

3 College of Intensive Care Medicine, Melbourne, VIC, Australia.

**Correspondence:** felicityh@cicm.org.au

## References

- 1 Ganju A, Kapitola K, Chalwin R. Modifications to predefined rapid response team calling criteria: prevalence, characteristics and associated outcomes. *Crit Care Resus* 2019; 21: 32-39