

Benefits of a Rapid Response Team During the COVID-19 Pandemic

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BACKGROUND

Rapid Response Teams during the COVID-19 pandemic have helped to facilitate optimum patient care, alleviate staffing shortages, and reduce financial costs for inpatient facilities nationwide. Early Rapid Response Team activations were associated with higher mortality at 72 hours and at one month, increased rates of invasive intervention and ICU admission. Determining risk factors of early rapid response team activation is of financial importance as improved medical decision-making regarding disposition maximizes allocation of resources while potentially limiting morbidity and mortality.

PURPOSE

The disease progression of COVID-19 is known to vary with most patients experiencing dyspnea from days 5-8, potential ARDS from days 8-12, and ICU admission typically seen on days 9.5-12. Because of this, having an experienced ICU RN with the assessment skills able to identify the clinical signs of each of these phases becomes imperative to communicate a patient's potential ICU needs to a physician.

METHODS

MERT data from 2020 and 2021 were collected, analyzed, and compared to pandemic-associated rapid response team development nationwide. The amount of MERT activations were compared annually, as well as the category of MERT calls by month. This data is reflected in Figure 1 & Figure 2. Upticks in data trends were then compared to known “pandemic waves” and compared to MERT productivity.

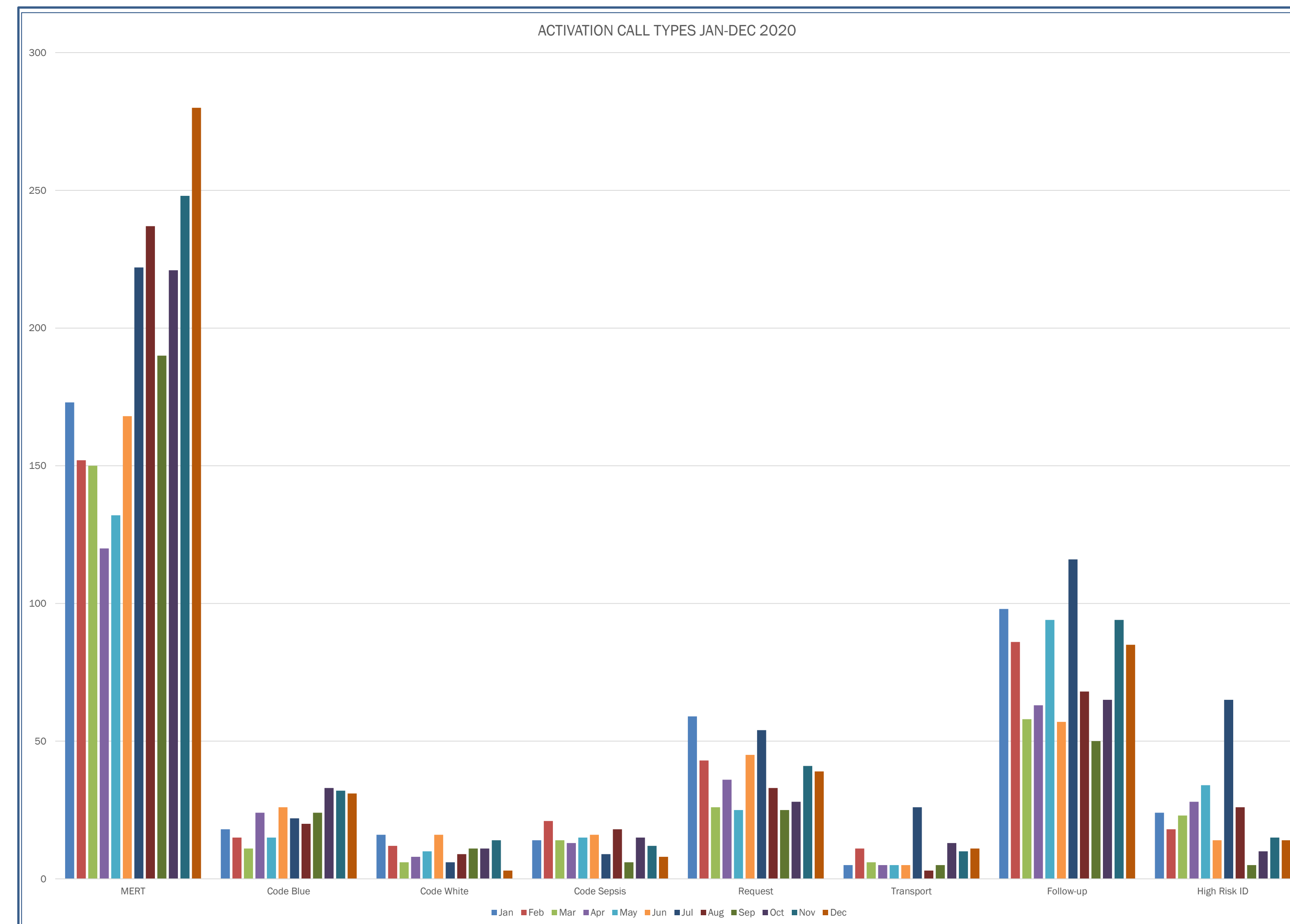


Figure 1. 2020 Activations by Call Type Jan 2020-Dec 2020

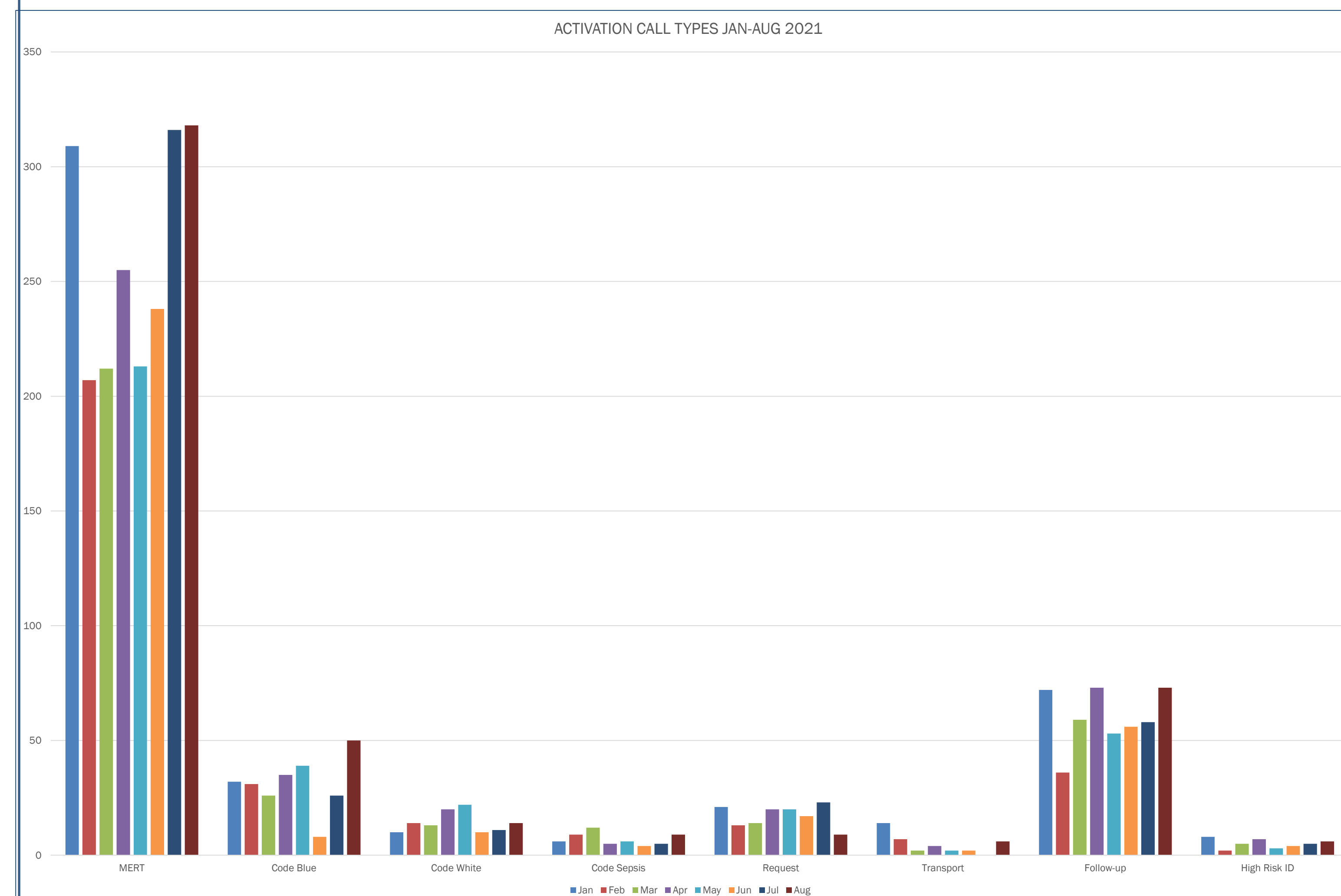


Figure 2. 2021 Activations by Call Type Jan 2021-Aug 2021

RESULTS

Data reflected that the greatest amount of MERT activations at UMC paralleled known “waves” of Covid-19 in 2020. In total 2293 MERT activations occurred with 271 additional Code Blue activations. 2021 data showed that within nearly half the time frame, (January 2021 and August 2021) there have been 2068 MERT activations and 247 Code Blue activations as the COVID pandemic continues.

CONCLUSIONS

Rapid Response Teams are vital to hospital successes amidst a pandemic environment. Early and appropriate clinical triage of deteriorating patients facilitates better patient outcomes, alleviates staffing needs by allowing for early planning, and reduces financial burden on a hospital through limiting unforeseen morbidity and mortality. Implementation of a MERT Team at University Medical Center parallels nationwide implementation of rapid response teams, and hospital-acquired clinical data illustrates that thousands of lives are saved annually as a result.

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