

## **Rapid response to critical deterioration of pediatric cardiac patients: Characteristics and outcomes**

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### **Abstract-**

The Rapid Response (RR) system is a multidisciplinary modality to detect, trigger and provide response to clinical decompensation of patients outside the Intensive Care Unit (ICU). There is growing evidence to support that early detection of physiologic deterioration and prompt response can decrease adverse outcomes i.e. cardiopulmonary arrest or mortality. Pediatric cardiac patients are highly vulnerable to decompensation needing emergent intervention and treatment. We sought to explore the frequency and pattern of utilization of RR by these patients and their outcomes. We conducted a retrospective review study at a large tertiary care referral pediatric heart center. We reviewed 1906 RR events that occurred in our center over a period of three years. Out of these 152 occurred in cardiac patients. We reviewed the charts of the patients involved in these events with respect to the demographic characteristics, reason for RR event, interventions needed and outcomes thereafter. The results provide useful insight into causes of acute clinical deterioration in pediatric cardiac patient population. The important observations made during this research will hopefully be a useful guide to direct initiatives to improve care and resource allocation to this high risk population.

### **Biography**

Aarti Bavare has completed her Pediatric Residency at the Children's Hospital Boston and Boston University combined pediatric residency program. She has received fellowship training in Pediatric Critical Care and Pediatric Cardiac Critical Care at Texas Children's Hospital and Baylor College of Medicine. She is currently an Assistant Professor of Pediatrics at Baylor College of Medicine and is the Medical Director of the house-wide Pediatric Rapid Response System at Texas Children's Hospital. Her research interests include critical communication, resource utilization to serve critical needs of children and simulation medicine.

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