

740 **BRINGING ICU CARE TO BEDSIDE: HAVE CRITICAL CARE RESPONSE TEAMS IMPROVED THE QUALITY OF PATIENT CARE IN ONTARIO?**

Nasim Haque, Bernard Lawless, Linda Kostrzewa, Meiyin Gao. *Critical Care Services Ontario, Canada*

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Background Critical Care Response Teams (CCRTs) are multidisciplinary teams of critical care clinicians with expertise in providing speedy clinical review and intervention to deteriorating patients. In 2006, Critical Care Services Ontario introduced a CCRT program in 31 Ontario acute care hospitals (27 adult, 4 pediatric) to improve quality of care for patients.

Objectives To assess the impact of intensivist-led CCRTs on adult patient outcomes in 27 sites after eight years of implementation.

Methods The study used a mixed method design, using CCRT data from the provincial Critical Care Information System, hospital-reported data on cardiac arrest and mortality rates, and semi-structured interviews. The quantitative findings are presented here. Longitudinal data analysis was conducted using data from 2007–2015. Trend tests assessed the significance of the implementation time across the study period. Linear regressions modeled the relationship between the two outcome variables (non-ICU cardiac arrest and hospital mortality), and CCRT implementation time, adjusting for age, gender, and type of site (teaching or community).

Results Cardiac arrest rates decreased over time from 1.9 in FY2007/08 to 1.5 per 1000 admissions in FY2014/15 and the trend test was significant ($\beta_{\text{time}} = -0.11$ [$-0.19, -0.03$]). Hospital mortality rates also decreased over time (39.8 per 1000 admissions in FY 2007/08 to 37.7 in FY 2014/15), the trend test was significant only for teaching sites ($\beta_{\text{time}} = -0.22$ [$-0.29, -0.14$]).

Conclusions Our results show that intensivist led-CCRTs improve patient outcomes and have strengthened critical care services system. Based on these positive findings, nurse-led model for CCRTs is currently being piloted in community hospitals.