

The Successful Implementation of an Extramural Paediatric Critical Care Response Team (ExPCCRT) in Ontario

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Introduction

- Tertiary level critical care expertise is concentrated in Ontario's four Paediatric Academic Health Science Centres (PAHSCs), yet community hospitals are often the first point of contact into the health care system for children who require critical care.
- When children become critically ill they can deteriorate rapidly which can present a significant challenge for clinicians who may not have the volume of activity, practiced technical skill or resources to provide rapid diagnosis and treatment.
- In order to ensure all children in Ontario have access to paediatric critical care expertise, Extramural Paediatric Critical Care Response Teams (ExPCCRTs) were established at 4 tertiary level paediatric centres.
- The objectives of the ExPCCRT program are to:
 - 1) provide timely specialist consultation to physicians caring for critically ill children to ensure access to appropriate care and timely transport across a large geographic area.
 - 2) partner with CritiCall Ontario, the province's "one number to call" emergency consultation and referral service for physicians, to provide coordinated access to paediatric critical care expert advice, transport resources (through Ornge air ambulance), and critical care bed availability.

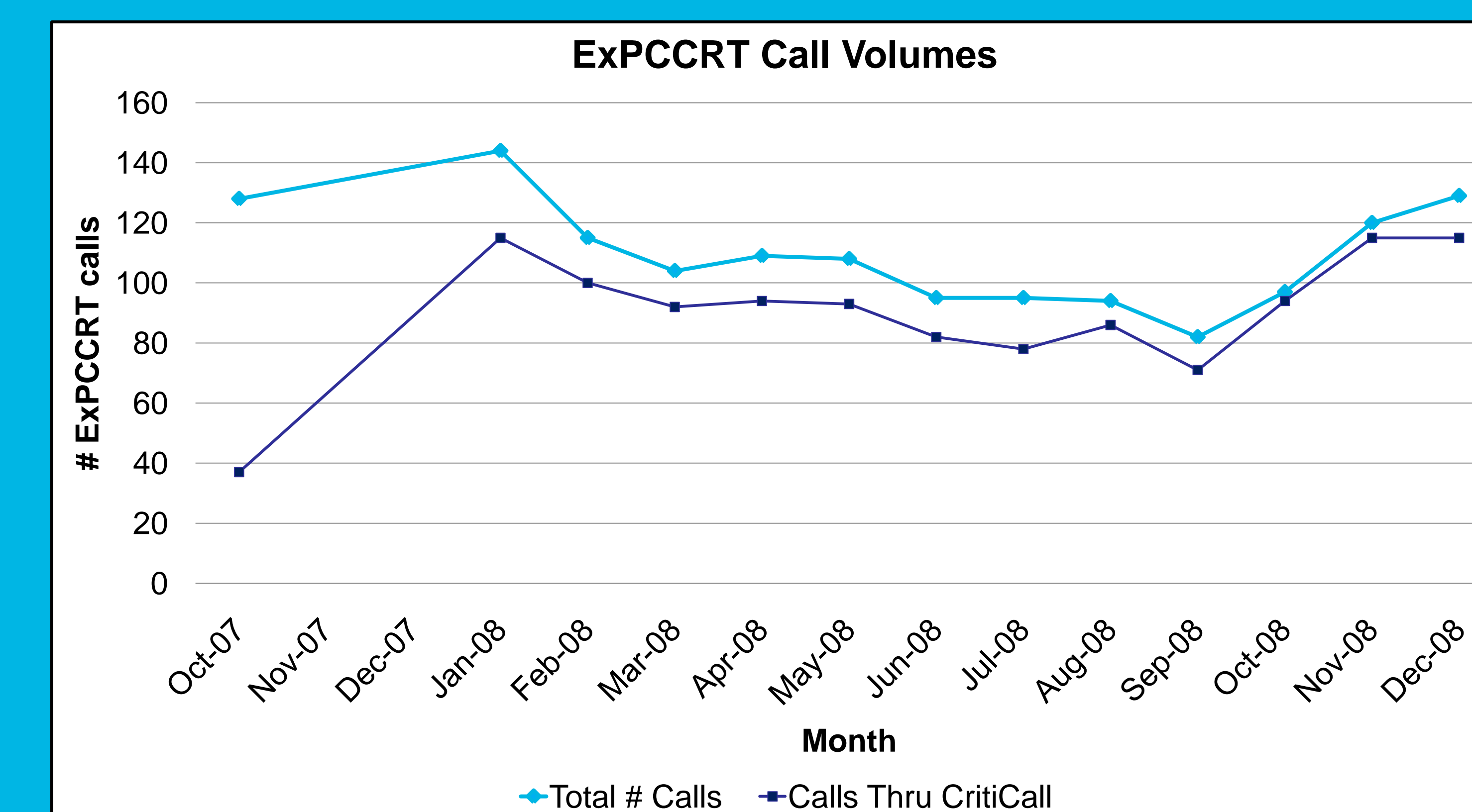
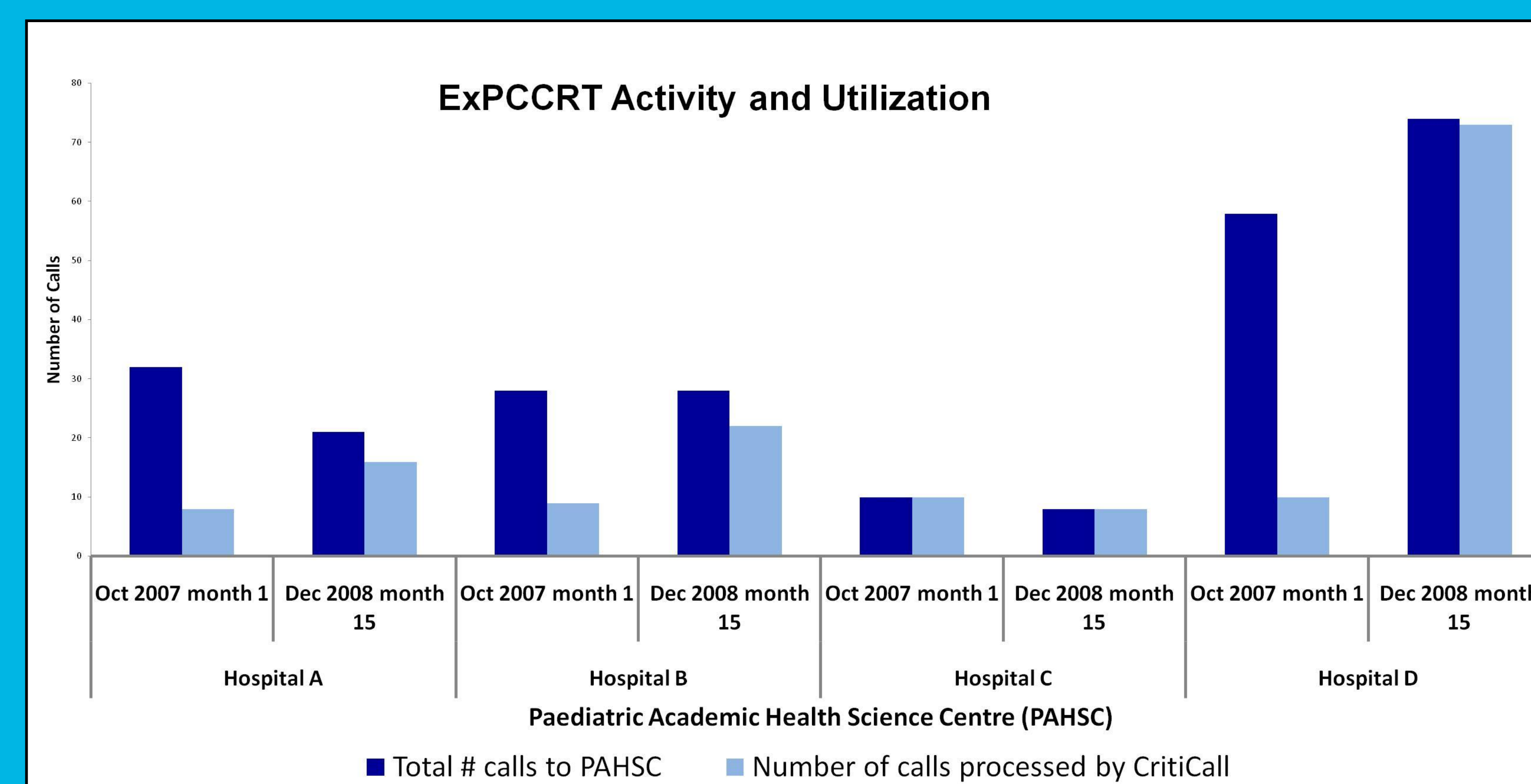
Methods

- Referral patterns for tertiary paediatric critical care were predetermined and approved by the Paediatric Critical Care Network.
- CritiCall Ontario was established as the sole point of contact for referring hospitals seeking consultations for critically ill children.
- The 4 participating centres partnered with CritiCall to streamline communications and increase the effectiveness and efficiency of transfers to tertiary care facilities.
- By calling CritiCall's "one number to call," referring physicians are able to consult with a Paediatric Intensivist regarding patient management and/or potential transfer.
- CritiCall tracks the movement of critically ill children transferred through the ExPCCRT.
- With combined input from CritiCall and members of the collaborative, a comprehensive marketing and communication plan was developed and implemented. Communication tools including posters, presentations, telephone stickers and letters to hospital administrators, were distributed to more than 150 hospitals in Ontario by CritiCall Ontario Account Managers.

Results

- Program started in October 2007.
- In 2008, a total of 1298 calls were placed to the tertiary PAHSCs. Of those, 1135 (87.5%) were processed through CritiCall Ontario.
- Treatment advice was provided for all children and 1171 (90%) were transferred to a higher level of care.
- As a snapshot indicator, the average time to acceptance to tertiary PAHSCs was 58 minutes in January, 2008 and 38 minutes in April, 2009 (median time = 23 minutes)
- Since the inception of the ExPCCRT, the volume of calls processed through CritiCall Ontario has continued to rise.

($p < 0.0001$, Fisher Exact Test)



Conclusions

A comprehensive and standardized implementation and approach to a provincial ExPCCRT has resulted in a significant increase in utilization by community physicians accessing critical care support for paediatric patients.

