Critical Care Response Teams (CCRTs) are multidisciplinary teams of critical care clinicians who bring the skills of the intensive care unit (ICU) to the general ward to support ward staff in identifying and managing at-risk patients. The team has the experience to provide speedy review and intervention to deteriorating patients in the ward with the intent of averting further deterioration of patients, cardiac arrest, and death. The most common CCRT configurations are physician-led and nurse-led models. Currently, there are 46 CCRTs operational in the province of Ontario, Canada. This includes 36 Intensivist-led teams, 4 of which are pediatric CCRTs and 10 nurse-led teams.

The majority of survey respondents were female (90%). 55% of respondents were between the ages of 35 and 54 and most had 6 years of professional experience. The main findings are summarized below:

**Reasons for CCRT activation**
- When the nurse is worried: 66% (Pre) and 74% (Post)
- Anytime when the patient is seriously ill: 65% (Pre) and 78% (Post)

**Impact of CCRT on patient care**
- Early clinical intervention for patients at risk of deterioration: 94% (Pre) and 95% (Post)
- Early assessment and diagnosis of at risk patients: 94% (Pre) and 93% (Post)
- Prevent a minor problem from becoming a major problem: 92% (Pre) and 93% (Post)
- Decreased cardiac arrests: 81% (Pre) and 88% (Post)
- Decreased ICU re-admissions: 84% (Pre) and 86% (Post)

**Uptake of CCRT service can be improved**
- Education and training on units: 94% (Pre) and 94% (Post)
- Marketing and promotional awareness: 83% (Pre) and 80% (Post)
- Management influence: 77% (Pre) and 78% (Post)
- Having supportive organizational culture: 58% (Pre) and 68% (Post)

**Appreciation of CCRT services**
- Supporting post-ICU care: 55% (Pre) and 75% (Post)
- Early intervention to avert ICU admission: 90% (Pre) and 95% (Post)
- Perception on CCRT has added value on their ward: 88% (Pre) and 96% (Post)

60.5% of respondents rated the CCRT services as being "Very Good" or "Good".

**Comparison of RNs Perceptions: Pre-Post CCRT**

<table>
<thead>
<tr>
<th>Reasons for CCRT activation</th>
<th>Pre (N = 300)</th>
<th>Post (N = 316)</th>
</tr>
</thead>
<tbody>
<tr>
<td>When the nurse is worried</td>
<td>66%</td>
<td>74%</td>
</tr>
<tr>
<td>Anytime when the patient is seriously ill</td>
<td>65%</td>
<td>78%</td>
</tr>
</tbody>
</table>

**Comparison of CCRTs Perceptions: Pre-Post**

<table>
<thead>
<tr>
<th>Reasons For Joining CCRT Team</th>
<th>Pre (N = 90)</th>
<th>Post (N = 86)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity to improve patient care</td>
<td>97%</td>
<td>93%</td>
</tr>
<tr>
<td>Opportunity to expand application of critical care skills set</td>
<td>84%</td>
<td>88%</td>
</tr>
<tr>
<td>Opportunity to learn new skills and techniques</td>
<td>83%</td>
<td>79%</td>
</tr>
</tbody>
</table>

**Conclusions**

The nurse-led CCRT initiative was well received by both Ward RNs and CCRT members.

**Next Steps**

- The MOHLTC is considering the implementation of additional nurse-led teams.
- CCRT Scorecard is being developed for the purpose of performance management.
- An impact evaluation is planned to take place 5 years post-implementation.

**References**