Critical Care Response Teams & End of Life Discussions: Collaboration for Patient Centered Care at Grand River Hospital

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Critical Care Response Teams (CCRT)

- 1st introduced in January 2006 as one of seven closely linked initiatives developed for Ontario’s Critical Care Strategy
- A major innovation in hospital practice gaining global recognition for their capacity to improve patient safety, critical care access, and the efficiency of hospital resource utilization
- Specific funding for 4 Paediatric and 27 Adult Intensivist led programs across Ontario
- Ideally comprised of an Intensivists, a Critical Care Nurse & Respiratory Therapist
- Also known as Medical Emergency Teams or Outreach Teams
CCRT at Grand River Hospital

Up to 80% of patients admitted to the ICU following a cardiopulmonary arrest, exhibit signs of deterioration 6-8hrs prior to an arrest situation. The CCRT:

- Educate ward staff to monitor indications of serious or imminent deterioration
- Empower them to activate our team who:
  - Deliver timely intervention, resuscitation, triage and follow-up throughout the hospital on a 24/7 basis.
  - Stabilize the patient before transfer to ICU
  - Assist with advanced nursing skills
## CCRT at GRH

### Initial Measures

<table>
<thead>
<tr>
<th>Track as Baseline, # of:</th>
<th>Goals</th>
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<tbody>
<tr>
<td>1. Adult Cardiac arrests on medicine wards</td>
<td>Decrease by 30%</td>
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<td>2. Adult pre-arrest situations on medicine wards</td>
<td>Decrease by 30%</td>
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<td>3. CCRT calls</td>
<td>↑ Staff comfort calling CCRT</td>
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<td>4. ICU in-hospital admissions</td>
<td>Decrease in-hospital ICU admissions &amp; readmissions</td>
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<td>5. ICU readmissions after &lt;48hours post discharge</td>
<td>Increase documentation of code status</td>
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<td>6. patients with documented code status</td>
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CCRT Successes

• Code Blue rates have decreased in medical and surgical programs in 3 of the last 4 years
• Number of pre-arrest situations have fallen each of the last 4 years in both the medical & surgical programs
• Readmission to ICU remain low at 2%
Opportunity for Quality Improvement

The CCRT

• Is mandated by the MoHLTC to be available for timely discussions about diagnosis, prognosis, & end of life care

• Observed a gap in care; many patients did not have advanced directives, expressing their wishes & preferences

• Could collect data for evidence of documentation regarding discussions about end of life care/advanced directives

• Responded to Senior Leadership’s concerns regarding ICU admission rate, ICU mortality rate, & HSMR (Hospital Standardized Mortality Ratio)
Our Study

• Data collection occurred over 1 year June 2010 to June 2011
• Total 163 transfers to ICU from other in-patient areas. Excluded:
  – admissions from the OR & Emergency
  – readmissions to the ICU during the same hospital visit
• 141 patients in our sample. Data included:
  – date of hospital admission
  – the service they were admitted to
  – date of admission to ICU
  – was there a documented code status discussion before admission to ICU
  – who had the discussion with the patient or family
  – doctor’s order written stating the patient’s preferences
Our Data
% Patients Who Had a Discussion

- Level of Care Discussion: 47 (33%)
- No Discussion: 94 (67%)
ICU Admissions- Source

- Medicine: 28%
- Surgery: 24%
- Oncology: 13%
- Step-Down Unit: 23%
- Other: 12%
Age Range of Our Sample
Level of Care Discussions per Hospital Service

- Medicine: 28%
- Surgery: 13%
- Oncology: 28%
- Step-Down Unit: 31%
How Do We Measure Up?
Only 40% were very well prepared to have EOL discussions with their patients.

Yet, nearly 20% of dialysis patients stop dialysis prior to death.

Dialysis patients rely heavily on unit staff to address their palliative care needs, including pain & symptom management and psychosocial & spiritual support.

Less than 10% of patients reported discussing EOL issues with their nephrologists.
Jennifer Temel, et al

- 28% in standard care group had documented advanced directives (vs. 53% of patients who were receiving integrated care)
- Early palliative care patients had a better quality of life than patients assigned to standard care & had fewer depressive symptoms (16% vs. 38%)
- 33% in the palliative care group received aggressive end-of-life care (vs. 54%)
- Median survival was longer in the palliative care group (11.6 months vs. 8.9 months)

• 78% were treated in the ICU, 65% died in ICU
• None (0%) had discussions of palliation or EOL care as an alternative course of treatment before admission to ICU
• On admission, 20% of those who subsequently died in hospital had advanced directives in place
• 78% who died in hospital had DNR orders in place before death. However,
  - 48% made that decision < 48hrs before they died
  - ICU pts had more invasive tests (17% vs. 8%)
  - were less likely to have adequate pain control (33% vs. 48%)
  - less likely to have referral to hospice care services (12% vs. 25%).
Does It Matter?
Alexis Wright, et al...

• Examined the association between EOL discussions, aggressive medical interventions, patient mental health & caregiver bereavement adjustment.
  – No associated with higher rates of major depressive disorders or more worry
  – Patients were significantly more likely to accept that their illness was terminal
  – Preferred medical treatment focused on relieving pain & discomfort over life-extending therapies
  – Associated with lower rates of ventilation, resuscitation, admission to the ICU, more enrolled in a hospice for more than a week

JAMA, October 8, 2008—Vol 300, No. 14
Collaboration for Quality

• Enhance philosophy of patient centered care
• Collaboration with Ethics Committee to introduce and support use of new Advanced Directive form hospital wide
  – Includes identification of Substitute Decision Maker or Power of Attorney
  – To be completed within 24 hours of admission
• Educate and support ward staff in their efforts
• Continue to initiate discussions when required
Lessons Learned...Moving Forward

• Celebrate our successes
  – EOL discussions has been identified as a Key Quality Indicator
• Acknowledge our Champions
• Lead by Example
• Get our data
Thank You
Questions?

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References


