Critical Care SURGE CRISIS PLAN

How does the Department of Critical Care respond to a surge in patients? How do we ensure safe care processes for patients and staff?

Until recently, the Department of Critical Care has not had a Surge Crisis Plan, or Mass Casualty Plan; we relied on clinical intuition and experience. We recognized this as a gap, and as we planned to participate in an organizational Mass Casualty Exercise on May 28th we began to draft a plan. Our plan is based on a review of the literature, other organizations’ critical care surge plans, the things we were taught from events such as the VG flood, and many discussions with care providers about a plan that ‘makes sense’.

Our draft Critical Care Surge Crisis Plan clarifies procedures to invoke when the need for critical care services exceeds available resources (i.e. beds, staff, supplies). Overall, the goal is to optimize patient outcomes by:

1. Placing unstable and highly-resource-dependent patients in usual critical care areas and move stable, less resource-dependent ICU patients to non-traditional areas until the situation improves or until patients can be transferred to other facilities.
2. Ensuring patients are transferred from the Emergency Room or Operating Room to ICUs as promptly as possible.
3. Mobilizing staff and equipment from other parts of the QEII, Central Zone, and the province to support the delivery of critical care services at ‘Ground Zero’.
4. Facilitating communication within the organization and between critical care areas and various sites, by ensuring there is widespread mutual understanding of the Critical Care Surge Crisis Plan; this will facilitate a response that is timely, coordinated, and effective.

The draft plan has been circulated to many frontline staff and leaders. Next steps include broader stakeholder feedback and alignment with the newly released organizational plan. Once we shepherd the plan through this process, it will be made widely accessible to all, and we will be doing more mock exercises to practice using this tool. Ultimately, we recognize this as one small local piece of a much-needed provincial plan for critical care patients.

An Opportunity Next-Door in PEI!

The Canadian Association of Critical Care Nurses (CACCN) is the voice for excellence in Canadian Critical Care Nursing. Each year, they host a conference called ‘Dynamics’. This conference is a diverse display of solution-focused nursing, demonstrating creativity in dedication to evidence-based practice. It offers an unsurpassed opportunity for national networking. This September, Dynamics will be held “next-door” in Charlottetown, PEI. Our Critical Care group will be very well represented, as we have had THREE abstracts accepted!

- Oral presentation entitled “Navigating Rough Seas – Keeping our Head above Water in a Flood and its Aftermath”.
- Oral presentation entitled “I.C.U. M.O.V.E.S: Intensive Care Unit Mobility, Optimizing a Very Early Start”.
- Poster presentation entitled “Medication Safety Huddles in the ICU: A Patient Safety Initiative led by our ICU Pharmacists and Nurses”.

Congratulations to everyone on their successful submissions!
The H1N1 pandemic of 2009 brought with it a cohort of patients that were young and sick - so sick that they required advanced techniques for oxygenation that exceeded our capabilities with traditional ventilators. It was during this pandemic that our Extracorporeal Membrane Oxygenation (ECMO) program was born, under the leadership of then-department member Dr. Dietrich Henzler. The departmental ECMO working group provides a structure for guidance and review of this uncommon yet highly resource-intensive treatment.

The working group ensures unified approaches to ECMO via the development of policy and procedure, routine formal review of all ECMO cases, in addition to continually updating practice to reflect current, evidence-based standards. Because ECMO requires both multi- and interprofessional approaches, different groups are represented in the working group: Respiratory Therapy, Perfusion, Nursing and Physicians – in this way every aspect of patient care is addressed and can be improved upon on an ongoing basis. The current efforts of our group include the development of a pre-printed order (PPO) for the running of ECMO, and creating a standardized approach to documentation and review of these cases.

We are confident that with the ongoing suggestions and improvements made by our group we increase the safety and utility of ECMO in our institution, ultimately leading to improved patient outcomes. This work will form the basis of ongoing use of ECMO, which is fast becoming the new standard of care for certain types of refractory respiratory failure.

**Another Successful Event!**

On May 31st, the Department of Critical Care and the Nursing Practice Council hosted a very successful educational event.

All of the speakers received great reviews! Thanks to:

- Constable Philip Apa (RCMP) & Detective Cst. Jeff Seebold (HRP), on the topic of Community Drug Use
- Dr. Meghan Mackenzie, with a toxicology review including the new high dose insulin PPO
- A challenging care scenario panel presentation, with panel members: Trent MacIsaac, College of Registered Nurses of Nova Scotia; Rev. David Maginley, Staff Chaplain; Mary Anne Persaud, Senior Legal Counsel for NSHA; and Dr. Jeff Kirby, Dept. of Bioethics, Dalhousie University

Big thanks to our Practice Council Leadership: Pam & Steven (5.2), Ronna (3A) (currently recruiting a Co-Chair! Speak with Ronna and Tricia to get involved) and Tricia, Cynthia, and Karen, for spearheading the planning. Lunch was provided compliments of the prize money from the Spacelabs Innovation Award, received last fall by Marlene, Pam, and Karen, recognizing the novel approach of the Quality Leader role, and the use of simple data to effect positive change.

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**What the tests for Compliance outlines:**

<table>
<thead>
<tr>
<th>What we do</th>
<th>compliant with published evidence and reviewed by medical and pharmacy leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VTE prophylaxis policy or guideline</strong></td>
<td>There is a hospital VTE policy. There is a VTE Prophylaxis section on our ICU Admission orders.</td>
</tr>
<tr>
<td><strong>Patients at risk for are identified and provided with appropriate, evidence-informed prophylaxis</strong></td>
<td>ICU Admission orders are based on published evidence and reviewed by medical and pharmacy leadership.</td>
</tr>
<tr>
<td><strong>Measures for appropriate prophylaxis are established, the implementation of prophylaxis is audited, and this information is used to make improvements.</strong></td>
<td>Prophylaxis is documented on the Admission orders. It is assessed daily on the Daily Progress Notes (VTE section). Pharmacological prophylaxis is documented on the MAR. Mechanical prophylaxis is documented on the Nursing Notes and Physician Daily Progress Notes. Early mobility is accepted as a ‘standard of care’. Monthly chart audits are completed (average compliance 96% in 2016).</td>
</tr>
<tr>
<td><strong>Information is provided to pts and team members about the risks of VTE and how to prevent it</strong></td>
<td>Information is provided to families about ‘blood clots’ in the Information for Families booklet, given to all families on Admission. Pharmacological prophylaxis treatment is clearly outlined in the ICU Admission PPO for the team.</td>
</tr>
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**The Critical Care Quality Team & Accreditation**

The Accreditation Canada program is designed to foster ongoing quality improvement through evidence-based standards and rigorous external peer review. Used most effectively, achievement of the Accreditation Standards is built into the way we do our daily work. This is the approach that was adopted a number of years ago by the Critical Care Quality Team; we strive to weave the Standards into our team goals and actions.

Part of the continuous Accreditation cycle, is an onsite visit. Our next onsite visit will be in the fall of 2017. As such, you will begin to hear more and more about Accreditation, as our Team begins to highlight how the Standards are interwoven with care processes and goals.

As an example of how our care processes support Accreditation, the chart to the left outlines the Venous Thromboembolism (VTE) Prophylaxis ROP.
One of the key’s to patient safety is team communication. In our ICUs, bedside rounds represent the main opportunity for the interdisciplinary team to share information, establish goals and make decisions.

The DaRT helps us to ensure key components of quality care are being addressed. As well, it helps us to gather data about how we are doing on rounds – what are our strengths and what are areas for improvement. This is of even greater importance working in a system with very limited available data for decision-making.

**How are we doing with DaRT completion?**

Not so great...

ANY member of the team can input data into the tool! The Intensivists and Charge Nurses are the leads in championing the tool and ensuring the team is completing on Rounds. It should be completed Monday to Friday, with a minimum completion rate of 60 days/quarter (20/month).

**What is DaRT showing us?**

It can show us lots...if we do it!

Most of the questions on the DaRT relate to our Quality Goals / Initiatives. For example, there are questions related to sedation, pain, delirium, pressure ulcers, central lines, weaning and VAP, mobility, and family involvement.

The following are examples of how the information from DaRT helps build a picture.

**Mobility in the ICU**

From DaRT we know that we are talking about mobility on Rounds, but we have room for improvement. Our goal is to discuss mobility on 90% of our rounds. We are not quite there yet, on average we do ask about mobility on 70-80% of the time.

From the Physiotherapy Daily Tracking Tool, we know that patients are being moved, and we are doing it safely. The table provided below gives an example of that data:

<table>
<thead>
<tr>
<th>MONTH</th>
<th># OF PATIENTS</th>
<th># PTS SEEN BY PHYSIO</th>
<th># IN-BED MOBILIZATIONS</th>
<th># OUT-OF-BED MOBILIZATIONS</th>
<th>SAFETY EVENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 2014</td>
<td>239</td>
<td>117</td>
<td>75</td>
<td>107</td>
<td>1</td>
</tr>
<tr>
<td>Jan 2015</td>
<td>226</td>
<td>129</td>
<td>86</td>
<td>58</td>
<td>0</td>
</tr>
<tr>
<td>Feb 2015</td>
<td>189</td>
<td>121</td>
<td>87</td>
<td>210</td>
<td>0</td>
</tr>
</tbody>
</table>

Monthly Chart Audit data augments our understanding of Mobility. For example, this graph reflects the percentage of charts audited with the Mobility Level documented each shift. As well, we know from our Chart Audits that patients are being mobilized as per the Mobility protocol 80-85% of the time.
Changes to our Critical Care Family: Welcomes! & Thank You’s!

We have had a few new hires and additions to our ICU family since our last edition. WELCOME!

- **3A ICU** is pleased to announce that their Novice Critical Care Nurses hired last June just completed the CCNP program, welcome to: Andrew Watson, Alex Hebert, and Channing Bishop. Emma Eteinne and Courtney MacPhee have also joined the 3A team after completing the CCNP program.

- **5.2 ICU** is excited to congratulate the following people on the success of the CCNP program: Liz Hobson, Katie Gordon, Charlotte MacLellan, and Britany MacArthur. In addition they are thrilled to welcome the following staff to the unit upon completion of CCNP: Kayla Ryan and Julie Mellon.

- **RT Group** is happy to welcome their new hires: Garrett Whitsett, Scott Chaput, Alicia Tilley, Jaclyn Sanderson, and Shania Ellsworth.

With the coming of new staff we have seen some amazing members of our family leave. A BIG thank you for your dedication and hard work! You will be missed!!

- **5.2 Retirements:** Ann Mackeigan

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**Upcoming Events & Conferences:**

- **Critical Care Grand Rounds** @ 1200-1300, Rm 378 Bethune, VG
  - Tuesday September 6th (TBA)
  - Tuesday October 11th – Dr. Babar Haroon
  - Tuesday November 1st – Dr. Edmund Tan
  - Tuesday December 6th (TBA)

- **Critical Care Journal Clubs** @ 1200-1300, Rm 378 Bethune, VG
  - Tuesday September 20th
  - Tuesday October 18th
  - Tuesday November 8th

**ALL MEMBERS OF THE TEAM WELCOME!!!**

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**CONGRATS!**

The Respiratory Therapy Group would like to send a big congratulations to Jill Chamberlaine for achieving the highest overall mark for a student in all of the Dalhousie Schools of Allied Health.

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**Thanks & Kudos**

The Quality & Patient Safety team would like to take a few minutes to recognize Kristen Griffiths for her commitment to Quality and Patient Safety!

Kristen is an administrative assistant in the Department of Critical Care; she is indispensible in that role, but is also indispensible to the Quality Team. Kristen is our faithful leader, scheduling, and rescheduling meetings, taking our minutes and keeping us on task. Not to mention, Kristen is the one who puts her time, energy and passion into physically creating The Advocate Quality Newsletter, putting it all together! It is her creativity, design skills, and attention to detail that lets us put out a quarterly Newsletter. Without Kristen this would be a much more daunting task. So THANK YOU KRISTEN, for truly being a key member of our Quality Team!

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"Keep love in your heart. A life without it is like a sunless garden when the flowers are dead" ~ Oscar Wilde~

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