ENHANCED RECOVERY AFTER SURGERY NETWORK

Webinar/Teleconference
May 22, 2013
• **Enhanced Recovery After Surgery**: A perioperative care pathway to improve patient outcomes and recovery after major surgery.

• Session sponsored by the [Specialist Services Committee (SSC)](https://www.ssc.bc.ca), a collaborative committee between the BC Medical Association and the Ministry of Health, with representation from health authorities.

• Mandate is to support the delivery of specialist care services to patients in BC.
ROLE OF NETWORK

• To bring together sites from across BC that have implemented or are considering implementing ERAS.

• To share experiences, expertise, best practices, and to find opportunities to link with other jurisdictions.

• To better coordinate provincially to implement, improve, and sustain common pathways.
AGENDA

• Short Presentations
  ○ Deborah Bachand, RN (Victoria General Hospital)
  ○ Stephen Parker, RN (St. Paul’s Hospital)
  ○ Dr. Ron Collins, Anesthesiologist (Kelowna General Hospital)
  ○ Remarks by Dr. Laurence Turner, General Surgeon (Royal Columbian)

• Questions & Discussion

• Next Steps
ERAS programs follow well trodden paths, which are...

• Evidence based, peer reviewed, best practice standards internationally proven to improve outcomes and patient satisfaction

• A challenge to local culture and embedded practices-aka “we’ve always done it this way”
**PREHABILITATION**

- Promoting self management and care through robust and comprehensive pre-admission education
- Optimizing preoperative Immune system

**ENHANCED INTRAOPERATIVE CARE**

- Fluid balance Cardio Q
- Patient warming >36*
- Glucose control
- Standardized pain control

**OPTIMIZE POST OPERATIVE CARE**

- Standardized pain management
- Tubes and lines out POD2
- Early feeding postoperatively
- Early planned ambulation
- Reinforce ERAS principles

![Patterns of Recovery](image)
ERAS...who’s driving the bus?  
Who’s riding the bus?

- **PATIENT**, frontline care provider team, physician champions, and administrative leadership

- You need ‘buy-in’ but more importantly – you need ‘**stay in**’!

- Does your team share the vision?

- Do they believe in the ‘WHY’ behind ERAS?

- Consider an NHS sustainability template at the beginning of your journey.
Colon Pathway Project at VIHA

• Successfully implemented at Victoria General in 2010
• Implemented at Royal Jubilee in 2011
• Sustainability issues identified 2012
  • Collaborative team meeting March 2013 to review and revise
  • Patient teaching booklet revision in progress
  • Audit tool revised for use by unit RN’s for real time audits

NEXT STEPS:

ERAS pathways for AAA at RJH, and radical prostatectomy procedures at VGH are underway

• Gynecology division has requested a hysterectomy pathway = true engagement
Supporting the pathway to Enhanced Recovery After Surgery

Patient EDUCATION:
Comprehensive patient teaching including booklets, web based materials, consider group teaching; enlist patient’s ideas!

Staff EDUCATION
Consider the extra time that must be dedicated to educate staff
Consider generational issues and challenges
Consider connecting with schools

EDUCATION IS THE KEY...

Physician & Senior Leader EDUCATION
When promoting change of this nature frame the education with evidence that supports the opportunity to improve practice and enhance patient care
...and success in using the key depends on teamwork

Thank you
How you want to be treated.

ERAS Network
May 23, 2013
What we have in place

- Team website for communication, sharing of info, references
- Pre-printed order sets: pre-admission, day of surgery & post-op
- Comprehensive patient education manual
- Patient navigator (pre-op education, inpatient, post-op follow-up)
- Documentation and Reference pathway
- Audit database
- Patient Experience Survey **
Progress so far

- Implemented December 2012
- 40 patients - Mean LOS 6.1 days (↘ from 8.9)
  Median LOS 5 days
- Good staff uptake overall
- 3 readmissions (no comparison data yet)
- Some revisions to order sets made to clarify some areas: diet, RTC antiemetic
What has gone well

• Interdisciplinary steering group.
• Taking time!
• Decision to implement for a defined patient population
• Having CNS with time to guide the project work
• Liaising with other centres
• Having a patient navigator
• Pre-op education – more in depth, thorough baseline assessments
• Carbohydrate loading
• Pre-op warming
• Intra-op fluids ↓↓
• Good nursing buy-in with implementation
• Ability to monitor audit data relatively quickly
Challenges

- Large number of departments/individuals (silos/processes)
- Needed to create numerous work-around systems – (communications)
- No dedicated time for team members to work on ERAS project
- Inconsistencies with RTC antiemetic, NSAIDS (process related)
- Lack of space & funding
- Data gathering – inconsistent documentation (not related to pathway) or delay to chart scanning if discharged
- Who supplies the gum??
Plans

- Expand to MSJ site for colon surgery
- Add patients with planned colostomy as next group:
  - Change how ostomy services/education provided
  - Scheduling in PAC
  - Space
- Other surgeries??
## Enhanced Recovery Processes

<table>
<thead>
<tr>
<th></th>
<th>LOS: All N = 67</th>
<th>LOS: Age &gt; 80 N = 10</th>
<th>R.I.W.</th>
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<tr>
<td>Traditional</td>
<td>9.1</td>
<td>11.4</td>
<td>2.5045</td>
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<td>ERACS</td>
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## Relative Contributions to Adverse Events and Excess Length of Stay

adapted from Fry et al, J Am Coll Surg 2008;207:698-704

<table>
<thead>
<tr>
<th>Procedure</th>
<th>n</th>
<th>% total cases</th>
<th>Adverse event (%)</th>
<th>Prop. Adverse Events (%)</th>
<th>Avg. ↑ LOS</th>
<th>Prop. All ↑LOS (%)</th>
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<tbody>
<tr>
<td>Colectomy</td>
<td>12,767</td>
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<td>28.9</td>
<td>24.3</td>
<td>9.8</td>
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<tr>
<td>Sm Bowel resection</td>
<td>3,576</td>
<td>2.8</td>
<td>32.9</td>
<td>7.7</td>
<td>13.9</td>
<td>10.6</td>
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<tr>
<td>Inpt. Chole.</td>
<td>11,718</td>
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<td>7.5</td>
<td>5.7</td>
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<td>4.9</td>
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<tr>
<td>Ventral Hernia</td>
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<td>10.1</td>
<td>4.9</td>
<td>6.3</td>
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<tr>
<td>Pancreat.</td>
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Long Term Impact of Complications

Adherence to the ERAS protocol and outcomes after colorectal cancer surgery

ERAS group, Arch Surg 2011;146:571-77

- 27% improvement in adherence (47% to 74%)
- 27% reduction in any 30 day morbidity
- In fact: dose-response curve for adherence:
  - 70% adherence: LOS 7.4 days; OR morbidity: 0.62
  - 80% adherence: LOS 7.0 days; OR morbidity: 0.57
  - 90% adherence: LOS 6.0 days; OR morbidity: 0.33
- Elements most predictive of good outcome:
  - GD fluid management, Pre-operative CHO beverage

Simpson J et al (under review)

There is a dose response effect, whereby improved compliance with ER elements is associated with shorter LOS

Colorectal, musculoskeletal and urological surgery all showed highly significant correlations associating increasing ER score with decreasing LOS
Questions & Discussion
Next Steps

- What do participants want to achieve or get out of the Network?
- How do participants want to connect or stay involved?

Informal Network

Structured Collaborative

Level of coordination?
Common standard pathway?
Consistent measurement?
Change management support and resources?
Sustainability?
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