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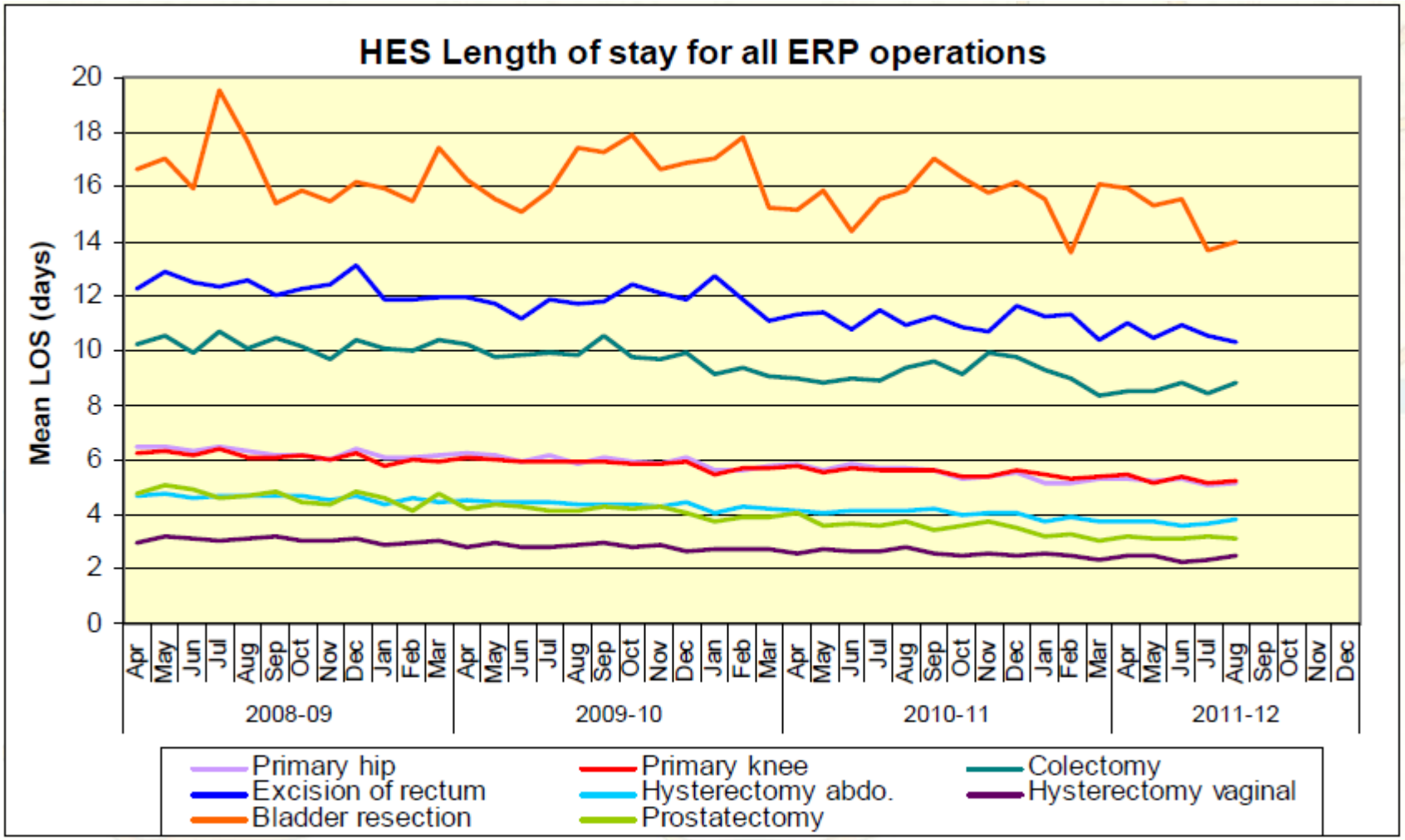
Early discharge for radical cystectomy and pelvic exenteration-how we do it

Mr Julian Smith
Consultant Urological Surgeon

Cystectomy is morbid



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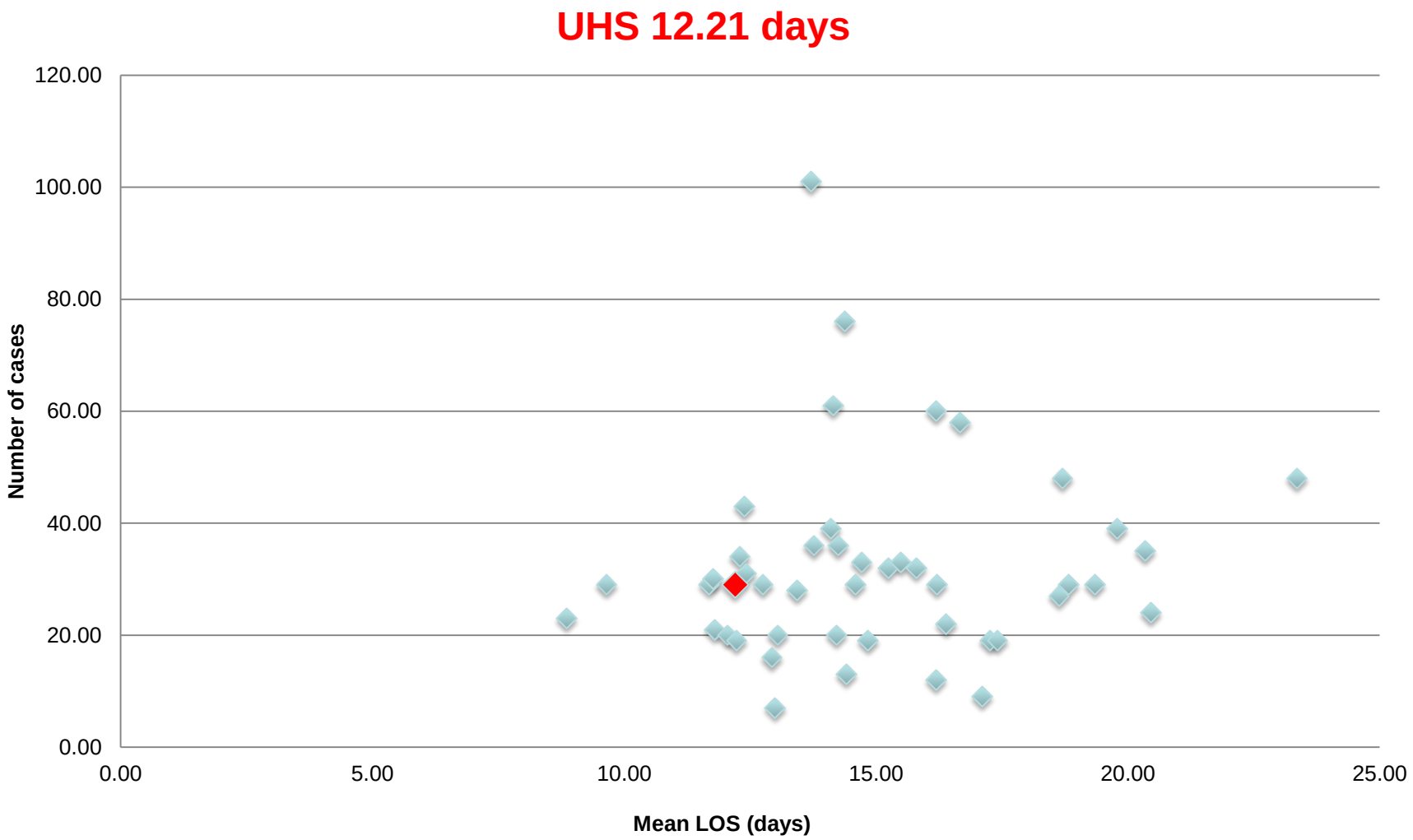
National Variation

Mean length of stay by volume of cases 06/2011-06/2012



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ERP is not just a pathway!

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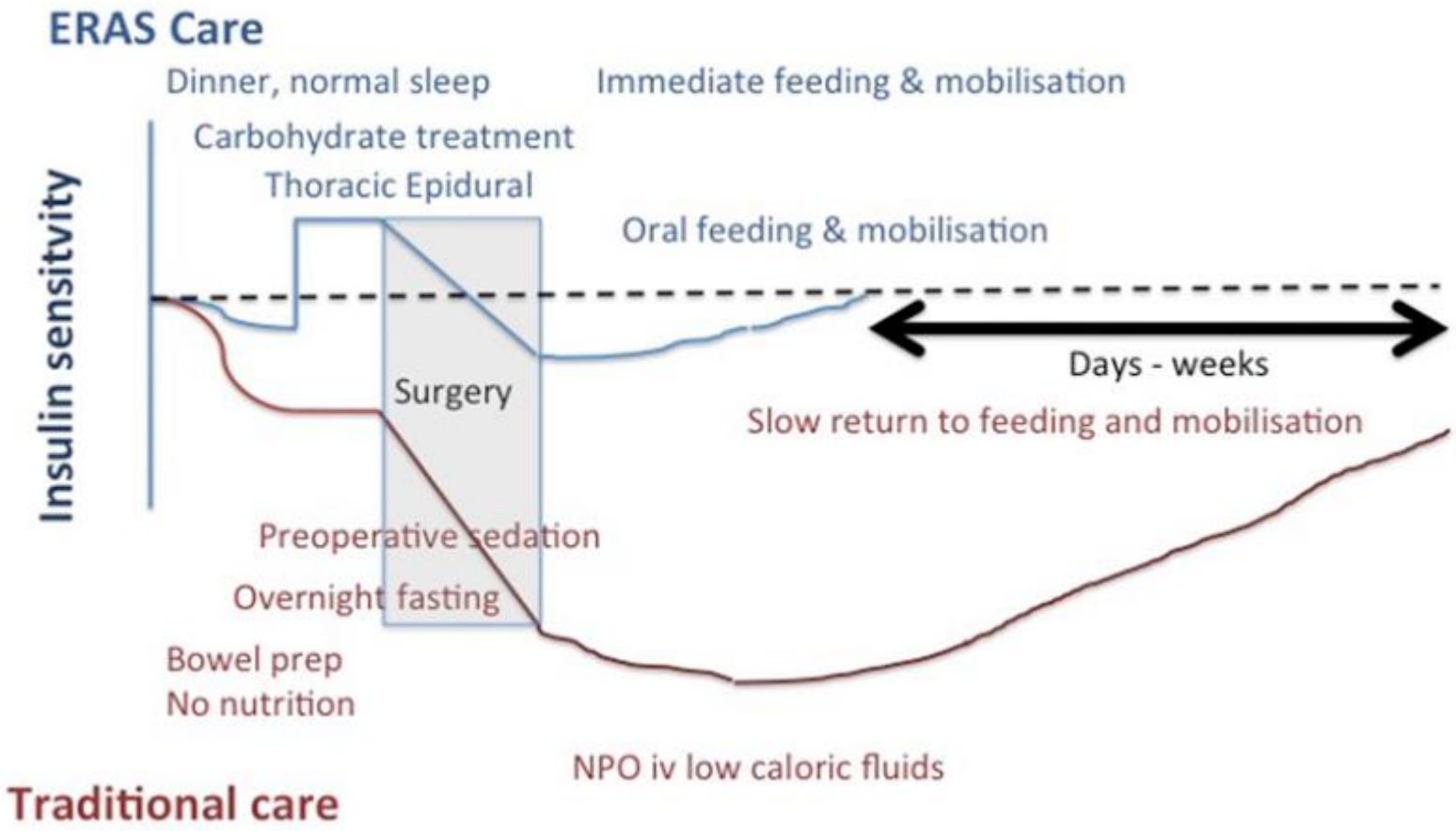
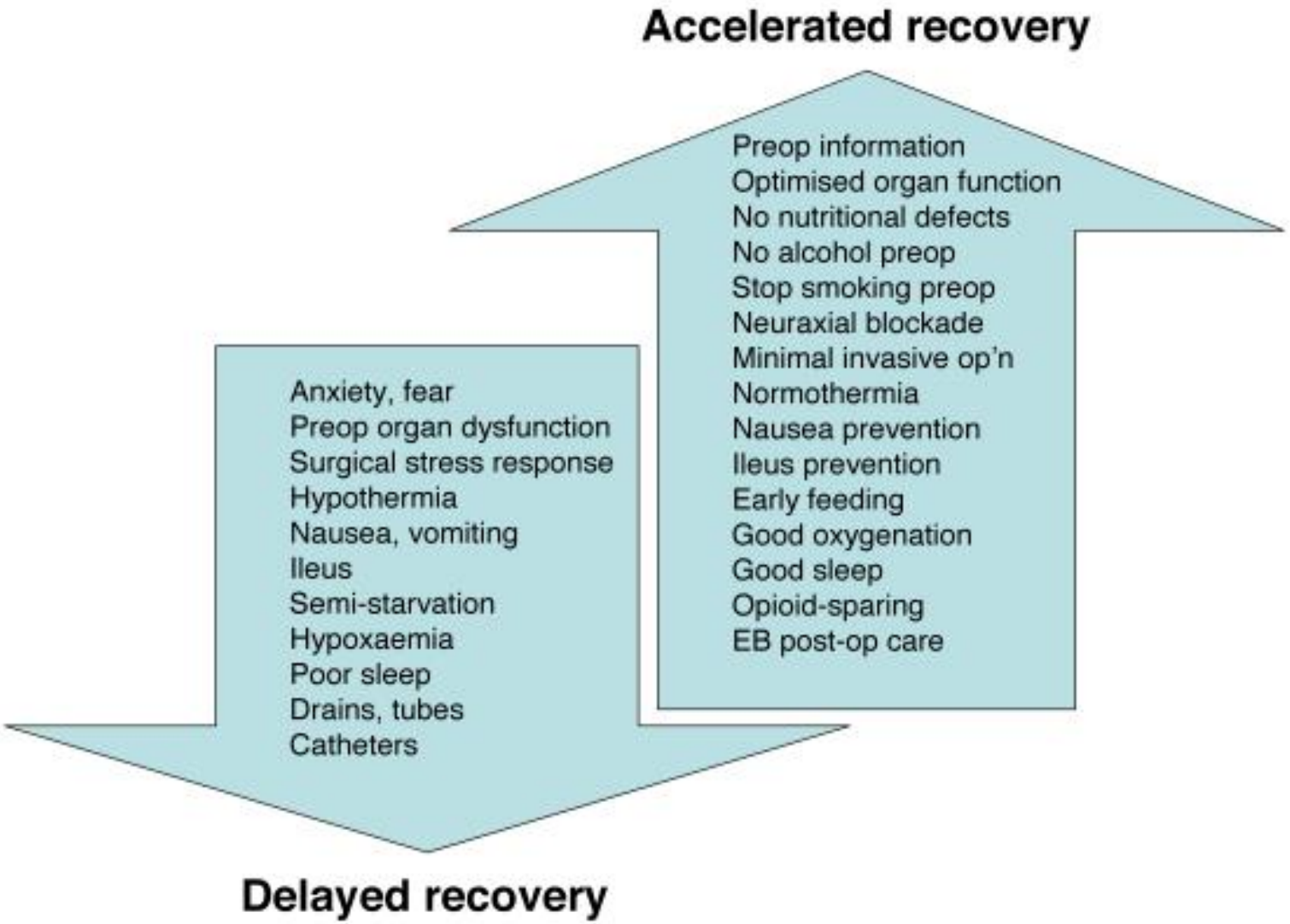
Problems:

Embedded surgical culture
Apprenticeship
Tradition
Experience
Reluctance to change?

Principles of ERP



Principles of ERP



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REDUCING TIME TO ORAL DIET AND HOSPITAL DISCHARGE IN PATIENTS UNDERGOING RADICAL CYSTECTOMY USING A PERIOPERATIVE CARE PLAN

RAJ S. PRUTHI, JUDY CHUN, AND MARC RICHMAN

UROLOGY 62: 661–666, 2003. © 2003

- 40pts, 2001-2
- Clear fluids-day 2
- Normal diet-day 4
- Mean LOS 5.2 days
  - 4-5 days-70%
  - 6-7 days 27%
  - ≥8 days 3%
- 1 Ileus

- How?
- Mini- incision
- Extraperitoneal
- Limiting Opiates
  - Ketorolac 30mg iv QDS
- Prokinetics
  - Metoclopramide 10mg iv TDS
- Early Ambulation and diet

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Prospective Randomized Controlled Trial of Robotic versus Open Radical Cystectomy for Bladder Cancer: Perioperative and Pathologic Results

Jeff Nix, Angela Smith, Raj Kurpad, Matthew E. Nielsen, Eric M. Wallen, Raj S. Pruthi *

Division of Urologic Surgery, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

EUROPEAN UROLOGY 57 (2010) 196–201

	Robotic ($n = 21$)	Open ($n = 20$)	p value
Mean EBL, ml (median)	258 (200)	575 (600)	<0.0001
OR time, h (median)	4.20 (4.2)	3.52 (3.4)	<0.0001
Time to flatus, d (median)	2.3 (2)	3.2 (3)	0.0013
Time to BM, d (median)	3.2 (3)	4.3 (4)	0.0008
Length of stay, d (median)	5.1 (4)	6.0 (6)	0.2387
In-house analgesia, mg (morphine equivalents)	89.0 (87.5)	147.4 (121.5)	0.0044
Clavien units (median)	2.3 (2)	2.6 (2)	0.5622

BM = bowel movement; EBL = estimated blood loss; OR = operating room.

- Robot Complications:
  - 2 Ileus
  - 2 UTI
  - 1DVT
  - 1ARF
  - 1 Incarcerated hernia
- Open Complications:
  - 3 Ileus
  - 1 UTI
  - 1 ARF
  - 1 Urine leak
  - 1 Death

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ERP Phase 1

- Introduced Jan 2011
- Comparison of Non-ERP and ERP-1:
- N-ERP 69pts
  - LOS median 14 days
- ERP-1 37pts
  - LOS median 10 days

Pre-operative
• Carbohydrate loading, shortened NBM period • Avoidance of bowel preparations, same day admission
Intra-operative
• Individualised, goal-directed fluid therapy • Rectus sheath catheter instead of epidural
Post-operative
• No routine nasogastric tube use • Early (day 0) oral intake with Fortisips® or equivalent • Planned mobilization within 24 hours • Chewing-gum use • Full therapy support (stoma care, physiotherapy, dietitian)

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Culture Change

- **Lead from the top:**
  - Consultant of the week/ Senior registrar decisions
  - Twice daily progress appraisal
- **Team building:**
  - The patient and family are central (pre and post-op)
  - Overlapping roles/ “mucking in”
  - Weekly ward nursing staff protected teaching
  - Physiotherapy goals ”shifting the goal posts”
  - Positive feedback
- **Supra-regional Stoma meeting:**
  - Pre-op prosthesis and practice
  - Early engagement and stoma independence

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In theatre change

- *Surgical:*
- Synergy with anaesthetist:
  - Minimise fluid shifts
- Cell-Saver use
- Anchored stents
- Overnight pelvic drain

- *Anaesthetic:*
  - Intra-operative Oesophageal Dopper/LIDCO
- Rectus Sheath catheters
- NSAID Supps or iv?
- Routine Magnesium replacement in recovery

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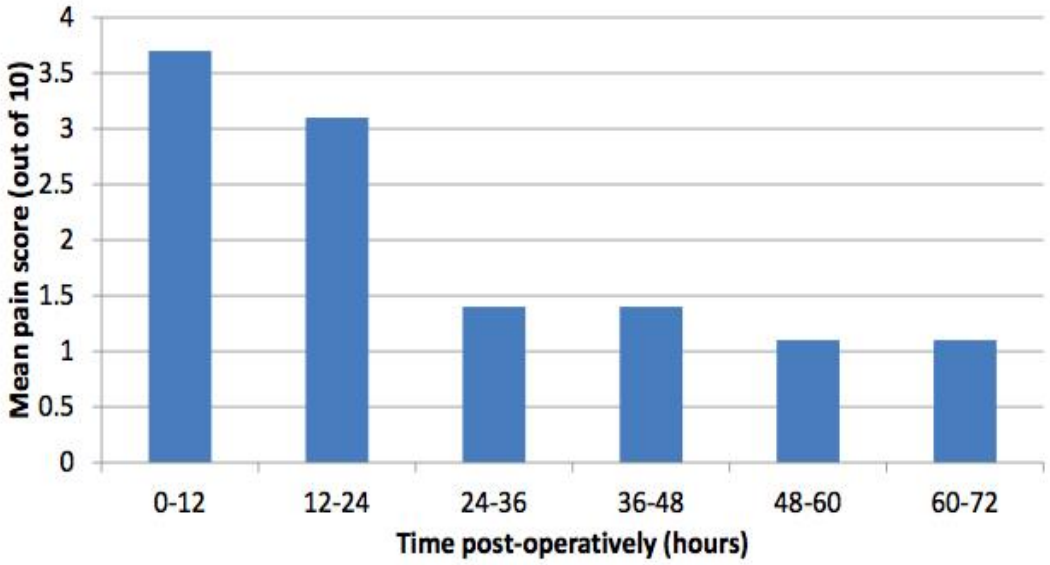
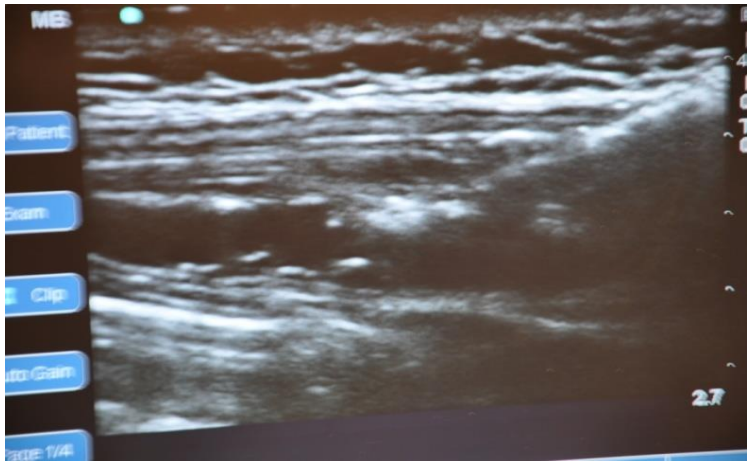
Use of rectus sheath catheters for pain relief in patients undergoing major pelvic urological surgery

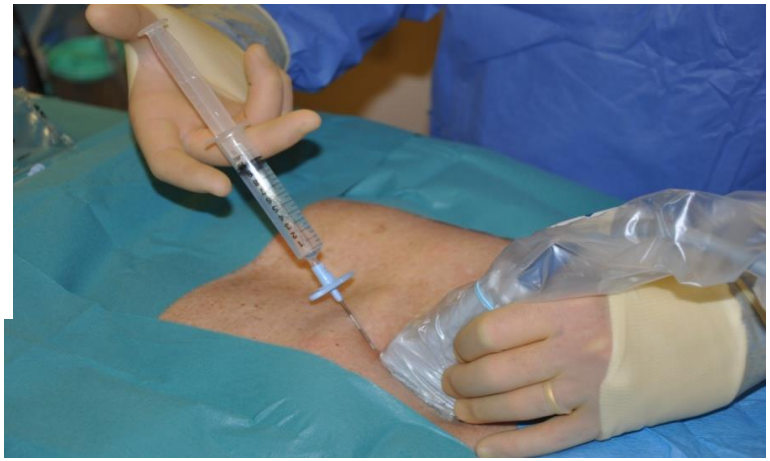
Thomas J. Dutton, John S. McGrath and Mark O. Daugherty

Exeter Surgical Health Services Research Unit, Royal Devon and Exeter NHS Foundation Trust, Exeter, UK

Figure 2. Mean post-operative pain scores per 12-hour period







De-medicalisation

- Evening:
  - -Tea/Coffee
  - - Fortisips
- Day 1:
  - Urethral drain out
  - PCA down
  - Discontinue iv fluids
  - Sit out for meals
  - Fortisips/ Soup/Jelly/Ice Cream
  - Pt chewing gum and GUT physiology lesson!
  - Walk am on SHDU then walk to the ward pm
  - Stoma lesson
- Day 2:
  - Disconnect Urometer
  - Stoma lessons am & pm
  - Stoma independence
  - Walk off ward

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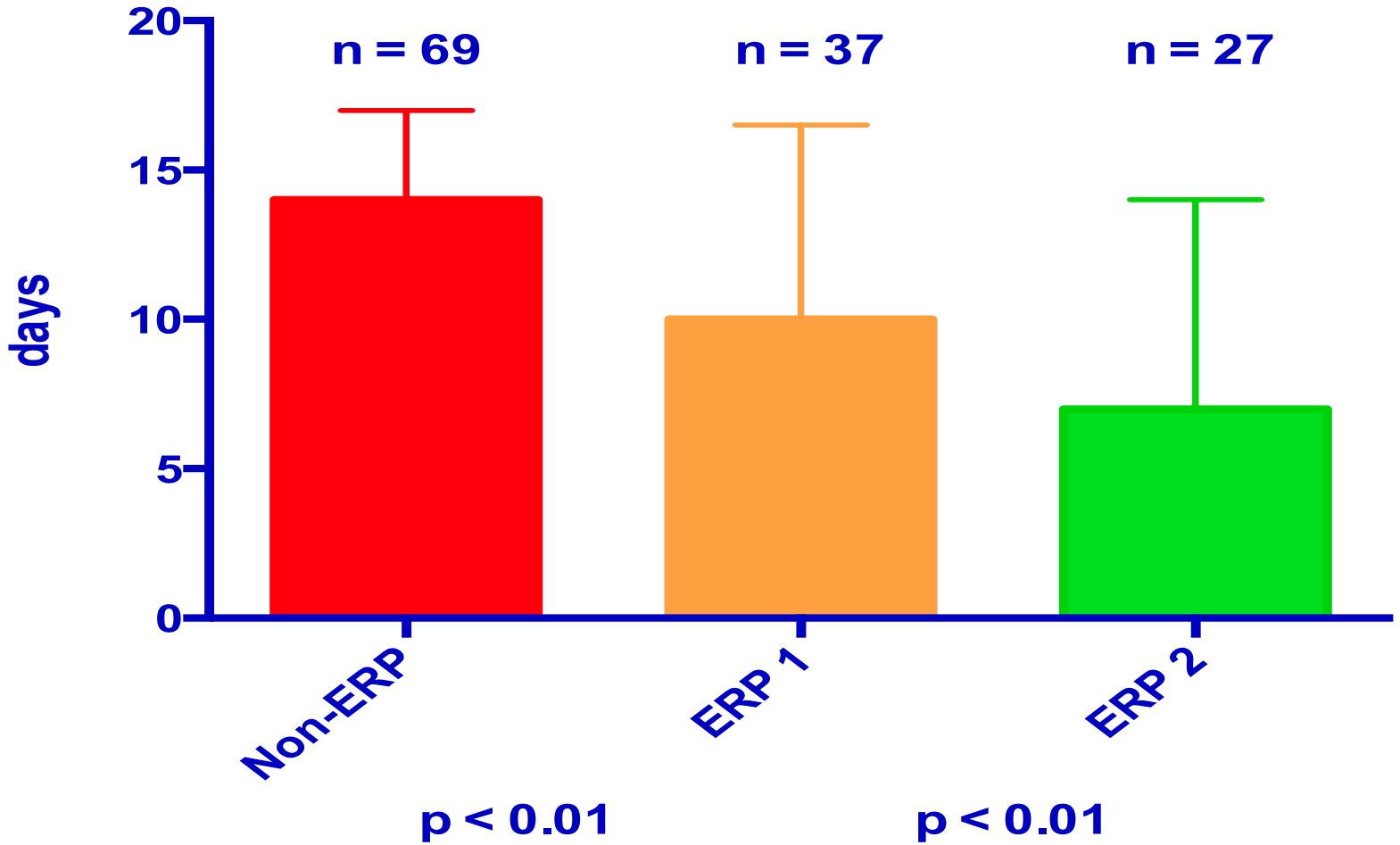
Marginal gain:
Median LOS 7 days



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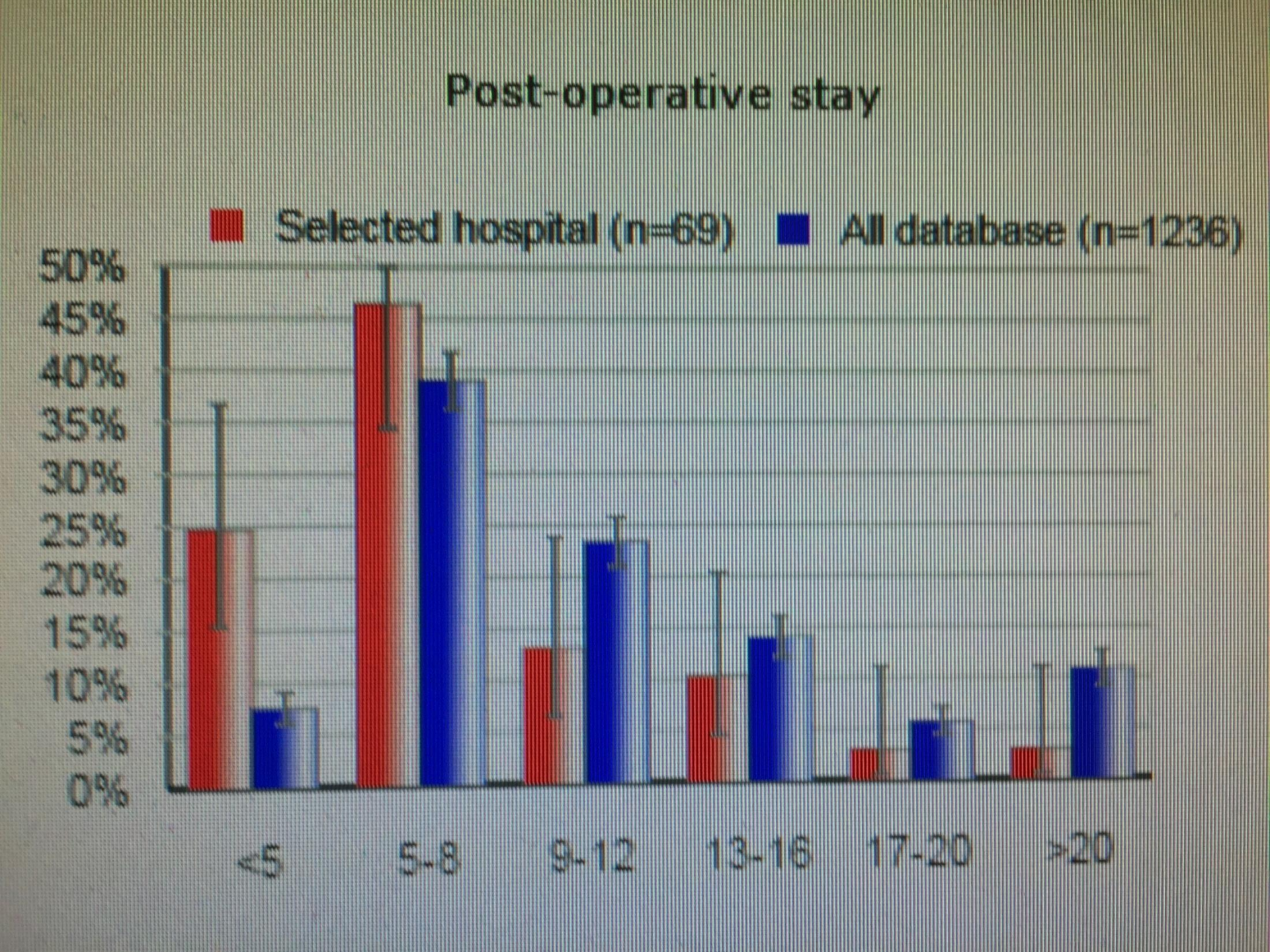
Post-operative stay
Selected hospital (n=69)
All database (n=1236)
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
<5
5-8
9-12
13-16
17-20
>20

Discharge?

When tolerating normal diet, pain controlled with oral analgesia and normal bowel activity.

Support:

- High levels of Surgeon-patient Interaction
- D/C with stents
- Low Residue/ High protein diet
- Open Access to Ward
- 24hr Help line
- 48hrly telephone consult with ANP
- Stent removal day 10 (day 14 for salvage and exenteration)

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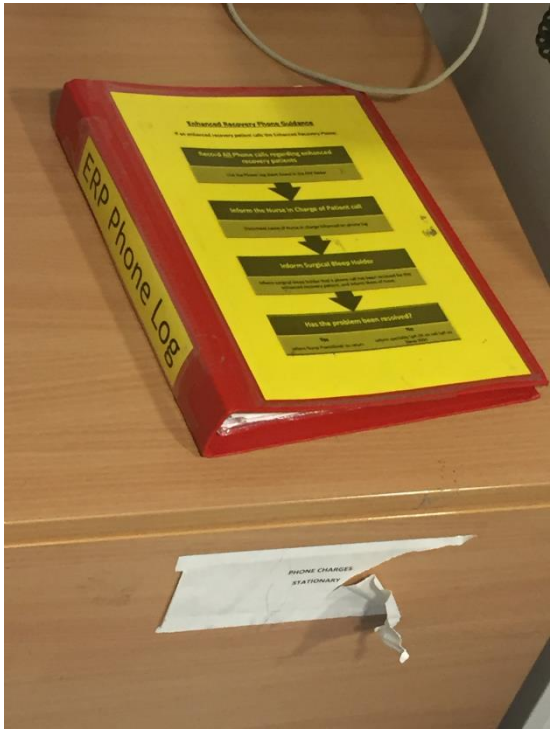
Complications and Safety

- Readmission 90 day:
  - Non-ERP 10.1%
  - ERP-1 13.2%
  - ERP-2 18.5% (5 patients) (p=0.54)
  - National readmission 15-18%



- Safety:
  - 48hrly telephone consult
  - Safety hotline and readmission criteria:
    - Vomiting, unwell, fevers, CVS or DVT flags!

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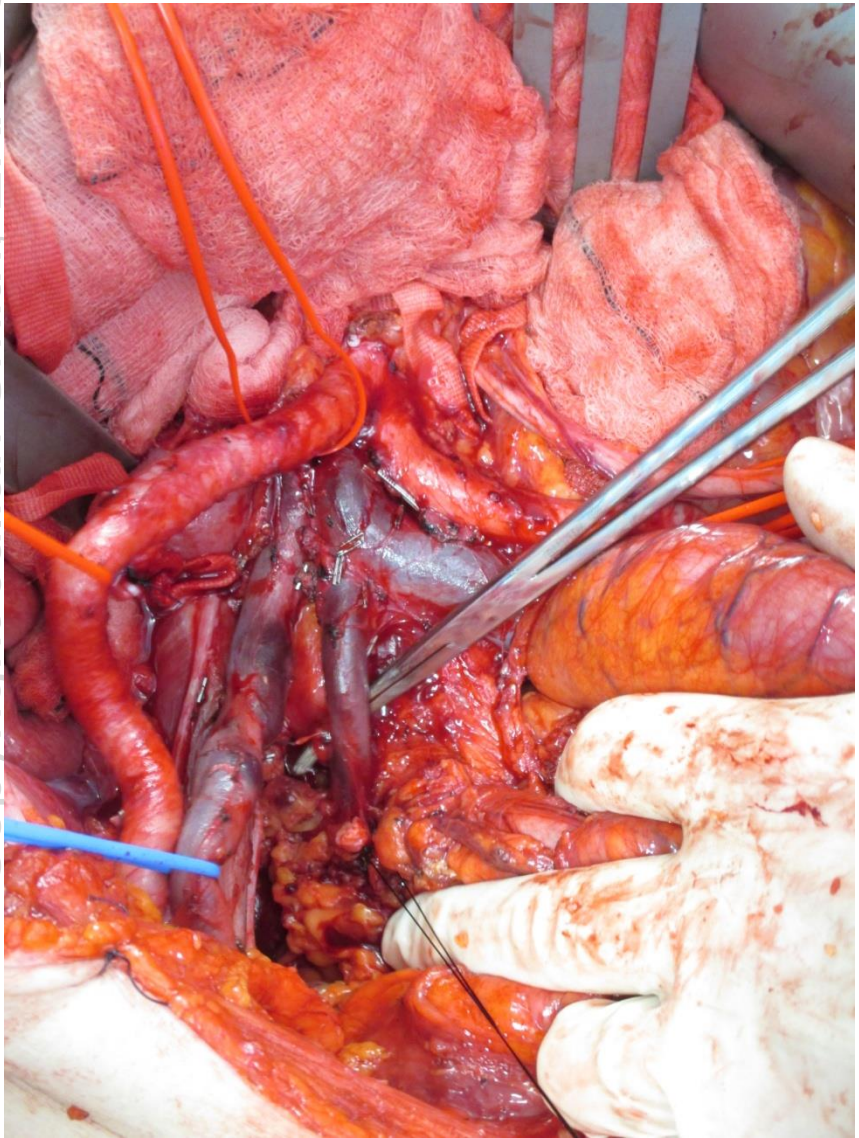
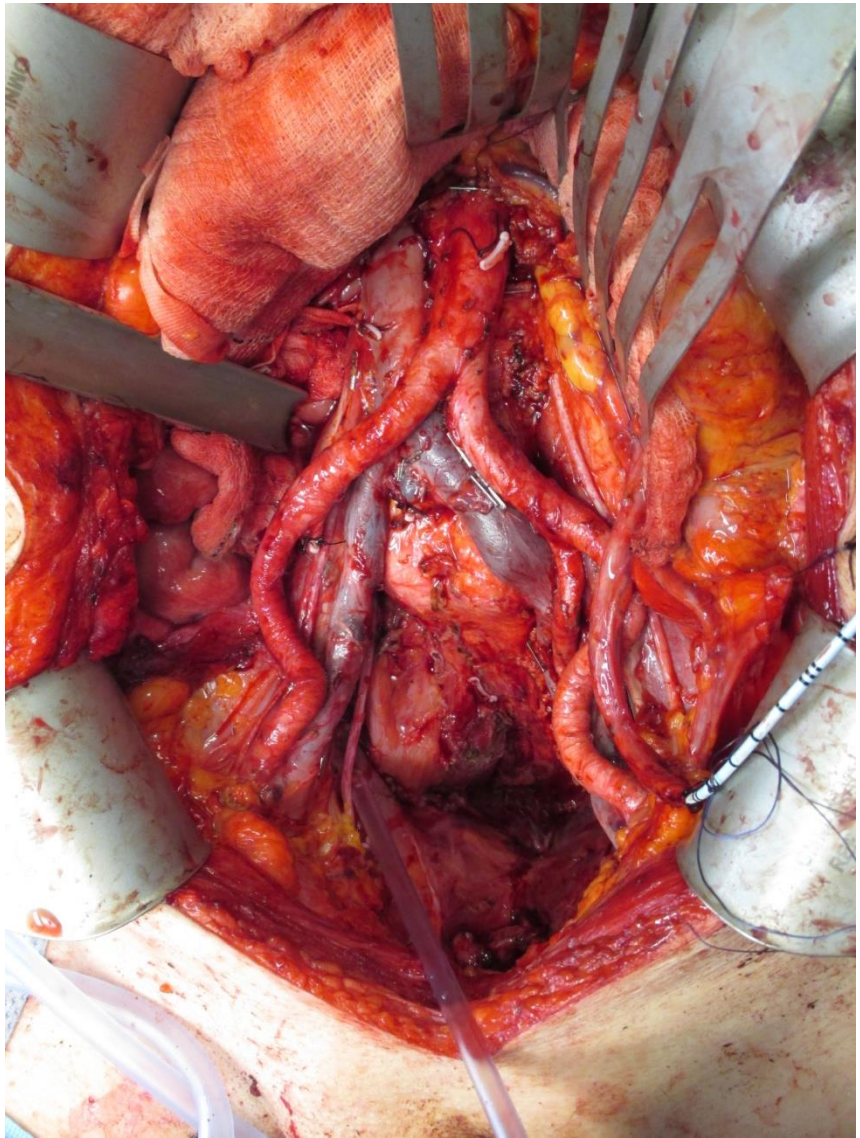
Cystectomy or Exenteration?





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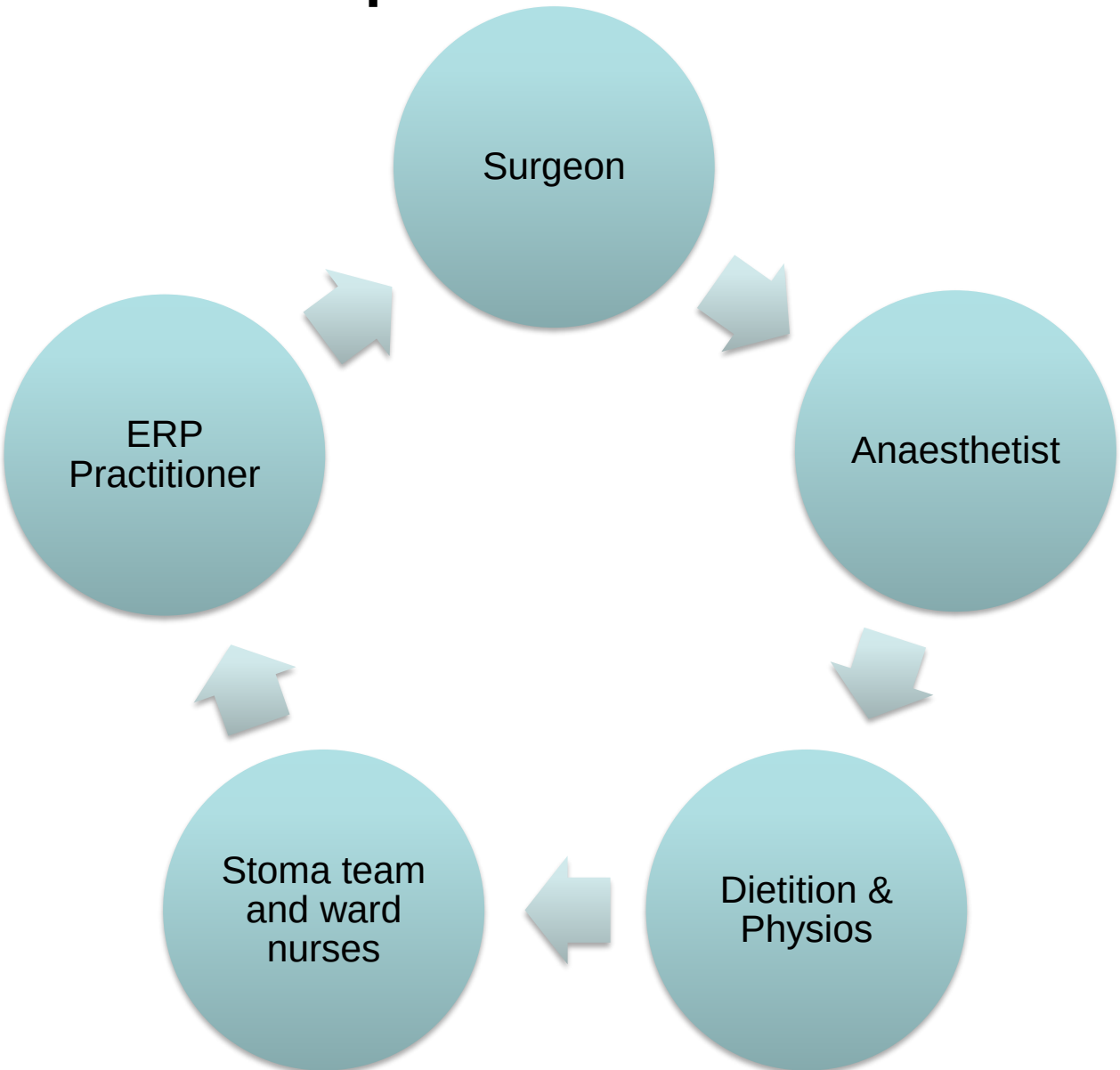
Behavior of a group of health care professionals



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Questions?

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