Enhanced Recovery after Colorectal Surgery Pathway

Enhanced Recovery after Colorectal Surgery pathway is a programme of care aimed at reducing the physical trauma of surgery and achieving a complication-free recovery, thereby shortening hospital stays for patients.

Enhanced Recovery after Colorectal Surgery is a relatively new method of patient management. It is a collection of strategies that combine in a structured pathway allowing the surgical and anaesthetic teams to decrease the physical insult and aid recovery enabling earlier discharge. This is achieved with fewer complications.

While some of the following are active administrations of new modalities, there are others that seek to reduce complications by minimising the effect of preparation for surgery, and the surgery itself, on the gut. The 17 key elements included in the Enhanced Recovery after Colorectal Surgery Pathway are:

1. Preoperative counselling
2. Preoperative feeding (up to two hours prior to surgery)
3. Reduced or No bowel preparation
4. No premedication
5. Fluid restriction (or at least optimisation)
6. Perioperative high oxygen concentration
7. Active prevention of hypothermia
8. Epidural analgesia
9. Laparoscopic or minimally-invasive incisions
10. No routine use of NG tubes
11. No routine use of drains
12. Enforced postoperative mobilisation
13. No systemic morphine use
14. Standard laxatives
15. Early removal of urinary catheters
16. DVT prophylaxis
17. Enhanced preoperative and postoperative nutrition via supplements

Developed with support from St Mark’s Hospital.

Helen Broadwell
Enhanced Recovery Nurse (Colorectal)
July 2009
### Signature Sheet

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</table>
### Patient Addressograph / Details

- Name: ........................................................................................................................................
- D.O.B: ........................................................................................................................................
- Hosp No: ....................................................................................................................................
- Consultant: .................................................................................................................................
- Ward: ...........................................................................................................................................

### Patient reviewed by surgical doctor
- Yes  
- No  
- n/a

### Consent signed
- Yes  
- No  
- n/a

### Patient fully aware of planned surgery
- Yes  
- No  
- n/a

### Investigations - Results available
- Yes  
- No  
- n/a

### Bloods performed within the last 10-14 days
- Yes  
- No  
- n/a

- If no **must** be repeated today

### If previously warfarinised check INR
- Yes  
- No  
- n/a

- Inform anaesthetist if INR >1.2

### X-ray and ECG available
- Yes  
- No  
- n/a

### Prescription chart written
- Yes  
- No  
- n/a

### Admission Data:

- Patient orientated to ward
- Yes  
- No  
- n/a

- Observations - TPR, BP, SaO₂ and Pain score
- Yes  
- No  
- n/a

- Clexane prescribed and given at 18.00hrs
- Yes  
- No  
- n/a

- Anti-embolism stockings given and applied
- Yes  
- No  
- n/a

- Order pressure relieving equipment if appropriate
- Yes  
- No  
- n/a

- Check patient details and name bands insitu
- Yes  
- No  
- n/a

### Bowel preparation as per protocol
- Yes  
- No  
- n/a

### Referrals:

- Pain nurse
- Yes  
- No  
- n/a

- Physiotherapist
- Yes  
- No  
- n/a

- Stoma nurse
- Yes  
- No  
- n/a

- Dietician
- Yes  
- No  
- n/a

- Social worker
- Yes  
- No  
- n/a

- Anaesthetic review
- Yes  
- No  
- n/a

### Nutrition:

- Normal diet
- Yes  
- No  
- n/a

- Ensure normal intake of oral fluids
- Yes  
- No  
- n/a

- Pre-op drinks given
- Yes  
- No  
- n/a

### Referrals:

- Pain nurse
- Yes  
- No  
- n/a

- Physiotherapist
- Yes  
- No  
- n/a

- Stoma nurse
- Yes  
- No  
- n/a

- Dietician
- Yes  
- No  
- n/a

### Nurses Signature

- Day Shift
- Night Shift

### Please record any variances

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<thead>
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<th>Time</th>
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Pre-Operation Day

Date: ...........................................

## Ward:
- No food 6 hours before surgery
- Pre-op drinks and oral fluid up to 2 hours before surgery
- Theatre preparation completed
- TED stockings in situ, if appropriate, observe heels
- Confirm Clexane NOT given this am
- Bowel preparation as per protocol

## Post-op Theatre / Recovery:
- Epidural / PCA / painbust insitu ... if no, record reason
- Observations as per protocol
- Urine- minimum of 100mls over 4 hours
- Report any abnormalities to anaesthetist
- Patient sat up
- Patient offered a drink
- Check Pressure Areas Intact

### Total volume of IV fluid given in theatre =

### Estimated fluid loss in theatre =

## Time Variance & Reason

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Nurses Signature    Ward Nurse    Recovery Nurse

Date:  

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### Post-Operation Ward

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<th>Observations as per epidural / PCA / painbuster protocol</th>
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<tr>
<td>Maintain fluid balance chart</td>
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<tr>
<td>Administer IV fluids and encourage oral intake</td>
</tr>
<tr>
<td>Urine output - ensure <strong>minimum</strong> output of <strong>100mls</strong> over <strong>4 hours</strong></td>
</tr>
<tr>
<td>Complete stoma care plan if appropriate</td>
</tr>
<tr>
<td>Check pressure areas and record waterlow score</td>
</tr>
<tr>
<td>Mobility - ensure change of position</td>
</tr>
<tr>
<td>- TED stockings insitu, if appropriate</td>
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<tr>
<td>- refer to physio, if appropriate</td>
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<tr>
<td>- 6hrs post surgery sit out for 2 hrs, if appropriate</td>
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<tr>
<td>Encourage oral fluids, aim for 1000mls</td>
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<tr>
<td>High protein drinks x 2</td>
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<tr>
<td>Check patient for gastric dilatation / paralytic ileus</td>
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<tr>
<td>- patient feels unwell / nauseated</td>
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<td>- tachycardia &gt;100</td>
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<td>Patient education - remind patient of programme requirements</td>
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**Nurses Signature**

**Day Shift**

**Night Shift**

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**Date:** ……………………….
Post-Op Day 1
Date: .........................

Patient addressograph / details
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D.O.B: ..........................................................
Hosp No: .....................................................
Consultant: ..................................................
Ward: ..........................................................

Observations as per epidural / PCA / painbuster protocol
Maintain fluid balance chart
Discontinue IV fluids
Urine output: **minimum of 100mls over 4hours**
Complete stoma care plan, if appropriate
Observe wound
Check pressure areas
Mobility - out of bed for a total of 8 hours
  - walks x 4 (aim for 60 metres each walk)
  - TED stockings insitu, if appropriate. Observe heels
  - promote deep breathing
  - refer to physio if appropriate
Encourage oral fluids, at least 2000mls
High protein drinks - minimum of 2
Light diet
Check patient to exclude gastric dilatation / paralytic ileus
  - patient feels unwell / nauseated
  - tachycardia >100
  - abdominal distension
Patient education - remind patient of programme requirements
Blood tests – FBC, U&E’S, LFTs
Discharge plan

Nurses Signature

Day Shift

Night Shift

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### Observations as per epidural / PCA / painbuster protocol
- Maintain fluid balance chart
- Record any bowel motion
- Weigh patient
- Remove catheter - if remains state reason
- Discontinue epidural / PCA / painbuster, if appropriate
  - give oral analgesia
- Observe wound - renew dressing
- Hygiene needs met
- Check pressure areas
- Mobility - out of bed for a total of 8 hours
  - walks x 4 *(aim for 60 metres each walk)*
  - TED stockings insitu, if appropriate. Observe heels
  - promote deep breathing
  - refer to physio if appropriate
- Encourage oral fluids, at least 2000mls
- High protein drinks - minimum of 2
- Light / normal diet as tolerated
- Check patient to exclude gastric dilatation / paralytic ileus
  - patient feels unwell / nauseated
  - tachycardia>100
  - abdominal distension
- Patient education - remind patient of programme requirements
- Blood tests - FBC and U&E’S
- Discharge plan

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**Date:** ……………………….
### Post-Op Day 3

**Date:** ......................

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<th>Observations as per epidural / PCA / painbuster protocol</th>
<th>Yes</th>
<th>No</th>
<th>n/a</th>
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<tbody>
<tr>
<td>- if epidural / PCA / painbuster down record 4 hourly</td>
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<td>Maintain fluid balance chart</td>
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<td>- give oral analgesia</td>
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<td>If catheter remains then state reason</td>
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<td>Complete stoma care plan if appropriate</td>
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<td>- high protein drinks minimum of 2</td>
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<td>Discharge plan</td>
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**Nurses Signature**

**Day Shift**

**Night Shift**
### Patient Addressograph / Details
- **Name:** …………………………………………………
- **D.O.B.:** …………………………………………………
- **Hosp No:** …………………………………………………
- **Consultant:** …………………………………………………
- **Ward:** ………………………………………………………

### Observations 4 Hourly
- Maintain fluid balance chart
- Record any bowel motion
- Weigh patient
- If catheter remains state reason
- Give prescribed oral analgesia
- Complete stoma care plan if appropriate
- Observe wound
- Hygiene needs met
- Check pressure areas

#### Mobility
- Out of bed for a total of 8 hours
  - Walks x 4 *(aim for 60 metres each walk)*
  - TED stockings insitu, if appropriate. Observe heels
  - Promote deep breathing
  - Refer to physio if appropriate
- Encourage oral fluids, aim for 2000mls
  - High protein drinks minimum of 2
  - Normal diet

#### Check to exclude gastric dilatation / paralytic ileus
- Patient feels unwell / nauseated
- Tachycardia>100
- Abdominal distension

### Patient Education - Remind patient of programme requirements
- Discharge plan

### Post-Op Day 4

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## Observations 4 hourly

- Maintain fluid balance chart
- Record any bowel motion
- If catheter remains state reason
- Observe wound
- Complete stoma care plan if appropriate
- Hygiene needs met
- Check pressure areas
- **Mobility**
  - out of bed for a total of 8 hours
  - walks x 4 *(aim for 60 metres each walk)*
  - TED stockings insitu, if appropriate. Observe heels
  - promote deep breathing
- **Encourage oral fluids, aim for 2000mls**
  - high protein drinks minimum of 2
  - normal diet
- **Patient education - remind patient of programme requirements**
- TTA's written
- **Discharge plan**

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## Discharge Plan

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### Patient fit for discharge.

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### Nutrition:

- Advice on nutritional requirements
- Consider giving high protein drink

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### Education / Information:

- Patient and carer prepared
- Written information given to patient
- Information leaflet discussed
- Patient has contact details

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### Wound Care:

- District / practice nurse letter given
- Dressings and staple remover supplied

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### Medications:

- TTA’s written
- TTA’s given to patient
- Own drugs returned
- Patient understands about medications and regime

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### Environment

- Transport home
- Transport booked if required
- Keys to property available

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### Documentation:

- Letter to G.P.
- Out patients appointment

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### If Stoma Present:

- Reviewed by stoma nurse
- Proficient and confident in stoma care
- Supplies of appropriate appliance
- Contact numbers for stoma nurse

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### Nurses Signature          Day Shift
**Patient addressograph / details**
Name: …………………………………………………
D.O.B: …………………………………………………
Hosp No: …………………………………………………
Consultant: ………………………………………………
Ward: …………………………………………………

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**Post-Op Day .....**

**Date: .........................**

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**Mobility**
- out of bed for a total of 8 hours
  - walks x 4 *(aim for 60 metres each walk)*
  - TED stockings insitu, if appropriate. Observe heels
  - promote deep breathing

**Encourage oral fluids, aim for 2000mls**
- high protein drinks minimum of 2
- normal diet

**Patient education - remind patient of programme requirements**

**TTA's written**

**Discharge plan**

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**Nurses Signature**

**Day Shift**

**Night Shift**

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