Bowel Surgery – Enhanced Recovery After Surgery (ERAS) Pathway

Site Applicability

PHC Acute Care

Instructions

1. Review pathway once per shift for patient care goals and expected outcomes
2. Do not document on this pathway, complete documentation in the Electronic Health Record or paper chart as per policy

Pathway Patient Goals

1. Acute Care length of Stay (LOS) within target 4 days (5 days with stoma)
2. Patients are prepared for surgery
3. Patients have pain management to a level acceptable to the patient
4. Patients are free of nausea/vomiting on POD 1
5. Patients are aware of and understand discharge criteria
    a. Able to independently perform all ADLs as required (unless unable preoperatively)
    b. Pain managed with oral analgesics
    c. Tolerating regular diet – at least 1 solid mean without nausea, vomiting , bloating or increased abdominal pain
    d. Passing flatus or stool
    e. Clinical exam and lab tests show no evidence of complications or untreated medical complications

Inclusion Criteria

1. Provider order for pathway (required)
2. All patients having bowel surgery for non-obstructing disease, including:
    - Colectomy: partial, right or left hemicolectomy, transverse or sigmoid colectomy
    - Emergency bowel surgery patients can commence the pathway post –op on the “Day of Surgery”

Pathway

Pre-Surgery (Pre-admission Clinic Visit or Pre-op on ward, if applicable)	
Care Category	**Expected Outcomes**
Fall Risk	• Universal Fall Prevention strategies are in place (SAFE Step)
Cognition	• Delirium Risk factors assessed and baseline CAM score recorded • Alert and Oriented x 3 • Mini Cognitive Assessment for patients 70 years or older (PHC)
Assessment	• VS within patient usual normal limits • Baseline Admission Screening /Risk Assessments completed: o Violence risk o Delirium risk o Alcohol/Drug Screen o Smoking o Dysphagia o Falls o Advance care planning
Pain Management	• Acceptable comfort pain level (as stated by patient) documented
Elimination	• Patient's regular bowel pattern documented • Bowel preparation explained • Bowel Prep administered as ordered • Stoma site marked by NSWOC nurse if applicable
Nutrition / Hydration	• Risk factors for post op nausea/vomiting (PONV) assessed o Female, non-smoker, history of motion sickness, previous history PONV • Carbohydrate loading requirements understood • Fasting requirements reviewed and understood
Skin/Dressings/Drains	• Skin integrity intact and documented • Baseline Braden Scale documented as applicable • Understands pre-op skin prep (chlorhexidine wash) • Pre-op skin preparation completed as per protocol
Diagnostics	Ordered preoperative investigations are completed and results reviewed (e.g. Lab work, radiology)
Mobility	• Functional mobility assessment completed and documented. • Timed Up and Go test (TUG) completed for patients 65 and older, or with mobility problems
Medications	Best possible medication history obtained and recorded Preoperative medication instructions available for patient

Teaching & Discharge Planning	• Review all education materials and instructions with patient/family ensuring opportunity to ask questions, assess understanding (return demonstration as appropriate): o Planned surgery and expected length of stay o Support person identified for assistance following surgery o Transportation needs for discharge reviewed o Pain scales, anticipated pain management strategies (PCA, Epidural/spinal, oral, non-pharmacological.) o Pre-op medication instructions o Fasting and carbohydrate loading pre-op o Bowel preparation, pre-op skin preparation o Exercises and activity levels, including leg exercises (VTE prevention) o Demonstrates deep breathing & coughing o Neomycin education completed if applicable Refer to patient education materials

Day of Surgery	
Tasks & Activities	**Expected Outcomes**
Risk Assessments	• Universal Fall Prevention strategies are in place (SAFE Step) • Fall risk care plan in place, if appropriate
Cognition	• Alert and Oriented x 3 (person, place, time) • No evidence of new confusion, agitation, anxiety or CAM Screen Negative
Assessment	• VS Q4H (within patient's normal limits) • Breath sounds clear • Level of Consciousness assessed and documented
Pain Management	• Pain (including patient goal comfort level and POSS) assessed as per pain modality protocol and recorded • Pain medications administered as per orders • Regularly scheduled acetaminophen • Epidural site satisfactory, if applicable
Elimination	• IF Foley insitu, output more than 30 mL/hr • If Foley insitu, pericare once per shift • If no Foley present, urine output more than 360 mL/12 h • Abdomen soft, not distended, non-tender • Flatus or stool passed per rectum or ostomy • Stoma satisfactory (if applicable)
Nutrition / Hydration	• No nausea/vomiting • Antiemetics given as per orders • NG placement assessed (if applicable) • NG output assessed and documented, replacement administered, if ordered • Fluid intake 750 mL/12 h or more, or in keeping with restrictions • Post-Surgical Transition Diet or other diet ordered • Fluids tolerated • Solids tolerated • Has taken Boost 1.5- Drinks 250 mL BID
Skin/Dressings/Drains	• Dressings dry and intact • Lines, tubes and drains secure, drainage within expected limits • Drain(s) patent if applicable • Skin integrity intact, No evidence of pressure areas (See Braden Score) • Post op wash given
Mobility	• Foot/ankle and deep breathing exercises performed hourly • Turned Q2h until able to reposition independently • Patient sat at edge of bed/ in chair for 15 minutes or physio assessed

	• VTE prophylaxis (SCD, low molecular weight heparin, or heparin)
Teaching & Discharge Planning	• Reviewed orientation to room/environment • Pre-op teaching reviewed/reinforced • Appropriate teaching materials provided e.g. Urinary catheter pamphlet • Progress on pathway reviewed

Post -Operative Day 1	
Tasks & Activities	**Expected Outcomes**
Risk Assessments	• Universal Fall Prevention strategies are in place (SAFE Step) • Fall risk care plan in place, if appropriate
Cognition	• Alert and Oriented x 3 (person, place, time) • No evidence of new confusion, agitation, anxiety or CAM Screen Negative
Assessment	• VS Q4H (within patient's normal limits) • Breath sounds clear • Level of Consciousness assessed and documented
Pain Management	• Pain and POSS assessed as per pain modality protocol and documented • Pain level acceptable to patient • Pain medications administered as per orders (PCA/Epidural/Oral) • Epidural site satisfactory (if used), • Regularly scheduled acetaminophen
Elimination	• Foley removed, unless otherwise ordered • If Foley insitu, pericare once per shift • If Foley insitu, output more than 30 mL/hr • If no Foley, urine output more than 360 mL/12 h • Abdomen soft/not distended, non-tender • Flatusor stool passed per rectum or ostomy • Stoma satisfactory if applicable • Patient taught how to "burp" and empty bag
Nutrition / Hydration	• No nausea/vomiting • Antiemetics given as per orders • NG insitu, NG output assessed and documented, replacement administered, if ordered • Patient chewed gum (30 minutes TID) if no NG • Post-Surgical Transition Diet or other diet ordered • Fluids tolerated • Solids tolerated • Has taken Boost 1.5- Drinks 250 mL BID • IV saline locked when PO intake Fluid intake 1500 mL/24 h or more, or in keeping with restrictions
Skin/Dressings/Drains	• Dressings dry and intact • Drains patent, secure, drainage within expected limits • Skin integrity intact no evidence of pressure areas (See Braden Score)
Mobility	• Foot/ankle and deep breathing exercises hourly while in bed • Up in chair for meals

	• Walk 60 meters in hallway with assistance x 3 • Up to bathroom with assistance • VTE prophylaxis (SCD, low molecular weight heparin, or heparin)
Diagnostics	• Hemoglobin and creatinine as ordered; Results within normal limits or MD notified
Teaching & Discharge Planning	• Appropriate teaching materials provided e.g. Urinary catheter pamphlet • Progress on pathway reviewed. • Confirm patient has support person available at home • Teaching for self-administration of subcutaneous medications (i.e. enoxaparin) started • Teaching for self-care of ostomy started (if present) • Patient has arranged for support person at home for 72 hrs post discharge • Discharge criteria reviewed and reinforced

Post-Operative Day 2	
Tasks & Activities	**Expected Outcomes**
Risk Assessments	• Universal Fall Prevention strategies are in place (SAFE Step) • Fall risk care plan in place, if appropriate
Cognition	• Alert and Oriented x 3 (person, place, time) • No evidence of new confusion, agitation, anxiety or CAM Screen Negative
Assessment	• VS Q4H within patient's normal limits • Breath sounds clear • Level of Consciousness assessed and documented
Pain Management	• Pain and POSS assessed per pain modality protocol and documented • Pain level acceptable to patient • Pain medications administered as per orders (PCA/Epidural/Oral) • Epidural discontinued as per order (if not done on POD 1) • Regularly scheduled acetaminophen
Elimination	• Foley removed, unless otherwise ordered • If Foley insitu, pericare once per shift • Urine output more than 360 mL/12 h • Abdomen soft/not distended, non-tender • Flatus or stool passed per rectum or ostomy • Stoma satisfactory • Patient able to "burp" bag independently & empty bag with supervision • 48 to 72 hours post-op stoma appliance change and peristomal assessment done
Nutrition / Hydration	• No nausea/vomiting • Antiemetics given as per orders • Fluids and post op diet (as per orders) tolerated • Boost 1.5- Drinks 250 mL BID • Patient chewed gum (30 min TID) or NG insitu, if applicable • IV saline locked • Fluid intake 1500 mL/24 h or more, or in keeping with restrictions
Skin/Dressings/Drains	• Dressings dry and intact • Drains discontinued when output less than 50 mL/24 h or as ordered • Skin integrity intact, no evidence of pressure areas (See Braden Score)
Mobility	• Foot/ankle and deep breathing exercises hourly while in bed • Up in chair for meals independently • Walk 120 meters in hallway with assistance x 3, Up to bathroom with assistance • VTE prophylaxis (SCD, low molecular weight heparin, or heparin)

	• Independent with ADLs
Teaching & Discharge Planning	• Progress on pathway reviewed. • Discharge criteria reviewed • Discharge teaching (going home after bowel surgery) started • Teaching for self-administration of subcutaneous medications (enoxaparin) continued, if applicable • Teaching for self-care of ostomy continued (if present) • Confirm patient home prepared/equipment in place as needed

Post- Operative Day 3	
Tasks & Activities	**Expected Outcomes**
Risk Assessments	• Universal Fall Prevention strategies are in place (SAFE Step) • Fall risk care plan in place, if appropriate
Cognition	• Alert and Oriented x 3 (person, place, time) • No evidence of new confusion, agitation, anxiety or CAM Screen Negative
Assessment	• VS Q8H (or Q4H if pain modality remains in use) within patient's normal limits, • Breath sounds clear
Pain Management	• Pain and POSS assessed as per pain modality protocol and documented, • Pain level acceptable to patient • Pain medications administered as per orders (PCA/Oral) as needed • Regularly scheduled acetaminophen
Elimination	• No signs or symptoms of urinary tract infection • Urine output more than 360 mL/12 h • Abdomen soft/not distended, non-tender • Flatus or stool passed per rectum or ostomy • Stoma satisfactory • Patient able to "burp" bag independently and empty bag with supervision • 48 to 72 hours post op stoma appliance change and peristomal assessment done
Nutrition / Hydration	• Solid diet (as per orders) tolerated • Fluid intake 1500 mL/24 h or more, or in keeping with restrictions • Boost 1.5- Drinks 250 mL BID • Patient chewed gum (30 minutes TID) or NG insitu (if applicable)
Skin/Dressings/Drains	• Dressing removed, skin edges well approximated, no signs of infection • Drains discontinued when output less than 50 mL/24 h or as ordered • Skin integrity intact, no evidence of pressure areas (See Braden Score)
Mobility	• Foot/ankle and deep breathing exercises hourly while in bed • Up in chair for meals independently • Walk 120 meters in hallway with minimal assistance x 3 • Up to bathroom independently • Independent with ADLs
Diagnostics	• Day 3 bloodwork ordered and results reviewed • Creatinine level: Results within normal limits or MD notified • Renal function stable (within 10% of pre-op baseline)

Teaching & Discharge Planning	• Progress on pathway reviewed. • Confirm patient home prepared/equipment in place as needed • Discharge teaching (going home after bowel surgery) reinforced • Review & reinforce "Pain and Ways to Manage it" • Teaching for self-administration of subcutaneous medications (VTE prophylaxis) and self-care of ostomy (if present) continued • TST aware of pending discharge, if needed
Discharge Criteria	☐ Independent with ADLs ☐ Pain managed with oral analgesics ☐ Passing flatus or stool ☐ Tolerating diet ☐ Clinical exam shows no signs of complications

Post-Operative Day 4 to discharge	
Tasks & Activities	**Expected Outcomes**
Risk Assessments	• Universal Fall Prevention strategies are in place (SAFE Step) • Fall risk care plan in place, if appropriate
Cognition	• Alert and Oriented x 3 (person, place, time) • No evidence of new confusion, agitation, anxiety or CAM Screen Negative
Assessment	• VS Q8H (or Q4H if pain modality remains in use) within patient normal limits, • Breath sounds clear
Pain Management	• Pain and POSS assessed as per protocol and documented • Pain level acceptable to patient • Pain managed on Oral analgesics
Elimination	• No signs or symptoms of urinary tract infection • Urine output more than 360 mL/12 h • Abdomen soft (not tender, not distended) • Flatus or stool passed per rectum or ostomy • Stoma satisfactory • Independent with “burping” & emptying the bag • Changes stoma appliance with assistance /supervision
Nutrition / Hydration	• Fluids and solid diet (as per orders) tolerated • Boost 1.5- Drinks 250 mL BID • Patient chewed gum (30 minutes TID) or NG insitu (if applicable) • Fluid intake 1500 mL/24 h or more, or in keeping with restrictions
Skin/Dressings/Drains	• Dressing removed, skin edges well approximated, no signs of infection • Drains discontinued when output less than 50 mL/24 h, or as ordered • Skin integrity intact, No evidence of pressure areas (See Braden Score)
Mobility	• Foot/ankle and deep breathing exercises hourly while in bed • Up in chair for meals independently • Walk 120 meters in hallway independently x 3 • Up to bathroom independently • Independent with ADLs
Diagnostics	
Teaching & Discharge Planning	• Progress on pathway reviewed. • Any barriers to discharge identified and team made aware • Discharge teaching continued • Ability to self-administer medications (e.g. enoxaparin) assessed and teaching completed

	• Confirm patient home prepared/equipment in place as needed • Teaching for self-care of ostomy continued • Patient and family aware of follow up appointment • TST aware of pending discharge, if needed • Has follow-up appointment for post discharge & transportation arranged
Discharge Criteria	☐ Independent with ADLs ☐ Pain managed with oral analgesics ☐ Passing flatus or stool ☐ Tolerating diet ☐ Clinical exam shows no signs of complications

Discharge Day	
Tasks & Activities	**Expected Outcomes**
Risk Assessments	• Universal Fall Prevention strategies are in place (SAFE Step)
Cognition	• Alert and Oriented x 3 (person, place, time) • No confusion, agitation, anxiety or CAM Screen Negative
Assessment	• VS within patient's normal limits
Pain Management	• Pain level acceptable to patient • Pain managed with Oral analgesics
Elimination	• No signs or symptoms of urinary tract infection • Abdomen soft/not distended, non-tender • Flatus or stool passed per rectum or ostomy • Stoma assessed as satisfactory (if present) • Able to care for ostomy independently
Nutrition / Hydration	• Diet and fluids tolerated • Fluid intake 1500 mL/24 h or more, or in keeping with restrictions
Skin/Dressings/Drains	• Incision approximated, no signs of infection • Skin integrity intact, No evidence of pressure areas (See Braden Score)
Mobility	• Acceptable level for discharge -Independent with activity (or at baseline)
Discharge	• Home support available and prepared, if needed • Has discharge prescription and Medication counselling completed • Patient / Family have follow up appointment • Has education materials such as "Caring for your wound"(FO. 160.W9151F) • Patient / Family are aware of when to seek medical attention for complications • Patient / Family have all belongings • Arrangements made for removal of staples post op day 7 to 10 • Patient is independent with medication administration, including subcutaneous medications (i.e. enoxaparin) • Patient able to care for stoma independently • TST notified of actual discharge (if needed)

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	Surgery