**Description:**
The POSH Colorectal Recovery Pathway is an evidence based enhanced recovery program for patients undergoing colorectal operations at Phoenix Indian Medical Center (PIMC). The pathway should be considered for all such patients with the understanding that providers may consider alternative treatment strategies based on the specifics of the individual patient.

**Goals:**
- Standardize care for patients undergoing colorectal surgery using a pathway specifically designed for PIMC patients based on best practices and evidence
- Meet SCIP quality measures
- Improve patient satisfaction
- Improve outcomes & decrease complications

**Sources:** (Citations & abstracts with links to PubMed are available in the POSH Reference Library.)
The pathway is based upon the following references. SCIP and ERAS are the major sources, with additional references as listed. Each step of the pathway includes the appropriate reference.

**SCIP**
Surgical Care Improvement Project, CMS Core Measure

**ERAS**

**Antibiotic Prophylaxis References**
*Summarized in PIMC Recommended Peri-Operative Prophylaxis Card* (posted in all peri-operative areas and available on POSH website)

**Alvimopan References**

**VTE Prevention**
*Summarized in PIMC Inpatient VTE Risk Screening Document* (posted in all pharmacies and available on POSH website)
Pathway

I. Pre-Operative (inpatient and outpatient)
   A. Patient education (ERAS)
      a. Operation
      b. Expected recovery time
      c. Possible complications
      d. Pain control
      e. Mobilization
      f. VTE prophylaxis
      g. Incentive spirometry
   
   B. Bowel prep (Deierhoi)
      a. Mechanical: Golytely (drink entire contents the day before surgery)
      b. Oral antibiotics
         i. Neomycin (2g x 2 doses, 7 pm and 11 pm day before surgery)
         ii. Metronidazole (2g x 2 doses, 7 pm and 11 pm day before surgery)
   
   C. Alvimopan (Delaney)
      a. If meets PIMC P&T Inclusion Criteria:
         12 mg po (1 dose) 2 hours before scheduled surgery start time with sip of water
   
   D. NPO at MN
   
   E. Prophylactic Antibiotic Selection (SCIP, Bratzler, Deierhoi)
      Administer 1 hour prior to incision
      UNLESS: Vancomycin or Fluoroquinolone: administer 2 hours prior to incision
      a. Preferred regimen:
         Cefazolin (1 gram if <80 kg, 2 grams if >=80 kg) + Metronidazole 500 mg
      b. If PCN allergy and no history of MRSA:
         Ciprofloxacin 400 mg + Metronidazole 500 mg
      c. If PCN allergy and history of MRSA
         Ciprofloxacin 400 mg + Clindamycin 900 mg
II. Intra-operative

A. Hair removal with clippers only (SCIP)

B. Orogastric tube to be removed at the end of the case (ERAS)

C. Maintain normothermia with Bear Hugger (ERAS)
   a. (SCIP) Pt must be equal or greater than 96.8 within 30 minutes prior to anesthesia end time or immediately 15 minutes after anesthesia end time.

D. Avoid excessive fluid administration (ERAS)

E. Redose antibiotics if case is longer than half of the administration interval (Bratzler)
   See PIMC Recommended Peri-Operative Prophylaxis Card for specifics (posted in all operating rooms).

F. Consider IV acetaminophen (ERAS)
III. Post-Operative

A. Diet: start clear liquids post-operatively (ERAS)

B. Early mobilization
   a. POD#0: out of bed to chair and walk if feasible
   b. POD#1: continue out of bed to chair and walk (ERAS)

C. VTE prophylaxis (SCIP)
   a. SCDs
   b. Mobilization as above
   c. Pharmacologic (Kearon)
      to be started by POD#1 unless concern for bleeding risk or other contraindication
      (document if not begun)
      i. Heparin – for most patients
      ii. Enoxaparin – for patients with abdominal/pelvic cancers

D. Antibiotics: to be stopped within 24 hours after surgical end time (SCIP)
   If therapeutic antibiotics indicated, must document.

E. Urinary catheter (SCIP)
   a. Remove POD#1 if UOP>30 cc/hr
   b. Remove POD#2 at latest (document if not removed)

F. Pain control
   a. IV acetaminophen x 48 hours after surgery standing (ERAS)
      consider dose reduction if significant liver impairment; discuss with pharmacy
   b. Narcotic pain medication of choice
      i. Morphine PCA OR
      ii. Intermittent Hydromorphone OR
      iii. Fentanyl infusion
   c. Consider IV ketorolac if normal renal function; caution in older patients, diabetic
      patients, bleeding risk.

G. Alvimopan (Delaney)
   a. Dose until bowel function returns or total of 7 post-op days