**Enhanced Recovery Thoracic Surgery**

**Esophagus Pathway**

**Preoperative**
- Patient Education/Expectations for Hospital and Home
- Medical Risk Consultation: Cardiac Clearance and PFTs for All Patients
- Surgery Wellness Referral for >65 years old or concern for diminished functional status
- Smoking Cessation: Goal 4 weeks prior to Surgery
- Nutrition: Referral to Dietician

**Intraoperative**
- Anesthesia:
  - Fasting: Clear liquid diet until 2 hours prior to surgery
  - Surgical Site Infection Prophylaxis: Ancef (discontinue following closure of wound)
  - Normothermia
  - Lung Protective Ventilation and Goal Directed Fluid Management
  - Postoperative Nausea/Vomiting Prevention
  - Central Line: remove at end of case if used
  - Pain Management:
    - PCEA
    - Tylenol ATC (4g/day)
    - NSAIDS ATC: for all patients <75 years old and normal renal function. IV Toradol 15mg q6h until PO intake, then PO Diclofenac 50mg BID
    - Gabapentin 300mg BID: to be started with PO intake
- Surgery:
  - Minimally invasive techniques (robotic or video-assisted surgery) when possible
  - Intercostal Nerve Block

**Postoperative**

**POD0**
- Admit to 8S or 10 CVT as Stepdown
- Delirium Order Set
- RT Consultation (Airway Clearance Pathway & Incentive Spirometer) and PT Consultation
- Ambulation required Day of Surgery
- CT -10 suction
- Case Management Meeting on Day of Surgery

**POD1**
- Ambulate QID
- Remove foley
- CT to water seal
- Chest tube amylase and bilirubin
- NGT to gravity
- IVF to TKO
- Daily dulcolax, hold for BM

**POD2**
- Remove NGT if output <100cc/24h, no gastric conduit distension CXR, and no ileus
- Chest tube amylase and bilirubin
- Sips (start with grape juice to see if comes out chest tube) while OOB to Chair

**POD3**
- Advance to CLD. Food and Drinks only to be served if OOB to Chair.
- Chest tube amylase and bilirubin (to be continued daily until chest tube removed)
- Remove Chest Tube if WBC normal/normalizing and output <400cc/24h and clear
- Wean PCEA

**POD4**
- Remove PCEA
- Advance to FLD
- RD Consultation

**POD5**
- **Discharge Home** on FLD until clinic
  - Standardized Discharge Instructions (Smartphrase “dcesophagus”)
  - Medications (2-week Supply):
    - Pain- Tylenol ATC, Diclofenac ATC (if indicated), Gabapentin ATC, Opioids prn
    - Bowel Regimen- Colace and Senna
  - Meds to Beds for All Patients
  - Hospital Team to Message Clinic Staff for Each Discharge
Enhanced Recovery Thoracic Surgery

Lung Pathway

Preoperative
- Patient Education/Expectations for Hospital and Home
- Medical Risk Consultation: Cardiac Clearance and PFTs for All Patients
- Surgery Wellness Referral for >65 years old or concern for diminished functional status
- Smoking Cessation: Goal 4 weeks prior to Surgery

Intraoperative
- Anesthesia:
  - Fasting: Clear liquid diet until 2 hours prior to surgery
  - Surgical Site Infection Prophylaxis: Ancef (discontinue following closure of wound)
  - Venous Thromboembolism Prophylaxis: Subcutaneous Heparin (given prior to incision)
  - Normothermia
  - Lung Protective Ventilation and Goal Directed Fluid Management
  - Postoperative Nausea/Vomiting Prevention
  - Central Line: remove at end of case if used
  - Pain Management:
    - PCEA: only for open procedures
    - Tylenol ATC (4g/day)
    - NSAIDS ATC: for all patients <75 years old and normal renal function. IV Toradol 15mg q6h until PO intake, then PO Diclofenac 50mg BID
    - Gabapentin 300mg BID
- Surgery:
  - Minimally invasive techniques (robotic or video-assisted surgery) when possible
  - Intercostal Nerve Block

Postoperative – Open Lobectomy
POD0
- Admit to 8S or 10 CVT as Stepdown
- CT -10 suction
- Delirium Order Set
- RT Consultation (Airway Clearance Pathway & Incentive Spirometer) and PT Consultation
- Ambulation required Day of Surgery
- Sips/Chips
- Case Management Meeting on Day of Surgery
POD1
- CT to water seal
- Remove foley
- IV Lasix 20mg x 1 (if previously on diuretic, adjust dose accordingly)
- Clear Liquid Diet and ADAT with Bowel Regimen (Colace and Senna). Food and Drinks only to be served if OOB to Chair.
- Ambulation QID
- Wean PCEA in PM

POD2
- PO Lasix 20mg BID (if previously on diuretic, adjust dose accordingly). To be continued until discharge.
- Remove CT (Output<400cc/24hr and No Air Leak)
- Remove PCEA

POD3
- Discharge Home on FLD until clinic
  - Standardized Discharge Instructions (Smartphrase “.dclung”)
  - Medications:
    - Pain (2-week supply)- Tylenol ATC, Diclofenac ATC (if indicated), Gabapentin ATC, Opioids prn
    - Diuresis (1-week supply)- PO Lasix 20mg qD (if previously on diuretic, adjust dose accordingly)
    - Bowel Regimen (2-week supply)- Colace and Senna
  - Meds to Beds for All Patients
  - Hospital Team to Message Clinic Staff for Each Discharge

Postoperative – Minimally Invasive Lobectomy

POD0
- Admit to 8S or 10 CVT as Stepdown
- CT -10 suction
- Delirium Order Set
- RT Consultation (Airway Clearance Pathway & Incentive Spirometer) and PT Consultation
- Ambulation required Day of Surgery
- Sips/Chips
- Case Management Meeting on Day of Surgery

POD1
- CT to water seal
- Remove foley
- IV Lasix 20mg x 1 (if previously on diuretic, adjust dose accordingly)
- Clear Liquid Diet and ADAT with Bowel Regimen (Colace and Senna). Food and Drinks only to be served if OOB to Chair.
- Ambulation QID

POD2
- Remove CT (Output<400cc/24hr and No Air Leak)
- PO Lasix 20mg BID (if previously on diuretic, adjust dose accordingly). To be continued until discharge.
- Discharge Home
Standardized Discharge Instructions (Smartphrase “.dclung”)

Medications:
- Pain (2-week supply)- Tylenol ATC, Diclofenac ATC (if indicated), Gabapentin ATC, Opioids prn
- Diuresis (1-week supply)- PO Lasix 20mg qD (if previously on diuretic, adjust dose accordingly)
- Bowel Regimen (2-week supply)- Colace and Senna

Meds to Beds for All Patients
Hospital Team to Message Clinic Staff for Each Discharge

Postoperative – Minimally Invasive Wedge Resection/Lung Biopsy/Pleural Biopsy

POD0
- Foley removed in OR
- Admit to 8S or 10 CVT as Stepdown
- CT to water seal on arrival to ward
- Delirium Order Set
- RT Consultation (Airway Clearance Pathway & Incentive Spirometer) and PT Consultation
- Ambulation required Day of Surgery
- Sips/Chips
- Case Management Meeting on Day of Surgery

POD1
- Ambulation QID
- Clear Liquid Diet and ADAT with Bowel Regimen (Colace and Senna). Food and Drinks only to be served if OOB to Chair.
- Remove CT regardless volume of output
- IV Lasix 20mg x 1 (if previously on diuretic, adjust dose accordingly). If patient stays longer than POD1, start PO Lasix 20mg BID that will be continued until discharge.
- Discharge Home

- Standardized Discharge Instructions (Smartphrase “.dclung”)
- Medications:
  - Pain (2-week supply)- Tylenol ATC, Diclofenac ATC (if indicated), Gabapentin ATC, Opioids prn
  - Diuresis (1-week supply)- PO Lasix 20mg qD (if previously on diuretic, adjust dose accordingly)
  - Bowel Regimen (2-week supply)- Colace and Senna
- Meds to Beds for All Patients
- Hospital Team to Message Clinic Staff for Each Discharge