Physician Orders PEDIATRIC: LEB Cardiovascular Surgery Post Op Plan

Initiate Orders Phase
Care Sets/Protocols/PowerPlans

- Initiate Powerplan Phase
  
  Phase: LEB CV Surgery Post Op Phase, When to Initiate:__________________________

LEB Cardiovascular Surgery PostOp Phase
Admission/Transfer/Discharge

- Transfer Pt within current facility
  
  Level of Care: Critical Care, To CVICU

- Change Attending Physician

- Notify Physician-Once
  
  Notify For: Of room number on arrival to unit.

Vital Signs

- Vital Signs
  
  Monitor and Record T,P,R,BP, q15min, x 2h or until stable, then q1h

Activity

- Bedrest

Food/Nutrition

- NPO

Patient Care

- Advance Diet As Tolerated
  
  Advance diet as tolerated after extubation

- Isolation Precautions

- Intake and Output
  
  Routine, q1h(std)

- Daily Weights
  
  Routine, qEve

- NIRS Monitor
  
  Monitor: Cerebral and Somatic

- Cardiopulmonary Monitor
  
  T:N Routine, Monitor Type: CP Monitor

- DC CP Monitor
  
  When ALL Criteria met: No NG-Tube, No PCA, No Chest Tube, No Sepsis Alert notified, PEWS of 0 and 24 hour post op.

- Elevate Head Of Bed

- Mouth Care
  
  q4h(std), with Toothette oral swabs, use colostrum, if available.

- Suction Patient

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☐ PRN, oro/nasopharyngeal once extubated.

☐ Replogle (NGT)

☐ NG Tube Type: Replogle, Suction Strength: To Gravity (DEF)*

☐ NG Tube Type: Replogle, Suction Strength: Low Intermittent

☐ Chest Tube Care

☐ To Suction At: -20cm (DEF)*

☐ To Suction At: -30cm

☐ Chest Tube Care

q1h(std), strip chest tube(s) to maintain patency q1h and PRN

☐ Drain Care

empty blake/JP drains q1h

☐ Drain Care

PD drain to gravity.

☐ Indwelling Urinary Catheter Care

indwelling urinary catheter to gravity.

☐ Whole Blood Glucose Nsg

Routine, q1h(std)

☐ Whole Blood Glucose Nsg

Routine, prn, PRN

☐ Apply Biopatch

T:N, if child is greater than 1000grams, apply Biopatch to central line dressing site immediately postoperatively.

☐ Dressing Care

Routine, Action: Change, QWeek, CVL dressing

☐ Dressing Care

Routine, Action: Change, PRN, occlusive dry dressings to incision sites and drain sites, if soiled or becomes non-occlusive.

☐ Temporary Pacemaker Critical Care

Special Instructions: atrial wires in situ

☐ Temporary Pacemaker Critical Care

Special Instructions: ventricular wires in situ

☐ Nursing Communication

Volume: Place order to administer FFP's, _____mL over 1 hour if systolic blood pressure less than______ and central venous pressure less than______ and HCT greater than______.

☐ Nursing Communication

Volume: Place order to administer PRBC's _____mL over 1 hour for systolic blood pressure less
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than_____ and central venous pressure less than_____ and HCT less than ______.

☐ Nursing Communication
  Place order to administer PRBC’s _____mL over 1 hour for if HCT less than ______.

☐ Initiate Post Op Pulmonary Hypertension Protocol
  T;N

☐ Sequential Compression Device Apply
  Apply To Lower Extremities

Respiratory Care

☐ LEB Critical Care Respiratory Plan(SUB)*

☐ Oxygen Delivery
  Special Instructions: Titrate to keep O2 sat at _____ to _____%  

☐ ISTAT POC (RT Collect)
  Stat, Test Select ABG | Lactate | Potassium | Sodium, Special Instructions: collect upon arrival to unit, T;N

☐ ISTAT POC (RT Collect)
  Stat q1h For 2 occurrence, Test Select ABG | Lactate | Potassium | Sodium, T;N+60

☐ ISTAT POC (RT Collect)
  Stat q2h For 2 occurrence, Test Select ABG | Lactate | Potassium | Sodium, T;N+240

☐ ISTAT POC (RT Collect)
  Stat q4h, Test Select ABG | Lactate | Potassium | Sodium, T;N+600

☐ ACT Point of Care (RT Collect)
  Stat

☐ Co-oximetry (RT Collect)
  Routine q12h

Continuous Infusion

☐ D5W
  500 mL, IV, Routine, 1 mL/hr, To be administered via CVP Line (DEF)*
  Comments: Use inline air filter with all IV infusions, Max rate 40 mL/hr

☐ D5W
  500 mL, IV, Routine, 1 mL/hr, To be administered via LAP Line
  Comments: Use inline air filter with all IV infusions, Max rate 40 mL/hr

☐ D5W
  500 mL, IV, Routine, 1 mL/hr, To be administered via PAP Line
  Comments: Use inline air filter with all IV infusions, Max rate 40 mL/hr

☐ D5 1/4 NS
  500 mL, IV, Routine, mL/hr, Use inline air filter with all IV infusions, Max rate 40 mL/hr

☐ D5 1/2NS
  500 mL, IV, Routine, mL/hr, Use inline air filter with all IV infusions, Max rate 40 mL/hr
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+1 Hours D10 1/4 NS (Pediatric) (IVS)*
Dextrose 10% in Water
250 mL, IV, Routine, mL/hr, Use inline air filter with all IV infusions, Max rate 40 mL/hr
sodium chloride
9.6 mEq

+1 Hours Heparin 2 Units/ml in 500 ml NS (Pediatric)
500 mL, Intra-ARTERIAL, Routine, 2 mL/hr, for patients greater than or equal to 10 kg
Comments: Use inline air filter with all IV infusions

+1 Hours Sodium Chloride 0.9% Bolus
mL, Injection, IV, once, STAT, ( infuse over 15 min ), (Bolus)
Comments: Use inline air filter with all IV infusions

+1 Hours albumin, human 5% Bolus
mL, Injection, IV, once, STAT, ( infuse over 30 min ), (Bolus)
Comments: Use inline air filter with all IV infusions

Vasoactive Medications

+1 Hours Vasopressin Drip (Pediatric) (SHOCK) (IVS)*
Sodium Chloride 0.9%
97.5 mL, IV, Routine, milli-units/kg/min, Reference Range: 0.2 to 0.5 milli-units/kg/min
Comments: Use inline air filter with all IV infusions

Vasopressin (additive)
50 units

+1 Hours Phenylephrine Drip (Pediatric) (IVS)*
Dextrose 5% in Water
99 mL, IV, Routine, Reference Range: 0.1 to 0.5 mcg/kg/min
Comments: Use inline air filter with all IV infusions

Phenylephrine (additive) pediatric
10 mg, mcg/kg/min

+1 Hours EPINEPHrine Drip (Pediatric) (IVS)*
Dextrose 5% in Water
49.5 mL, IV, Routine, Reference Range: 0.01 to 0.2 mcg/kg/min
Comments: Use inline air filter with all IV infusions

EPINEPHrine (additive)
0.5 mg, mcg/kg/min

+1 Hours NORepinephrine Drip (Pediatric) (IVS)*
Dextrose 5% in Water
96 mL, IV, Routine, Reference Range: 0.01 to 0.2 mcg/kg/min
Comments: Use inline air filter with all IV infusions

norepinephrine
4 mg, mcg/kg/min
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- **+1 Hours** DOPamine Drip (Pediatric) (IVS)*
  - Diluent volume
  - 1 mL, IV, Routine, Reference Range: 2 to 20 mcg/kg/min
  - Comments: Use inline air filter with all IV infusions
  - DOPamine
  - 400 mg, mcg/kg/min

- **+1 Hours** Milrinone Drip (Pediatric) (IVS)*
  - Diluent volume
  - 100 mL, IV, Routine, Reference Range: 0.25 to 1 mcg/kg/min
  - Comments: Dose must be adjusted for renal dysfunction. Use inline air filter with all IV infusions
  - Milrinone (additive)
  - 20 mg, mcg/kg/min

- **+1 Hours** NitroGLYcerin Drip (Pediatric) (IVS)*
  - Diluent volume
  - 250 mL, IV, Routine, Reference Range: 1 to 4 mcg/kg/min
  - Comments: Use inline air filter with all IV infusions
  - NitroGLYcerin (additive) pediatric
  - 100 mg, mcg/kg/min

- **+1 Hours** NitroPRUSSIDE Drip (Pediatric) (IVS)*
  - Dextrose 5% in Water
  - 98 mL, IV, Routine, Reference Range: 0.25 to 4 mcg/kg/min
  - Comments: Use inline air filter with all IV infusions
  - Nitroprusside
  - 50 mg, 1 mcg/kg/min

- **NitroPRUSSIDE Drip (Pediatric) (IVS)*
  - Dextrose 5% in Water
  - 50 mL, IV, Routine, Reference Range: 0.25 to 4 mcg/kg/min
  - Comments: Use inline air filter with all IV infusions
  - Nitroprusside
  - 50 mg, 1 mcg/kg/min

- **NiCARdipine Drip (Pediatric) (IVS)*
  - Diluent volume
  - 200 mL, IV, Routine, 12 mL/hr
  - NiCARdipine (additive)
  - 40 mg, 1 mcg/kg/min

**Electrolytes**

- **+1 Hours** Calcium Chloride Drip (Pediatric) (IVS)*
  - Dextrose 5% in Water
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30 mL, IV, Routine, Reference Range: 2 to 10 mg/kg/hr
Comments: Wean drip by 2 mg/kg/hr for ionized Calcium greater than or equal to 1.4,
Use inline air filter with all IV infusions
calcium chloride (additive)
2,000 mg, mg/kg/hr

Diuretics
☐ +1 Hours Furosemide Drip (Pediatric) (IVS)*
Dextrose 5% in Water
30 mL, IV, Routine, Reference Range: 2.5 to 10 mg/kg/day
Comments: Use inline air filter with all IV infusions
furosemide (additive) pediatric
100 mg, mg/kg/day
☐ +1 Hours Bumetanide Drip (Pediatric) (IVS)*
Dextrose 5% in Water
30 mL, IV, Routine, Reference Range: 2.5 to 10 mcg/kg/hr
Comments: Use inline air filter with all IV infusions
bumetanide (additive)
2.5 mg, mcg/kg/hr

Anticoagulants
☐ +1 Hours Heparin Drip (Pediatric) (IVS)*
Diluent volume
1 mL, IV, Routine
heparin (additive)
25,000 units, unit/kg/hr

Sedation
☐ +1 Hours FentaNYL Drip (Pediatric) (IVS)*
Dextrose 5% in Water
15 mL, IV, Routine
Comments: Use inline air filter with all IV infusions
fentanyl (additive)
500 mcg, mcg/kg/hr
☐ +1 Hours MorPHINE Drip (Pediatric) (IVS)*
Dextrose 5% in Water
49.5 mL, IV, Routine
Comments: Use inline air filter with all IV infusions
morPHINE (additive)
5 mg, mcg/kg/hr
☐ +1 Hours Midazolam Drip (Pediatric) (IVS)*
Dextrose 5% in Water
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15 mL, IV, Routine
  Comments: Use inline air filter with all IV infusions
midazolam (additive)
  50 mg, mg/kg/hr

Paralytics
- **+1 Hours** Vecuronium Drip (Pediatric) (IVS)*
  Diluent volume
  30 mL, IV, Routine
  Comments: Use inline air filter with all IV infusions
vecuronium (additive)
  30 mg, mg/kg/hr

- **+1 Hours** Cisatracurium Drip (Pediatric) (IVS)*
  Diluent volume
  20 mL, IV, Routine
  Comments: Use inline air filter with all IV infusions
cisatracurium (additive)
  40 mg, mcg/kg/min

Bronchodilators
- Aminophylline Drip (Pediatric) (IVS)*
  Dextrose 5% in Water
  30 mL, IV, Routine
  Comments: Use inline air filter with all IV infusions
aminophylline (additive)
  500 mg, mg/kg/hr

Medications
- **+1 Hours** ceFAZolin
  25 mg/kg, Ped Injectable, IV Piggyback, q6h, Routine, (for 8 dose ), For Pump Cases, Max dose = 1 gram

- **+1 Hours** ceFAZolin
  25 mg/kg, Ped Injectable, IV Piggyback, q6h, Routine, (for 4 dose ), For Non-Pump Cases, Max dose = 1 gram
Vancomycin may be given if patient has allergy to cephalosporins(NOTE)*

- **+1 Hours** vancomycin
  10 mg/kg, Ped Injectable, IV, q8h, Routine, (for 6 dose ), Max dose = 1 gram

- **+1 Hours** ondansetron
  0.1 mg/kg, Ped Injectable, IV Piggyback, q6h, PRN Nausea/Vomiting, Routine, Max dose = 8 mg

- **+1 Hours** pantoprazole
  1 mg/kg, Ped Injectable, IV Piggyback, q24h, Routine, (infuse over 15 min), Max dose = 40 mg
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- **+1 Hours** famotidine
  - 0.25 mg/kg, Injection, IV, q12h, Routine, Max Daily Dose = 40 mg/day

- **+1 Hours** diphenhydramine
  - 1 mg/kg, Ped Injectable, IV, q6h, PRN Nausea, Routine, Max dose = 50 mg

- **+1 Hours** hydralazine
  - 0.2 mg/kg, Ped Injectable, IV, q4h, PRN Hypertension, (Maximum dose = 20 mg)

**Analgesics**

- **+1 Hours** morphine
  - 0.1 mg/kg, Ped Injectable, IV Push, q1h, PRN Pain, Severe (8-10), Routine, (for 3 days), Max dose = 5 mg

- **+1 Hours** ketorolac
  - 0.5 mg/kg, Ped Injectable, IV Push, q6h, PRN Pain, Moderate (4-7), Routine, (for 4 doses), Max dose = 30 mg

**Sedatives**

- **+1 Hours** chlorpromazine
  - 0.5 mg, Injection, IV, q1h, PRN Agitation, Routine (DEF)*
  - 1 mg, Injection, IV, q1h, PRN Agitation, Routine
  - 2 mg, Injection, IV, q1h, PRN Agitation, Routine
  - 3 mg, Injection, IV, q1h, PRN Agitation, Routine
  - 4 mg, Injection, IV, q1h, PRN Agitation, Routine
  - 5 mg, Injection, IV, q1h, PRN Agitation, Routine

**Anti-pyretics**

- **+1 Hours** acetaminophen
  - 10 mg/kg, Liq, PO, q4h, PRN Pain, Mild or Fever, Routine
  - Comments: For temperature greater than 38, Max Dose = 75 mg/kg/day up to 4g/day

- **+1 Hours** acetaminophen
  - 10 mg/kg, Supp, PR, q4h, PRN Pain, Mild or Fever, Routine
  - Comments: For temperature greater than 38, Max Dose = 75 mg/kg/day up to 4g/day; May give PR if unable to tolerate PO.

**Bowel Care**

- **+1 Hours** glycerin suppository (pediatric)
  - 1 supp, Supp, PR, q24h, PRN Other, specify in Comment, Routine, For no stool for 24 hours

- **+1 Hours** polyethylene glycol 3350
  - 8.5 g, Powder, PO, QDay, PRN Constipation, Routine (DEF)*
  - 17 g, Powder, PO, QDay, PRN Constipation, Routine

- **+1 Hours** docusate
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☐ 2.5 mg/kg, Oral Susp, PO, bid, Routine, (1 mL = 10 mg) (DEF)*
☐ 50 mg, Cap, PO, bid, Routine
☐ 100 mg, Cap, PO, bid, Routine

Electrolytes
☐ +1 Hours potassium chloride
  ☐ 0.5 mEq/Kg, Injection, IV, q4h, PRN Other, specify in Comment, Routine, Potassium less than or equal to 3.5, Max dose = 40 mEq (DEF)*
  ☐ 1 mEq/Kg, Injection, IV, q4h, PRN Other, specify in Comment, Routine, Potassium less than or equal to 3, Max dose = 40 mEq

☐ +1 Hours calcium chloride
  10 mg/kg, Ped Injectable, IV, q4h, PRN Other, specify in Comment, Routine, (infuse over 2 hr), Max dose = 1 gram
  Comments: Ionized Calcium less than 1.3

☐ +1 Hours magnesium sulfate
  15 mg/kg, Ped Injectable, IV, q4h, PRN Other, specify in Comment, Routine, (infuse over 4 hr), Max dose = 2 grams
  Comments: Magnesium less than 2

Diuretics
☐ +1 Hours furosemide
  ☐ 1 mg/kg, Ped Injectable, IV Push, q6h, Routine, Max dose = 40 mg (DEF)*
  ☐ 1 mg/kg, Ped Injectable, IV Push, q8h, Routine, Max dose = 40 mg
  ☐ 1 mg/kg, Ped Injectable, IV Push, q12h, Routine, Max dose = 40 mg
  ☐ 1 mg/kg, Ped Injectable, IV Push, N/A, Routine, Max dose = 40 mg, dose time to be determined by MD

☐ +1 Hours chlorothiazide pediatric
  3 mg/kg, Ped Injectable, IV, q12h, Routine, Check with MD prior to administration of first dose

☐ bumetanide
  0.025 mg/kg, Ped Injectable, IV, q24h, Check with MD prior to administration of first dose

Respiratory Medications
☐ +1 Hours albuterol (MDI)
  2 puff, MDI, INH, q4h, Routine, (for 6 dose), (1 puff = 90 mcg)

Laboratory
☐ CBC
  STAT, T;N, once, Type: Blood, Nurse Collect
  Comments: Collect upon arrival to unit.
  ☐ CMP
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- **BMP**
  - STAT, T;N, once, Type: Blood, Nurse Collect
  - Comments: Collect upon arrival to unit.

- **PT/INR**
  - STAT, T;N, once, Type: Blood, Nurse Collect
  - Comments: Collect upon arrival to unit.

- **PTT**
  - STAT, T;N, once, Type: Blood, Nurse Collect
  - Comments: Collect upon arrival to unit.

- **Fibrinogen Level**
  - STAT, T;N, once, Type: Blood, Nurse Collect
  - Comments: Collect upon arrival to unit.

- **Magnesium Level**
  - STAT, T;N, once, Type: Blood, Nurse Collect
  - Comments: Collect upon arrival to unit.

- **CBC**
  - Routine, T+1;0400, once, Type: Blood

- **CMP**
  - Routine, T+1;0400, once, Type: Blood

- **BMP**
  - Routine, T+1;0400, once, Type: Blood

- **PT/INR**
  - Routine, T+1;0400, once, Type: Blood

- **PTT**
  - Routine, T+1;0400, once, Type: Blood

- **Fibrinogen Level**
  - Routine, T+1;0400, once, Type: Blood

- **Magnesium Level**
  - Routine, T+1;0400, once, Type: Blood

- **CBC**
  - Routine, T+2;0400, qam x 3 day, Type: Blood

- **BMP**
  - Routine, T+2;0400, qam x 3 day, Type: Blood

- **Magnesium Level**
  - Routine, T+2;0400, qam x 3 day, Type: Blood

- **Methemoglobin**
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Time Study, T;N, q12h, Type: Blood
Comments: if patient on inhaled nitric oxide

☐ LEB Transfusion Less Than 4 Months of Age Plan(SUB)*
☐ LEB Transfusion 4 Months of Age or Greater Plan(SUB)*
Order below replaces Chloride test no longer available in Istat Profile.(NOTE)*
☐ Chloride Level
  Time Study, T;N+60, q1h x 2 occurrence, Type: Blood, Nurse Collect
☐ Chloride Level
  Time Study, T;N+240, q2h x 2 occurrence, Type: Blood, Nurse Collect
☐ Chloride Level
  Time Study, T;N+600, q4h, Type: Blood, Nurse Collect

Diagnostic Tests
☐ Electrocardiogram
  Start at: T;N, Priority: Stat, Reason: Other, specify, Transport: Portable, Perform upon arrival to unit.
☐ Chest 1 VW
  T;N, Reason for Exam: Other, Enter in Comments, Stat, Portable
☐ Chest 1 VW
  T+1;0600, Reason for Exam: Other, Enter in Comments, Routine, Portable
  Comments: Reason: post-op cardiovascular surgery
☐ Chest 1 VW
  T+2;0600, Reason for Exam: Other, Enter in Comments, Routine, Portable
  Comments: post-op cardiovascular surgery

Consults/Notifications/Referrals
☐ Notify Physician For Vital Signs Of
☐ Notify Physician-Continuing
  Notify For: Notify if chest tube output is 10mL/kg/hr or greater, leakage, dislodgement, or for other significant changes in chest tube output.
☐ Notify Physician-Continuing
  Notify For: Notify if urinary output is < 1mL/kg/hr.
☐ Notify Physician-Continuing
  Notify For: Notify if patient experiences nausea/vomiting.
☐ Consult MD Group
☐ Consult MD
☐ Nutritional Support Team Consult
  Routine, Reason: Parenteral Nutrition Support
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☐ Dietitian Consult/Nutrition Therapy
☐ Lactation Consult
☐ Medical Social Work Consult  
  *Reason: Assistance at Discharge*
☐ Audiology Consult  
  *Routine, Special Instructions: Screening*
☐ Consult Pastoral Care  
  *Reason for Consult: Family Support*
☐ Consult Clinical Pharmacist  
  *Reason: Anticoagulant therapy*
☐ Physical Therapy Ped Eval & Tx
☐ Speech Therapy Ped Eval & Tx  
  *Reason for Exam: _______________________________*
☐ Occupational Therapy Ped Eval & Tx

________________________  ________________  ______________________________________  __________
Date                   Time                   Physician’s Signature                     MD Number

*Report Legend:*
DEF - This order sentence is the default for the selected order  
GOAL - This component is a goal  
IND - This component is an indicator  
INT - This component is an intervention  
IVS - This component is an IV Set  
NOTE - This component is a note  
Rx - This component is a prescription  
SUB - This component is a sub phase, see separate sheet  
R-Required order