Clinical Pathway: Preoperative Inborn Neonates with Critical Congenital Heart Disease

Notes: (1) This pathway is a general guideline and variations can occur based on professional judgment to meet individual patient needs. (2) This is a quality improvement document and should not be a part of the patient's medical record.

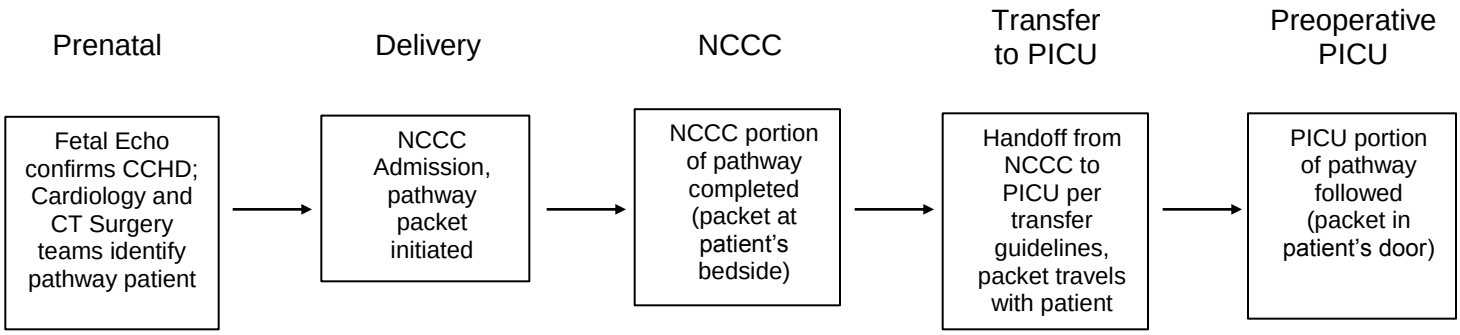
Eligibility Criteria:

- Prenatally diagnosed critical congenital heart defect (CCHD) which will require surgical intervention prior to discharge
- Delivered at UNC Children's Hospital

Exclusion Criteria (examples, not an exhaustive list):

- No planned surgical intervention prior to discharge
- Postnatal Echocardiogram with no confirmed CCHD

Pathway Process



Instructions for Providers

- All patients should have a paper copy of this pathway in their chart from admission to NCCC through transition to PICU
- Please obtain most recent version of pathway packet here: **https://www.med.unc.edu/ticker**
- After transition of care to the PICU, a PICU team member should put the pathway in the box outside of the patient room for collection by the pathway team.

Notes: This pathway is a general guideline and does not represent a professional care standard governing providers' obligations to patients. Care is revised to meet the individual patient needs. This is a quality improvement document and should not be a part of the patient's medical record.

Preoperative Inborn Neonates with Critical Congenital Heart Disease: NCCC

Patient Barcode Label

Suggested Guidelines

ADMISSION
CONSULTS (place order AND page/call) □ Pediatric CT Surgery (“Cardiac Surgery”) □ Pediatric Cardiology □ PICU ("Intensivist”)
LABS □ Type and Screen x 2 □ CBC with differential □ Chemistry 10 □ Arterial blood gas with lactate □ Microarray/Karyotype 5 Cell □ *Cytogenetics postnatal/FISH, blood (22q11 microdeletion analysis for TOF, IAA, Truncus arteriosus as well as for other anatomical lesions at the discretion of the cardiologist)*
STUDIES/IMAGING □ Echocardiogram (Pediatric Congenital Complete with Doppler) □ CXR □ ECG 12 Lead □ Head Ultrasound (US Neonatal Head) □ Renal Ultrasound (US Renal Complete)
ACCESS □ UVC □ UAC • Limit peripheral arterial sticks □ Lower extremity PICC • Left leg preferred if possible
MEDICATIONS □ Alprostadil (Prostin), as indicated • *See Alprostadil guidelines for starting dose and titration*
MONITORING/MAINTENANCE
□ Arterial blood gas with lactate every 4-6 hours □ Maintain NPO status, replogle for decompression if intubated □ Goal Hct per Pediatric Cardiology and CT Surgery: ____ to ____ □ Pre- and post-ductal oxygen saturation monitoring □ Goal oxygen saturation per Pediatric Cardiology and CT Surgery: ____ to ____
TRANSFER
□ Transfer to PICU per NCCC/PICU Transfer Guidelines

Notes: This pathway is a general guideline and does not represent a professional care standard governing providers’ obligations to patients. Care is revised to meet the individual patient needs. This is a quality improvement document and should not be a part of the patient’s medical record.

Preoperative Inborn Neonates with Critical Congenital Heart Disease: PICU

Patient Barcode Label

Suggested Guidelines

TRANSFER
□ Handoff from NCCC team per NCCC/PICU Transfer Guidelines □ Chart and order review • Confirm completion of labs/studies □ Place Cerebral and Somatic NIRS
PREOPERATIVE MONITORING/MAINTENANCE
□ CXR daily if intubated, otherwise as needed □ Arterial Blood Gas with lactate every 4-6 hours □ NIRS monitors □ Maintain NPO status, replogle for decompression if intubated □ Goal Hct per Pediatric Cardiology and CT Surgery: ____ to ____ □ Pre- and post-ductal oxygen saturation monitoring □ Goal oxygen saturation per Pediatric Cardiology and CT Surgery: ____ to ____ □ Continue Alprostadil (Prostin) infusion if indicated • *See Alprostadil guidelines for starting dose and titration*
DAY PRIOR TO SURGERY
□ CXR • Consider furosemide if evidence of pulmonary edema □ CBC with differential □ Chemistry 10 with total protein and albumin □ pRBC and FFP to be ordered by Pediatric CT Surgery