HFNC Initiation for Acute Care Patients at N.C. Children's Hospital (INPATIENT)

- This is a guildeline for the management of patients admitted to the Children's Hospital requiring initiation of HFNC. Management of your patient may require a more individualized approach.
- Children at risk for severe symptoms who may not be appropriate for this pathway include those with significant prematurity, cardiac, pulmonary, or neuromuscular disease. Confirm with primary team that patient is to follow pathway.
- HFNC for chronic, end of life care is outside pathway. Contact Unit Charge RN and RT to discuss specific cases.

[1] Breathing Severity Assessment (BSA)

Highest rating in any category dictates patient's BSA

Category		Mild	Moderate	Severe
Respiratory Rate	< 3 mo	30-60	61-80	>80
	3-12 mo	25-50	51-70	>70
	1-2 yr	20-40	41-60	>60
Work of Breathing		Normal	Retractions	Nasal flaring, grunting, head bobbing, retracting throughout
Mental Status		Baseline	Fussy	Lethargic or inconsolable

- If BSA Severe at anytime call primary team to bedside. If acutely concerned call PRRT.
- Though not part of BSA scoring, also consider patient's O2 sat.
- RT to do BSA before any intervention and again approximately 10 minutes after.

Pediatric inpatient with tachypnea and increased work of breathing

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RN: Call Primary Team to assess

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Call Pediatric Rapid Response Team (PRRT)
(RN or Primary Provider)
- Suction and reposition
- Antipyretic if febrile
- Make NPO
-Place IV, consider NS bolus and MIVF

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Determine if clinically appropriate for PICU or Intermediate Care for initiation of HFNC
PRRT, Floor Team (Beside RN, RT, Primary Resident/Attending), and Charge Nurse

Those Who Need PICU HFNC Initiation (NOT eligible for initiation of HFNC outside of PICU)
- Clinically significant cardiac disease
- Patients with lethargy, irritability, change in mental status, poor perfusion, apnea

HFNC not needed
Off pathway.

Initiate HFNC on Acute Care Unit

- Suction + reasses VS q30 min.
- Start at 1.5 L/kg/min or max for cannula (whichever is lower).
- Only increase FiO2 over 40% for hypoxemia (sat <88%) that doesn't respond to suctioning or repositioning.

Age	Starting Flow	Cannula Size	[2]Cannula Max Flow	Initial FiO2
< 3 mo	1.5 L/kg/min	Sml/Med	8/10 LPM	<40%
3-12 mo	1.5 L/kg/min	Med/Lrg	10/23 LPM	
>12 mo	1.5 L/kg/min	Lrg/XL	23 LPM	

Transfer to PICU

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[1]BSA after 30 min

BSA Mild/Moderate → Maintain current settings

BSA Severe or Hypoxemia → - Ensure primary team at bedside
- Suction/supportive care
- Increase to 2 L/kg/min or [2]max for cannula (whichever is lower)

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BSA and Huddle after 60 mins: PRRT and floor team (RN, RT, resident/attending, charge nurse) assess

BSA Mild/Moderate

BSA Severe, ongoing hypoxia, or severe tachycardia

Continue HFNC on Acute/Intermediate Care Unit
- Change to Intermediate Care Status.
- Primary team to determine if patient okay to PO.
- ***Primary team to determine if patient is appropriate to follow WEANING SUPPLEMENTAL O2 PATHWAY.***

Also eligible for HFNC on Intermediate Care Unit
- UNC ED patients stable on HFNC for a minimum of 90 minutes.
- PICU patients stable on HFNC (not increasing flow).

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