Palmetto Health Quality Collaborative

Care Map

Acute Viral Bronchiolitis

Management of acute viral Bronchiolitis for inpatient population aged 3 months and older

IMPORTANCE OF FOCUS

Acute Viral Bronchiolitis is the most common diagnosis resulting in pediatric hospital admissions with charges exceeding 1 billion dollars annually. Utilization of non–evidence-based therapies and testing remains common despite a large volume of evidence to guide quality improvement efforts.

GOALS

The overall goal of this Care Map is to improve the care of children hospitalized with Bronchiolitis by increasing compliance with the AAP clinical practice guidelines.

To support this goal, in 2014, the PHQC will begin tracking the use of systemic corticosteroids for the management of Bronchiolitis. The PHQC is also tracking pediatric physician review of an educational module prepared by Dr. Matthew Garber that includes these guidelines.

KEY RECOMMENDATIONS

Clinicians:

- **Should diagnose Bronchiolitis and assess disease severity on the basis of history and physical examination.**
- **Should assess risk factors for severe disease, such as age less than 12 weeks, a history of prematurity, underlying cardiopulmonary disease, or immunodeficiency, when making decisions about evaluation and management of children with Bronchiolitis.**
- **Should not routinely obtain radiographic or laboratory studies.**
- **Should not administer albuterol (or salbutamol) to infants and children with a diagnosis of Bronchiolitis.**
- **Should not administer epinephrine to infants and children with a diagnosis of Bronchiolitis**
- **Should not administer systemic corticosteroids to infants with a diagnosis of Bronchiolitis in any setting**

CARE PATHWAY COMPONENTS

Guidelines of Care

1. Respiratory therapist will perform assessment and document on Respiratory Evaluation form in Cerner.

2. Exclusion criteria from protocols.

    a. Patients on PICU service

Acute Viral Bronchiolitis

Management of acute viral Bronchiolitis for inpatient population aged 3 months and older

Guidelines of Care (continued)

3. Exclusion criteria for 3% Hypertonic Saline alone: Give with SABA

a. BPD

b. CLD

c. Asthma or history of wheezing prior to getting Bronchiolitis

4. Patients will be scored first and for score >2 suction and assigned clinical intervention based on the written guideline(s) developed specifically for Bronchiolitis.

5. If no intervention is need patient will be assessed and scored 4 hours after the initial assessment.

6. Therapy modality and frequency will be ordered in Cerner using Guidelines of care as the ordering physician and the "Signature not required" option.

7. The default medicated aerosols delivery method will be HHN.

8. Patient requiring Treatment will receive 4cc of 3% Hypertonic Saline.

9. **Patients requiring SABA with Hypertonic Saline will be given 2.5mg of albuterol.**

10. **Patient requiring suctioning or treatments will be assessed Q4 and prn.**

11. **Patient requiring no intervention will be assess Q12 and prn.**

12. Treatments will be given based on these guidelines.

13. **The physician will be notified by direct contact if the patient's clinical status deteriorates, or if an adverse event occurs.**

14. Deviations from the guideline due to special patient conditions will be discussed with the physician, the assigned respiratory therapist and/or the Respiratory Care Supervisor.

15. Therapy will be monitored on an ongoing basis by the Medical Director and Respiratory Care managers to ensure the quality, safety, and appropriateness of respiratory services provided.

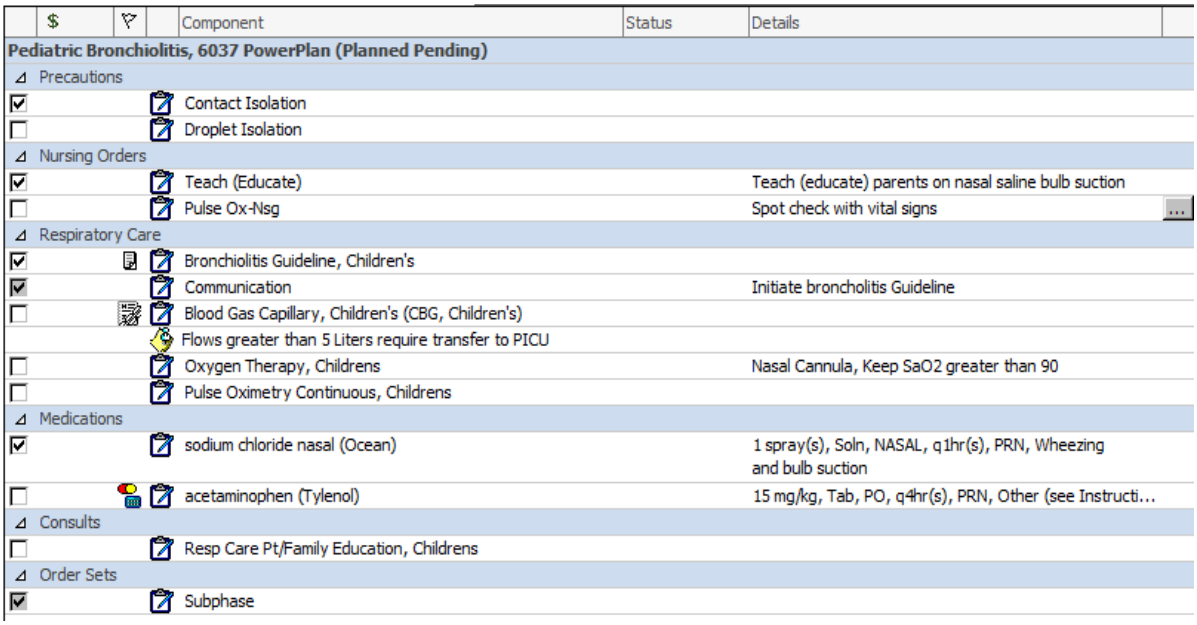
Palmetto Health Quality Collaborative

Care Map

Acute Viral Bronchiolitis

Management of acute viral Bronchiolitis for inpatient population aged 3 months and older

Electronic Medical Record Power Plan



$	Component	Status	Details
Pediatric Bronchiolitis, 6037 PowerPlan (Planned Pending)			
Precautions			
☑	Contact Isolation		
☐	Droplet Isolation		
Nursing Orders			
☑	Teach (Educate)		Teach (educate) parents on nasal saline bulb suction
☐	Pulse Ox-Nsg		Spot check with vital signs
Respiratory Care			
☑	Bronchiolitis Guideline, Children's		
☑	Communication		Initiate broncholitis Guideline
☐	Blood Gas Capillary, Children's (CBG, Children's)		
	Flows greater than 5 Liters require transfer to PICU		
☐	Oxygen Therapy, Childrens		Nasal Cannula, Keep SaO2 greater than 90
☐	Pulse Oximetry Continuous, Childrens		
Medications			
☑	sodium chloride nasal (Ocean)		1 spray(s), Soln, NASAL, q1hr(s), PRN, Wheezing and bulb suction
☐	acetaminophen (Tylenol)		15 mg/kg, Tab, PO, q4hr(s), PRN, Other (see Instructi...
Consults			
☐	Resp Care Pt/Family Education, Childrens		
Order Sets			
☑	Subphase		

RESOURCES

Gadomski AM, Brower M. Bronchodilators for Bronchiolitis. *Cochrane Database Syst Rev*. 2014; (12):CD001266

Hartling L, Bialy LM, Vandermeer B. Epinephrine for Bronchiolitis. *Cochrane Database Syst Rev*. 2011;(6):CD003123

Fernandes RM, Bialy LM, Vandermeer B. Glucocorticoids for acute viral bronchiolitis in infants and young children. *Cochrane Database Syst Rev. 2010;(10)*:CD004878

For Additional Information

Matthew Garber, MD Associate Professor of Pediatrics, Director of Pediatric Hospitalists and Chief Quality Officer
Matthew.Garber@palmettohealth.org

Reviewed/Updated July 2015

This Care Map presents a model of best care based on the best evidence available at the time of publication. It is not a prescription for every patient, and it is not meant to replace clinical judgment. Although physicians are encouraged to follow the Care Map to help focus on and measure quality, variation from the pathway may occur as clinical freedom is exercised to meet the needs of the individual patient Send feedback to Elizabeth Sheridan, Manager of Clinical Integration for the Palmetto Health Quality Collaborative (PHQC) at Elizabeth.sheridan@palmettohealth.org or 803 434-6906