Scope: Hospital-wide Patient Care
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Management of Bronchiolitis in Infants

Version: 5

Co-issued by Paediatric Medicine and the Division of Paediatric Emergency Medicine.

Introduction

Bronchiolitis is an acute inflammatory disease of the lower respiratory tract, resulting from obstruction of small airways. It is initiated by infection of the upper respiratory tract by any one of a number of seasonal viruses, the most common of which is respiratory syncytial virus (RSV).

Previous confusion around the clinical management of infants with bronchiolitis has improved with the creation and integration of clinical practice guidelines. Typical bronchiolitis in infants is a self-limited disease, usually due to an acute viral infection whose clinical course is not generally altered by aggressive evaluations/interventions, use of antibiotics, or other therapies. Young infants and those in high-risk categories are at higher risk of requiring admission. RSV immunization reduces the rate of hospitalization.

Several studies on the use of clinical guidelines for the management of infant bronchiolitis have shown a reduction in unnecessary resource utilization with a streamlining of medical care for these infants.

Objectives

In the target population, the objectives of this guideline are to:

- decrease the use of unnecessary diagnostic studies;
- decrease the use of medications;
- provide guidance on the use of appropriate respiratory therapy;
- improve the rate of appropriate admission;
- improve the use of appropriate monitoring activities; and
- decrease length of stay.

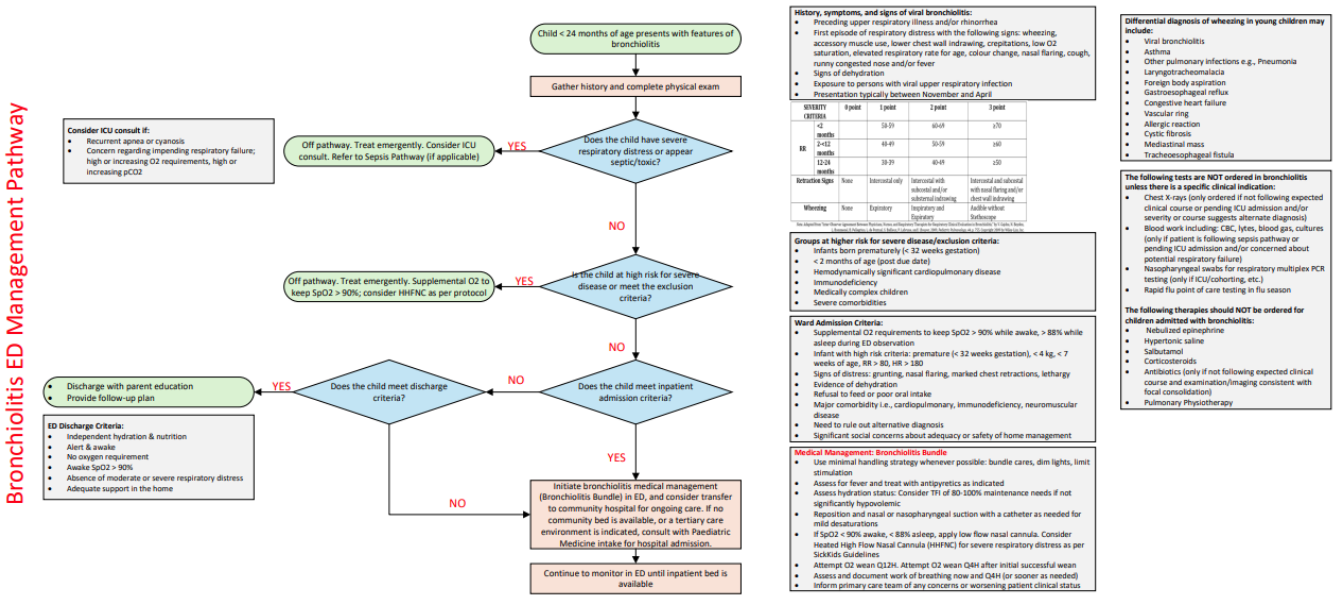
Target Users

Include, but are not limited to:

- Emergency Medicine physicians, nurses, nurse practitioners, and trainees
- Inpatient physicians, nurses, nurse practitioners, and trainees
- Respiratory Therapists
- Pharmacists
- Patients and families

Clinical recommendations summary table

ED Management Recommendations



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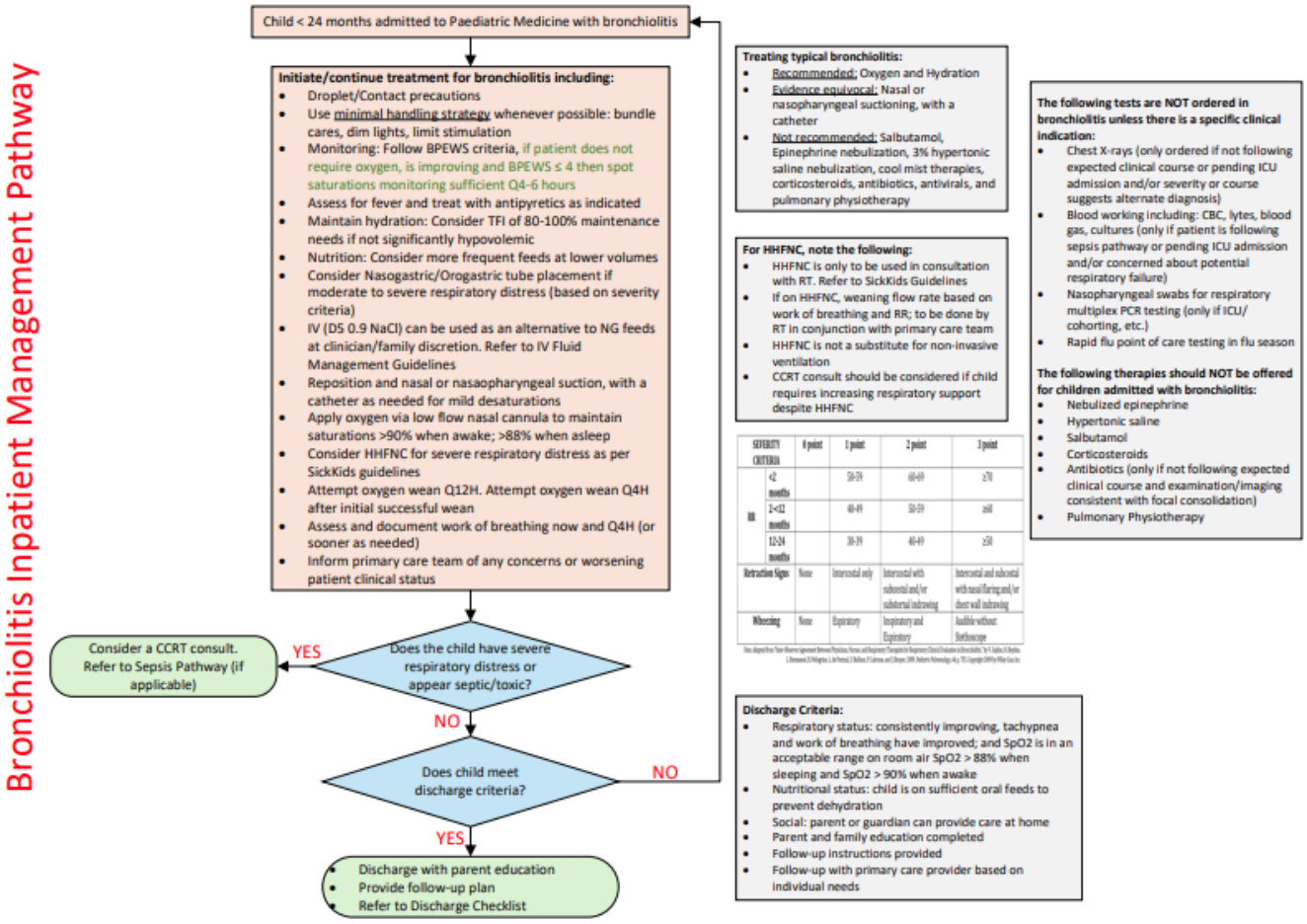
Inpatient Management Recommendations



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Evaluation Plan

- Ongoing monitoring of bronchiolitis pathway adherence.

References

1. Alexander A, McGee A, Wazeerah T. Oral nutrition in children with bronchiolitis on high-flow nasal cannula is well tolerated. *Hospital Pediatrics*. 2017; 7 (5), 249-255

2. Canadian Paediatric Society. Bronchiolitis: Recommendations for diagnosis, monitoring and management of children one to 24 months of age. *Paediatrics and Child Health* 2014; 19(9):45-91. (Reaffirmed 2017)

3. Hartling L, Fernandes RM, Bialy L, et al. Steroids and bronchodilators for acute bronchiolitis in the first two years of life: systematic review and meta-analysis. *BMJ*. 2011; 342:d1714.

4. Kepreotes E, Whitehead B, Attia J, Oldmeadow C, Collison A, et al. High-flow warm humidified oxygen versus standard low-flow nasal cannula oxygen for moderate bronchiolitis (HFWHO RCT): an open, phase 4, randomised controlled trial. *The Lancet*; 2017, 389.10072, 930-939.

5. O'Brien S, et al. Australasian bronchiolitis guideline. *Journal of Paediatrics and Child Health*; 2019, 55, 42-53

6. Ralston S, Allan S, Lieberthal H, et al. Clinical Practice Guideline: The diagnosis, management, and prevention of bronchiolitis. *Pediatrics*. 2014; 134(5)

7. Schuh S, Lalani A, Allen U, et al. Evaluation of the Utility of Radiography in Acute Bronchiolitis. *J Pediatr;* 2007;150:429-33

8. Fujiogi, M., Goto, T., Yasunaga, H., Fujishiro, J., Mansbach, J. M., Camargo, C. A., Jr, & Hasegawa, K. (2019). Trends in Bronchiolitis Hospitalizations in the United States: 2000-2016. Pediatrics. 2019;144(6), e20192614.

9. Kalburgi S, Halley T. High-Flow Nasal Cannula Use Outside of the ICU Setting. Pediatrics. 2020;146(5):e20194083. doi:10.1542/peds.2019-4083

10. Ralston SL, Lieberthal AS, Meissner HC, et al. Clinical practice guideline: the diagnosis, management, and prevention of bronchiolitis [published correction appears in Pediatrics. 2015 Oct;136(4):782]. Pediatrics. 2014;134(5):e1474-e1502. doi:10.1542/peds. 2014-274

Attachments:

Clinical Recommendations.pdf

Discharge Checklist Bronchiolitis_June 29.docx

ED pathway.pdf

Inpatient pathway.pdf