

Clinical Initiative: Bronchiolitis

Acute bronchiolitis is a common viral chest infection. It frequently affects infants aged one or younger, and is most often occurs in autumn and winter. The infection causes the small tubes in the lungs (bronchioles) to become inflamed and narrowed by swelling and mucus, leading to difficulty breathing, fast breathing, wheezing and poor feeding.

Many infants with bronchiolitis can be managed in the community, however infants who are more unwell attend or are referred to hospital. According to data from the Public Health Research and Development Committee, emergency department presentation and admissions have both risen by 28% over the last six years, exceeding population growth. Patients are discharged when no longer requiring supportive care, with some hospitals using acute review clinics to reduce the need for or length of the stay in hospital.

Despite recently updated clinical guidelines¹, there is clinical variation in inpatient and emergency department management of bronchiolitis in NSW. Infants less than one year of age with bronchiolitis also experience a high rate of tests and treatment that may be unnecessary, harmful and increase the length of stay in hospital, including:

- radiation exposure with chest x-rays
- naso-pharyngeal suctioning for viral testing
- treatment with bronchodilators
- treatment with oxygen.

Approach

The program aims to improve adherence to these guidelines and to reduce unnecessary investigations and treatment and reduce total bed days for infants (<1 year of age) with bronchiolitis. This will involve the following:

- changing existing thresholds for investigations and treatment that have now been recognised to be without benefit
- changing carer expectations in line with updated recommendations for clinicians, aiming to improve consumer literacy to help drive appropriate care
- changing care setting from inpatient to outpatient for infants who may be admitted for observation in case of deterioration and also for infants who no longer require treatment and are being observed for relapse.

Overall, the aim is to reduce potential harm from unnecessary testing and treatment.

Stakeholders

This initiative is now open for expressions of interest from local health districts and specialty health networks. Expressions of interest are open for specific sites which may be early adopters of this project.

Expected benefits

The potential benefits may include:

- improvement in health outcomes and efficient service delivery through the consistent provision of best practice care for children with bronchiolitis in NSW
- a reduction in unwarranted clinical variation in the care of patients with bronchiolitis
- optimisation of patient and carer experience through enhanced delivery of patient-centred care
- education, resources and support provided to families with infants with bronchiolitis.

For more information

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