NSW Health

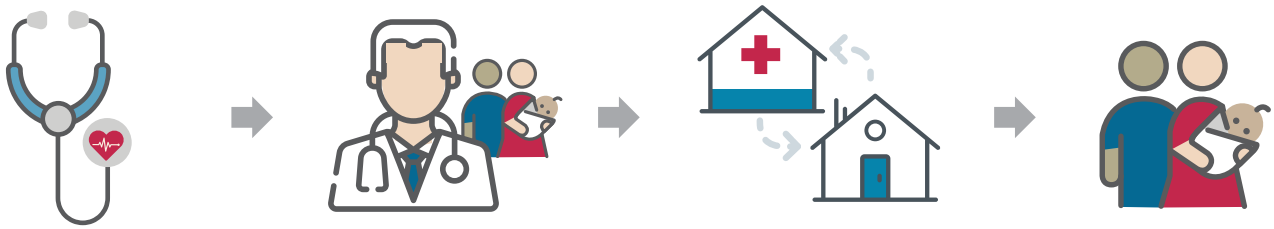
Leading Better Value Care

Bronchiolitis

Organisational models

This document provides decision-makers with options to improve care in different service delivery settings. Building on *Bronchiolitis: Clinical priorities* (2018) which described *what* to improve, the focus here is on *how* to improve care. Together these documents are informed by: research evidence about best clinical care and the effectiveness of different delivery models; empirical evidence about current service delivery levels; experiential evidence from clinicians and patients.

IMPROVING KEY PRIORITY AREAS



Diagnostic testing

- Support evidence-based diagnostic reasoning through training and capability development
- Provide decision tools to advise appropriate use of X-rays, and discourage unnecessary use of nasopharyngeal aspirates
- Enhance capability and confidence of junior staff through activities such as bedside teaching

Acute management

- Consistent care across emergency departments (EDs) and paediatric wards
- Champion local guidelines through senior clinicians to avoid unnecessary use of bronchodilators, systemic corticosteroids, and antibiotics
- Implement a decision algorithm for oxygen use

Optimising health

- Identify babies at higher risk of severe illness and clinical deterioration
- Establish short term follow up capability
- Provide accurate discharge information for primary carers/ general practitioners (GPs)
- Incorporate clinical and social risk factors in the discharge planning process

Working with families

- Promote shared decision making between clinicians and families
- Communicate proactively with families and carers
- Monitor and evaluate processes for safe home management
- Support health literacy, ensuring staff give information to families about deterioration and when to return to hospital or visit GP (e.g. brochures, web, helplines, translated material)

IMPROVING THE OVERALL PATIENT JOURNEY

- Adopt an organisational model that facilitates early paediatric clinical review for babies who present to acute facilities
- Identify lead clinicians who maintain and continually develop expertise to support diagnosis, management and to ensure safe early discharge and optimal care
- Endorse the role of GPs, supporting the development of effective primary care relationships with families
- Harmonise clinical practice across hospitals and GPs, supporting frequent review of patients by GPs.
- Establish data collection and monitoring through audit and feedback processes
- Systematically collect and act upon patient reported experience measures. No PROMS are collected for this condition
- Use staff survey to inform efforts to improve experiences of providing care

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● Potential location(s) for implementation

OPTIONS FOR ORGANISATIONAL CONFIGURATIONS

A coordinated approach delivers core components of care. The options below outline different organisational models which sites can use to tailor their clinical services to fit with local requirements. Larger hospitals may have options 1 and 2 both in use; smaller hospitals require ED protocols that ensure evidence-based diagnostic testing, and appropriate transfers for more severe cases.

Option 1: Paediatric acute review service (non-admitted patient)

Babies are followed up, or return to hospital, for planned acute review – usually the day after their departure from the ED and/or the hospital. Services may be co-located with EDs, paediatric wards, ambulatory care units or operate as part of stand-alone short stay day units. This is in use in Sydney Children's (Randwick), Wyong, and Sutherland Hospitals.

	Early admission	Ward	Acute review service	Direct admission
Clinical review with paediatric consultation	●	●	●	
Timely diagnosis and acute management	●	●	●	●
Clinical and social risk factor assessment	●	●	●	●
Family point of care education on supportive management and appropriate investigations and treatment	●	●	●	●
Support for early discharge home		●		●
Integrated communication with GP or local health service	●	●	●	

Option 2: Paediatric short stay service (admitted patient)

This service provides same day admission capability. Admissions are generally unplanned and occur directly from the ED. It is suitable for babies who are clinically stable, require continuing observation or care for up to 48 hours, or whose disposition is dependent on response to treatment.

	Emergency department	Appropriate hospital admission
Specialist paediatric management	●	●
Clinical and social risk factor assessment	●	●
Communication with GP or local health service	●	
Support early discharge home		●
Support for management at home in consultation with family/carer	●	●

Option 3: Virtual health model

Virtual wards, paediatric hospital in the home (HITH) and remote telemonitoring to support smaller local sites. Can be combined with either of the above models of care. This model is particularly suited for use in remote or rural areas.

	Emergency department	Early admission	Transition to discharge	Community/ Acute Review Service
Telehealth	●	●	●	●
Remote monitoring (education for patients on what to expect, how to use the system and contact staff)			●	●
Telephone support			●	●
Support for self-management		●	●	●

Brief vignettes, describing how various organisational models have been implemented locally, are housed on the LBVC hub or website.

For babies who are cared for exclusively in the ED

A local protocol supports the delivery of appropriate care, considering environmental and social risk factors and follow-up support. These protocols are appropriate for all EDs and an exemplar is in use in Murrumbidgee LHD.

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