

## Local Guideline



John Hunter  
Children's Hospital  
CHILDREN, YOUNG PEOPLE AND FAMILIES



Health  
Hunter New England  
Local Health District

## Referral to Allied Health in NICU

<b>Sites where Local Guideline applies</b>	Neonatal Intensive Care Unit JHCH & Allied Health services JHCH
<b>This Local Guideline applies to:</b>	
1. Adults	Yes
2. Children up to 16 years	Yes
3. Neonates – less than 29 days	Yes
<b>Target audience</b>	All clinical staff caring for infants that require referral to allied health services
<b>Description</b>	Provides information about Allied health services in JHCH and referral processes
<b>National Standard</b>	Comprehensive care

[Go to Guideline](#)

<b>Keywords</b>	Social Work (SW), Physiotherapy (PT), Occupational Therapy (OT), Dietetics, Speech Pathology (SP), Music Therapy Child Life Therapy, Audiology, Pharmacy, NICU, JHCH
<b>Document registration number</b>	JHCH_NICU_02.05
<b>Replaces existing document?</b>	No
<b>Related Legislation, Australian Standard, NSW Ministry of Health Policy Directive or Guideline, National Safety and Quality Health Service Standard (NSQHSS) and/or other, HNE Health Document, Professional Guideline, Code of Practice or Ethics:</b>	
<ul style="list-style-type: none"> <li><a href="#">NSW Health Policy Directive PD2017_013 Infection Prevention &amp; Control Policy</a></li> </ul>	
<b>Prerequisites (if required)</b>	N/A
<b>Local Guideline note</b>	This document reflects what is currently regarded as safe and appropriate practice. The guideline section does not replace the need for the application of clinical judgment in respect to each individual patient but the procedure/s <b>require mandatory compliance</b> . If staff believe that the procedure/s should not apply in a particular clinical situation they must seek advice from their unit manager/delegate and document the variance in the patient's health record.
<b>Position responsible for the Local Guideline and authorised by</b>	Jason Simpson General Manager / Director of Nursing CYPFS
<b>Contact person</b>	Jenny Ormsby Guideline Development Coordinator NICU JHCH Jennifer.Ormsby@hnehealth.nsw.gov.au
<b>Contact details</b>	
<b>Date authorised</b>	6 <sup>th</sup> December 2018
<b>This document contains advice on therapeutics</b>	No
<b>Issue date</b>	20 <sup>th</sup> December 2018
<b>Review date</b>	20 <sup>th</sup> December 2021

Note: Over time links in this document may cease working. Where this occurs please source the document in the PPG Directory at: <http://ppg.hne.health.nsw.gov.au/>

## PURPOSE AND RISKS

*This local clinical guideline has been developed to provide instruction to the health clinician and to ensure that the risks of harm to the child from appropriate referred to allied health services are prevented, identified and managed.*

*The risks are:*

- *Increased stress of parents*
- *Delay in correct treatment/management*
- *Poor weight gain or sucking swallowing difficulties*

*The risks are minimised by:*

- *Clinicians having knowledge of the referral process for allied health*
- *Clinicians seeking assistance if caring for infants is outside their scope of practice*
- *Following the instructions set out in the clinical procedure*
- *Notification and management of the complications/ risks to the patient*

**Risk Category:** *Clinical Care & Patient Safety*

## Glossary

Acronym or Term	Definition
CMV	Cytomegalovirus
DDH	Developmental dysplasia of the hip
IUGR	Inutero Growth Restriction
IVH	Intraventricular Haemorrhage
LC	Lactation consultant
MRG	Mandatory reporter guide
OT	Occupational Therapist
PT	Physiotherapist
PND	Post Natal Depression
SGA	Small for Gestational Age
SP	Speech Pathologist
SW	Social Worker
TOF	Tracheo-oesophageal fistula

## Guideline

This Guideline does not replace the need for the application of clinical judgment in respect to each individual patient.

## Contents

[top](#)

[Social Work \(SW\)](#)

[Physiotherapy \(PT\)](#)

[Occupational Therapy \(OT\)](#)

[Dietetics](#)

[Speech Pathology \(SP\)](#)

[Music Therapy](#)

[Child Life Therapy](#)

[Audiology](#)

[Pharmacy](#)

[Referral Contacts](#)

## Social work

[top](#)

The social workers in the Neonatal Intensive Care Unit (NICU) work together with families and support them during the duration of their baby's stay in NICU. Social workers are also able to assist with the emotional and practical issues that may arise for families during their stay in NICU.

Social work will see the following:

- all new patients in the intensive care unit
- families in the special care nursery that are from out of the local area or if an appropriate referral is made requesting social work input as per the criteria below

Referrals can be made to social work for the following:

- Request for social work to complete a psychosocial assessment of the family
- Concerns about parents mental health e.g. Depression, anxiety, PND
- Concerns about parents attachment to baby
- Child protection concerns or advice / guidance on completing the MRG
- Practical information such as accommodation / transport issues
- Grief and loss support

If you are unsure if a referral is appropriate please discuss with the social worker.

## Physiotherapy

[top](#)

The physiotherapist in the NICU provides support for babies who are premature or who have been very unwell. This may include assistance with positioning and developmental care, management of muscle and bone problems, assessment and treatment of babies who are very premature or have a neurological problem.

The following services are offered by the physiotherapist in NICU:

### Lacey Assessment of Preterm Infants

- Preterm babies born less than 30 weeks
- Preterm babies >30 weeks if other concerns eg. IVH, oxygen, significant IUGR

### General Movements video (may also be provided by Occupational Therapist)

- Prematurity (less than 30 weeks gestation)
- Hypoxic Ischaemic Encephalopathy
- Neurological Event: seizures, stroke, intraventricular haemorrhage grade 3 or 4, meningitis, CMV
- Post-surgical infants (general anaesthetic)
- Prematurity (< 34 weeks) with one of the following:
  - Multiple birth with foetal loss of a co-twin
  - Growth restriction (SGA with birth weight < 3<sup>rd</sup> percentile)
  - Congenital Abnormality
  - Difficult neonatal course- referred for GM by neonatal team

### Head checks

- Infants with scaphocephaly, plagiocephaly or brachycephaly
- Head preference or neck tightness

### Respiratory support from Physiotherapy

- Infants with changes on CXR and blood gases with excessive secretions not improving with suctioning alone.
- Respiratory intervention from physio will be discussed with the managing Neonatologist prior to commencement.

## **Developmental care round (in conjunction with SW, SP and OT)**

- For intensive care babies born less than 30 weeks.

## **Long term babies (may also be provided by OT)**

- If post term and having longer awake periods, can provide input on appropriate developmental play.

## **Education**

- Education sessions for supporting the development of the preterm baby occur weekly

## **The physiotherapist can also assist with infants who are identified as having the following conditions:**

### **Genetic/Congenital/other diagnosis**

- Cystic Fibrosis
- Trisomy 21- information and education supplied on development and refer to appropriate service (NDIA, EI, regional physio)
- Other chromosomal abnormalities- provide assessment, education and submit referral as required.
- Spina bifida
- Osteogenesis imperfecta
- Congenital Talipes Equinovarus
- Developmental Dysplasia of Hips
- Contractures associated with other conditions
- Positional talipes

### **Breech/Family history of DDH**

- If stable hip check follow up with GP for ultrasound at 6 weeks CA
- Neonatal Fractures

## **Occupational therapy**

[top](#)

The occupational therapist in NICU may assist with positioning, handling and settling, and supporting infant development / developmental care. If specific equipment is needed to support infant positioning to optimize respiratory health or feeding, the occupational therapist can prescribe or provide this equipment.

### **Inpatient referrals can be made for the following:**

- Positioning intervention for infants with specific diagnostic conditions (e.g. Pierre Robin Sequence where side lying is required, assessment of capsule/car seat positioning prior to discharge where additional positioning support is required).

- Support with pressure care considerations and equipment.
- Hand/arm splints for infants where congenital deformity or contracture is identified.
- Developmentally appropriate positioning support and intervention for NICU infants post-term (e.g. Tumble form chairs for upright positioning when socially ready, toys for use).
- General Movements assessment videos (criteria as per Physiotherapy)
- Referral for Hammersmith (HINE) assessment for infants greater than 3 months gestation where there has been an “absent fidgety” GM assessment or other significant concerns exist

### **Outpatient referrals:**

- Referral for standardised developmental assessment and interventions to support development/skill acquisition for NICU graduates
- Referral for upper limb function and standardised hand (HAI) assessment
- Referral for positioning intervention and equipment (highchair supports for transition to solids, supportive seating, pram modifications, bathing equipment)

## **Dietetics**

[top](#)

The dietitian in NICU assists with development of a plan to achieve adequate post-natal growth for infants in NICU. This is achieved by assessing nutritional requirements and working in conjunction with the medical team to achieve optimal growth.

### **Referral to dietitian – Neonatal Nutritional Risk Screening Criteria**

#### ***Automatic Referral***

Any infant

- < 28 weeks GA by day 7 of life (NICUS data collection)
- Weight < 10<sup>th</sup> percentile at birth

The need for ongoing Dietetic involvement will be discussed with Neonatologist on service

#### ***Referral required after discussion with the managing Neonatologist***

Any infant that meets the following criteria:

#### **Nutritional intake:**

- Parenteral nutrition <120ml/kg/d by >7 days and nil by mouth
- < 160ml/kg/day enteral feeds in a preterm infant
- < 150ml/kg/day enteral feeds in a term infant
- ≥ 180ml/kg/day of fortified preterm formula or fortified breast milk

#### **Faltering Growth**

- < 15g/kg/day weight gain for >5 days (<37 weeks corrected gestational age)
- < 20g/day weight gain for >7 days (>37 weeks corrected gestational age)

#### **Intolerance to preterm formula or breastmilk fortifier**

**Any baby with:**

- <28 weeks gestational age transitioning to  $\geq 4$  suck feeds per day
- Necrotising Enterocolitis where elemental formula is being considered
- Short bowel syndrome
- Malabsorption
- Other gastrointestinal anomaly
- Congenital heart disease where growth impairment is likely
- Chylothorax
- Renal failure
- Osteopenia requiring additional calcium and phosphate

**Speech pathology**[top](#)

The speech pathologist in NICU assists babies who have difficulties with suck feeding. Referrals for speech pathology can be made after consultation with the managing Neonatologist.

**Referrals can be made to speech pathology for:**

- Assessment of suck feeding for infants who are slow to progress
- Assessment of suck feeding for infants already known to LC but having sucking specific difficulties
- Assessment of oral motor skills / readiness for sucking feeds
- Assessment of swallow safety requiring instrumental assessment such as modified barium swallow for infant considered to be at risk of aspiration
- Assessment of oral structures for infants with anatomical anomalies who may require alternate feeding equipment or additional feeding support (e.g. cleft palate and craniofacial anomalies)

**Infants at risk of sucking and swallowing difficulties may include:**

- Premature infants with chronic lung disease who have required prolonged respiratory support (particularly respiratory support after 34 weeks gestation)
- Infants with Hypoxic Ischaemic Encephalopathy
- Infants with known neurological history such as: seizures, stroke, intraventricular haemorrhage grade 3 or 4, meningitis, CMV
- Low muscle tone / increased tone impacting on feeding
- Infants with cardiac anomalies requiring intervention (not self-resolving)
- Infants with cleft lip and/or palate
- Infants with known or suspected genetic condition
- Infants with gastrointestinal disorders (e.g. gastroschisis, exomphalus, TOF)

**Music therapy**[top](#)

An infant's wellbeing can be supported by listening to music. Some of the benefits include masking of excessive environmental (background) noise, decreased or more stable heart rate, increased oxygen saturation levels, improved neural (brain) development, and decreased stress behaviours. The music therapist can provide this service in NICU.

## Referrals can be made to Music Therapy for modulating:

- cardiac/respiratory function
- feeding behaviours
- sucking patterns
- sleep patterns
- unsettled behaviours
- quiet alert states
- parent – premature baby bonding
- maternal anxiety
- parental stress associated with premature infant care

Referrals could be made after usual nursing practices have been implemented, and listed functions, behaviours and patterns persist.

## Child life therapy

[top](#)

Referrals can be made to the Child Life Therapist for the following:

- developmental play for term or close to term babies – (unless already known to PT / OT / SP and developmental care plan in place)
- Support to help siblings who may benefit from play resources to help them understand why their sibling and parents need to stay in hospital
- Babies that will be transitioning to the ward and require developmental play role-modelling for families

Referrals can be made following discussion with the managing Neonatologist. Before referral, please consider how appropriate play stimulation might be for both the infant and the family, as well as any resources the family may be able to bring in from home.

Babies can also be referred to the NICU volunteer buddy program if the infant requires comforting and/or stimulation for periods of time.

## Audiology

[top](#)

Infants in NICU receive a hearing screen via trained screeners who are part of the JHH SWISH team. Infants who obtain a REFER result on the screen or who have meet an exclusion criteria for screening are referred by the SWISH Coordinator to the Audiologist for diagnostic testing. The exclusion criteria is outlined in the “The Guidelines of the Statewide Infant Screening - Hearing (SWISH) Program”

[http://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2010\\_002.pdf](http://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2010_002.pdf)



Infants can also be referred to the Audiologist for diagnostic assessment by the Neonatologist if any factor arises, before or after the screen is performed, that may put the infant at risk of a hearing loss.

## Pharmacy

[top](#)

The role of the pharmacist is to ensure quality use of medicines in the Neonatal Intensive Care Unit (NICU), with a focus on medication safety.

The pharmacist will regularly review medications prescribed for NICU patients and advise on medication related issues in the unit. They will attend consultant rounds at least twice per week and review all new admissions within one business day.

Referrals can be made to the pharmacist for the following:

- Unusual medications in NICU (i.e. not on Neomed)
- Advice on administration of medications
- Counselling on medications for parents and carers
- Use of restricted antimicrobials
- Management of medication related incidents

## Referral Contacts

[top](#)

**Allied Health Reception Phone: X13700**

### Social Worker

Monday – Friday 08:00 – 16:30

Page # 2934

### Physiotherapist

Monday – Friday 08:00 – 16:30

Page # 3205

### Occupational Therapist

Monday – Friday 08:00 – 16:30

Page # 2223

### Dietitian

Monday – Friday 08:00 – 16:30

Page # 6515

### Speech Pathologist

Monday – Friday 08:00 – 16:30

Page # 5582, or Page # 5737

### Music Therapist

Mondays, Wednesdays, and Fridays 10:00 – 18:00

Page #5900

### **Child Life Therapist**

Monday - Friday 08:00 - 16:30

Page #2238

### **Audiologist**

Monday to Friday 09.00 – 16.30

Ext 13548 RiMS 36414

### **Pharmacist**

Page # 5705

## **Staff Preparation**

It is mandatory for staff to follow relevant: “Five moments of hand hygiene”, infection control, moving safely/safe manual handling, documentation practices and to use HAIDET for patient/carer communication: **H**and hygiene **A**cknowledge, **I**ntroduce, **D**uration, **E**xplanation, **T**hank you or closing comment.

## **References**

National Women’s Health Clinical Guidelines Referral to Dietitian – Neonatal Nutritional Risk Screening Criteria

<http://www.adhb.govt.nz/newborn/guidelines/nutrition/DietitianReferral.htm> (accessed on 11/4/2017)

Olsen IE, Richardson DK, Schmid CH, Ausman LM, Dwyer JT. Dietitian involvement in the neonatal intensive care unit: more is better. *Journal of the American Dietetic Association* 2005;105:1224-30.

American Speech-Language-Hearing Association (2004). Roles of Speech-Language Pathologists in the Neonatal Intensive Care Unit: Guidelines

Joanne Loewy, Kristen Stewart, Ann-Marie Dassler, Aimee Telsey and Peter Homel. The Effects of Music Therapy on Vital Signs, Feeding, and Sleep in Premature Infants. *Pediatrics* 2013;131;902; originally published online April 15, 2013.

## Implementation, monitoring compliance and audit

1. Approved clinical guideline will be uploaded to the PPG and communication of updated 'Referral to Allied Health in NICU' clinical guideline to NICU staff will be via email and message on the HUB.
2. Incident investigations associated with this Guideline and Procedure will include a review of process.
3. The Guideline and Procedure will be amended in line with the recommendations.
4. The person or leadership team who has approved the Guideline and Procedure is responsible for ensuring timely and effective review of the Guideline and Procedure.
5. Evaluation will include a review of the most current evidence as well as a consideration of the experience of Neonatal staff at JHCH in the implementation of the Guideline and Procedure.

**Author** Brodie Hughes Speech Therapist JHCH

**Contributors** Rosemary Day Physiotherapist JHCH  
 Amanda Orr Occupational Therapist JHCH  
 Michelle Jackman Occupational Therapist JHCH  
 Alison Isles Social Worker JHCH  
 Katrina Burrip Social Worker JHCH  
 Alicia Tremain Social Worker JHCH  
 Elizabeth Webster Dietician JHCH  
 Yvette Anscombe Dietician JHCH  
 Sean Nolan Music Therapist JHCH  
 Michelle Jenkins Senior Pharmacist NICU JHCH

**Reviewers** Koert De Waal Neonatologist JHCH  
 Paul Craven Director NICU JHCH  
 Javeed Travadi Deputy Director NICU JHCH

**Approved** Operational, Planning & Management Committee NICU 18/10/18  
 Clinical Quality & Patient Care Committee 5/12/18

## Feedback

Any feedback on this document should be sent to the Contact Officer listed on the front page.