Clinical Guideline

HNEkidshealth
Children, Young People & Families

NSW GOVERNMENT Health
Hunter New England
Local Health District

Short Term Escalation Plans (STEPs) for Neonatal Patient Flow

Sites where Clinical Guideline applies	All Newborn Service sites, and Maternity sites that provide care for neonates across HNELHD
This Clinical Guideline applies to:	
1. Adults	No
2. Children up to 16 years	No
3. Neonates – less than 29 days	Yes
Target audience	Newborn Service Managers, Nurse Unit Managers, Maternity Unit Managers, Team Leaders, Neonatal Nurses, Medical staff, Neonatal Nurse Practitioner and Obstetric staff
Description	Provides information for neonatal clinicians regarding neonatal patient flow and escalation pathways during bed block periods

Hyperlink to Guideline

Keywords	STEPs, neonatal, escalation, back transfer, bed status, NICU, SCU, bed block, demand, management
Document registration number	HNELHD CG 20_03
Replaces existing document?	No

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:

- NSW Health Guideline GL2016_018 NSW Maternity and Neonatal Service Capability Framework
- NSW Ministry of Health Demand Escalation Framework
- NSW Health Policy Directive PD 2012_054 Bed Numbers Data Collection – NSW Procedures Policy
- NSW Health Guide to the Role Delineation of Clinical Services

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PURPOSE AND RISKS

This document has been developed to provide support and guidance to the health clinician to provide high quality, safe and timely care for newborns who will ideally be located as close to home as possible. This guideline establishes consistent measurement of demand for Newborn Services and outlines appropriate responses to changing service demands. Managing changing demands requires effective communication and cooperation amongst all hospital services.

This demand escalation framework provides a patient centred focus to avoid and minimise the impact of demand or capacity mismatches in patient flow, contributing to maintaining business continuity and health system performance.

Any unplanned event resulting in, or with the potential for injury, damage or other loss to infants/staff/family as a result of this procedure must be reported through the Incident Information Management System and managed in accordance with the Ministry of Health Policy Directive: Incident Management Policy PD2019_034. This would include unintended injury that results in disability, death or prolonged hospital stay.

Risk Category*: Clinical Care & Patient Safety*

CLINICAL PROCEDURE SAFETY LEVEL

Every clinician involved in the procedure is responsible for ensuring the processes for clinical procedure safety are followed. The following level applies to this procedure (click on the link for more information):

Level 1 procedure

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.

OUTCOMES

1	Neonatal patient flow processes will ensure safety for all babies in HNELHD
2	All staff recognise their responsibility and roles in supporting patient flow to ensure best possible patient care from admission to discharge
3	That agreed and standardised processes reduce variation and provide consistency of services across the network
4	The appropriate communication pathways are utilised to ensure timely sharing of information across Newborn Services

CONTENT

Transfer of Care

Patient Flow Processes

STEPs for NICU

STEPs for Special Care Units

Documentation

Tiered Newborn Services Network

GUIDELINE

While not requiring mandatory compliance, staff must have sound reasons for not implementing standards or practices set out within guidelines issued by HNE Health, or for measuring consistent variance in practice.

Rationale

To establish a shared and consistent understanding of the demand for services and to outline appropriate responses to changing service demands. Neonatal bed demand refers to situations where high bed occupancy and/or acuity threatens the continuation of services of Newborn Services. Through effective communication and collaboration across the Tiered Newborn Services Network, our aim is to support safe and timely transfer of newborns closer to home which in turn will enhance the provision of critical neonatal services in HNELHD.

TRANSFER OF CARE Top

The aim of all health care team members is to reunite babies and families as soon as possible in the most appropriate location and by the most appropriate pathway. All members of the health care team are responsible for gathering and imparting accurate information relating to admission, ongoing care and transfer of care planning. The family is included at the centre of any communication and planning process. In order to align with these goals, care teams should undertake the following steps to ensure the baby is cared for in the right place, at the right time and by the right personnel when any transfer of care is involved.

Planning includes:

- Completion of clinical rounds to identify suitable patient for transfer to non-tertiary service
- Discuss possible transfer with family
- Request transfer on Electronic Patient Journey Board (EPJB)/Patient Flow Portal (PFP)
- Contact Unit Manager to discuss bed availability and once confirmed, notify medical team
- Complete nursing clinical handover
- Complete medical handover and discharge summary
- Inform family confirmed plan to transfer
- Complete all necessary transfer booking requirements
- Update planned transfer on EPJB/PFP
- Confirm bed availability on the day of transfer

PATIENT FLOW PROCESSES Top

The patient flow across Newborn Services relies on three key processes. These processes are:

- **Monitoring** – Demand and capacity
- **Activation** – Of responses according the STEPs
- **Notification** – When capacity is reached

STEPs, are short term escalation plans that support contingency planning. STEPs advise which alert notifications are required, actions to be taken, and the responsible action owners.

STEPs FOR NEONATAL INTENSIVE CARE UNIT

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STATUS	DEMAND ACCESS	ACTION	RESPONSIBILITY	OUTCOME
STEP 0 **LEVEL GREEN** ***(OPEN)***	*Beds Available*	• Accept tiered network admissions • Support Supra-LHD activity, admissions from other Neonatal Networks • Completion of clinical round; Identify suitable patients for transfer to local hospital • Maintain updated EPJB/PFP	• Tertiary teams	• Provision of neonatal care at the correct service
STEP 1 **LEVEL AMBER** ***(LIMITED CAPACITY)***	*Beds restricted; Admission priority for Tiered Newborn Network for JHCH, other admissions negotiated* Consideration given to: • Impending admissions/ transfers • Acuity in NICU • Skill/staffing mix available • Supra-LHD activity, NICU capacity across the state • No cases to be refused without consultation with on service/ on call Neonatologist and Unit Manager or TL after hours	• Update EPJB/PFP to reflect status • Review/optimise nurse to patient ratios • Identify non-local NICU patients that may be able to transfer to another NICU closer to residence • Review ICU patients suitability for transfer into HDU bed • Identify suitable patients for discharge to PNW or pHITH • Identify suitable patients to transfer back to local SCU • Address “exit block” issues with SCU • Liaise daily with local SCU management team • Cap expected admission period to within 12 hours	• Team Leader (TL) of tertiary NICU/SCU • Neonatologist on service for NICU/SCU • NUM/MUM/TL of regional SCU • NUM of NICU • On call Manager for JHCH • Newborn Service Manager	• Successful identification and transfer of suitable patients where able • Adequate staffing cover and skill mix to cover increase demand

STEP 2 **LEVEL RED** ***(CLOSED)***	*Surge Activity* *(above core business)* *Beds Fully Occupied; Admission priority for local inpatients and emergency admissions, other admissions negotiated* Consideration given to: • Impending admissions/ transfers • Status of other Supra-LHD Tertiary neonatal services • Acuity in NICU • Skill/staffing mix available • No cases to be refused without consultation with on service/ on call Neonatologist and Unit Manager, or TL after hours • No critical/ emergency cases to be refused	***AS ABOVE PLUS**:* Tertiary service TL and Unit Manager to: • Escalate to Head and/or Manager of Newborn Services • Set-up all surge bed spaces with remaining available equipment • Notify all staff via messaging service of crisis situation • Liaise with PICU to discuss bed status and contingency planning Head and/or Manager of Newborn Services to: • Liaise and escalate to local Director of Nursing (DON)	• NUM/MUM/TL of regional SCU • NUM of NICU • On service/ on call Neonatologist • Manager and Head of Newborn Services • Director of Nursing and Midwifery at regional centre	• Completion of communication loop of service risk • Provision of staff to cover emergency admission activity • Successful identification and transfer of suitable patients where able • Diversion of non-emergency potential admissions to OPEN *(Green)* Supra-LHD neonatal units • Provision of emergency newborn service to provide safe care for families
STEP 3 **LEVEL BLACK** ***(CRISIS)***	*Internal Emergency*	***AS ABOVE PLUS**:* • Head and Manager Newborn Service to devise contingency plans • Head and Manager of Newborn Services to escalate to JHCH/CYPFS executive • CYPFS executive to notify the MOH	***AS ABOVE PLUS**:* • Executive Management of CYPFS	• Provision of emergency newborn service to provide safe care for families • Crisis response management

STEPs FOR SPECIAL CARE UNITS

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STATUS	DEMAND ACCESS	ACTION	RESPONSIBILITY	OUTCOME
STEP 0 **LEVEL GREEN** ***(OPEN)***	*Beds Available*	• Accept tiered network admissions • Update EPJB/PFP to reflect impending transfer/admission	• Special Care Units • Maternity Units	• Provision of neonatal care at the correct service
STEP 1 **LEVEL AMBER** ***(LIMITED CAPACITY)***	*Beds restricted; Admission priority for local inpatients and tertiary service, other admissions negotiated* Consideration given to: • Impending admissions/ transfers • Status of tertiary service • Skill/staffing mix available • No cases to be refused without consultation with on service /on call Paediatrician and Unit Manager	• Update EPJB/PFP to reflect status • Review/optimise nurse to patient ratios • Identify non-local SCU patients that may be able to transfer to a L3/2 maternity service • Identify suitable patients for discharge to PNW or pHITH • Aim to cover staffing gaps by within 24 hours • Cap expected admission period to within 12 hours	• NUM/MUM/TL of regional SCU • On service/ on call Paediatrician	• Successful identification and transfer of suitable patients • Adequate staffing cover and skill mix to cover increase demand
STEP 2 **LEVEL RED**	*Surge Activity* *(above core business)* *Beds fully occupied; Admission priority for local inpatients, other admissions negotiated* Consideration given to: • Impending admissions/ transfers	***AS ABOVE PLUS**:* Special Care Unit Manager to: • Set-up all surge bed spaces with remaining available equipment • Contact NETS *(ideally prior to birth)* for retrieval of emergency admissions • Escalate to Head and/or Manager of Newborn Services	• NUM/MUM/TL of regional SCU • On service/ on call Paediatrician • Manager and Head of Newborn Services • Service Manager/ Director of Nursing and Midwifery at	• Completion of communication loop of service risk • Provision of staff to cover emergency admission activity • Provision of emergency newborn service to provide safe care for families

(CLOSED)	• Status of tertiary service • Skill/staffing mix available • No cases to be refused without consultation with on service /on call Paediatrician and Unit Manager • No critical/ emergency cases to be refused	• Liaise and escalate to local Director of Nursing (DON)	regional centre	
STEP 3 **LEVEL BLACK** ***(CRISIS)***	*Internal Emergency*	***AS ABOVE PLUS**:* • Unit Manager and Lead Paediatrician to liaise with Newborn Service lead management to discuss contingency plans	***AS ABOVE PLUS**:* • Executive Management of CYPFS	• Provision of emergency newborn service to provide safe care for families • Crisis response management

DOCUMENTATION

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Demand management and escalation planning relies on the regular updating of the EPJB and PFP. Maintenance of timely information is vital and Newborn Services are required to update the electronic portals in line with the following timeframes:

Electronic Patient Journey Board (EPJB)

- Minimum of once per shift and
- As clinical plan and changes occur

Patient Flow Portal (PFP) including the Neonatal bed status

- Every 4 hours (NICU only)

TIERED NEWBORN SERVICES NETWORK

Top

Hospital sites for neonatal transfers within the HNELHD Tiered Newborn Services network and their unit capacity.

HOSPITAL	CONTACT NUMBER	GESTATION	CLINICAL REQUIREMENT	FUNDED BEDS
JOHN HUNTER CHILDREN'S NICU/SCU	49214410	≥ 23 weeks	All ICU patients	**43 FUNDED** (55 surge capacity)
MAITLAND SCU	49392117	≥ 32 weeks	Off respiratory support	**8 FUNDED** (12 surge capacity)
TAMWORTH SCU	67777428	≥ 32 weeks	Off respiratory support	**8 FUNDED** (12 surge capacity)
MANNING BASE (TAREE) SCU	65929283	≥ 32 weeks	Off respiratory support	**3 FUNDED** (4-6 surge capacity)
ARMIDALE SCU	67769642	≥ 32 weeks	Off respiratory support	**0 FUNDED** (*2 nominated beds*) (3-4 surge capacity)
PORT MACQUARIE SCU	55242414	≥ 32 weeks	Off respiratory support	**6 FUNDED** (8 surge capacity)
COFFS HARBOUR SCU	66567273	≥ 32 weeks	Off respiratory support	**6 FUNDED** (8 surge capacity)
KEMPSEY SCU	65612600	≥ 34 weeks	Off respiratory support	**0 FUNDED** (2 surge capacity)
GOSFORD SCU	43206530	≥ 30 weeks	Stable CPAP/HFNC	**15 FUNDED** (20 surge capacity)
NEWCASTLE PRIVATE SCU	49419322	≥ 32 weeks	Off respiratory support	**4 FUNDED** (8 surge capacity)
GRAFTON SCU	66418489	≥ 34 weeks	Off respiratory support	**4 FUNDED** (no surge capacity)

IMPLEMENTATION PLAN

The clinical guideline will be:

- Circulated to General Managers and Sector Managers.
- Circulated to clinicians via Tiered Neonatal Network/Newborn Services and the Children, Young People and Families Services and the Women's Health and Maternity Network.
- Made available on the intranet (PPG) and HNEKidshealth website.
- Presented at facility units meetings and tabled for staff to action.

MONITORING AND AUDITING PLAN

- The person or leadership team who has approved the clinical guideline is responsible for ensuring timely and effective review of the guideline.
- Evaluation will require a review of the most current evidence as well as consideration of the experience of HNELHD staff in the implementation of the clinical guideline.
- Data derived from monitoring and evaluation should inform the review of the clinical guideline either as required or scheduled.
- Implementation, education support and monitoring compliance be completed by local Clinical Educators and Managers.
- Amendments to the guideline will be ratified by the Manager and Head of Newborn Services and WHaM Networks prior to final sign off by the Children, Young People and Families Services.

CONSULTATION WITH KEY STAKEHOLDERS

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APPENDICES

1. Abbreviations & Glossary

REFERENCES

1. NSW Ministry of Health Guideline GL2016_018 Maternity and Neonatal Service Capability Framework.
2. King Edward Memorial Hospital (Western Australia) Code Yellow - Neonatal Bed Demand Management Policy.
3. NSW Health Ministry of Health Demand Escalation Framework.
4. NSW Health Guide to the Role Delineation of Clinical Services.
5. The Sydney Children's Hospital Network, Demand Management and Escalation Plan Policy.
6. South Eastern Sydney Local Health District, Neonatal Services Demand Management and Escalation Plan Policy.

OTHER USEFUL LINKS

- HNELHD Policy Compliance Procedure PD2009_060:PCP 5 Clinical Handover – Discharge Summaries
- HNELHD Policy Compliance Procedure PD2009_060:PCP 1 Clinical Handover – ISBAR

FEEDBACK

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

APPENDIX ONE

ABBREVIATIONS & GLOSSARY

Acronym or Term	Definition
CMC	Clinical Midwifery Consultant
CNC	Clinical Nurse Consultant
CPAP	Continuous Positive Airway Pressure
CYPFS	Children, Young People and Families Services
DON	Director of Nursing
EPJB	Electronic Patient Journey Board
HDU	High Dependency Unit
HFNC	High Flow Nasal Cannula
HNELHD	Hunter New England Local Health District
ICU	Intensive Care Unit
JHCH	John Hunter Children's Hospital
LHD	Local Health District
L3/2	Indicates service capability code L3 Maternity/L2 Neonatal service
MOH	Ministry of Health (NSW Health)
MUM	Maternity Unit Manager
NETS	Newborn and paediatric Emergency Transport Service
NICU	Neonatal Intensive Care Unit
NNP	Neonatal Nurse Practitioner
NICU	Neonatal Intensive Care Unit
NUM	Nursing Unit Manager
PFP	Patient Flow Portal
pHITH	Paediatric Hospital in the Home
PNW	Post-Natal Ward
SCU	Special Care Unit
STEPs	Short Term Escalation Plans
Supra-LHD	Newborn Services acts as service beyond LHD needs, activity maps to requirements for newborn across the state.
Surge Beds	These are additional hospital capacity beds that are not staffed or operational. They are a way of responding to peak demands.
Surge Capacity	The total number of physical bed spaces that units can flex up to that can accommodate patients safely, beyond funded bed numbers. This activity is staffing dependant.
TMH	The Maitland Hospital