

ADMISSION OF A NEONATE TO THE GRACE CENTRE FOR NEWBORN CARE - CHW

PRACTICE GUIDELINE [®]

DOCUMENT SUMMARY/KEY POINTS

- This document provides information on the admission process for neonates in Grace Centre for Newborn Intensive Care
- Neonates are admitted from other hospitals via the NETS team, Westmead NICU, Westmead delivery suite, other hospital transfer teams, NSW ambulance, the Emergency Department at CHW or post operatively for Day of Surgical Admission (DOSA) patients.

Key Performance Indicators

- Parents are informed and aware of the facilities available during their infant's stay
- All infants have two identification bands on admission and transfer
- Admission assessment is documented in the progress notes
- The mother's intention to breast feed is documented
- The patient has a Neonatal Skin Risk Assessment Score (NSRAS) documented within the first 4 hours of admission

CHANGE SUMMARY

- Updated content to reflect changes in process
- Hand Over Prompt (HOP) tool included for local handover guidance
- **25/09/23:** minor review – Clinical deterioration flowchart added to the Section – Monitoring. Links to guidelines updated.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1 st June 2022	Review Period: 3 years
Team Leader:	Nurse Educator	Area/Dept: GCNC - CHW

<h1>READ ACKNOWLEDGEMENT</h1>
<ul style="list-style-type: none"> All clinicians working in Grace Centre for Newborn Intensive Care.

TABLE OF CONTENTS

Defining Statement	3
Admission of an Infant	3
Preparation prior to admission	3
On admission of infant.....	4
<i>All infants</i>	4
Documentation	5
<i>Observations</i>	6
<i>Monitoring</i>	6
<i>IV fluids</i>	6
<i>Procedures</i>	7
Families	7
<i>Support for parents</i>	7
<i>Visiting guide</i>	8
<i>Consent for treatment</i>	8
The Hand Over Prompt (HOP) tool	9
Supporting References	10

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1 st June 2022	Review Period: 3 years
Team Leader:	Nurse Educator	Area/Dept: GCNC - CHW

Defining Statement

The aim of this practice guideline is to facilitate and streamline the admission process in Grace Centre for Newborn Intensive Care (GCNIC). The collection of baseline data and effective handover is essential in ensuring quality patient care¹. During the admission process, family-centred care should be encouraged and promoted in line with the SCHN mission. A smooth transition to GCNIC, effective handover and family-centred care can help parents feel less overwhelmed and become more involved in the care of their infant². A safe handover is associated with safer patient care, and greater trust in clinicians by patients and family members.²

Admission of an Infant

An organised admission process can assist in the speedy assessment and stabilisation of the infant.

All requests for admission need to be discussed with and accepted by the on-call neonatologist who liaises with the NUM/nurse in charge.

Preparation prior to admission

- Obtain information regarding the infant's weight, gestational age, current condition and management from NETS or the referring hospital (Double check the patient's name and details with 2nd person to avoid mistakes and ensure correct information). If the baby is born after hours obtain a MRN from the emergency department by contacting the triage desk.
- Assemble the charts and relevant documentation ready for the arrival of the infant.
 - The clinical support officer (CSO) will enter infant's details as part of the admissions process and this will trigger an entry into the eMR with name of the admitting Neonatologist and the transferring hospital and patient details³.
 - Check the Medical Record Number (MRN) with a second person to ensure accurate documentation.
 - If the infant is admitted after being home for some time document in the eMR the names and contact details of the community health providers involved in their care.
- Ensure that the appropriate equipment is ready and in working order for the allocated bed space:
 - A pre-warmed incubator for infants weighing less than 1800g or who are less than 34 weeks gestation, or open care system for other infants requiring assessment and/or surgery ¹. Consider admitting directly onto a transport bed if the patient is self-ventilating and likely to attend a scan or procedure.
 - The monitor is turned on, the infant's details entered. Alarm limits are set (as indicated by the clinical status of the infant) and placed in 'standby' mode.

- The relevant monitoring modules and cables (e.g. cardio-respiratory, saturation probe, manual BP, arterial BP, CO2 end tidal monitoring, temperature probe) are assembled and ready for use. (Pre/Post ductal saturation monitoring for cardiac admissions)
- Prepare the equipment; ID bands, ECG leads, temperature probe, adhesive bandage for saturation probe, two swabs + pathology bag, stool sample container, stethoscope, nappy, gastric drainage bag (if required) FG 8 or 6 nasogastric tube (if required), bed linen.
- Bedside trolley with suction equipment (2 oral suction catheters size 8 FG, in-line suction catheters size 6 FG, suction packs), Rediwipes, measuring tape, nappies, normal saline, sterile glove and 3ml syringe (if ventilated) 10ml enteral syringes and pH strips.
- Disposable anaesthetic resuscitation bag and tubing assembled and in working order with appropriately sized face mask.
- Suction canister and tubing are assembled and checked.
- The ventilator is set-up and ventilator checks have been attended and checked by an accredited nurse. Pre-set ventilator parameters if they are known.
- Hostel accommodation for parents may be organised at this time. Parent's rooms on Grace maybe used for afterhours admissions if available.

On admission of infant

All infants

- On admission obtain a detailed clinical handover of the infant's condition, history, baseline vital signs, interventions, and treatments as this plays an important role in gaining correct information to enable consistency of care¹.
- Handover should occur at the patient bedside with all care providers present³.
- Work with NETS team at their direction to safely transfer the infant to the Grace bed. The NETS team will manage the NETS specific equipment.
- Clarify any questions you may have with nurse and team handing over the care of the infant before they leave the unit¹.

Safe Handover = Safe Patient

- Take two MRSA admission swabs from nose and throat. Send these with the appropriate eMR labels to pathology via the Lamson tube located in the on-site laboratory⁴.
- A complete physical assessment of all infants is performed by a registered nurse and admitting Medical Officer/Nurse Practitioner ³ Document the assessment in the patient's eMR and discuss with the medical team. Note any physical abnormalities.
- Record a full set of observations in eMR

- Attend a weight, length and head and document in eMR and the Neonatal Database.
- Admission bloods + Blood Gas (UEC, FBC, group and hold as required) should be collected by the registrar/Neonatal nurse practitioner (NNP)/accredited Registered Nurse via venepuncture or from the arterial line if in situ. If the patient is likely to go to surgery within the first 24hrs of age, also collect a Newborn Screen sample at this time.
- Maternal bloods (if supplied) must have 2 x signatures on the collection tube prior to submission.
- Observe the infant for two minutes and perform a baseline pain assessment score using the mPAT (modified Pain Assessment Tool) score⁶. [Please refer to Pain Management of Newborn Infants guideline](#).
- Attend a Neonatal Skin Risk Assessment Score (NSRAS) within the first four hours of admission, after completing a comprehensive inspection of the infant's skin surfaces, ensuring to check under devices that may be pressing on the skin. Document this in the eMR.
- Check the infant's record for vitamin K administration and Hepatitis B status, document in the eMR. If the documentation is missing, a call to the maternity/referring hospital will be required.
- Enquire about the location of the placenta to ensure it has been sent to histopathology at the referring hospital.
- Assist with any diagnostic procedures, always supporting the infant according his or her behavioural cues with developmental care to alleviate stress and giving sucrose for procedural pain^{4, 5}.
- Check in EBM with two RN's. Label and store according to the [Infant Feeding: Practice guideline - CHW](#).

Documentation

- The neonatal registrar or NP is responsible for obtaining informed consent for treatment from the parent/guardian⁷.
- The neonatal registrar or NP is responsible for admitting the patient onto the neonatal database.
- Place two identification bands with the infant's name on two separate limbs.
- If not already completed, complete the Newborn Screening card, and ask the parents to sign the consent section of the card after providing them with the information brochure. Document the Newborn Screening in the eMR and in the infant's Health Record (Blue) Book.
- Have sucrose prescribed on the medication chart by an accredited nurse⁵.
- Ask the mother if she intends to breast feed and record her feeding intention in the admission notes. Ask if she requires assistance with the breast expressing equipment.

Observations

- When the transport team arrives the admission procedure is a shared responsibility until the transferring team has completely handed over the infant's care to the admitting team.
- The medical registrar/NP/fellow should be present or notified immediately when the infant arrives³.
- Baseline observations are recorded by the admitting nurse whilst the infant is in the transport crib.
 - A blood gas may be collected by the NETS team prior to transferring the infant to the incubator/open care system.
- Infants may be muscle relaxed for the NETS transfer.
- The infant's condition should be constantly monitored for changes with handling³.

Monitoring

- Check the ventilator settings with the registrar. Connect the infant to the ventilator and listen to the air entry in the chest².
- Measure the ETT and check correct taping measurement with transferring nurse. Ensure ETT is taped securely².
- Ensure bedside monitoring has been applied and is functioning prior to disconnection of transport monitor.
- Ensure the temperature probe is positioned securely along the infant's flanks below the axilla or on the infant's abdomen, avoiding the infant's liver as the liver carries out heat generating reactions that could affect temperature assessment⁸.
- If the infant is nursed in an incubator the environmental temperature is set within the infant's neutral-thermal zone¹ (check chart - [Thermoregulation in Neonatal Care guideline](#)).
- Attach the CO₂ end-tidal monitoring.
- Dual SpO₂ monitors are used for infants with a structural cardiac defect (pre ductal: preferably right hand; post ductal: left and right foot⁹).
- Early escalation should be considered for patients that are particularly vulnerable to physiological instability. Please refer to Grace [Clinical deterioration flowchart](#).

IV fluids

- Connect transport IV fluids to syringe pump at transfer prescribed rate until the orders for the fluids are re-prescribed. Once re-prescribed, the fluids must be changed and reconnected to the patient. Ensure ANTT.
- Check the IV insertion sites for any redness, swelling or signs of infiltration.

- If a sample of maternal blood was sent with the baby ensure that the referring hospital has labelled the tubes with mother's name with two signatures and send to laboratory for X-match. The baby's addressograph label is added to the top of the request form sent with the sample. 2 signatures are also required on the request form from NETS or the birth hospital. If the samples are not signed by two people, the samples are invalid and will be rejected by the laboratory.
- Ensure correct positioning of transducer and "zeroing" of arterial line, as well as appropriate trace on the monitor. Please refer to [arterial monitoring guideline](#).

Procedures

- If clinically indicated, insert a naso-gastric or oro-gastric tube if not already placed. If the patient is medically and surgically cleared to commence enteral feeds, advocate for breastfeeding or breast milk feeding if it is the mother's intention.
- Inform the neonatologist when the parents have arrived.
- Repeat x-rays may need to be performed to confirm the position of the ETT.
- Document all procedures in the eMR.

Families

Support for parents

- Ensure parents are supported during their infant's admission procedure. You may need to ask another staff member for assistance or involve the social worker.
- Explain the admission process and arrange for them to be shown the parents lounge area with tea and coffee facilities and explain the use of the room is for parents only.
- Give them the parent admission booklet which contains useful information.
- Ensure all information is explained to the parents, such as unit phone number/s, the hostel accommodation or ward en-suite accommodation, the parents lounge and explain the procedure for entering the unit by using the intercom on arrival.
- Consider contacting authorised interpreters for non-English speaking parents to enable them to ask questions and receive all the information they need¹. Check to see if the medical team and lactation need to use the service at this time.
- Acknowledge parents each time they arrive in the nursery and show them the location of their baby's bedspace.
- Show them where the toilet is located.
- Issue the family a *Baby Diary* if they would like one.
- Explain the milk room and storage of the mother's expressed milk if required and arrange for the Lactation Consultant to see the mother¹².
- Set up breast pump equipment for the mother and explain expressing and procedure.

Visiting guide

- Advise them that all visitors are to wait in the external waiting area. The Parent Lounge is for use by parents only.
- Families are welcome in GCNIC, and parents are encouraged to be in attendance and care for their baby at any time³.
- Relatives and friends are welcome to visit dependent on contemporary hospital visitation rules when the parents are present or with permission from the parents who have informed the nursing staff of their wishes. This permission should also always be in writing and preferably obviously visible to nursing staff either with the infant's notes or attached to the bedside monitor, next to the infant's name tag.
- Siblings are allowed into the nursery but not any other children. Siblings should be supervised at all times by the family. If they are unwell entry into the nursery is not permitted. Their immunisation status should be current.
- Because of the limited space it is recommended for only two visitors (including parents) to be at the bedside at any one time.
- Important information regarding an infant's condition, treatment or prognosis should be directed primarily to the parents. This information may be shared with other family members if the parent's wish¹³.
- The designated baby rest period is from 1200hrs to 1500hrs each day. Where possible, procedures should be limited to urgent procedures only during this time to promote bonding time with parents.
- Visiting hours for other visitors are as such 1000hrs to 1200hrs and 1500hrs to 2000hrs.
- Explain the hand washing procedures to parents and visitors including the importance of removing of jumpers, jackets, watches and jewellery³.
- Discourage visitors from wandering around the ward to look at other babies¹³.
- Infants are not discussed with visitors (unless approved by the parents) or with other parents¹³.
- Much of the information provided to parents when their baby is admitted to the unit will need to be repeated on subsequent visit. This is normal as stressed families may not take in all the required information.

Consent for treatment

- All treatments and procedures require informed consent. This is to be obtained by the medical officer, surgeon or nurse practitioner required for each individual procedure such as treatment, formula, surgical procedures, blood transfusions, immunisation, imaging, and the use of intravenous contrast³.
- In some situations, verbal parental consent by phone may be obtained by the Medical Officer or NP when written consent is unobtainable. The process and outcome of the consent must be documented in the medical record¹⁴.

- Consent is filed in the bedside medical record¹⁴. Medical staff and NPs are responsible for obtaining and witnessing all consent forms excluding pasteurised donor human milk (PDHM). Consent for PDHM can only be completed by a Neonatologist or a Lactation Consultant.
- If consent has not been obtained prior to the surgery or procedure, then the attending consultant or surgeon needs to be informed prior to the infant leaving the unit.

The Hand Over Prompt (HOP) tool

INTRODUCTION
INTRODUCTION OF THE PATIENT
 (AND OF STAFF TO THE FAMILY)
 NB: Have you introduced yourself to the patient's family?
 Patient's name, Age (in days) GA, Current GA, weight, referral hospital

SITUATION
SITUATION (CURRENT CLINICAL STATUS)
 Reason for admission

BACKGROUND
BACKGROUND (RELEVANT MEDICAL HISTORY)
Antenatal History: Gravida/Parity, mode of delivery, APGARs, maternal complications, NBST, Hearing screening, Immunisations
Baby's Medical History: Admission date, dates of surgeries, dates of significant procedures and tests (including results), dates of significant changes in clinical status

ASSESSMENT (CURRENT ACTIONS AND MANAGEMENT)
Ventilation: Respiratory support type, mode of ventilation, ventilation settings, suctioning
Vital Signs: Changes in vital signs, target vital signs
 Additional Observations: (BGL, neurovascular limb, neurological/GCS, head circumference)
Fluid Balance: TFR, IV access, maintenance fluids and infusions, enteral nutrition, gastric output, vomits, urine output, bowel movements, urinalysis
 Wound sites and skin integrity (including NSRAS)
Pain Management: PAS and NWS
Social: Parents, family issues/concerns, family meetings

RECOMMENDATION
RECOMMENDATION AND REQUEST (PLAN OF CARE)
 What is the current plan for this shift?
 What is the escalation plan for this infant in the case of a clinical deterioration?
 What is the long-term plan for this infant?

REMEMBER
Cross-check with your outgoing nurse:
 Airway & Ventilation settings
 In/out CCIS chart, infusion orders and rates
 Medication chart





Supporting References

1. Haikerwal, M., Dobb, G. and Ahmed, T. Save Handover : Save Patients. Guidance on clinical handover for clinicians and managers. The Australian Medical Association Limited. 2006. 17, 35, 41.
2. Raeisi, A., Rarani, M. A., & Soltani, F. Challenges of patient handover process in healthcare services: A systematic review. *Journal of education and health promotion*, 2019, 8, 173.
3. Forde MF, Coffey A, Hegarty J. Bedside handover at the change of nursing shift: A mixed-methods study. *Journal of clinical Nursing*. 2020 Oct;29(19-20):3731-42.
4. Obeidat, H. M., Bond, E. A. and Callister, L. C. The Parental Experience of Having an Infant in the Newborn Intensive Care Unit. *The Journal of Perinatal Education*, 2009 *Vol. 18, No. 3*, 28.
5. Barr, P. *Newborn Intensive Care, A handbook for staff* 3rd ed. Royal Alexandra Hospital for Children, Westmead. 2004
6. Nakamura, M. M., McAdam, A. J., Sandora, T. J., Moreira, K. R. and Lee, G. M. Higher Prevalence of Pharyngeal than Nasal *Staphylococcus aureus* Carriage in Pediatric Intensive Care. *Journal of Clinical Microbiology*, 2010 *Vol. 48, No. 8*, 2957-2959.
7. NICU Net – Grace Centre for Newborn Care, Weight calculator. Available URL: <http://nicunet/Calculators/WeightCalc.htm>
8. Spence K, Gillies D, Harrison D, Johnston L, Nagy S. A reliable pain assessment tool for clinical assessment in the neonatal intensive care unit. *JOGNN - Journal of Obstetric, Gynecologic, & Neonatal Nursing* 2005. *34, 1*, 80-6.
9. NSW Health Policy Directive Newborn Bloodspot Screening Policy, Cat. No. PD2016_015, Statewide Services Development, North Sydney, 2016. 1-2, 9. <http://webapps.schn.health.nsw.gov.au/epolicy/policy/3347>
10. NSW Health Guideline Statewide Infant Screening – Hearing (SWISH) Program, Cat. No. GL2010_002, Primary Health and Community Partnerships, North Sydney, 2010. 7. http://www.health.nsw.gov.au/policies/gl/2010/pdf/GL2010_002.pdf
11. Sherman, T.I., Greenspan, J.S., Clair, N. St., Touch, S.M. and Shaffer T.H. 2006
12. Optimizing the Neonatal Thermal Environment. *Neonatal Network*, 25, 4, 255.
13. Allen, H. D., Gutgesell, H. P., Clark, E. B. and Driscoll, D. J. *Heart Disease in Infants, Children and Adolescents. Including the fetus and young Adult* 6th ed. [Lippincott Williams & Wilkins](#), 2001. 48.
14. NSW Health Policy Directive Breastfeeding in NSW: Promotion, Protection and Support, Cat. No. PD2018_034, Health Advancement, North Sydney, 2018. 39. <http://webapps.schn.health.nsw.gov.au/epolicy/policy/5426>
15. NSW Health Policy Directive 2020 Consent to Medical Treatment – Patient Information, Cat. No. IB2020_010, Legal and Legislative Services, North Sydney, 13. <http://webapps.schn.health.nsw.gov.au/epolicy/policy/5257>

Copyright notice and disclaimer:

The use of this document outside Sydney Children's Hospitals Network (SCHN), or its reproduction in whole or in part, is subject to acknowledgement that it is the property of SCHN. SCHN has done everything practicable to make this document accurate, up-to-date and in accordance with accepted legislation and standards at the date of publication. SCHN is not responsible for consequences arising from the use of this document outside SCHN. A current version of this document is only available electronically from the Hospitals. If this document is printed, it is only valid to the date of printing.