NEONATAL UNIT

URU PĀ-HARAKEKE

STUDENT NURSE ORIENTATION

Developed by: Nga Manu Teka: Practice Development
November 2019, Revised 2022

Contents

DOCUMENT CONTROL

Version	Issue & Circulation Date	Brief Summary of Change
1.	January 2017	
2.	May 2017	
3.	November 2019	
4.	July 2022	Added drug calcs, added codes,updated contacts
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Location	MDHB: student	
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WELCOME

Welcome to Palmerston North Hospital and the Neonatal Unit. We hope that you enjoy your time with us and that you find it a worthwhile and interesting learning experience. This package will give you some brief information about what you can expect from your time with us.

Palmerston North Neonatal Unit is a Level 2A Unit with:

17 beds: 5 NICU
10 Special Care Beds and 2 isolation beds.

NICU: Neonatal Intensive Care: Babies who are seriously ill and who may require ventilation; and babies who have PICC lines and arterial lines (umbilical arterial line).

S.C.B: Special care beds for babies who require specialised nursing care. They may be premature, or full term.

The geographic area that the NNU covers includes Manawatu, Tararua, Horowhenua, Otaki and occasionally Whanganui, Taihape and Waiouru.

STAFF

Nursing staff include Registered Nurses and Enrolled Nurses. There are six Paediatricians and Registrars who provide 24-hour cover for the Neonatal Unit.

Discharge planning and education / parenting skills are an integral part of the care given in the Neonatal unit. This commences at admission and all staff participate in this. Once discharged, babies who meet selected criteria are under the care of the Paediatric Home Care team, which is based in the Children's Clinic.

Post-discharge parents may ring the Neonatal Unit at any time for advice or reassurance. Each call and information /advice given is documented so can be referenced at a future date

All boarder mothers get their meals from the hospital café delivered to the Neonatal Unit under Mahi Tahi. In the Neonatal Unit itself, we have four Parent-craft beds for parents to stay in to feed and care for their baby for a few days before discharge. The baby may go out in those rooms with their parents. Babies who are being discharged on O_2 are in a room with parents prior to discharge.

KEY CONTACTS

NNU	Reception	06 350 9159 ext. 8415
Charge Nurse	Melissa Woodd	06 350 9159 ext. 8418 Pager 271
Nurse Educator	Ashleigh Dam	06 350 9159 ext. 8336 Page 405 Ash.dam@midcentraldhb.govt.nz
Speciality Clinical Nurse	Ali Bigwood	06 350 9159 ext. 8418 Ali.bigwood@midcentraldhb.govt.nz

Please contact the Charge Nurse or your Clinical Lecturer to confirm your start dates and times. If you are unable to attend your placement, please ring the ward and advise the Charge Nurse and your Clinical Lecturer.

PRECEPTOR

You will be allocated a primary preceptor and follow their rostered duties which may include morning, afternoon, nights and weekends. There may be times your primary preceptor is not on duty and you will be allocated a secondary preceptor.

EXPECTATIONS OF THE STUDENT NURSE

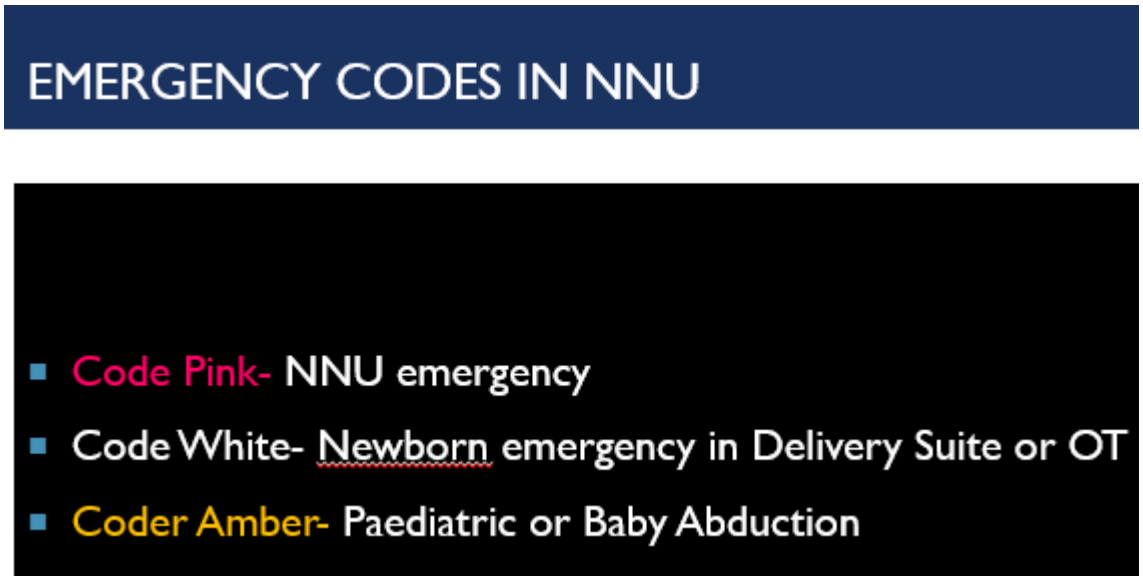
- On the first day please complete the Student contact details form (page 18) and give it to the Charge Nurse or nurse in charge of the shift.
- It is expected that you arrive on time and if you are going to be late or unwell and cannot come in please ring and ask to speak to the Charge Nurse/nurse in charge of the shift. Hours of work are:
    - Morning duty 0700-1530 hours
    - Afternoon duty 1445-2315 hours
    - Night duty 2245-0715 hours
- We endeavour to give you continuity of preceptor(s) wherever able. If you are unable to work the days that you have been rostered, you need to discuss this with the Nurse Educator or your Clinical Lecturer.
- You must complete the full shift that you are allocated to work.
- The preceptor you are working with needs to be aware of your learning objectives.
- Your preceptor will work with you to help you learn about assessment and management of a variety of conditions relevant to the setting.
- A working knowledge of drug calculations is essential. Please review your knowledge of normal temperature, pulse, respiration rate, blood pressure, pain assessment and blood glucose levels.
- Third year nursing students commencing their final placement need to identify which preceptor will be completing their documentation requirements and ensure their preceptor has an adequate timeframe to complete this.
- Please ensure that your uniform meets your institution standards.

HEALTH AND SAFETY

Every staff member is responsible for their own safety and the safety of others. The Occupational Health and Safety Manual outlines the hazards within the department. Please familiarise yourself with these hazards and their management. All accidents are to be reported to the Charge Nurse and a Riskman completed.

EMERGENCIES

All staff should make themselves familiar with the response requirements for all emergencies during their orientation. Please ensure that fire exits are always kept clear and corridors uncluttered. Exits must be clear at all times.



OBJECTIVES

Before you start please consider what you want to achieve on this placement. Bring a list of objectives, remembering that these need to be realistic. Please share with your preceptor/s at the beginning of your placement the documentation that must be completed while on that placement. Objectives may include but are not limited to:

- Documentation
- Gain an understanding of the multidisciplinary team
- Infection prevention and control
- Patient assessment-including risk assessments
- Time management and prioritising care
- Vital signs – accurate recording and interpretation

PARKING

Students can purchase concession parking cards from the Wilson Parking Office on site to get a discounted parking fee: a $20 bond is required to purchase these cards.

CONTROLLED DOCUMENTS

Once on placement you will need to access relevant policies, procedures and guidelines. Ask your preceptor to help you find the Controlled Documents on the intranet. *(Note: you cannot access this outside of the organisation.)*

NURSING CLINICAL PRACTICE MODEL OF CARE: KEY NURSING

This model of care includes a primary nurse and an associate nurse being the overall coordinators of care. The aim is to:

- Promote family/ whānau centred care
- Recognise the infant is an integral part of the family/whānau
- Ensure best interests of the infant is paramount
- Promote empowerment
- Share knowledge and information of family/whānau
- Ensure autonomy and accountability in nursing practice
- Develop staff knowledge and skills

The KEY Nurse coordinates and oversees care by:

- Ensuring admission assessment is complete
- Ensuring care plan is complete/accurate
- Ensuring care is being delivered as per the care plan
- Ensuring family/whānau are involved in care planning, updating and weekly evaluation
- Discharge plan reflects family/ whānau needs
- Discharge plan is clear and concise
- Discharge plan is being actioned
- Follow-up with colleagues any deviations from planned care

Role of other Nursing Staff is to ensure:

- Assessment is completed on admission
- A care plan is written on admission
- Care plan is updated/revised each shift
- Family/whānau are kept informed and involved in care plan
- Discharge planning is commenced on admission
- Discharge plan is checked each shift and action taken appropriately
- Documentation is accurate and completed
- Liaison and feedback with the primary nurse

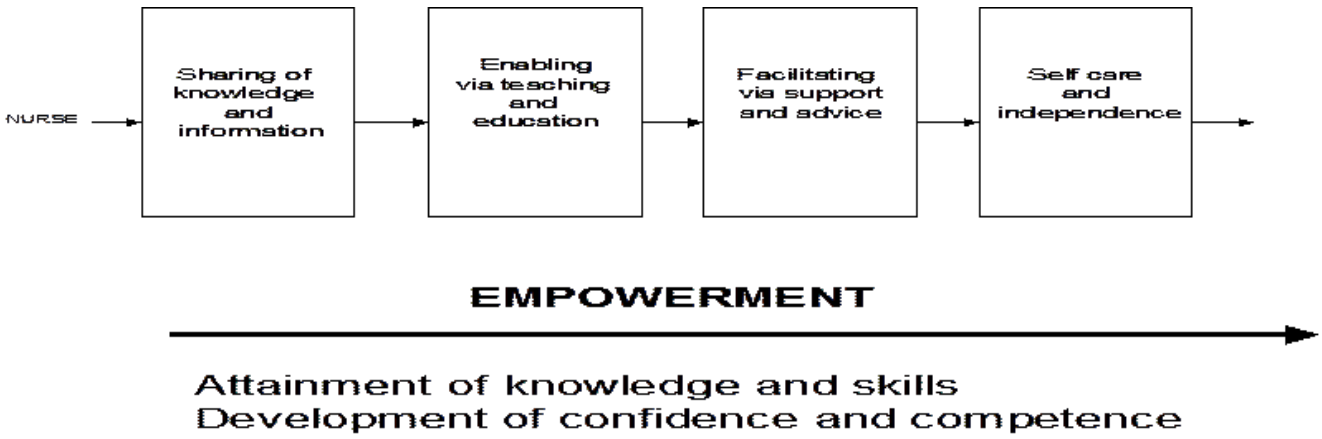
FAMILY/WHĀNAU CENTRED CARE POLICY

Supports the integrity of the family/whānau while individualising care to promote individual and family/ whānau health.

Parents and family/whānau members provide the child's primary strength and support. Their information and insights can enhance staff knowledge, improve care and help design friendlier systems. At the heart of family/whānau centred care is the belief that health-care providers and the family/whānau are partners, working together to best meet the needs of the child.

PRINCIPLES OF A FAMILY/WHĀNAU CENTERED ENVIRONMENT

Family/Whānau Strengths: The family/ whānau is the constant in the child's life. We support family/ whānau members as partners and decision-makers in their child's care and help them cope more confidently with their child's illness.
Respect: Family/whānau centred care requires trust and respect, including respect for each family/ whānau values, beliefs, and religious and cultural background. We value family/ whānau knowledge of their children, acknowledge their authority as decision-makers and respect their choices.
Choices: We provide the information families/ whānau need to make educated choices about treatment and support the choices they make.
Information Sharing: We provide medical information to families/ whānau and value the personal information families/ whānau provide about their children. This information exchange builds trust and contributes to the partnership between families/ whānau and caregivers.
Support: We support families/ whānau by respecting their decisions; offering comfort as they cope with the child's illness; meeting the social, developmental and emotional needs of the child; and fostering family/ whānau members' confidence in their ability to care for their child.
Flexibility: Families/ whānau bring different personalities, life experiences, values, beliefs, education, and religious and cultural backgrounds to the hospital setting. Family/ whānau centred care emphasizes that staff need to be flexible so they can meet the needs and preferences of families.
Collaboration: As partners in care, professional staff and family/ whānau members work together in the best interest of the child.
Empowerment: Families/ whānau have the right and the authority to care for their children. The core concepts of family/ whānau centred care empower families/ whānau in the care of their children.



Family Focused Partnership Model adapted from: Children's Nursing in Practice, The Nottingham Model

Parents and family/whānau provide the child's primary strength and support. Their information and insights can enhance the professional staff's knowledge, improve care and help design friendlier systems.

ORIENTATION TO THE CLINICAL AREA

It is important that you have an awareness of the environment in which you will be working to ensure the safety of yourself, the patient and other staff members. You are required to complete a clinical area orientation checklist. This is provided by your academic institution: once completed give this to your Clinical Lecturer.

ORIENTATION TO KEY PEOPLE AND ROLES

WHO/WHAT	(√) when completed (x) if not applicable
Charge Nurse	
Clerical Support	
Speciality Clinical Nurse	
Enrolled Nurses	
Family/Whānau Violence Resource Nurse	
Lactation Consultant	
Multi - Disciplinary Team Members	
Nurse Educator	
Preceptors	
Registered Nurses	
Safe Sleep Resource Nurse	
Vaccination Link Nurse	

EMERGENCY RESPONSE

The emergency number for Fire, Cardiac Arrest and Security is 777. In an emergency situation, please follow the direction of the nursing and medical staff. Locate the following:	
WHAT	(√) when completed (x) if not applicable
Emergency Bells	
Emergency Equipment	
Emergency Phone Number	
Emergency Response Flip Chart	
EWS Forms and Process	
Fire Extinguishers	
Fire Hoses	
Portable Oxygen	

Red Phone (fire emergencies)	
Suction	

SEARCH AND FIND			
Individual breast milk		Water cooler	
Milk freezer		Parents tea room	
Labels for milk containers		Family rooms	
Heel prick device		Spare cots	
Sterile gauze		Disposable nappies	
Saline ampoules		Admission register	
Sterile water ampoules		Drug fridge	
Bottles sterile water		Laryngoscope	
Clean ambu-bag		Spare ECG leads	
Litmus paper		Spo2 probes	
New admission Assessment		Baby weighing scales	
Oxygen analyser		Breast pump	
Low flow oxygen meter		Suction catheters	
Naso gastric tubes		Charge nurses office	
Tape for securing NG tubes		New folders for infants notes	
Syringes for feeds		Hospital phone directory	
Resuscitation trolley		Hip check book	
Spare linen		Oxygen tubing	
IV trolley		Nasal prong oxygen tubing	
IV fluids		Drug resource folder	
IV pump		Covers for top incubator	
Pacifiers		Hospital formula	

COMMON MEDICATIONS

This placement is a good opportunity for you to familiarise yourself with the mode of action, administration, risks and nursing considerations related to a number of medications.

Oral medications

You will only ever be the third checker for oral medications under the direct supervision of a registered nurse (RN), remembering the 10 rights of safe medication administration:

1. Right patient
2. Right medication
3. Right dose
4. Right time
5. Right route
6. Right reason
7. Right response to the medication e.g. analgesia
8. Right documentation
9. Right formulation e.g. immediate release or slow release
10. Right to refuse after being offered an informed choice.

In neonates it is important to ensure that the it is also the correct dose for the right weight of the baby.

Intravenous medications

3rd year students – IV infusions may be prepared under the direct supervision of a RN but students in Neonates **do not** administer IV medications.

Controlled Drugs

Controlled drugs are kept in the locked controlled drugs cupboard, inside the general drugs cupboard at all times. Student nurses are not permitted to double check or sign for controlled drugs.

We use ISBAR format for verbal handovers.

Please ask your preceptor how this works.

ISBAR for CLINICAL HANDOVER	
I	**Identification:** It's (name) handing over baby X in bay X.
S	**Situation:** State the immediate clinical situation at the time of handover. (Baby X is currently stable establishing feeding or baby X has deteriorated tis shift)
B	**Background:** Give relevant details: presentation/clinical history. Baby was admitted at X weeks gestation now corrected age of X. Previously on… (identify social issues).
A	**Assessment:** Put it all together. My assessment is…. (eg vital signs, other signs and symptoms, feeding regime and tolerance, medications, blood results, social issues). This shift baby required… I have …
R	**Recommendation (for the next shift):** Please follow the current plan of care (eg in particular the feeding plan from the lactation consultant, UVC lines due change this PM).

Understanding the Neonate:

A Neonatal infant presents with a diverse range of potential or actual problems. In order to identify and limit these it is important that all infants are assessed regularly. Many neonates will be on continuous monitoring, please be aware nursing students are not to touch or silence alarms without being directly advised to by your preceptor.

Regardless of weight and gestation all infants share common problems.

- Temperature Control
- Nutrition and feeding
- Family Bonding
- Neuro-developmental progress

- Jaundice
- Potential for respiratory distress
- Complex social situations/neonatal abstinence syndrome.

During your time in the Neonatal unit it is expected that you will gain an understanding of these concepts.

NURSING CONSIDERATIONS

Below is a list of questions that you can find the answers to while you are working in the neonatal unit.

1. List ways in which a baby might lose heat.

2. What is the ideal axilla temp for a baby being nursed in an incubator or cot?

3. What would you do if the baby you were looking after had an axilla temperature of 36.3^{o}C if the baby is in:

   - A cot:

   - An incubator:

4. Demonstrate to a staff member that you understand the “controls” of an incubator.

5. What are the criteria for the transfer of a baby from an incubator to a cot?

6. When you are transferring a baby from an incubator to a cot, how would you dress him/her?

7. What is the criteria for “bathing” in the Neonatal Unit?

8. Why is it important that noise is kept to a minimum in the Neonatal Unit?

9. List six ways in which noise can be reduced in the Neonatal Unit.

10. What is the best prevention of cross infection in the Neonatal Unit?

11. What advice re cross infection is given to parents when their baby is admitted to the Neonatal Unit?

12. You are asked to care for a baby in the Neonatal Unit - to take his temperature and change his nappy. When would you wash your hands?

13. Jaundice is a common complication of Prematurity. List your responsibilities as the nurse caring for a baby who is under phototherapy.

14. Describe the stools of a baby who is under phototherapy.

15. Under the following headings discuss the routine observations that are done in the Neonatal Unit. List normal limits where applicable:

    - Heart rate
    - Respirations
    - Skin
    - Colour
    - Intake & Output

16. What would you do if any of these observations were outside the normal limits?

17. Calculate the amount of fluid a baby would require if they are on 90mls/kg/day and weigh 1.85kg?

18. List the responsibilities that you have when tube feeding a baby:

19. How often are naso-gastric tubes changed in the Neonatal unit?

20. The baby you are caring for is having 2 hourly gastric feeds. He is nursed in an incubator, and is on a cardiac monitor. What cares does this baby have, and how often are they done?

21. The above baby has progressed to 3 hourly feeding. How often is baby tried at the breast initially?

22. What are the criteria here for a baby to progress to demand breast feeding?

23. Your baby has a bradycardia with apnoea? What actions would you take?

24. What are the signs and symptoms of stress exhibited by a premature Baby?

Drug Calculations

Conversion Section

1. 1 gram = how many milligrams?
    a) 10
    b) 100
    c) 10,000
    d) 1,000

2. 8 milligrams = how many micrograms?
    a) 80
    b) 80,000
    c) 8,000
    d) 800

3. 1 microgram = how many milligrams?
    a) 0.001
    b) 1.00
    c) 0.01
    d) 0.10

4. 500mg = how many grams?
    a) 5.0
    b) 0.5
    c) 50
    d) 500

5. 400 micrograms = how many milligrams?
   a) 400
   b) 40
   c) 4
   d) 0.4

6. Gentamycin can be given as a slow push
   TRUE / FALSE

7. When prepared, IV Amoxicillin 250mg has a final solution volume of 5mL. 85mg IV 12 hourly has been prescribed. Calculate how much will you give.

8. You are caring for a baby who is 36 weeks, day 2. When checking the dose of gentamicin as per the neonatal drug compendium which of the following would be the correct prescribing?

   a) 5mg/kg, 36 hourly
   b) 5mg/kg, 24hourly
   c) 7.5mg/kg, 36hourly
   d) 7.5mg/kg, 24hourly

9. You are preparing IV Amoxicillin for a baby. In order to get a final volume of 5mL you must add how much sterile water for injection to the vial?

10. You have a vial of IV gentamicin (80mg/2mL). You are drawing up 9.6mg gentamycin for a 1.92kg baby. How much do you need prior to dilution?

11. You have a term baby, day 3 weight 3.68kg. IV Amoxicillin 184mg is charted as per the neonatal compendium. How much would you draw up from the 250mg vial reconstituted to 5mL?

12. When is the trough level for gentamicin taken?
   a) 2 hours before 2nd dose
   b) 2 hours before 3rd dose
   c) 1 hour after the 2nd dose
   d) 1 hour before 3rd dose

13. What is a therapeutic trough level for a baby on IV gentamicin

14. You are caring for a baby weighing 3.8kg with severe moulding following a ventouse delivery who requires 38mg paracetamol for pain. (strength 250mg/5mL) How much would you give?
    a) 1.52 mL
    b) 1.14 mL
    c) 0.76 mL
    d) 0.93 mL

b) You are caring for a baby (weight 3.45kg) who has a blood sugar level of 2.2mmol/l. Dextrose gel 40% is charted 0.5ml/kg. How many ml would you give?
    a) 2.2
    b) 1
    c) 1.7
    d) 3

15. You are looking after a pēpi on IVAB and notice the IVC is slight redness near the IV
    Site. What would the phlebitis score be and your action?
    a) Phlebitis score 0, observe cannula.
    b) Phlebitis score 1, observe cannula.
    c) Phlebitis score 2, remove and consider need to resite cannula.
    d) Phlebitis score 3, incident report, remove and consider the need to resite cannula.

EVALUATION OF YOUR PRECEPTOR

Please return your evaluation to your Charge Nurse

Name of Preceptor_____ Date_____

E = Excellent **VG =** Very Good **S =** Satisfactory **NI =** Needs Improvement

Please read the following statements then tick the box that best indicates your experience

My Preceptor:	**E**	**VG**	**S**	**NI**
Was welcoming and expecting me on the first day				
Was a good role model and demonstrated safe and competent clinical practice				
Was approachable and supportive				
Acknowledged my previous life skills and knowledge				
Provided me with feedback in relation to my clinical development				
Provided me with formal and informal learning opportunities				
Applied adult teaching principals when teaching in the clinical environment				

Describe what your preceptor did well

Describe anything you would like done differently

Signed: _____ Name: _____

YOUR CONTACT DETAILS

We care about your well-being as well as your education. If you don't arrive for a planned shift, if there is illness on the ward or in the case of an emergency we need to be able to contact you. Please could you provide the ward with your contact details and an emergency contact using the form below.

Your Name	
Your Home Phone number	
Your mobile phone number	
Name of emergency contact	
Phone number of emergency contact	

From time to time the staff on the ward may need to contact your lecturer regarding your progress, for support or in the case of problems. Please could you supply the contact details of the Lecturer/CTA that will be supporting you during this placement, in the form below?

Name of Lecturer/CTA	
Phone number of Lecturer/CTA	

This information will be kept for the length of this placement and then disposed of. It will not be shared with anyone else without your permission unless there is an emergency.