

National Neonatal Nurses Knowledge and Skills Framework 2014



Table of Contents

Glossary	3
1.0 Foreword	5
2.0 Acknowledgements	6
3.0 National Neonatal Nursing Knowledge and Skills Framework – An Introduction	7
4.0 Components of the National Neonatal Nurses Knowledge and Skills Framework	8
5.0 Quality	9
6.0 Aim of the Neonatal Nurses Knowledge and Skills Framework	10
7.0 Rationale and Approach	11
8.0 Levels of Practice	12
9.0 Areas of Practice	13
10.0 Nursing Council of New Zealand (NCNZ) Domains of Practice.....	13,14
11.0 How can the National Knowledge and Skills Framework assist nurses, employers and families.....	15
12.0 How to use the Knowledge and Skills Framework.....	16,17,18
National Neonatal Nursing Knowledge and Skills Framework.....	19
(A) Competent Level of Neonatal Care.....	20
(B) Proficient Level of Neonatal Care.....	36
(C) Expert Level of Neonatal Care.....	53

Glossary

Unit definitions:

- Level 3 unit – Tertiary health provider in a base hospital, includes six NZ L3 units – Auckland, Middlemore, Waikato, Wellington, Christchurch, Dunedin
- Level 2a unit – Care provider for infants with moderate to severe complications, including infants with gestation of 28 weeks or above. Consultation with a tertiary unit is required to manage complex infants – includes Taranaki Base, Hawkes Bay and Palmerston North Hospitals.
- Level 2 unit – Secondary care provider for babies with moderate complications and greater than 32 weeks gestation. Provides resuscitation and stabilisation for transfer.
- Level 1 unit – Provides care for babies with minimal complications and greater than 35 weeks gestation (i.e. 36 weeks 0 days).

Infant definitions:

Neonate = newborn from birth to 28 days of life Infant = newborn from birth to one year

Extremely preterm	<28 weeks completed gestation
Very preterm	28 – 32 weeks completed gestation
Moderately preterm	32 – 34 weeks completed gestation
Preterm	<37 weeks completed gestation
Late preterm	34 – 36+6 weeks gestation
Term	37 – 40+6 weeks gestation
Post term	>41 weeks completed gestation
Low birth weight (LBW)	Birth weight <2500 grams
Very low birth weight (VLBW)	Birth weight < 1500 grams
Extremely low birth weight (ELBW)	Birth weight <1000 grams

Abbreviations/definitions:

BHFI	Baby Friendly Hospital Initiative
CPAP	Continuous positive airway pressure
FVIP	Family violence / Child protection intervention programs
	Formal teaching programs undertaken with parents pre discharge primarily focused on preventing shaken baby syndrome.
NNCA	Neonatal Nurses College of Aotearoa - Neonatal chapter of the New Zealand Nurses Organisation
NNKSF	Neonatal nurses knowledge and skills framework
Neopuff	T-Piece resuscitation device
SBAR/ISBAR	(SBAR) Situation, Background, Assessment, Recommendations (ISBAR) Identify Helpers, Situation, Background, Assessment, Recommendations. A standardized approach to clinical communication that promotes efficient transfer of key information requiring a clinician's immediate attention and action
POCT	Point of care testing
Safe sleep	Education programme undertaken with parents pre discharge on infant safe sleep practice. The programme is managed by Change for our Children as directed by the New Zealand Ministry of Health and covers topics including safe sleep positions, SUDI prevention and maintaining smoke free environment.
SUDI	Sudden unexpected death of an infant.

1.0 Foreword

E ngā mana, e ngā reo e ngā karangarangatanga maha, tēnā koutou
All authorities, all voices, all the many alliances and affiliations, greetings

The Neonatal Nurses College of Aotearoa (NNCA) recognises that:

“Neonatal nurses utilise knowledge and complex nursing skills to provide care for the neonate, their whanau and family. They practice independently whilst in collaboration with other health professionals. They provide comprehensive nursing assessments to develop, implement, and evaluate an integrated plan of care for the neonate, their whanau and family, requiring substantial scientific and professional knowledge base and skills. This unique partnership occurs in a range of settings, including the community. Neonatal nurses may practice in a variety of clinical contexts depending on educational preparation and practice experience. Practice experience entails cognitive, integrative and technical abilities of the neonatal nurse. These put into practice, the ethical and culturally safe approach to procedures, protocols and practice guidelines. Neonatal nurses use their expertise to manage, teach, evaluate and research nursing practice. There are conditions placed on the scope of practice of neonatal nurses according to their qualifications or experience limiting them to a specific area of practice.” (NZNO, 2008 pg 1)

This 2008 document (pg2) acknowledged the need for a review and further development of the Neonatal Standards and Education framework in response to changing nursing educational requirements. In 2012 the committee of the Neonatal Nurses College of Aotearoa sanctioned the forming of a subcommittee to review, develop and reformat the knowledge and skills framework as a living working document applicable to all neonatal nurses.

The National Neonatal Knowledge and Skills Framework (NNKSF) document will provide the user with a nationally consistent pathway to demonstrate their level of knowledge and skill alongside educational achievement. This will support neonatal nurses to advance their practice in alignment with the Professional Development Recognition Programme (PDRP) and Nursing Council of New Zealand (NCNZ) competencies.

2.0 Acknowledgements

This document is the result of two years of work by a group of neonatal nurses from throughout New Zealand and representative of both tertiary and secondary health providers. The work has been done collaboratively and the group wishes to acknowledge Neonatal Nurses College of Aotearoa for its financial support in allowing periodic teleconference and face to face meetings to occur at specific times during the development process of the document.

We would also like to acknowledge the Diabetes Nurse Specialist group for allowing us to model our framework on their 2009 Diabetes Knowledge and Skills Framework.

Working Group members:

- | | |
|---------------------------------|---|
| • Leanne Baker (Project leader) | Nurse Educator, NICU, Waikato DHB
NNCA Committee member |
| • Jane Bocock | Charge Nurse Manager, Taranaki DHB
NNCA Committee member |
| • Kerry Somerville | Nurse Educator, NICU, ADHB |
| • Anne Jackson | Clinical Nurse Specialist, NICU, Canterbury DHB |
| • Wilma Tielemans | Nurse Educator, NICU, Capital & Coast DHB |
| • Edna Byron | Nurse Educator, NICU, Canterbury DHB |
| • Lisa Christensen | Nurse Educator, NICU, Southern DHB |

Consultation groups

- | | |
|---|--|
| - New Zealand Nurses Organisation (NZNO) | - New Zealand Breastfeeding Authority (NZBA) |
| - Te Runanga Aotearoa | - College of Midwives |
| - Senior nursing and medical colleagues providing document consultation | - College of Nurses Aotearoa |
| - Current NNCA committee | - National Newborn Clinical Network |
| - NNCA neonatal nurse membership | |

3.0 National *Neonatal Nursing Knowledge and Skills Framework (NNKSF)* – An Introduction

In accordance with the Health Practitioners' Competence Assurance Act (HPCA) 2003, all nurses in New Zealand are required to demonstrate competence to practice. (HPCA, 2003). The primary purpose of the HPCA act is to protect the health and safety of members of the public by providing mechanisms to ensure that health practitioners are competent to practice.

The New Zealand Nursing Council (NCNZ) has provided New Zealand registered nurses (RN's) with a framework to prove competency within the requirements of their annual practicing certification. As the NCNZ framework only identifies the minimum standard of skill and knowledge that all RN's must possess, the development of service specific knowledge and skills framework documents has become increasingly popular and necessary. The Neonatal Nurses Knowledge and Skills (NNKSF) framework whilst remaining grounded in the NCNZ framework identifies specific knowledge and skills that an RN requires to plan, deliver and evaluate care to neonates and their family/whanau. This document supports a high level of expertise, and will allow for standardisation of knowledge and skill, identify knowledge gaps and support career development and progression across all levels of neonatal care within New Zealand.

Neonatal care is rooted in the philosophy of family centred care (FCC). FCC recognises infants exist in the context of a family/whanau and that parents are integral to, and coequal in the care of an infant, whanau includes kuia (female elder), koroua (male elder), pakeke (adult), rangatahi (youth) and tamariki (children) and provide strength and support to the parents and infant. Therefore in accordance with the Treaty of Waitangi the principles of protection, partnership and participation are held as core fundamental practices underpinning all aspects of care within the NNKSF.

A neonatal nurse requires skills and knowledge to deliver care that reflects the individual needs of an infant across both acute and long term phases of the infant's hospital care and transition into the community setting. The delivery of nursing care needs to encompass scientific knowledge, evidence based practice and advanced technology to maintain infant physiologic stability while concurrently supporting and facilitating parent-infant bonding. Recognition of the humanistic qualities of nursing such as compassion, respect and open communication will ensure the nurse is best equipped to advocate between the family/whanau and multidisciplinary team and provide true patient centered care.

4.0 Components of the National Neonatal Nurses Knowledge and Skills Framework

The Neonatal Nurses Knowledge and Skills Framework incorporates:

- Aspects of Neonatal care with associated level of knowledge and skill required for each level of competency
- Criteria for evaluation of clinical competency
- Clinical indicators as a measure for practice standard

5.0 Quality

The NNKSF is a tool that allows for assessment, advancement and improvement in the quality of care delivered by neonatal nurses. This is enabled through the structured, formative style approach taken with the document, positioning the knowledge and skills of neonatal nurses within a context of a specialty practice. Hudelson et al (2007) recognise 'knowledge and skills' as one of three factors contributing to the quality of healthcare; with 'personal motivation', 'ability and willingness to collaborate' also noted as contributors.

The vulnerable and fragile nature of the neonatal patient population places them at high risk for mortality and co-morbidities associated with suboptimal care. Neonatal nurses have an obligation to advocate on behalf of the newborn, their family/whanau, where care does not meet NZ neonatal nursing standards. It is therefore the responsibility of service providers to ensure excellent quality care is able to be delivered through the availability of adequate funding and resources to support neonatal nurses working with this vulnerable patient group. This includes the provision of educationally prepared and qualified neonatal staff caring for the sick and premature neonate at all times; with the supervision of new staff according to individual orientation programs, designed to meet the New Zealand Neonatal Nursing Standards as determined by the NZNO Neonatal Nurses College.

As undergraduate nursing programs do not educationally prepare nurses for the neonatal working environment, the need for cost effective and accessible post graduate education is essential to developing skilled nurses that will promote excellent quality care and improved outcomes for this patient population. Neonatal nurse education and subsequent access to ongoing education has been recognised by the NZ Ministry of Health as being a high priority for the retention of a skilled neonatal workforce (Ministry of Health, 2004).

6.0 Aim of the Neonatal Nurses Knowledge and Skills Framework

The aim of the NNKSF is to provide a nationally transferrable, supporting document that guides education and gives structure to the professional development of neonatal nurses. It outlines minimal standards of knowledge and skill for both the neonatal nurses and the service provider, and it should be applicable to all levels of neonatal units within New Zealand.

Outcomes

1. Service infrastructure that supports the delivery of neonatal healthcare including Developmental Care principles
2. Skilled, educated neonatal workforce – staff satisfaction and retention
3. Neonatal nurse involvement in consultation processes that impact upon neonatal care
4. PDRP development/career structure for neonatal nurses
5. Reduction in mortality and co-morbidities of the neonatal population
6. Safe integration of the neonate into their family/whanau utilising family centered care principles.
7. Flexible document applicable to all neonatal units in NZ
8. Performance review compatibility

Implementing the Knowledge and Skills Framework

The flexibility of the document allows for assessment, evaluation and review of the knowledge and skill of the neonatal nurse utilising nationally standardised criteria, for the purposes of performance appraisal, PDRP development and career advancement. The layout categorises care into various aspects of nurse responsibilities and activities incorporating the NCNZ domains and competencies for practice

7.0 Rationale and Approach

Not all infants in New Zealand are born healthy and at term (>37 completed weeks gestation). In 2010 64,433 women completed 64,485 pregnancies, of these pregnancies 64,936 infants were born alive. 7.4% of all live born infants were born preterm at <37 weeks completed gestation which equates to 4805 infants (MOH, 2010).

Neonatal nursing is a unique nursing specialty providing a bridge between midwifery and pediatric nursing, with focus on the first 28 days of postnatal life. Neonatal nursing provides care to newborns and families/whanau with health needs that require more resources and support than is available in postnatal wards and recognises that the needs of a neonatal infant are vastly different to infants requiring pediatric care. The care that neonates require is varied ranging from complex highly intensive to minimally supportive care. It extends across a wide range of gestations from the extremely preterm infant born at 23 – 24 weeks gestation through to post term infants. Neonatal care covers an array of conditions including those derived from prematurity or fetal development as well as medical and surgical conditions, and encompasses a variety of situations from emergency management to enhancement of normal infant development. Principles inherent in the Treaty of Waitangi include Kawanatanga / governance, Rangatiratanga/self-determination, Oritetanga/equity and Wairuatanga/spiritual freedom and are reflected in the breadth of neonatal nursing practice (NZNO, 2012).

Neonatal care is delivered throughout New Zealand in a variety of specialised units servicing a range of geographical locations. Neonatal units include special care baby units (SCBU) which offer care to infants >32 weeks gestations through to neonatal intensive care units (NICU) which offer care to infant < 32 weeks through to full term infants requiring ventilation, complex care or surgery. Neonatal care is not only limited to the hospital setting, it is also delivered in the home by specialist homecare teams who assist with transition to home after discharge. Neonatal care is also provided in the specialised transport setting where neonates are delivered outside the ability of the local hospitals services and must be transferred to the appropriate DHB service provider. Regardless of where care is delivered the core skills and knowledge needed to deliver safe infant care are the same.

8.0 Levels of Practice

COMPETENT – Generalist neonatal nurses (includes nurses new to practice following the one year New Entry to Practice (NETP) placement) whose day to day work involves caring for neonates and families across the spectrum of newborn care. These nurses must possess a core body of knowledge and skills in the care of the newborn incorporating the principles of the baby friendly hospital initiative (BFHI), family/whanau centered and developmental care delivery and multidisciplinary collaboration.

PROFICIENT - Specialty neonatal nurses – neonatal nurses who have achieved competency and demonstrated the skills necessary to be providing education to junior nursing staff, contributing to specialty practice improvement initiatives and delivery of specialized and complex care to the neonate and family/whanau.

EXPERT - Advanced neonatal nurses – neonatal nurses who have demonstrated advanced knowledge and skills in caring for the neonate and family/whanau. Expert nurses are able to develop plans of care based on expert clinical knowledge and role modelling of best practice care. Expert nurses are involved in formal education and professional development both in a personal context and in the context of the wider team and contribute to best practice through leadership, teaching and consultation with the wider multidisciplinary team.

9.0 Areas of Practice

All neonatal nurses regardless of the type of newborn service they practice in provide core fundamental care to infants and families/whanau. This NNKSF recognises the specialty expertise of nurses working with neonatal patients in primary, secondary and tertiary areas of practice. Within each of these areas the framework further identifies the varying levels of practice unique to the context of that level of care. The framework recognises and supports the need for nurses to practice at generalist (competent), specialty (proficient) and advanced (expert) levels of practice while providing the platform to meet service goals, deliver best practice specialty care and meet professional development requirements and NCNZ competency requirements.

10.0 Nursing Council of New Zealand (NCNZ) Domains of Practice

There are four domains of competence for the registered nurse scope of practice. Evidence of safety to practice as a registered nurse is demonstrated when the applicant meets the competencies within the following domains:

Domain one:

Professional responsibility

This domain contains competencies that relate to professional, legal and ethical responsibilities as well as cultural safety. These include being able to demonstrate knowledge and judgment and being accountable for own actions and decisions, while promoting an environment that maximizes health consumer safety, independence, quality of life and health.

Domain two:

Management of nursing care

This domain contains competencies related to assessment and managing health consumer care, which is responsive to the consumers' needs, and which is supported by nursing knowledge and evidence based research.

Domain three:**Interpersonal relationships**

This domain contains competencies related to interpersonal and therapeutic communication with health consumers, nursing staff and interprofessional communication and documentation.

Domain four:**Interprofessional health care & quality improvement**

This domain contains competencies to demonstrate that, as a member of the health care team; the nurse evaluates the effectiveness of care and promotes a nursing perspective within the interprofessional activities of the team.

11.0 How the Neonatal Nurses Knowledge and Skills Framework will assist nurses, employers and families/whanau.

The neonatal national knowledge and skills framework can support:

Neonatal nurses

- Develop skills transferable between any NICU / SCBU within New Zealand
- Outline career development throughout the nursing lifespan
- Outline knowledge and skills that need to be obtained before moving through levels of practice
- Assist with leadership development
- Assist with portfolio development
- Assist with attainment of skills

Employers

- Provide a standardised framework of expectations of knowledge and skills at each level of practice
- Provide a post-employment baseline of a potential employee's knowledge and skill
- Provide a framework to individualise orientation of a new employee
- Articulate expected behaviours
- Assist with performance appraisals
- Promote neonatal nursing as a career pathway

Families/whanau

- Standardises the care their infant receives between nurses and units
- Ensure safe and skilled caregivers are caring for their infant

12.0 How to Use the Knowledge and Skills Framework

The knowledge and skills framework enables all neonatal nurses to assess, evaluate and document their individual progress and development within a neonatal unit. The documented evidence can then be utilised when preparing a portfolio for PDRP and/or completion of a performance appraisal.

COMPETENCE is the combination of skills, knowledge, attitudes, values and abilities that underpin effective performance as a nurse (NCNZ, 2004).

EVIDENCE

Evidence is the material presented to demonstrate competence.

The evidence provided must be valid, sufficient, authentic, current, repeatable and direct.

One piece of evidence provided may be used to demonstrate more than one competency.

Presentation of Evidence

- Reflection on your own practice.
- Evidence of successful completion of training courses, formal study.
- What others say about you e.g. performance appraisal/review, peer review, preceptor feedback.

Be creative in how you compile your evidence – a reflective journal, a ring binder for your portfolio, electronically

This is your piece of work.

Example of completing the K&S Framework: (Competent Level)

ASPECT OF CARE	LEVEL OF KNOWLEDGE & SKILL	NCNZ COMPETENCY DOMAIN	EVIDENCE Signature, designation, date.
1. Delivery Room Care	To facilitate safe and appropriate care delivery to the neonate you will demonstrate understanding of neonatal transition at birth.		
	1.0 Identify equipment required in delivery room 1.1 Describes risk factors for neonates during transition 1.2 Describes the importance of nursing partnership with family/whanau 1.3 Articulate and utilise the neonatal resuscitation guidelines and algorithm (as per NZRC guidelines). 1.4 Demonstrate basic neonatal resuscitation skill (use of bag and mask and cardiac compressions)	1.1 – 1.5 1.1, 1.4, 2.1, 2.9	Completed orientation package. <i>See page 4 of orientation workbook</i> Successfully completed NLS course. <i>Refer certificate of attendance section D of portfolio</i> <i>N. Preceptor (RN). 17/8/2014</i>
2. Management of admission	Demonstrates assessment and time management skill when admitting an uncomplicated infant to NICU/SCBU		
	2.0 Demonstrates ability to prepare an admission space for level 2 and stable CPAP infant (as per individual unit protocol/guideline) 2.1 Is able to anticipate needs for uncomplicated admission – includes documentation and vital signs, initial respiratory and nutritional assessment and assistance for medical/nurse specialist. 2.2 Provides appropriate introduction for family/whanau of newly admitted infant 2.3 Demonstrates care plan formulation in partnership with family/whanau	2.1 – 2.5 2.5	See reflective journal page 3. See personal statement “Cultural Safety” – section C of portfolio. <i>A Nurse (RN) 24 Aug. 14.</i> <i>N. Preceptor (RN). 24/8/2014</i>

Example of what a reflective journal could look like (evidence may be recorded in other formats and linked back to the framework):

Aspect of Care	Reflection on your practice – an example.	NCNZ Competency	Signature and Date
Admission	<p>Went to a delivery of 34 week gestation baby. No resus required. Brought baby back to neonatal.</p> <p>Assessment - ABC – self ventilating in room air, mild recession, no grunting. SpO₂ - > 90 % in air (normal saturation limits 88 – 92) Pink and well perfused. Crying.</p> <p>Temp 36.6°C (within normal range – but need to monitor).</p> <p>BGL – 2.8 mmol/L (just within normal range, but need to monitor).</p> <p>Weight: 2.2kg, HC, 32cm.</p> <p>Care planned:</p> <p>Monitor respiratory status.</p> <p>Parents welcomed and the reason for admission explained – identified need to monitor blood sugar levels and temperature because baby is premature and small.</p> <p>Nursed in incubator to maintain temperature within normal parameters to minimise oxygen and glucose requirements and allow baby to be observed.</p> <p>Baby placed on cardiorespiratory monitor – monitor HR, RR and SpO₂.</p> <p>Fluids and nutrition – can breast feed but may not because premature. Discuss insertion of IV cannula and 10% glucose with medical staff, NG feeding EBM +/- formula. Encourage mother to express colostrum for initiation of feeding, demonstrate hand expressing and storage of EBM.</p> <p>Monitor urine output and passing of meconium.</p> <p>Document – clinical notes and observation chart – admission and progress; complete cultural assessment and commence care plan in partnership with the family.</p> <p>Reflection at end of shift and discussed with preceptor.</p>	2.1 – 2.5	<p><i>A Nurse (RN) 24 Aug. 14.</i></p> <p>N. Preceptor (RN).</p> <p>24/8/2014</p>

New Zealand Registered Neonatal Nurses - Knowledge and Skills Framework

REGISTRATION COMPETENCIES

Professional
Responsibility

Management of
Nursing Care

Interpersonal
Relationships

Interprofessional
Health & Quality
Improvement

AREAS OF PRACTICE

POPULATION GROUP

ALL
NEONATAL
CARE
NURSES

GENERAL
NEONATAL
POPULATION

NEONATAL
NURSES

PREDICTABLE
HEALTH

SPECIALTY
NEONATAL
NURSES

HIGH RISK
SOCIALLY
COMPLEX
NEEDS

NEONATAL
NURSE
PRACTITIONER

COMPLEX CARE
NEEDS -
PHYSIOLOGICAL
& SOCIAL

NATIONAL NEONATAL
KNOWLEDGE & SKILLS ASPECTS OF
CARE

- Safe Sleep
- Nutrition & Growth
- Newborn Life Support
- Transport & Stabilisation
- Family Violence
- BFHI
- Transition Physiology
- Hyperbilirubinaemia
- Neutral thermal Environment
- Hypoglycaemia
- Developmental Care
- Recognising the sick neonate
- Care of the surgical infant
- Preterm, late preterm, term
- Bereavement

PRACTICE, SERVICE, CLINICAL AND
HEALTH OUTCOMES

POST REGISTRATION
EDUCATION PATHWAY

NETP → SHORT COURSES → PG CERT → PGDIP → MASTERS → NNP
- STUDY DAYS

COMPETENT

LEVEL OF NEONATAL KNOWLEDGE AND SKILLS FOR ALL REGISTERED NURSES

INDEX

Page

Competent Neonatal Nurse – Responsibilities and Activities

Aspect of Care:

1.0	Delivery Room Care.....	22
2.0	Management of an Admission.....	22
3.0	Physiology and Pathophysiology of neonatal respiratory distress.....	23
4.0	Oxygen Therapy.....	24
5.0	Blood Glucose Management	24
6.0	Thermal Management	25
7.0	Cardiovascular Assessment.....	26

8.0 Nutrition and Elimination.....	27
9.0 Diagnostic Investigations.....	28
10.0 Medication and blood products	29
11.0 Skin Care	30
12.0 Care of the Elective Surgical Infant.....	31
13.0 Safe Sleep/SUDI	31
14.0 Breastfeeding/BFHI.....	32
15.0 Neurological/Developmental Care.....	32
16.0 Family/Whanau Centred Care.....	33
17.0 Discharge Planning.....	34
18.0 Infection Prevention and Control	34
19.0 Neonatal Palliative Care	35

NB: Suggested individual competencies are listed for each aspect of knowledge or skill, these are a guide and others may be used if deemed appropriately covered by the evidence. Use of the dash (–) when describing competencies denotes a series of competencies in a row that may be covered by the evidence provided.

National Neonatal Nurses Knowledge and Skills Framework 2014

ASPECT OF CARE	COMPETENT LEVEL OF KNOWLEDGE & SKILL	NCNZ COMPETENCY DOMAIN	EVIDENCE/ COMMENTS – Date/signature and designation
1. Delivery room care	To facilitate safe and appropriate care delivery to the neonate the nurse will demonstrate understanding of neonatal transition at birth.	Competent	
	1.0 Identify equipment required in delivery room. 1.1 Describes risk factors for neonates during transition. 1.2. Describes the importance of nursing partnership with family/whanau. 1.3 Articulate and utilise the neonatal resuscitation guidelines and algorithm (as per NZRC guidelines). 1.4 Demonstrate basic neonatal resuscitation skill (use of bag and mask, neopuff and cardiac compressions).	1.4, 2.1, 2.5 2.2, 2.6 1.2, 1.5 2.4 1.1, 1.4, 2.1, 2.9 1.1, 2.1,	
2. Management of admission	Demonstrates assessment and time management skill when admitting an uncomplicated infant to NICU/SCBU.	Competent	
	2.0 Demonstrates ability to prepare an admission space for level 2 and stable CPAP infant (as per individual unit protocol). 2.1 Is able to anticipate needs for uncomplicated admission – includes documentation and vital signs, initial respiratory and nutritional assessment and assistance for medical/nurse specialist/NP. 2.2 Appropriately initiates a therapeutic relationship with family/whanau of a newly admitted baby.	1.4 2.1 2.1, 2.2, 2.3 3.1, 3.3 1.2, 1.4 3.1, 3.2	

	2.3 Demonstrates care plan formulation in partnership with family/whanau.	1.2, 1.4 3.1, 3.2,	
	2.4 Identifies and implements individual cultural safety needs when formulating care plan and making appropriate referrals.	1.4 3.2	
3. Physiology and pathophysiology of causes of neonatal respiratory distress	Recognise the normal parameters for neonatal respiratory function, demonstrate assessment of an infant's respiratory status and describe physiology behind common respiratory conditions.	Competent	
	3.0 Describe basic anatomy and physiology of the neonatal airway.	2.1, 2.2	
	3.1 Demonstrate assessment of infant respiratory status and describe normal parameters for RR/SpO ₂ /HR.	1.1, 2.1, 2.2	
	3.2 Describe the signs and symptoms of infant respiratory distress and the physiology behind each symptom.	2.1, 2.3, 2.6, 2.8	
	3.3 Describe the basic pathophysiology of the following conditions and identify infants at risk of these conditions: (i) Transient tachypnoea of the newborn (ii) Respiratory distress syndrome(RDS)/hyaline membrane disease (HMD) (iii) Meconium exposure (iv) Chronic lung disease (CLD)/bronchopulmonary dysplasia (BPD)	2.1, 2.2, 2.3, 2.6	
	3.4 Describe the impact of cold stress on the infants respiratory system.	2.1 – 2.2	
	3.5 Describe basic respiratory investigations/tests and demonstrate	2.1, 2.2, 2.3,	

National Neonatal Nurses Knowledge and Skills Framework 2014

	nursing skills used to assess respiratory function.	2.6	
4. Oxygen therapy - application and maintenance	Describe the application of oxygen therapy appropriate for identified respiratory conditions. Identify safety issues and alarm parameters to maintain therapy within therapeutic range.	Competent	
	<p>4.0 Identify conditions requiring supplemental oxygen therapy.</p> <p>4.1 Identify different modes of respiratory support available.</p> <p>4.2 Describe safety issues to be aware of to ensure safe administration of oxygen to the neonate.</p> <p>4.3 List the adverse effects of oxygen administration and identify methods to minimise risk.</p> <p>4.4 Identify the need for suction in the neonate and demonstrate safe suctioning technique providing rationale.</p> <p>4.5 Demonstrate setting up and application of respiratory therapy modes in accordance with in individual neonatal unit.</p> <p>4.6 Demonstrate application of appropriate monitoring and alarm limits for an infant receiving oxygen therapy.</p>	<p>1.1, 2.1, 2.2</p> <p>1.1, 2.1</p> <p>1.1, 1.4</p> <p>1.1, 1.4, 2.5</p> <p>1.1 2.2</p> <p>1.4, 2.1, 2.6</p> <p>1.4 2.1 - 2.5</p>	
5. Blood glucose management	Demonstrates knowledge of identification, prevention and management of the infant at risk of unstable blood glucose.	Competent	
	<p>5.0 Identifies infants at high risk of developing hypoglycaemia and describes preventative interventions.</p> <p>5.1 Describe the pathophysiology and implications of unstable neonatal blood glucose levels.</p>	<p>1.1 2.1 – 2.6</p> <p>2.1 – 2.8</p>	

	<p>5.2 Maintains unit specific compliance certification related to point of care testing equipment.</p> <p>5.3 Demonstrates competence in obtaining and testing a blood glucose sample and using unit specific equipment and protocols.</p> <p>5.4 Identifies normal blood glucose range and demonstrates competence in interpreting blood glucose results.</p> <p>5.5 Describes appropriate intervention based to treat mild, moderate or severe hypoglycaemia. (as per unit specific protocols).</p> <p>5.6 Demonstrates appropriate documentation for the hypoglycaemic infant.</p> <p>5.7 Demonstrates understanding of the process of transitioning infant to full enteral feeds and ongoing monitoring to maintain euglycaemia.</p>	<p>1.1 2.1</p> <p>1.1, 2.1</p> <p>2.1 – 2.8 3.3</p> <p>1.1 2.1 – 2.6</p> <p>2.2, 2.3</p> <p>2.1 – 2.6</p>	
6. Thermal management	Maintains infant within a thermoneutral environment to facilitate homeostasis and minimise metabolic demand.	Competent	
	<p>6.0 Describe the definition 'neutral thermal environment'.</p> <p>6.1 Describe the normal infant temperature range and identify risk factors for neonatal temperature instability (as per individual unit protocol) and completes appropriate documentation.</p> <p>6.2 Describe the 4 main principles of heat loss in the neonate.</p> <p>6.3 Discuss methods of temperature maintenance including</p>	<p>2.1 – 2.4</p> <p>1.1, 1.4 2.1, 2.3</p> <p>2.1, 2.2, 2.5</p> <p>2.1, 2.2, 2.6,</p>	

	<p>humidification available in NICU/SCBU and which method would be appropriate for the following infants:</p> <ul style="list-style-type: none"> (i) Newly born term infant (ii) Newly born preterm infant > 32/40 (iii) Newly born preterm infant < 32/40 <p>6.4 Discuss consequences of the following temperature states in the neonate:</p> <ul style="list-style-type: none"> (i) Hypothermia (ii) Hyperthermia <p>6.5 Demonstrates competence in setup and function of the equipment used for temperature maintenance and monitoring (as per individual unit protocol). Includes documentation of use.</p>	<p>2.7, 2.8</p> <p>2.1, 2.2, 2.6, 2.7, 2.8</p> <p>1.1, 1.4 2.1, 2.3, 2.5</p>	
7. Cardiovascular assessment	Demonstrate cardiovascular assessment and describe application of cardiovascular monitoring and documentation.	Competent	
	<p>7.0 Describe the normal parameters for neonatal heart rate and identify conditions that may cause variations.</p> <p>7.1 Describe/ demonstrate a full cardiovascular assessment, include:</p> <ul style="list-style-type: none"> (i) Auscultation using stethoscope (ii) Perfusion – capillary refill, peripheral perfusion (iii) Blood pressure monitoring (iv) Colour <p>7.2 Demonstrates knowledge of application of a cardiorespiratory monitor, setting of alarm limits and documentation of an infant being nursed during monitoring.</p>	<p>2.1 - 2.8</p> <p>1.1, 1.2 2.1 – 2.6</p> <p>1.1, 1.3 2.1 – 2.9</p>	

8. Nutrition and elimination	Demonstrate knowledge of the nutritional requirements and care of the infant requiring nutritional support.	Competent	
Enteral Feeding	8.0 Identify infants at risk for nutritional deficit/ compromise.	2.1 – 2.9	
	8.1 Describe daily fluid requirements from delivery to day 5 (as per individual unit protocol).	2.1 – 2.9	
	8.2 Discuss fluid type and delivery mode of nutritional supplementation for infants: (i) Term infant admitted with no respiratory compromise (ii) Term infant with respiratory compromise requiring support (iii) Late preterm infant 34-37/40 with/without respiratory compromise (iv) Preterm infant < 33/40 with or without respiratory compromise	2.1 – 2.9	
	8.3 Describe and demonstrate the safe insertion and securing of a nasogastric/orogastric tube (as per individual unit protocol).	1.1, 1.3 2.1	
	8.4 Describe nursing management of an infant with a gastric tube insitu (as per individual unit protocol).	2.1, 2.4, 2.6, 2.7	
	8.5 Describe assessment and documentation of hourly/daily fluid balance – include input and output.	2.1, 2.2, 2.3	
	8.6 Describe basic nursing assessment of GI function and feeding tolerance.	2.1, 2.2, 2.6	

Management of an infant with intravenous (IV) fluids	<p>8.7 Maintains current organisational IV/Medicine management certification.</p> <p>8.8 Demonstrate competence in assisting with IV cannulation and taping.</p> <p>8.9 Identify different types of IV fluid and describe rationale for selection of each fluid (as per individual unit protocol).</p> <p>8.10 Identify methods of parenteral fluid delivery and describe nursing intervention/responsibility when caring for an infant receiving parenteral fluid (as per unit protocol).</p> <p>8.11 Identify signs of IV infiltration and interventions.</p> <p>8.12 Describe the role of the infusion pumps and medication safety software (if installed) in delivering and monitoring IV therapy (as per unit specific protocol).</p>	<p>1.1, 2.9</p> <p>2.1, 2.4, 2.7, 2.9, 3.1</p> <p>1.1 2.1,</p> <p>2.1 -2.9 3.1</p> <p>2.2 2.9</p> <p>1.1 2.1 – 2.9</p>	
9. Diagnostic investigations	Demonstrates ability to recognise need for and undertake basic laboratory and imaging procedures and techniques.	Competent	
	<p>9.0 Demonstrates the knowledge of what is required to safely and accurately obtain/handle samples for the following investigations:</p> <p>(i) Hyperbilirubinaemia</p> <p>(ii) Hypo/hyperglycaemia</p> <p>(iii) Serum electrolytes and full blood count</p> <p>(iv) Blood culture</p> <p>(v) Lumbar puncture</p> <p>(vi) Capillary/arterial blood gas (as per individual unit protocol/guideline)</p>	<p>1.1, 1.4 2.1, 2.2, 2.3 3. 3 4.1</p>	

	(vii) National testing card (Guthrie card) (viii) Coagulation screening 9.1 Describe and demonstrate infant preparation and positioning and assisting with a chest/abdominal x-ray. 9.2 Maintains appropriate training and certification for use of equipment to carry out laboratory testing in NICU/SCBU (as per individual unit protocol).	2.1, 2.4, 2.6 4.1 1.1 2.1, 2.4, 2.9	
10. Medication and blood products	Demonstrates safe preparation, administration and documentation of oral and IV medication in NICU/SCBU.	Competent	
	10.0 Demonstrates knowledge of where and how to access policies and procedural guidelines relevant to medication practice. 10.1 Attains required DHB/organisational IV and medicine management certification. 10.2 Demonstrates basic knowledge around the specific differences in medication prescription, preparation, action and delivery in neonates. 10.3 Describes DHB/organisational processes required when a medication incident occurs. 10.4 Demonstrates safe calculation, preparation and administration of neonatal IV and oral medication. 10.5 Describes appropriate actions to be taken should an adverse reaction be encountered when administering a medication (as per individual unit protocol).	1.1 2.1, 2.4, 2.6 1.1 2.1, 2.9 1.1, 1.4 2.1 – 2.9 4.2 1.1 2.1, 2.9, 4.2 2.1, 2.9 2.2, 2.5, 2.6 3.3 4.1	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>10.6 Describe and demonstrate correct checking and nursing care before, during and after administration of blood and blood products according to individual unit protocol.</p> <p>10.7 Describes how and where to access medication information when using unfamiliar medications.</p>	<p>1.1, 1.5 2.1 – 2.9</p> <p>1.1, 2.1, 2.9</p>	
11. Skin Care	Provides care that will promote assessment and intervention to protect and maintain infant skin integrity.	Competent	
	<p>11.0 Is able to identify infants at risk for compromised skin integrity and pressure injury.</p> <p>11.1 Describes appropriate interventions to minimise risk of skin damage for preterm infants.</p> <p>11.2 Demonstrates competence in infant hygiene assessment and management – including bathing, eye care etc.</p> <p>11.3 Demonstrates hygiene cares to parents/ care givers and involves them in care of the infant as condition allows.</p> <p>11.4 Identifies compromised skin integrity requiring intervention and identifies appropriate wound care resources within the DHB.</p> <p>11.5 Describe specific nursing care for the infant receiving phototherapy.</p>	<p>1.1, 1.5 2.1, 2.2, 2.4, 2.6, 2.9 2.1, 2.9</p> <p>2.1, 2.2, 2.4</p> <p>1.2, 1.5 2.1, 2.4, 2.7 3.1 – 3.3</p> <p>2.1, 2.2 3.3</p> <p>2.1 - 2.4</p>	
12. Care of the elective surgical Infant	Demonstrates provision of safe care for the infant pre and post operatively for elective surgical procedures.	Competent	
	12.0 Describes correct preparation of infant for planned surgical procedure.	1.1, 1.5, 3.3 2.1 – 2.4, 2.7,	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>12.1 Recognises principles of informed consent and documentation required for the elective surgical patient.</p> <p>12.2 Maintains safety when accompanying an infant to theatre and collecting the infant from theatre.</p> <p>12.3 Provides safe and appropriate pre and post-operative care for the surgical infant.</p> <p>12.4 Provides appropriate pre and post-operative education to family/whanau accessing appropriate support.</p>	<p>1.1 – 1.5 2.1 - 2.4</p> <p>2.1, 2.2, 2.5</p> <p>2.1 – 2.9</p> <p>1.2, 1.5 2.4, 2.7, 3.2</p>	
13. Safe sleep - SUDI	Is aware of the nursing responsibilities regarding education for family/whanau around safe sleep practice	Competent	
	<p>13.0 Attends introductory education session with SUDI facilitator.</p> <p>13.1 Describes principles of safe sleep and SUDI prevention.</p> <p>13.2 Demonstrates correct positioning of infant.</p> <p>13.3 Actively promotes and role models safe sleep practice and provides education for family/whanau.</p>	<p>1.1 2.4 2.4, 2.7</p> <p>2.1, 2.4, 2.7</p> <p>1.1, 1.2, 1.5 2.7, 3.1 -3.3</p>	
14. Breastfeeding/Baby Friendly Hospital Initiative	Demonstrates understanding of the Baby Friendly Hospital Initiative and actively promotes BFHI principles.	Competent	
	<p>14.0 Completes relevant BFHI education as per individual unit protocol/guidelines and maintains the appropriate complement of annual BF hours and clinical supervision.</p> <p>14.1 Describes the principles of BFHI and its implications for feeding management. Acknowledge cultural considerations.</p>	<p>1.1, 1.4, 1.5</p> <p>1.1, 1.5 2.6</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>14.2 Discuss the safe handling and storage of expressed breast milk in NICU (as per unit specific protocol).</p> <p>14.3 Describes the 10 Steps to Successful Breastfeeding as per WHO/UNICEF Guidelines.</p> <p>14.4 Assists mothers in recognition of feeding cues, positioning and latching techniques to facilitate breastfeeding in late preterm infant.</p> <p>14.5 Recognises breast conditions/problems that may impair breastfeeding and describe appropriate intervention/ referral.</p> <p>14.6 Demonstrates understanding of referral and collaboration with Lactation support services as per individual NICU.</p>	<p>3.2 1.4</p> <p>1.1, 1.5</p> <p>2.6, 2.7, 2.8 3.2, 3.3 4.1</p> <p>2.2, 2.3, 2.4 2.7 4.1</p> <p>4.1, 4.2</p>	
15. Neurological and developmental care	Promotes an environment that recognises developmental care as an integral component of neonatal care.	Competent	
	<p>15.0 Describes the principles of developmental care as applied to the infant > 32 weeks (or as per unit specific protocols).</p> <p>15.1 Demonstrates appropriate positioning, support and environmental consideration to promote developmentally appropriate care.</p> <p>15.2 Provides education for families/whanau on promotion of developmentally appropriate care for the neonate.</p> <p>15.3 Identifies resources and equipment available to facilitate developmentally appropriate care to the neonate.</p> <p>15.4 Incorporates assessment of infant developmental needs into care</p>	<p>1.1, 2.1 – 2.4</p> <p>2.1, 2.2, 2.3, 2.6, 2.7, 2.8,</p> <p>2.4 – 2.8 3.1 – 3.3</p> <p>1.1, 1.4, 2.1, 2.2, 2.4, 3.3</p> <p>1.2, 1.5</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>plan.</p> <p>15.5 Initiates referral to appropriate allied health support services for infant developmental support.</p> <p>15.6 Works in collaboration with the multidisciplinary team, making referrals as appropriate.</p>	<p>2.2</p> <p>2.2, 2.3, 2.8</p> <p>3.3</p> <p>3.1 – 3.3</p> <p>4.1, 4.2</p>	
16. Family/Whanau centred care	Demonstrates initiation, maintenance and resolution of the therapeutic relationship with family/whanau when planning and implementing care of the neonate. Incorporates the principles of the Treaty of Waitangi and cultural safety when developing relationships with family/whanau.	Competent	
	<p>16.0 Describes the principles of family centred care in NICU/SCBU.</p> <p>16.1 Actively demonstrates practice that reflects partnership with family/whanau.</p> <p>16.2 Formulates infant care planning, implementation and evaluation in partnership with family/whanau.</p> <p>16.3 Care plan reflects assessment of family/whanau personal beliefs, goals and culture and alignment with the Treaty of Waitangi.</p> <p>16.4 Ensures family assessment includes screening for Family Violence and Smoking cessation as per individual unit policy.</p>	<p>1.2, 1.4, 1.5</p> <p>1.2, 1.4, 1.5</p> <p>3.1 – 3.3</p> <p>4.1</p> <p>1.2, 1.4, 1.5</p> <p>4.1</p> <p>1.2, 1.4, 1.5</p> <p>4.1</p> <p>1.1, 1.2, 1.5</p> <p>2.5, 2.7, 2.9</p> <p>3.1, 3.2</p>	
17. Discharge planning	Participates in discharge planning and education for family/whanau.	Competent	
	<p>17.0 Describe the principles and goals of discharge planning for infant and family/whanau</p> <p>17.1 Identifies hospital and community resources available to</p>	<p>1.2, 1.5</p> <p>2.2, 2.3, 2.4</p> <p>3.1 - 3.3</p> <p>1.2, 1.5</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>augment discharge plan</p> <p>17.2 Provides basic discharge education for family/whanau utilising unit teaching resources</p> <p>17.3 Contributes to multi-disciplinary team discussion to facilitate discharge planning</p> <p>17.4 Completes appropriate public health education/screening i.e. smoking cessation, immunisation, safe sleep, family violence, infant CPR</p>	<p>2.1, 2.6, 2.8, 2.9</p> <p>3.1 -3.3</p> <p>4.1</p> <p>3.1 -3.3</p> <p>4.1</p> <p>2.4, 2.7</p> <p>3.1 – 3.3</p>	
18. Infection prevention control	Demonstrates understanding and application of the principles of infection prevention and control, including hand hygiene.	Competent	
	<p>18.0 Completes service specific infection control education as per individual Unit policy.</p> <p>18.1 Describes understanding of the principles of hand hygiene and 'The 5 Moments'.</p> <p>18.2 Can locate cleaning protocols, describe the cleaning products specific to local neonatal protocols and demonstrate safe use and disposal of chemical agents used for cleaning and disinfecting patient equipment.</p> <p>18.3 Recognises the specific protocol for access and management of intravenous and centrally placed cannula (asp per unit protocol).</p> <p>18.4 Describes appropriate location of disposal of blood and body fluid products as per specific unit protocol.</p>	<p>1.1, 1.4</p> <p>2.1, 2.9</p> <p>1.4</p> <p>2.1, 2.7, 3.3</p> <p>4.1</p> <p>1.1, 1.4</p> <p>2.5, 2.9</p> <p>1.1, 1.4</p> <p>2.5, 2.9</p> <p>1.1, 2.5, 2.9</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	18.5 Provides education to family/whanau on hand hygiene and infection prevention including adherence to visiting policies.	1.2, 1.4, 1.5 2.1, 2.4, 2.7	
	18.6 Demonstrates knowledge of organisational requirements around the use of personal protective equipment and isolation procedures for infant with communicable infection.	1.1, 1.4 2.7, 2.9 4.1	
19. Neonatal palliative care	Demonstrates understanding of the principles of end of life and palliative care for the infant and family/whanau.	Competent	
	19.0 Demonstrates knowledge of local protocols guiding end of life care.	1.1 - 1.5, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3	
	19.1 Identifies resources available to support staff and families/whanau during decision making around continuation of care.	1.2, 1.4, 1.5 2.9 3.1 - 3.3	
	19.2 Describes consideration to be made and steps to be undertaken when preparing for discontinuation of active treatment.	1.1, 1.2, 1.5 2.4 – 2.9 3.1 – 3.3 4.1, 4.2	
	19.3 Describes legal responsibilities of staff involved in end of life care both active and passive, including coroners requirements.	1.1, 1.2 2.4, 2.5, 2.9	
	19.4 Demonstrates knowledge of the resources available and the processes following an infant death in the neonatal unit.	1.1– 1.5, 2.1, 2.5 3.1 – 3.3, 4.1	

Proficient

LEVEL OF NEONATAL KNOWLEDGE AND SKILLS FOR ALL REGISTERED NURSES

INDEX

Page

Proficient Neonatal Nurse – Responsibilities and Activities

Aspect of Care:

1.0 Delivery Room Care.....	38
2.0 Management of Admission.....	39
3.0 Physiology and Pathophysiology of neonatal respiratory distress	40
4.0 Oxygen Therapy.....	41
5.0 Blood Glucose Management	42
6.0 Thermal Management	42
7.0 Cardiovascular Assessment.....	43

8.0 Nutrition and Elimination.....	44
9.0 Diagnostic Investigations.....	46
10.0 Medication and blood products	46
11.0 Skin Care	47
12.0 Care of the Elective Surgical Infant.....	48
13.0 Safe Sleep/SUDI	48
14.0 Breastfeeding/BFHI.....	48
15.0 Neurological/developmental Care.....	49
16.0 Family/Whanau Centred Care.....	50
17.0 Discharge Planning.....	51
18.0 Infection Control and Prevention.....	51
19.0 Neonatal Transport	51
20.0 Neonatal Palliative Care	52

National Neonatal Nurses Knowledge and Skills Framework 2014

ASPECT OF CARE	PROFICIENT LEVEL OF KNOWLEDGE & SKILL	NCNZ COMPETENCY DOMAIN	EVIDENCE/ COMMENTS – Date/signature and designation
1. Delivery room care 	To facilitate safe and appropriate care delivery to the neonate you will demonstrate in-depth understanding of neonatal transition at birth.	Proficient	
	<p>1.0 Demonstrates ability to assist with high risk deliveries and unexpected emergencies (as applicable for individual unit).</p> <p>1.1 Demonstrates comprehensive assessment of risk factors for newly born infants during transition utilising available history and circumstances.</p> <p>1.2 Demonstrates independent use of equipment required in delivery room.</p> <p>1.3 Role models nursing partnership with family / whanau during delivery and delivery room intervention.</p> <p>1.4 Demonstrates the ability to support family / whanau and involve them in care of the newborn as condition allows.</p> <p>1.5 Demonstrate proficient neonatal resuscitation skill (as per NZRC guidelines).</p> <p>1.6 Demonstrates ability to assist with intubation and administration of surfactant (as per unit specific protocol).</p> <p>1.7 Demonstrates ability to assist with intravenous and/or arterial line placement, intubation, delivery of emergency drugs, fluid resuscitation and emergency blood transfusion (as applicable for</p>	<p>2.1 – 2.6</p> <p>2.1 – 2.6</p> <p>2.5, 2.6</p> <p>1.2, 3.2, 3.3 4.1, 4.2</p> <p>1.3, 1.4, 1.5 3.1, 3.2</p> <p>1.1 2.5</p> <p>1.1, 2.5 4.1, 4.2</p> <p>2.1 -2.6 4.1, 4.2</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	individual unit).		
	1.8 Guides and assists colleagues with stabilisation and facilitation of safe transport from delivery suite to neonatal unit.	2.5 – 2.9	
2. Management of admission	Demonstrates comprehensive assessment and time management skill when admitting an infant to NICU/SCBU. Guides and supports others during the admission process.	Proficient	
	2.0 Is able to anticipate needs for any neonatal admission and work collaboratively with the wider neonatal team to prepare and provide safe and timely care.	3.1, 3.3 4.1, 4.2	
	2.1 Demonstrates leadership when receiving a new admission - acts as a role model and resource for other staff during admissions, considers skill mix and delegation of tasks.	1.3 2.9	
	2.2 Facilitates culturally appropriate introduction/support is provided for family/whanau of the preterm/unwell newly admitted infant during admission.	1.2, 1.5	
	2.3 Demonstrates care plan formulation in collaboration with other health care professionals and in partnership with family/whanau, ensuring a cultural assessment is undertaken at the earliest opportunity.	1.2, 1.5 3.1, 3.2, 3.3	
	2.4 Demonstrates comprehensive assessment and screening with family/whanau for smoking cessation and violence intervention programmes (as per unit protocol).	2.1, 2.6	

National Neonatal Nurses Knowledge and Skills Framework 2014

3. Physiology and pathophysiology of causes of neonatal respiratory distress	Recognises the normal parameters for neonatal respiratory function, demonstrates comprehensive assessment of an infant's respiratory status and describes physiology behind common respiratory conditions.	Proficient	
	<p>3.0 Demonstrate comprehensive knowledge and assessment of infant respiratory status and identify variations outside normal parameters for RR / SpO₂ / HR.</p> <p>3.1 Describe the physiologic mechanism of respiratory conditions, anticipates potential complications and initiates appropriate interventions and actions.</p> <p>3.2 Evaluates infant's response to interventions and progress toward expected outcomes in collaboration with the multidisciplinary team.</p> <p>3.3 Describe in-depth respiratory assessment including investigations / tests and demonstrate nursing skills used to assess respiratory function.</p> <p>3.4 Acts as a resource, guides and contributes to clinical learning of colleagues when caring for an infant with respiratory compromise.</p> <p>3.5 Works in partnership with family/whanau during planning and implementation of care for infants requiring respiratory support.</p>	<p>2.1 – 2.6</p> <p>2.1 – 2.6</p> <p>2.1 – 2.7, 2.8 4.1, 4.2</p> <p>2.2 – 2.5</p> <p>1.3 2.7 – 2.9 4.1, 4.2</p> <p>1.2, 1.4, 1.5 2.6, 2.7 3.1, 3.2</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

4. Oxygen therapy – application and maintenance	Describes the application of oxygen therapy appropriate for identified respiratory conditions. Provides education on safety issues and alarm parameters to maintain therapy within therapeutic range.	Proficient	
	<p>4.0 Demonstrates comprehensive knowledge of respiratory support modalities within the individual clinical environment.</p> <p>4.1 Demonstrates comprehensive knowledge of the adverse physiological effects of oxygen therapy.</p> <p>4.2 Demonstrates comprehensive interpretation of blood gas analysis.</p> <p>4.3 Guides and supports colleagues in safe independent set up, application and management of therapy modes in accordance with individual clinical environment.</p> <p>4.4 Acts as a resource person and role model for other neonatal nurses and supporting them in safe delivery of respiratory therapy modes and contributes to education on oxygen therapy</p> <p>4.5 Uses knowledge and theory to identify need and contraindications for suctioning.</p> <p>4.6 Evaluates effectiveness of prescribed respiratory support and reports findings to the multidisciplinary team.</p> <p>4.7 Provides discharge education on home oxygen therapy and safety requirements when using oxygen in a domestic environment.</p> <p>4.8 Acts as an advocate for family/whanau when planning for</p>	<p>2.1 - 2.9</p> <p>2.1 – 2.6</p> <p>2.1 – 2.6, 3.3 4.1, 4.2</p> <p>1.3 2.1 – 2.9 3.3</p> <p>1.3, 2.1 – 2.9 3.1 – 3.3 4.1, 4.2</p> <p>2.1, 2.2</p> <p>2.6, 2.8 3.3, 4.1, 4.2</p> <p>1.1 2.6 – 2.8 3.1, 3.2</p> <p>1.4</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	long term oxygen therapy with the wider interdisciplinary team.	2.6, 2.7 3.1, 3.2, 3.3 4.1, 4.2	
5. Blood glucose management	Demonstrates in-depth knowledge of identification, prevention and management of the infant at risk of or with unstable blood glucose.	Proficient	
	<p>5.0 Demonstrates comprehensive knowledge of neonatal conditions other than prematurity that may impact on blood glucose stability.</p> <p>5.1 Guides, supports and teaches others best practice sample collection, analysis, interpretation and documentation.</p> <p>5.2 Describe and discuss the potential causes and interventions for an infant with refractory hypoglycaemia (as per unit protocol).</p>	<p>2.1 - 2.6</p> <p>1.3 2.1 – 2.9 3.3 2.1 – 2.9 3.3 4.1, 4.2</p>	
6. Thermal management	Demonstrates comprehensive knowledge facilitation of a thermoneutral environment to facilitate homeostasis and minimise metabolic demand in the infant (includes therapeutic hypothermia).	Proficient	
	<p>6.0 Discuss non-environmental reasons for hypothermia and the interventions (as per individual unit protocol/guideline)</p> <p>6.1 Identify the risk factors and initiate with rationale the nursing care for preterm infants nursed in a humidified environment.</p> <p>6.2 Describe and discuss physiological implications of the following temperature states in the neonate: (i) Hypothermia (ii) Hyperthermia</p> <p>6.3 Acts as a resource for others in setup, function and</p>	<p>1.1 2.1 – 2.6 2.1 – 2.6 1.3 2.1 – 2.6 1.1, 1.3 2.1 – 2.9 3.3 4.1 – 4.3 1.1</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>troubleshooting of the equipment used for temperature maintenance and monitoring (as per individual unit protocol/guideline)</p> <p>6.4 Demonstrates comprehensive knowledge of neonatal hypothermia treatment for infants at risk of neurological injury (as per unit specific protocol)</p> <p>6.5 Delivers safe and appropriate nursing care for infant being cooled (as per unit specific protocol).</p> <p>6.6 Acts as a resource person and role model for colleagues contributes to the learning of colleagues managing a safe thermal management.</p>	<p>2.1 – 2.6</p> <p>1.1, 1.3 2.1 – 2.6</p> <p>1.3 2.1 – 2.9 3.3, 4.3</p> <p>1.3 2.1 – 2.9 3.3, 4.3</p>	
7. Cardiovascular assessment	Demonstrate comprehensive cardiovascular assessment and describe application and interpretation of cardiovascular monitoring and documentation.	Proficient	
	<p>7.0 Demonstrate comprehensive cardiovascular assessment, include:</p> <ul style="list-style-type: none"> i. Auscultation using stethoscope ii. Capillary refill, peripheral perfusion iii. Blood pressure monitoring (invasive and non-invasive) iv. Colour v. Pre and post ductal blood pressure and oxygen saturations vi. Identification of normal/abnormal cardiac rhythms vii. Pulses <p>7.1 Recognises abnormal findings related to cardiovascular system assessment and describes treatment options.</p> <p>7.2 Acts as a resource to others, role modelling and teaching safety</p>	<p>2.1 – 2.6</p> <p>2.1 – 2.7 3.2, 3.3</p> <p>1.3</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>when managing care of an infant with an indwelling arterial line (as per unit protocol).</p> <p>7.3 Evaluates infant's response to interventions and progress toward expected outcomes in collaboration with the multidisciplinary team.</p>	<p>2.1 – 2.9 3.3 4.3 2.1 - 2.6 3.3 4.1, 4.2</p>	
8. Nutrition and elimination	Demonstrate comprehensive knowledge of care of the infant requiring supplemental nutritional support.	Proficient	
Enteral Feeding 	<p>8.0 Discuss the principles of Baby Friendly Hospital Initiative (BFHI) and its implications for feeding management.</p> <p>8.1 Demonstrates comprehensive nursing assessment of infant gastrointestinal function and feeding tolerance. Guides and teaches colleagues.</p> <p>8.2 In collaboration with family/ whanau and interdisciplinary team formulates a plan of care to incorporate parental feeding preference, fluid type and mode of enteral nutritional supplementation for infants unable to fully suckle feed. Acts as an advocate for family/whanau to ensure their preferences are considered.</p> <p>8.3 Describes rationale for using standard infant formula, specialised formulas and nutritional supplementation. Guides and supports colleagues and family/whanau in safety when handling artificial milk products (as per unit protocol).</p> <p>8.4 Demonstrates collaborative practice with other the interdisciplinary team (i.e. medical, dieticians, lactation consultant,</p>	<p>1.1, 1.3 2.1 – 2.6 3.1 – 3.3 1.3 2.2, 2.9 4.3 1.2 – 1.5 2.1 – 2.6 3.1 – 3.3 4.1, 4.2 1.1, 1.3 2.1 – 2.6, 2.8, 2.9 3.1 – 3.3 1.3 3.3</p>	

	speech/ language therapy) when feeding or growth is problematic. Guides and supports colleagues to make appropriate referrals.	4.1, 4.2	
Parenteral Nutrition	8.5 Describe methods of parenteral nutrition (IV/CVL) delivery in your organisation and describe nursing intervention and responsibility during initiation and maintenance of intravenous fluid (as per unit protocol).	1.1 2.1 – 2.6 3.3 4.1, 4.2	
	8.6 Demonstrates proficiency in safe care of intravenous, umbilical lines and/or percutaneous indwelling central catheters (PICC) (as per unit protocol).	1.1 2.1 – 2.6	
	8.7 Maintains service specific advanced certification, teaches and acts as a resource for colleagues in management of intravenous fluid administration.	1.1, 1.3 2.8, 2.9 3.3	
	8.8 Demonstrates comprehensive assessment and documentation of growth (length, weight gain, head circumference) using recommended best practice measurement tools.	2.1 – 2.6	
	8.9 Demonstrates proficient use of IV infusion pumps and syringe driver pumps for delivering and monitoring of intravenous therapy (as per unit specific protocol).	1.1 2.1 – 2.6	
Fluid Balance Management	8.91 Maintains accurate and comprehensive fluid balance documentation and recognises signs of fluid imbalance. Guides colleagues in discussion and recommendations to interdisciplinary team.	1.1, 1.3 2.1 – 2.9 3.3 4.1, 4.2	

National Neonatal Nurses Knowledge and Skills Framework 2014

	8.92 Demonstrates comprehensive assessment of urinary and bowel/ostomy output and identifies deviations from the normal.	2.1 – 2.6	
	8.93 Describes physiology and assessment of urine output and identifies need for investigation/interventions.	2.1 – 2.6	
9. Diagnostic investigations	Demonstrates comprehensive knowledge of diagnostic interventions and imaging procedures and acts as a resource for others in the facilitation of the tests and interpretation of results.	Proficient	
 	9.0 Teaches safe and accurate practice when obtaining and handling all samples for laboratory analysis.	1.1, 1.3 2.5, 2.9	
	9.1 Interprets blood gas/blood tests and recommends an appropriate and timely response in collaboration with multidisciplinary team.	2.1 – 2.6 3.3 4.1, 4.2	
	9.2 Role models and teaches safe practice when obtaining samples from central and arterial lines (as per unit protocol)	1.1, 1.3 2.1 – 2.6	
10. Medication and blood products	Demonstrates and guides others in the safe preparation, administration and documentation of medication in NICU/SCBU.	Proficient	
	10.0 Utilises and contributes to policies and procedural guidelines relevant to medication practice and maintains required organisational IV and medicine management certification.	1.1 4.3	
	10.1 Demonstrates comprehensive knowledge around the specific management of medication prescription, preparation, action and delivery in neonates and acts as a role model and resource for other staff around medication safety.	1.1, 1.3 2.5, 2.9 4.3	

National Neonatal Nurses Knowledge and Skills Framework 2014

11. Skin Care	Demonstrates and role models nursing care promoting comprehensive assessment and intervention to protect and maintain skin integrity in the neonate.	Proficient	
	<p>11.0 Demonstrates comprehensive assessment and care planning for infants at risk of compromised skin integrity – acts as a resource to others.</p> <p>11.1 Demonstrates and role models application of appropriate interventions to minimise risk of skin damage for preterm infants.</p> <p>11.2 Guides and teaches hygiene cares to parents/ care givers and works in partnership with them to care for their infant as condition allows.</p> <p>11.3 Recognises compromised skin integrity requiring intervention and makes appropriate referrals to wound care resources within the DHB to work collaboratively with health professionals specialised in wound care.</p>	<p>1.3 2.1 – 2.6, 2.9</p> <p>1.3 2.1 – 2.6</p> <p>1.3 2.7 – 2.9 3.1, 3.2</p> <p>2.1 – 2.6 3.3 4.1, 4.2</p>	
12. Care of the elective surgical Infant	Demonstrates safe care for the surgical infant pre and post operatively and acts as a resource for others.	Proficient	
	<p>12.0 Co-ordinates correct pre-operative preparation of infant for surgical procedures, includes collaboration with interdisciplinary team for transfer to an alternate hospital.</p> <p>12.1 Demonstrates comprehensive skill in pre and post-operative nursing care, inclusive of pain assessment, fluid balance management, thermoregulation, airway management and collaboration with interdisciplinary team members.</p>	<p>2.1 – 2.6 3.3 4.1, 4.2</p> <p>1.1, 1.3 2.1 – 2.9 3.3 4.1, 4.2</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>12.2 Demonstrates and documents regular assessment of infant condition, recognition of complications and evaluation of infant response to interventions. Collaborates with interdisciplinary team.</p> <p>12.3 Provides education and support to colleagues and family/whanau when planning care for the surgical infant. Acts as an advocate for the family/whanau during collaboration with interdisciplinary team.</p>	<p>2.1 – 2.6 3.3 4.1, 4.2</p> <p>1.2, 1.3, 1.5 2.8, 2.9 3.1 – 3.3 4.1, 4.2</p>	
13. Safe sleep - SUDI	Role models and teaches nursing responsibilities regarding safe sleep practice and education for family/whanau.	Proficient	
	<p>13.0 Initiates appropriate monitoring of infants if safe sleeping practices cannot be adhered to due to infant's condition, documents variations in clinical notes and care plan and provides appropriate education to family/whanau.</p> <p>13.1 Provides appropriate discharge assessment, interventions and education for family/whanau regarding sleep practices i.e. use of Pepepod.</p>	<p>2.1 – 2.7 3.1, 3.2</p> <p>1.4 2.7 3.2</p>	
14. Breastfeeding - Baby Friendly Hospital Initiative (BFHI)	Acts as a resource for colleagues and family/whanau, actively promoting and role modelling BFHI principles and actively participates in breastfeeding education.	Proficient	
	<p>14.0 Provides education and support to parents and other health professionals around initiation and maintenance of breast milk supply for infants requiring long term use of expressed breast milk.</p> <p>14.1 Demonstrates comprehensive assessment of infant readiness to feed orally. Facilitates planning of care for the infant transitioning</p>	<p>1.3, 1.4 2.7, 2.9 3.1, 3.3</p> <p>1.4 2.1 – 2.7</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>from tube to oral feeding, including evaluation of breastfeeding proficiency.</p> <p>14.2 Works collaboratively with the lactation specialists and mother to formulate, document and implement a feeding plan into discharge planning. Provide appropriate education.</p> <p>14.3 Acts as a role model for colleagues, supporting and contributing to their learning.</p>	<p>3.2</p> <p>2.1 – 2.6</p> <p>3.3</p> <p>4.1, 4.2</p> <p>1.3</p> <p>2.9</p> <p>4.3</p>	
15. Neurological/ developmental care	Demonstrates comprehensive knowledge of neurological assessment and developmentally supportive care. Supports and guides others to provide individualised developmentally appropriate care to each infant.	Proficient	
	<p>15.0 Demonstrates comprehensive assessment, monitoring and documentation of infant neurological status using unit specific guidelines.</p> <p>15.1 Identifies appropriate developmental interventions for the neurologically compromised infant and acts as a resource for other nurses/allied health team members.</p> <p>15.2 Demonstrates and role models the principles of developmental care as applied to all infants admitted to the neonatal unit (as per specific protocols/guideline)</p> <p>15.3 Describes developmental care implications for long term development in the extremely preterm and late preterm infant.</p> <p>15.4 Guides and supports nurses and advocates for parents when planning individualised developmental interventions.</p>	<p>1.1, 1.3</p> <p>2.1 – 2.6</p> <p>1.3</p> <p>2.1 – 2.6, 2.9</p> <p>1.1, 1.3</p> <p>2.1 – 2.6, 2.9</p> <p>3.3</p> <p>1.4</p> <p>2.1 – 2.6</p> <p>1.2 – 1.5</p> <p>2.1 – 2.9</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	15.5 Participates in the education of colleagues around individual infant need.	3.1 – 3.3	
16. Family/Whanau centred Care	Applies the principles of the Treaty of Waitangi and cultural safety to practice when negotiating, planning, implementing and evaluating care of the neonate. Works in partnership with family/whanau.	Proficient	
	<p>16.0 Role models the principles of family centred care and Whanau Ora in the neonatal environment. Guides and supports colleagues to construct individualised family care plans.</p> <p>16.1 Initiates and regularly maintains the infant care plan to reflect current needs, in partnership with family/whanau. Advocates for the infant and family during interdisciplinary team collaboration.</p> <p>16.2 Care planning reflects ongoing assessment, evaluation and incorporation of family/whanau personal beliefs, values, goals and cultural preference.</p> <p>16.3 Supports and guides others in the initiation and conclusion of the therapeutic relationship.</p> <p>16.4 Demonstrates advocacy for individuals disclosing Family Violence and/or smoking cessation – initiates referrals to appropriate allied health agencies in partnership with the individual.</p>	<p>1.2, 1.3, 1.4, 1.5 2.7, 2.8, 2.9 3.1, 3.2, 3.3</p> <p>1.2, 1.5 3.1, 3.2 4.1, 4.2</p> <p>1.2, 1.5 3.1, 3.2 4.1, 4.2</p> <p>1.3 3.1 – 3.3</p> <p>3.3, 3.4 4.1,</p>	
17. Discharge Planning	Initiates and provides education for discharge planning to family/whanau and acts as a resource for other nurses when planning complex infant discharges.	Proficient	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>17.0 Co-ordinates a comprehensive needs assessment with the family/whanau in collaboration with the interdisciplinary team and community resource agencies (as per unit specific policy).</p> <p>17.1 Provides comprehensive discharge education for family/whanau utilising unit teaching resources and allied health staff. Guides and supports colleagues in the discharge process.</p> <p>17.2 Participates in multi-disciplinary team discussion to facilitate discharge planning and works in collaboration with other organisational and community resource groups/personnel (as per individual DHB).</p>	<p>1.1, 1.3, 1.4 2.1 -2.7 4.1, 4.2</p> <p>1.3, 1.4 2.7, 2.8, 2.9 3.1, 3.2</p> <p>3.3 4.1, 4.2</p>	
18. Infection prevention and control	Demonstrates and role models understanding and application of the principles of infection prevention and control, including hand hygiene.	Proficient	
	18.0 Acts as an advocate for others in maintaining and upholding the principles of infection prevention.	1.3, 1.4 2.5	
19. Neonatal transport	Facilitation of neonatal transport and retrieval. <i>(only for the RN who has elected to be part of a transport team)</i>	Proficient	
	<p>19.0 Achieves and maintains required service specific training, competencies and safety certifications to provide safe care to sick and compromised infants during road or air transport.</p> <p>19.1 Has successfully completed a flight course within one year of joining the team, or as per individual DHB requirements.</p> <p>19.2 Participates in staff training and acts as a resource for other staff in use transport equipment for inter-hospital transfer (as per DHB protocol).</p>	<p>1.1, 1.3, 1.4 2.5</p> <p>1.1</p> <p>1.3, 1.4 2.5, 2.9</p>	

	19.3 Takes personal responsibility for fitness to undertake transports.	1.1 2.5, 2.9	
20. Neonatal palliative care	Demonstrates and initiates care pathways and individualised plans of care in collaboration with the multidisciplinary team for infants and family/whanau during end of life and palliative care	Proficient	
	<p>20.0 Utilises local protocols and guidelines to formulate a comprehensive plan of care for infant and family/whanau following decision for transition to palliative care.</p> <p>20.1 Participates in and advocates for family/whanau during decision making meetings.</p> <p>20.2 Mobilises appropriate resources available to support staff and families/whanau during discontinuation of care.</p> <p>20.3 Demonstrates culturally sensitive and appropriate provision of physical, environmental and emotional care to the infant and the family/whanau following death.</p> <p>20.4 Recognises need for and provides support to colleagues during end of life planning and care and following death of an infant in their care.</p>	<p>1.1, 1.3, 1.5</p> <p>3.1, 3.2, 3.3</p> <p>2.1 – 2.6, 2.8 3.3 4.1, 4.2</p> <p>1.2, 1.5 3.1, 3.2</p> <p>1.3 2.8, 2.9 3.3 4.1, 4.2</p>	

Expert

LEVEL OF NEONATAL KNOWLEDGE AND SKILLS FOR ALL REGISTERED NURSES

INDEX

Page

Expert Neonatal Nurse – Responsibilities and Activities

Aspect of Care:

1.0 Delivery Room Care.....	55
2.0 Management of Admission	55
3.0 Physiology and Pathophysiology of Neonatal Respiratory Distress	56
4.0 Oxygen Therapy.....	57
5.0 Cardiovascular Assessment.....	57
6.0 Nutrition and Elimination.....	58
7.0 Blood Glucose Management	59

8.0 Thermal Management	59
9.0 Diagnostic Investigations.....	60
10.0 Medication and blood products.....	60
11.0 Skin Care	61
12.0 Care of the Elective Surgical Infant.....	61
13.0 Safe Sleep/SUDI	62
14.0 Breastfeeding/BFHI.....	62
15.0 Developmental Care.....	62
16.0 Family/Whanau Centered Care.....	63
17.0 Discharge Planning.....	63
18.0 Neonatal Transport	64
19.0 Neonatal Palliative Care	64

ASPECT OF CARE	EXPERT LEVEL OF KNOWLEDGE & SKILL	NCNZ COMPETENCY DOMAIN	EVIDENCE/ COMMENTS Date/signature and designation
1. Delivery Room Care	Provides guidance and leadership for appropriate care delivery to the neonate. Delivers education, support and mentorship to junior staff in caring for infants requiring admission for neonatal illness/disease.	Expert	
	<p>1.0 Establishes and maintains a professional relationship with other health professionals in the delivery room. Communicates effectively in a timely manner with the delivery room team, using ISBAR/SBARR (or similar tool)</p> <p>1.1 Utilises advanced assessment skills of the newborn infant, demonstrates the ability to recognise deviation from the norm and initiate appropriate actions.</p> <p>1.2 Utilises advanced knowledge and skills to assist with high risk deliveries (as applicable to unit).</p> <p>1.3 Initiates appropriate neonatal resuscitation in an emergency when medical staff unavailable, and guides/supports the delivery room team until medical/CNS team is present. Works within New Zealand Resuscitation Council guidelines.</p> <p>1.4 Takes leadership in supporting family/whanau and involve them in care of the newborn infant as condition of newborn allows.</p>	<p>3.3</p> <p>2.1 - 2.6</p> <p>2.5, 2.6</p> <p>1.1, 1.3 3.1, 3.2, 3.3 4.1, 4.2</p> <p>1.2, 1.4, 1.5 3.2</p>	
2. Management of admission	Leads/guides others during the process of a complex admission to NICU/SCBU.	Expert	
	2.0 Provides leadership when receiving a new admission – includes delegation of tasks.	1.3	

	<p>2.1 Implements a culturally appropriate, comprehensive care plan in collaboration with other health care professionals and in partnership with family/whanau.</p> <p>2.2 Performs comprehensive screening of family/whanau for smoking cessation and family violence intervention programmes (as per unit specific protocol).</p> <p>2.3 Acts as a resource person and role model for colleagues, supporting and contributing to their learning.</p>	<p>2.1 – 2.7 3.1, 3.2, 3.3</p> <p>1.1 2.7 3.1</p> <p>2.8, 2.9</p>	
3. Physiology and pathophysiology of causes of neonatal respiratory distress	Utilises advanced evidence based infant respiratory assessment, understands physiology behind common respiratory conditions and initiates and leads planning of care.	Expert	
	<p>3.0 Demonstrates comprehensive assessment and documentation of infant respiratory status.</p> <p>3.1 Initiates and guides others in nursing management of infants with complex conditions. Provides education, support and mentors less experienced staff to provide safe care of infants with respiratory disease.</p> <p>3.2 Demonstrates in-depth understanding and interpretation of diagnostic tests and reports appropriately.</p> <p>3.3 Takes the lead and acts as a resource person and role model for colleagues, supports them in the safe delivery of care and contributes to their learning.</p> <p>3.4 Initiates and participates in the development of service specific policies, procedures and guidelines for care of the</p>	<p>2.1 – 2.6</p> <p>1.3 2.4, 2.7, 2.9</p> <p>2.2, 2.3, 2.4, 2.5</p> <p>2.7, 2.8, 2.9</p> <p>1.1, 4.3</p>	

	neonate with respiratory compromise.		
4. Oxygen therapy - application and maintenance	Demonstrates advanced knowledge of oxygen therapy appropriate for identified respiratory conditions. Recognise safety issues and implement alarm parameters to maintain therapy within therapeutic range.	Expert	
	<p>4.0 Demonstrates advanced theoretical knowledge of different modes of respiratory support. Guides others in initiation of respiratory support. Provides evidence based education to others regarding safe use and troubleshooting of respiratory support equipment.</p> <p>4.1 Communicates effectively with rationale to the multidisciplinary team on effectiveness of treatment, giving recommendations for change.</p> <p>4.3 Takes leadership and acts as a resource person and role model for colleagues and supports them in the safe delivery of respiratory therapy modes.</p> <p>4.3 Provides education for parents in regards to oxygen therapy and requirements of safe care when oxygen therapy is in place on discharge</p>	<p>2.1 - 2.9</p> <p>1.3 2.8 3.2, 3.3</p> <p>1.3 2.1 – 2.9 3.1 – 3.3 4.1, 4.2 2.7 3.1, 3.2</p>	
5. Cardiovascular assessment	Demonstrates advanced cardiovascular assessment - applies evidence based practice and delivers appropriate care.	Expert	
	<p>5.0 Demonstrates a full cardiovascular assessment, and recognises and reports variations with rationale.</p> <p>5.1 Recognises signs and symptoms of heart failure, implications for infant care and initiates treatment options.</p>	<p>2.1 - 2.6</p> <p>2.1 -2.9 3.3, 4.1</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>5.2 Leads and directs planning of nursing care for infants with heart failure / cardiac conditions in partnership with MDT and family/whanau</p> <p>5.3 Demonstrates expert practice in caring for infants with indwelling arterial lines.</p> <p>5.4 Acts as a resource person and role model for colleagues, supporting and contributing to their learning.</p> <p>5.5 Provides education for parents/whanau on cardiovascular management.</p>	<p>2.1</p> <p>1.3, 1.4 2.4, 2.5, 2.6</p> <p>2.7, 2.8, 2.9</p> <p>3.1, 3.3</p>	
6. Nutrition and elimination	Demonstrates advanced theoretical knowledge and practical skills for care of the infant requiring supplemental nutritional support. Utilises evidence based research to guide others.	Expert	
Management of an infant with intravenous fluids	<p>6.0 Initiates nursing assessment of GI function and feeding tolerance. Demonstrates comprehensive assessment of infant nutrition and elimination. Utilises expert knowledge to develop appropriate plan of care in partnership with family/whanau.</p> <p>6.1 Demonstrates advanced reasoning for recommending use of both regular and specialised formula and/or feeding equipment (e.g. lactaids). Collaborates with appropriate specialist health team members during decision making.</p> <p>6.2 Guides others in the use of total parenteral nutrition (TPN) delivery according to organisational guidelines and protocols.</p> <p>6.3 Provides leadership and guidance in the clinical practice and care</p>	<p>2.1 – 2.6 3.1, 3.2, 3.2</p> <p>3.2, 3.3 4.1, 4.2</p> <p>1.1, 1.3 2.7</p> <p>1.1, 1.3</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>of centrally placed lines and delivery of fluids, (as per unit protocols). Develops service specific policies, procedures and guidelines for the management of fluid delivery utilising research based evidence.</p> <p>6.4 Collaborates with allied health team to manage infants with complex feeding or growth issues.</p> <p>6.5 Participates in clinical audits and development of service specific policies, procedures and guidelines, and follow-up with appropriate education to colleagues.</p>	<p>2.1 – 2.6 4.3</p> <p>3.2, 3.3 4.1, 4.2</p> <p>2.9 4.3</p>	
7. Blood glucose management	Has advanced knowledge of identification, prevention and management of the infant at risk of or with unstable blood glucose.	Expert	
	<p>7.0 Demonstrates advanced knowledge of the etiology, pathophysiology and interventions for hypo/hyperglycaemia in the neonate.</p> <p>7.1 Develops and implements a comprehensive plan of care, including rationale, assesses efficacy of care plan and makes appropriate recommendations to multidisciplinary team.</p> <p>7.2 Acts as a resource person and role model for colleague, supporting and contributing to their learning using best practice.</p>	<p>2.1 – 2.6</p> <p>2.1 – 2.6</p> <p>1.3, 2.7 – 2.9 3.3, 4.1</p>	
8. Thermal management	Has advanced theoretical knowledge of the importance of maintaining infants within a thermoneutral environment to facilitate homeostasis and minimise metabolic demand. Implements cooling for HIE.	Expert	
	8.0 Acts as a role model and leader in clinical practice of thermal assessment and management of the high risk neonate.	1.3, 1.4 2.1, 2.6	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>8.1 Initiates setup, function and troubleshooting of all equipment used for temperature maintenance/cooling (as per unit protocol/guidelines).</p> <p>8.2 Identifies infants at risk of HIE (as per unit protocol), and in collaboration with medical team, initiates appropriate unit specific cooling protocol.</p> <p>8.3 Acts as a resource person and role model for colleagues, supporting them in safe thermal management and contributing to their learning.</p>	<p>1.1, 1.4 2.5</p> <p>1.1 2.1 – 2.6 3.2, 3.3 4.1, 4.2</p> <p>1.3 2.7 – 2.9</p>	
9. Diagnostic investigations	Demonstrates advanced infant assessment and recommendation of diagnostic testing, and comprehensive interpretation of results, in collaboration with the wider multidisciplinary team.	Expert	
	<p>9.0 Demonstrates comprehensive understanding and interpretation of blood gas/blood test and recommend appropriate and timely response.</p> <p>9.1 Acts a resource person and role model for colleagues, utilising best practice literature to support and contribute to their learning.</p>	<p>1.1 2.1 – 2.6, 2.8</p> <p>1.1, 1.3 2.3 – 2.9 4.1, 4.3</p>	
10. Medication and blood products	Provide leadership and guidance in the safe preparation, administration and documentation of medication in NICU/SCBU	Expert	
	<p>10.0 Demonstrates advanced pharmacological knowledge around the specific differences in medical prescription, preparation and delivery, action and elimination of medication regularly used for infants.</p> <p>10.1 Demonstrates advanced knowledge of the consent process required for administration of medications and blood products.</p>	<p>1.1, 1.3 2.1, 2.5 4.2</p> <p>1.1, 1.2, 1.5 2.4 – 2.7, 3.2</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	<p>10.2 Guides others to maintain culturally safe practice before, during and after an exchange transfusion.</p> <p>10.3 Acts as a resource person and role model for colleagues, supporting and contributing to their learning.</p>	<p>1.1, 1.2, 1.3, 1.5 2.5 3.1 – 3.3 2.9 4.1</p>	
11. Skin care	Demonstrates advanced knowledge to promote assessment and intervention to protect and maintain skin integrity in the neonate. Utilises best practice guidelines to guide practice.	Expert	
	<p>11.0 Utilises and contributes to best practice guidelines to develop interventions and unit specific guidelines to minimise risk of skin damage for preterm and at risk term infants.</p> <p>11.1 Acts as a resource person and role model for colleagues, supporting and contributing to their learning</p>	<p>1.1 2.1 – 2.6 3.2, 4.1</p> <p>1.3 2.7, 2.8, 2.9, 4.1</p>	
12. Care of the elective surgical infant	Demonstrates advanced knowledge, provides leadership and guidance for the safe care of the neonate pre and post operatively for surgical procedures.	Expert	
	<p>12.0 Sets up, operates and troubleshoots transport equipment and acts as a resource to others when transporting an infant to and from theatre.</p> <p>12.2 Provides clinical leadership and education in pre and post-operative nursing care, inclusive of pain management, fluid balance, management, wound care, thermoregulation, and airway management.</p> <p>12.3 Collaborates with other health care professionals in delivering optimum care while recognising and supporting culturally appropriate practice.</p>	<p>2.5, 2.8, 2.9</p> <p>1.3 2.1 – 2.9 3.2, 3.3</p> <p>1.2, 1.5 4.1 – 4.3</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	12.4 Acts as a resource person and role model for colleagues and family/whanau supporting and contributing to their learning.	1.3 2.7, 2.8, 2.9 4.1	
13. Safe/sleep - SUDI	Demonstrates advanced knowledge of the nursing responsibilities regarding safe sleep practice and education for family/whanau.	Expert	
	13.0 Participates in ongoing development and provision of health education regarding Safe Sleep/SUDI to all levels of the multidisciplinary and allied health team.	1.3, 1.5 3.2 4.1	
	13.1 Communicates with other stakeholders/agencies in the wider community to promote and disseminate culturally sensitive best practice guidelines for safe sleep post discharge.	1.3, 1.5 3.1, 3.2, 3.3 4.1	
14. Breastfeeding/Baby Friendly Hospital (BFHI) Initiative	Actively promotes BFHI principles and actively participates in breastfeeding support and education of families/whanau and nursing staff.	Expert	
	14.0 Practices within the principles of Baby Friendly Hospital initiative (BFHI) and teaches the implications for feeding management to staff and client groups.	1.1 2.7 – 2.9 3.1 – 3.3 4.1	
	14.1 Contributes to ongoing auditing/development of culturally validated best practice guidelines to promote breastfeeding as per unit/regional requirements.	4.1, 4.2, 4.3	
15. Neurological/developmental care	Acts as a leader and advocate in the promotion of developmental care as an integral component of neonatal care.	Expert	
	15.0 Recognises developmental care implications for future development in the extremely preterm and late preterm infant and contributes to planning and delivery of best practice interventions.	1.4, 1.5 4.1, 4.2, 4.3	

National Neonatal Nurses Knowledge and Skills Framework 2014

	15.1 Acts as a resource person and role model for colleagues, supporting and contributing to their learning.	1.3 2.7 – 2.9 4.1	
16. Family/whanau centered care	Acts as an advocate in the promotion and delivery of culturally appropriate care to every family/whanau. Actively role models principles of the Treaty of Waitangi in all aspects of nursing practice.	Expert	
	<p>16.0 Guides others in the application the principles of the Treaty of Waitangi into care planning and implementation.</p> <p>16.1 Maintains knowledge of and actively promotes Ministry of Health initiatives such as Tikanga ā Tamariki Mokopuna principles to facilitate improved child health outcomes.</p> <p>16.2 Actively initiates, implements and evaluates the infant care plan in partnership with family/whanau.</p> <p>16.3 Actively guides and supports colleagues when assessing and implementing interventions for Family Violence and Smoking cessation. Provides education on management of unsafe situations.</p>	<p>1.3, 1.5, 1.9</p> <p>1.3, 1.5 2.6 4.3</p> <p>2.1 – 2.7 3.1</p> <p>3.2, 3.3 4.1, 4.2</p>	
17. Discharge Planning	Provides leadership during discharge planning and education for family/whanau – advocates for family/whanau during multidisciplinary discharge meetings.	Expert	
	<p>17.0 Leads and guides others to apply the principles and goals of discharge planning for infant and family/whanau.</p> <p>17.1 Maintains a comprehensive knowledge of local community resources including Maori health providers to facilitate safe discharge for all families/whanau.</p>	<p>1.3 2.1 – 2.7</p> <p>1.3, 1.5 3.1, 3.2, 3.3</p>	

National Neonatal Nurses Knowledge and Skills Framework 2014

	17.2 Provides comprehensive discharge education for family/whanau of complex infants, utilising unit teaching resources and allied health staff and community resources.	2.7, 2.8 3.1, 3.2, 3.3	
18. Neonatal transport	Facilitation of Neonatal transport and retrieval (<i>only if RN has elected to be part of a transport team</i>)	Expert	
	18.0 Provides education and support for new transport team members – acts as a resource and mentor.	2.9 3.3	
	18.1 Actively promotes best practice around neonatal transport and participates in audit and/or development of service specific protocols and guidelines for transport.	1.3 4.1, 4.2, 4.3	
19. Palliative Care for the neonate.	Provides leadership and support during end of life decision making and planning of care. Acts as a mentor/role model for other staff.	Expert	
	19.0 Takes a leadership role in decision making, planning and delivery of end of life care to the infant and family/whanau.	2.5, 2.8 3.1	
	19.1 Organises and or facilitates debriefing of colleagues following death of an infant in the neonatal unit as per individual unit procedure.	2.8 3.1, 3.2, 3.3	
	19.2 Provides evidence based education around end of life care and participates in development of protocols, procedures to ensure sensitive, appropriate delivery of care.	1.5 4.1, 4.2, 4.3	

Summary

Document development has become a modern accessory to the nursing workforce. Documents should have purpose, with the purpose of this knowledge and skills framework being to provide neonatal nurses in New Zealand with a platform for articulating and advancing practice. Through assessment and evaluation of practice the neonatal nurse is able to define and substantiate competency within the specialty.

Specialty care requires a commitment to the development of knowledge and skills through education both within the workplace and at tertiary level. Support for neonatal nurses to plan and advance neonatal care in the future is going to rely on neonatal nurses being able to advocate for their vulnerable patient population and the specialist care we provide.

Standardisation of a flexible quality assessment tool makes available a nationally transferrable, supporting document that guides education, gives structure to the professional development of neonatal nurses, articulates minimum standards of knowledge and skill for both the nurses providing neonatal care and the service provider resourcing the care, and is applicable to all levels of neonatal units within New Zealand.

Awhinatia mātou i roto i o mātou mahi

Guide us in the work we are doing

References

- Gould, D., Berridge, E., Kelly, D. (2006). The National Health Service knowledge and skills framework and its implications for continuing professional development in nursing. *Nurse Education Today*, 27: 26 – 34.
- Health Practitioners competency assurance act, no 40. (2003). Retrieved from:
<http://www.legislation.govt.nz/act/public/2003/0048/latest/DLM203312.html>
- Hudelson, P., Cleopas, A., Kolly, V., Chopard, P., & Perneger, T. (2008). What is quality and how is it achieved? Practitioners' views versus quality models. *Qual Saf Health Care* , 17, 31-36.
- Ministry of Health, (2004) *A Review of Neonatal Intensive Care Provision in New Zealand*. Retrieved September 20th 2014, from NZ Ministry of Health: <http://www.healthpac.govt.nz/moh.nsf/unidprint/mh4159?opendocument>
- Ministry of Health, (2010). *Report on Maternity*. Wellington. New Zealand: Ministry of Health. Retrieved August 20th from <http://www.health.govt.nz/publication/report-maternity-2010>
- Ministry of Health, (2011). *Services for Children and Young People - Specialist Neonatal Inpatient and Home Care Services Tier Level Two Service Specification*. Retrieved October 15th from:
http://www.google.co.nz/url?url=http://www.nsfl.health.govt.nz/apps/nsfl.nsf/pagesmh/155/%24File/Specialist%2BNeonatal%2BInpatient%2BHome%2BCare%2BServices%2BT2.doc&rct=j&frm=1&q=&esrc=s&sa=U&ei=RuY-VLH0IYTfoASn_oHwBQ&ved=0CBUQFjAA&usg=AFQjCNFeZkWIGjGJP9xVavO_S_R0s9wHcQ
- Nursing Council of New Zealand, (2007). *Competencies for Registered Nurses*. Wellington. New Zealand: Nursing Council of New Zealand.
- Nursing Council of New Zealand, (2004). November Newsletter.

New Zealand Nurse's Organisation, (2012). *Neonatal Nursing Standards*. Wellington, New Zealand: Neonatal Nurses College – Aotearoa. Retrieved August 20th 2014 from <http://www.nzno.org.nz/Portals/0/Files/Documents/Groups/Neonatal%20Nurses/2013-03-21%20NNCA%20updated%20nursing%20standards.pdf>

New Zealand Nurse's Organisation (2008). *Neoanatal education policy, standards and career development*. Wellington

Petty, J., (2014). A global view of competency in Neonatal nursing. *Journal of Neonatal Nursing*, 20: 3-10.