

Neonatal Critical Care Nursing

2026

V.02

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties



In The Name of Allah

PREFACE

- The primary goal of this document is to enrich the experience of postgraduate trainees by outlining the learning objectives and competencies necessary for them to become independent and competent future practitioners.
- This curriculum may contain sections outlining training regulations; however, such regulations must be sought from the "General Bylaws of Training in Postgraduate Programs" and "Executive Policies" published by the Saudi Commission for Health Specialties (SCFHS), which can be accessed online through the official SCFHS website. In the case of discrepancies in regulation statements, the one stated in the most updated bylaws and executive policies must be considered.
- As this curriculum is subject to periodic refinement, please refer to the electronic version posted online for the most updated edition at www.scfhs.org.sa

I. CONTRIBUTORS

This curriculum was prepared by the Specialty's Curriculum Development Committee:
• Ms. Aishah Ayesh Alshalawi • Ms. Maha Butran Al Mutairi • Ms. Jayaselvi John Joseph • Ms. Manal Mohammed Alamoudi
Reviewed by Advisory Committee Members (Curriculum Review Committee members):
• Dr. Walid Alkeridy MBBS, MSc, FRCPC • Dr. Nesrain Alhamedi MMEd, SBFM, ABFM
Reviewed and Approved by the Specialty's Scientific (Council/Committee) Members:
Approved by Head of the Curricula Review Committee:
• Ali Al-Yahya MD, MME, FRCSC

the contributor list(s) of the previous versions 2018.
• Curriculum Scientific Group • Dr. Elham Ali Bukhari • Dr. Hind Abdo Al Najjar • Dr. Wafaa Alarousey • Curriculum Specialist • Dr. Zubair Amin • Dr. Sami AlShamarri • Nursing Scientific Board • Dr. Ahmad Aboshaiqah • Dr. Hassan Al Shahrani • Dr. Hasna Banjar • Dr. Shadia Yousef • Dr.Sana Al Mahmoud • Dr.Wael Al Zayer • Dr. Eshtiaq Al Faraj • Dr. Elham Bukhari • Dr. Khalid Al Johani • Ms. Bushra Al Hunidi

II. COPYRIGHT STATEMENTS

All rights reserved. 2025 Saudi Commission for Health Specialties. This material may not be reproduced, displayed, modified, distributed, or used without written permission from the Saudi Commission for Health Specialties in Riyadh, Saudi Arabia. Any changes to this document were endorsed by the Specialty Scientific Council and approved by the Central Training Committee.

Unless otherwise stated, this document shall be considered effective from the publication date of the updated electronic version of this curriculum on the commission's website.

Correspondence:

Saudi Commission for Health Specialties

P.O. Box: 94656

Postal Code: 11614

Contact Center: 920019393

E-mail: Curricula@scfhs.org.sa

Website: www.scfhs.org.sa

ISBN: 978-603-8624-08-1

III. FOREWORD

The Advanced Nursing Diploma in the neonatal intensive care curriculum development team acknowledges valuable contributions and feedback from the Scientific Committee Members in developing this program. We extend special appreciation and gratitude to all members who have been pivotal in completing this curriculum, especially the Specialty Curriculum Development Group, Curriculum Advisory Committee members, and the Nursing Scientific Council. We would also like to acknowledge that the National Competency Framework for Bachelor of Nursing Programs is a copyright of the SCFHS, and that many of the described competencies have been acquired from their resources. The Scientific Committee of the Commission strives to ensure the proper process of continuous quality improvement of the program curriculum. To achieve this, a periodic review of the curriculum by expert professionals within the field will be performed to assess the scientific content and refine it based on the best available evidence at any given time.

IV. TABLE OF CONTENTS

PREFACE 3

I. CONTRIBUTORS 4

II. COPYRIGHT STATEMENTS 6

III. FOREWORD 7

IV. TABLE OF CONTENTS 8

V. INTRODUCTION 12

1. Context of Practice 12

2. Goals and Responsibilities of Curriculum Implementation 14

3. What is new in this edition? 15

VI. ABBREVIATIONS USED IN THIS DOCUMENT 16

VII. PROGRAM ENTRY REQUIREMENTS 18

VIII. LEARNING AND COMPETENCIES 19

1. Introduction to Competency-Based Education 19

2. Program Duration 22

3. Program Rotation 22

4. Alignment of Competencies, Roles, Assessment, and Educational Activities with Program Rotations 25

Rotation 1 26

ROTATION OBJECTIVES 26

Clinical nurse expert 28

WORKPLACE-BASED ASSESSMENTS 36

Learning Activities 36

ROTATION OVERVIEW 36

ROTATION OBJECTIVES 37

Clinical Nurse Expert 38

WORKPLACE-BASED ASSESSMENTS 46
Case-Based Learning 46
Progression Criteria 46
ROTATION OVERVIEW 47
ROTATION OBJECTIVES 47
WORKPLACE-BASED ASSESSMENTS 55
Case-Based Learning 55
WORKPLACE-BASED ASSESSMENTS 64
Case-Based Learning 64
ROTATION OVERVIEW 65
ROTATION OBJECTIVES 65
WORKPLACE-BASED ASSESSMENTS 73
Case-Based Learning 73
ROTATION OVERVIEW 74
ROTATION OBJECTIVES 74
WORKPLACE-BASED ASSESSMENTS 81
ROTATION OVERVIEW 82
ROTATION OBJECTIVES 82
WORKPLACE-BASED ASSESSMENTS 90
Proposal Presentation 90
ROTATION OVERVIEW 90
ROTATION OBJECTIVES 90
WORKPLACE-BASED ASSESSMENTS 99
ROTATION OVERVIEW 99
ROTATION OBJECTIVES 99
WORKPLACE-BASED ASSESSMENTS 106
Case-Based Learning 107
ROTATION OVERVIEW 107
ROTATION OBJECTIVES 107

WORKPLACE-BASED ASSESSMENTS 114
Case-Based Learning 115
ROTATION OVERVIEW 115
ROTATION OBJECTIVES 115
ROTATION ACTIVITIES 121
MODULE 121
FIRST YEAR TRAINING MODULES 121
SECOND-YEAR TRAINING MODULES 133
Content Outlines: 134
IX. CONTINUUM OF LEARNING 147
X. EDUCATIONAL ACTIVITIES
(TEACHING AND LEARNING STRATEGIES AND METHODS) 149
Teaching & Learning 149
XI. ASSESSMENT AND EVALUATION 159
1. Purpose of Assessment 159
2. Formative Assessment 161
Advance Nursing Practice Diploma training program 166
Appendix A provides the information on Assessment mapping 178
Summative Assessment 178
XII. PROGRAM AND COURSE EVALUATION 182
XIII. POLICIES AND PROCEDURES 184
XIV. APPENDICES 185
Appendix A: Academic Half-Day Topics 186
Appendix B (Research Requirements) 189
Appendix C (Simulation) 195
1. Activity Description 197
1. Overview 197
2. Teaching Methods and Learning Activities 199
Appendices 208

Appendix D 209

Appendix E: List of common disease in NICU. 210

Appendix F: Advance Nursing Practice in NICU Competencies 211

Appendix-G 213

V. INTRODUCTION

1. Context of Practice

Saudi Arabia has a significant need for Neonatal Intensive Care Units (NICUs) due to the high rates of prematurity, congenital anomalies, and neonatal sepsis. The country is actively addressing this need through the establishment and expansion of specialized NICUs in hospitals, such as those managed by the Ministry of Health and the other Tertiary Care Hospitals, and the development of comprehensive programs for premature infants. Specialized NICUs provide round-the-clock care, monitoring to ensure the well-being of infants. These units are staffed by highly skilled and well-trained neonatal intensive care professional who specialize in the management of high-risk infants.

Premature birth is a major cause of neonatal mortality in Saudi Arabia, highlighting the need for specialized care facilities. There is a high rate of inherited disorders due to consanguinity, which often require specialized neonatal care for conditions, such as congenital anomalies. It is another leading cause of death in newborns and creates a critical need for specialized treatment centers. There is a push for early intervention, risk factor identification, and specialized care to improve survival rates for vulnerable premature infants.

Tertiary Care Hospitals, University Hospitals, Medical Cities, and those under the Ministry of Health have been established, and their NICU services are expanding. These units provide a range of services, including incubators, respiratory support, such as high-frequency oxygenation ventilation, extracorporeal membrane oxygenation, feeding tubes, and treatment for conditions, such as hyperbilirubinemia. Tertiary Care hospitals have launched National Initiatives, such as the Neonatal Bone Health Program, to improve the care of high-risk infants. Saudi Arabia is working to increase the number of highly skilled teams

of professionals, including Neonatologists, Neonatal Nurses, and Neonatal fellows, through initiatives and training programs. Research is being conducted to improve prenatal care and reduce the long-term risks associated with premature birth. The program aims to facilitate learners' personal and professional growth in Neonatal Critical Care Nursing by enhancing the critical thinking skills necessary for making rapid, sound nursing judgments and encouraging them to demonstrate self-direction in providing immediate care in a variety of highly dependent settings, such as prehospital, emergency department, and labor and delivery units. Furthermore, the program synthesizes evidence-based and theoretical knowledge to deliver immediate, competent, and culturally sensitive data.

The program also aims to enhance trainees ability to utilize human and material resources effectively , strengthen clinical reasoning and decision making skills and develop the expertise required to provide safe evidence based neonatal care . Upon completion of the program, the learner will earn an advanced nursing practice diploma from the NCC. This program was conducted under the supervision of the Saudi Commission of Health Specialties.

Although significant progress has been made, barriers affecting quality remain apparent as the general population increases, causing patients' healthcare needs and demands to increase. Factors affecting healthcare quality can be categorized into patient factors (such as health literacy, access to care, and culture) and provider factors (including medical care, workload, culture, and job satisfaction). The delivery of premature and low-birth- weight infants presents serious challenges for healthcare professionals. Medical technology has become more sophisticated, adding another dimension to the skill requirements of neonatal nurses. This will increase the need for trained neonatal intensive care nurses equipped with the knowledge and critical thinking abilities required to use evidence-based practices (EBPs) to provide high-quality care to maximize

the chances of neonates' survival and to achieve optimal outcomes for both the infant and their family.

2. Goals and Responsibilities of Curriculum Implementation

This curriculum will guide trainees to become competent and fit for practice in their Neonatal Critical Care specialty. Accordingly, achieving this goal requires significant effort and coordination from all stakeholders involved in postgraduate training. As "adult-learners," trainees must be proactive, fully engaged, and exhibit the following: careful understanding of learning objectives, self-directed learning, problem solving, eagerness to apply learning through reflective practice based on feedback and formative assessment, growth mindset and self-awareness, and willingness to seek support when needed. Program directors, trainers, creditors, and training stakeholders play vital roles in ensuring successful implementation of this curriculum. Moreover, Training Program Committee Members, particularly Program Administrators and Chief Residents, significantly impact program implementation. Trainees should also be called upon to share responsibility for curriculum implementation.

The strategic direction of the Saudi Commission for Health Specialties (SCFHS) applies a recognized Competency Model of Training Governance to achieve the highest training quality, and a Neonatal Critical Care Postgraduate Program is required to cover research and evidence-based practice in its curriculum. Additionally, academic affairs in training centers and regional supervisory training committees play key roles in training supervision and implementation. The Neonatal Critical Care Scientific Committee guarantees that the curriculum content is regularly updated to align with the highest standards in Postgraduate Education of Neonatal Critical Care trainees.

3. What is new in this edition?

In this edition, the curriculum is transformed into a competency-based curriculum that explicitly represents the learning domains (knowledge, skills, and behavior). In addition, it grades the responsibility for the trainee, with a clearer demarcation of what should be achieved at each stage of training (milestone), provides detailed supervisory frameworks that support independent learning within a formal structure, and enriches formative assessment. The clinical examination OSCE content has been revised and updated to align with competency based curriculum and learning outcome.

VI. ABBREVIATIONS USED IN THIS DOCUMENT

ABBREVIATION	DESCRIPTION
SCFHS	Saudi Commission for Health Specialties
D (1)	(First) year of Diploma
D (2)	(Second) year of Diploma
OBGYNAE	Obstetrics & Gynecology
L&D	Labor & Delivery
OR	Operating Room
PT	Progress test
OSCE	Objective Structured Clinical Examination
SOE	Structural Oral Examination
CBD	Case-Based Discussion
CP	Clinical/ Case Presentation
CBE	Competency – Based Education
Mini-CEX	Mini-Clinical Experience report
DOPS	Direct Observation of Procedural Skills report
PD	Program Director
ITC	Institutional Training Committee

ABBREVIATION	DESCRIPTION
TPC	Training Program Committee
ITER	In-Training Evaluation Report
FITER	Final In-training Evaluation Report

VII. PROGRAM ENTRY REQUIREMENTS

Admission and registration requirements are governed by the Executive Policies of the Saudi Commission for Health Specialties (SCFHS).

Please refer to the updated policy of SCFHS.

Website: www.scfhs.org.sa

VIII. LEARNING AND COMPETENCIES

1. Introduction to Competency-Based Education

Training should be guided by well-defined "*enabling competencies*" that are developed based on a particular program's "*competencies*" to serve specific specialty needs. Enabling competencies are supposed to reflect the professional "*competencies*" and tasks that are aimed at being "*entrusted*" by the trainees upon graduation. This ensures that graduates fulfill the expected demands of the healthcare system and patient care in relation to their specialties. *Competency-based education* (CBE) is an approach to "*adult-learning*" that is grounded in achieving *pre-defined*, *fine-grained, and well-paced* sub-competencies that are derived from complex professional competencies.

Professional competencies associated with healthcare are usually complex and contain a mixture of multiple learning domains (knowledge, skills, and professional behavior). CBE is expected to change traditional approaches to postgraduate education. For instance, although it is a precious resource, the time of training should not be considered a proxy for *competence* (e.g., the time of rotation in certain hospital areas is not the primary marker of competence achievement). Furthermore, CBE emphasizes the critical role of informed judgment in assessing a trainee's competency progress based on their staged and progressive performance, using data collected from multiple educational and assessment encounters, methods, and workplace-based observations. Several CBE models, such as the National Competency Framework for the Bachelor of Nursing Programs, have been developed for undergraduate and postgraduate healthcare

education. This framework has been used in curricula for multiple reasons. Since it reflects the entry level of newly graduated nurses into nursing, it also reflects the entry level of NICU Postgraduate trainees into the specialty. Additionally, this framework integrates three learning domains (knowledge, skills, and attitudes) that demonstrate different nursing competencies. The following concepts enhance the implementation of CBE in the curriculum:

Competency: Competency refers to a healthcare professional's observable ability to encompass knowledge, skills, values, and attitudes/professional behaviors. It reflects the potential to perform efficiently in a given situation based on the standards of the profession and involves the practical application of these components in real-world settings. Professional roles (e.g., medical experts, health advocates, communicators, leaders, scholars, collaborators, and professionals) are used to define competency roles that make them malleable for learning and assessment.

Milestones: Competency is a cognitive construct that assesses the potential to perform efficiently in each situation, based on the standards of the profession. Professional roles (e.g., experts, advocates, communicators, leaders, scholars, collaborators, and professionals) are used to define competency roles and make them mendable for learning and assessment.

Learning-Domains: The categories or dimensions of learning encompass the development of a learner's abilities and attributes. These domains are commonly divided into the following three key areas: K = Knowledge, S = Skills, and A = Attitude (also known as professional behavior).

Principles of Competency-Based Medical Education (CBME)

Nurses must develop specific skills to achieve the competencies expected at each of the four levels of neonatal nursing practice. The skills required are diverse, may be transferable across several competencies, and can change over time to those specifically related to patient care within the competency 'responsibility for patient care.'

The competencies were derived with guidance from the National Health Service (NHS) Knowledge and Skills Framework (KSF) core dimensions under the following headings:

1. Communication and interpersonal relationships.
2. Personal, professional and people development.
3. Health, safety, and security.
4. Service development.
5. Quality.
6. Equality, Diversity, and Rights.
7. Responsibility for patient care.

1. Career Development © 2006 SNL, infant VOLUME 2 ISSUE 4 2006
2. Tracey Jones (2019), Council of International Neonatal Nurses, Inc. (COINN) Working Group, International Neonatal Nursing Competency Framework. https://doi.org/10.1016/j.jnn.2019.07.007
3. Integrating a skills checklist into the COINN neonatal nurse competencies, January 2022, Journal of Neonatal Nursing 28(3), DOI:10.1016/j.jnn.2021.12.003

2. Program Duration

The Advanced Practice Nursing Program in Neonatal Critical Care is a two-year program.

3. Program Rotation

Table 1: Clinical Rotations for Advanced Neonatal Intensive Care Nursing Diploma Program

Stage	Training Year	Mandatory core rotations*		
		Rotation name	Duration	Setting
Junior	D1	Orientation	1 week	Hospital and NICU sitting
		Foundations of neonatal nursing including Practicum	1 week	Maternity Labor and Delivery, Post Natal Care Department
		Neonatal resuscitation and stabilization of the newborn.	1 week	Maternity Labor and Delivery, NICU 2 (Intermediate Care Unit), NICU 3 (Intensive Care Unit) and Simulation Center
		Advance Neonatal Health Assessment	10 weeks	NICU 3 (Intensive Care Unit)
		Neonatal Pathophysiology	15 weeks	NICU 2 (Intermediate Care Unit), NICU 3 (Intensive Care Unit)
		Essential Nursing Practice in NICU	9 weeks	NICU 2 (Intermediate Care Unit), NICU 3 (Intensive Care Unit)

Stage	Training Year	Mandatory core rotations*		
		Rotation name	Duration	Setting
		Ethics in Nursing and Care Dimensions	1 week	NICU 2 (Intermediate Care Unit), NICU 3 (Intensive Care Unit)
		Theoretical part	10 weeks	
		Annual vacation	4 weeks	
	Total		52 weeks	
Senior	D2	Introduction to Research and Evidenced-Based Practice	1	Online in the SCFHS E-Learning Service (Proposal Only)
		Pharmacology in NICU	2	Pharmacy, TPN and formula preparation Unit, NICU 2 (Intermediate Care Unit), NICU 3 (Intensive Care Unit)
		Infection Control and Patient Safety.	8	Infection Control Department, Data Analysis Unit (QMD), NICU 2 (Intermediate Care Unit), NICU 3 (Intensive Care Unit)
		Advanced nursing care of critically ill neonates.	22	NICU 2 (Intermediate Care Unit), NICU 3 (Intensive Care Unit)
		Nursing Leadership and Management	4	NICU 2 (Intermediate Care Unit), NICU 3 (Intensive Care Unit)

Stage	Training Year	Mandatory core rotations*		
		Rotation name	Duration	Setting
		Theoretical Part	11	Lectures and in-class sessions
		Annual vacation	4 weeks	
	Total		52 weeks	

*Mandatory core rotation is a set of rotations that represents the program core components.

Note: PD is authorized to reallocate the number of weeks of training according to the trainees' learning needs.

4. Alignment of Competencies, Roles, Assessment, and Educational Activities with Program Rotations

- This section aims at matching the competencies and objectives of each rotation. Trainees and trainers should collaborate to achieve these objectives during teaching and formative assessments. Their expectations evolve as the training level progresses (training stage and milestones). Objectives under direct supervision by the preceptors while completing core competencies.
- Trainees in year two [D2] who completed the first-year core competencies are expected to complete the rotation objectives independently, while continuing to pursue advanced competencies, as demonstrated in the table below.
- In the second academic year [D2], with every new rotation, trainees may have 3-5 orientation shifts and can start working independently with one patient as a primary nurse. In this case, the program director, clinical instructor, head nurse, and/or in-charge nurse should ensure that a senior staff nurse accompanies the trainee during the working shift. A senior colleague will be the trainee's point of contact to validate and verify the tasks to be performed whenever needed.
- Through continuous formative assessment, the program's clinical instructor and preceptor can evaluate the trainee's preparedness to progress and increase the patient load to two and then three patients during the work shift.

Rotation 1

Foundations of neonatal nursing including Practicum

ROTATION OVERVIEW

This rotation, designed for the Junior Year (D1), is mandatory and introduces trainees to the Labor and Delivery Department, which provides exposure to intrapartum care and immediate newborn management.

ROTATION OBJECTIVES

By the end of this rotation, the trainee will be able to:

Clinical Practice

- Gather comprehensive patient history
- Calculate expected date of confinement (EDC)
- Perform immediate newborn care
- Execute APGAR scoring
- Obtain newborn history
- Assist with physical examination
- Discuss normal newborn characteristics
- Provide evidence- based health education to families and evaluate their practice.
- Provide safe, evidence based nursing care according to NICU slandered
- Support breastfeeding initiation

Intrapartum Skills

- Apply and interpret cardiotocography
- Recognize labor complications

- Communicate with laboring women and families

Newborn Care Skills

- Administer vaccinations
- Monitor blood sugar levels
- Conduct newborn screening
- Perform newborn assessment
- Monitor total serum bilirubin levels (TSB) levels

Clinical nurse expert

Competencies	Enabling Competencies
CN 1 Perform a patient-centered clinical assessment. CN 2 Perform procedures related to assessment and unit scope. CN 3 To systematically monitor the progress of labor and assess fetal well-being through appropriate clinical observations, investigations, and timely interventions in order to ensure optimal maternal and neonatal outcomes. CN 4 Provide safe basic nursing care to a healthy newborn. CN5 Perform assigned unit procedures, and administer neonatal vaccinations under supervision in accordance with hospital policy and safety measure.	• Collect complete health and obstetrical history. • Recognize appropriately urgent cases related to neonate. • Critically analyze and interpret all collected data correctly including the Cardiotocography (CTG). • Monitor the progress of pregnancy and fetal wellbeing appropriately including feta kick sound • Impart Relevant Health Education to Pregnant Women. • Carry out unit-specific procedures while adhering to infection prevention protocols and ensuring patient safety. • Facilitate thorough physical evaluation of the newborn • Interpret and explain normal newborn features to guide accurate assessments • Provide targeted health education to families. • Exhibit knowledge of typical neonatal growth and developmental milestones

Competencies	Enabling Competencies
	• Deliver safe and essential nursing care to healthy neonates • Safely administer neonatal vaccinations under supervision and promptly recognize and escalate urgent neonatal conditions to the appropriate healthcare provider.

Collaborator

Competencies	Enabling Competencies
Col 1. Work effectively with healthcare workers in the healthcare professions to promote understanding and manage differences situations. Col 2. Contributing to safe, timely, and patient-centered maternal and neonatal outcomes.	❖ Show respect toward trainers and colleagues. ❖ Ability to function as an individual and as a member in a multidisciplinary team effectively to provide patient care with managing different situations.

Communicator

Competencies	Enabling Competencies
Com 1 Discuss patient clinical data and findings to the preceptor, clinical instructor, and other healthcare providers in clear, accurate, and understandable language. Com 2 Establish therapeutic communication skills with patient's family. Com 3 Effectively communicate patient progress with the multidisciplinary healthcare team.	❖ Use patient-centered skills to effectively gather relevant information. ❖ Document clinical nursing encounters in an accurate, complete, timely, and accessible manner. ❖ Eexplain clinical data/findings in a good manner to preceptor and clinical instructor and other health care provider. ❖ Communicate clearly, effectively, and appropriately with patient by using empathetic verbal and nonverbal skills.

Health Advocate

Competencies	Enabling Competencies
HA 1. Actively supports and represents patient needs and concerns in clinical practice. HA 2. Contributing to initiatives or plans that enhance health outcomes at the patient's and family member.	❖ Assess the patient's family ability to access various services in the health social system. ❖ Apply the principles of patient safety and health care quality. ❖ Respond to the needs of the mother during delivery to meet good quality care.

Leader

Competencies	Enabling Competencies
Led 1. Demonstrate leadership skill through prioritizing and maintaining personal well-being. Led 2. Establish the highest quality of care with compassion and professionalism Led 3. Aware of self-limitation	❖ Contribute in promoting patient safety. ❖ Manage time to integrate practice and personal life. ❖ Recognizes situations requiring escalation to senior personnel. ❖ Assumes a leadership role when necessary in urgent clinical scenarios.

Scholar

Competencies	Enabling Competencies
S 1. Engage in the continuous education of professional activities through ongoing learning and using the latest evidence based practice. S 2. Share knowledge and evidence-based recommendations with peers and the healthcare team.	❖ Engage in the continuous enhancement of themselves and their profession through continuous education. ❖ Participate in a learning activity. ❖ Contribute to scholarly activity, patient quality and safety. ❖ Seek feedback from preceptors and colleagues to improve knowledge and clinical skills.

Professional

Competencies	Enabling Competencies
P 1. Demonstrate a commitment to patients by applying best practices and professional behavior through delivering safe, ethical and standardized care. P 2. Reflect the highest standards of excellence in clinical care and ethical conduct.	❖ Deliver quality of care with integrity and compassion. ❖ Recognizes limitations and seeks advice and consultations when necessary. ❖ Adhere to the legal and ethical standards of the profession. ❖ Demonstrate punctuality during work for shifts and educational event.

Duration: As per program schedule

Setting: Labor and Delivery Unit, Post-Natal Care Department (Nursery)

Supervision: Clinical Instructor and Preceptor

Educational Activities: Half-day activity, Interactive lectures, Discussion, Simulation Demonstration

WORKPLACE-BASED ASSESSMENTS

Required Direct Observation of Procedural Skills (DOPS):

1. Preparation of Neonatal Environment
2. CTG (Cardiotocography)
3. Immediate Newborn Care
4. APGAR Scoring
5. Vaccination
6. Monitor Blood Sugar Level
7. Newborn Screening
8. Newborn Assessment
9. TSB Checking and Monitoring

In-Training Evaluation Report (ITER):

Comprehensive assessment of labor and delivery competencies.

Assessment of post-natal care competencies.

Learning Activities

- Practice CTG interpretation with supervision
- Shadow experienced NICU stabilization/ Labor nurse.

Rotation 2

Neonatal Resuscitation and stabilization of the newborn.

ROTATION OVERVIEW

Foundational NICU rotation introducing intermediate neonatal care for moderately ill neonates.

ROTATION OBJECTIVES

By the end of this rotation, the trainee will be able to:

Clinical Practice

- Demonstrate comprehensive knowledge of key neonatal concepts
- Analyze common differential diagnoses with nursing interventions
- Apply evidence-based practice
- Identify and respond to urgent cases
- Maintain infection control and patient safety

Technical Skills

- Administer medications and vaccination safely
- Manage oxygen therapy with Performing nebulization and suctioning
- Insert and manage NGT/OG

Clinical Nurse Expert

Collaborator

Competencies	Enabling Competencies
CN 1. Performs comprehensive neonatal assessments CN 2. Practice and assists with NICU procedures according to protocol CN 3. Administers medications and therapies accurately CN 4. Ensures patient identification, safe equipment use, and risk reduction	❖ Applies fundamental NICU intermediate care principles accurately and safely in clinical practice. ❖ Applies clinical reasoning to recognize differential diagnoses and provide appropriate nursing care for NICU patients. ❖ Exhibits comprehensive basic and clinical knowledge of neonatal medical problems and formulates effective secondary prevention plans. ❖ Integrates evidence-based practice into clinical decision-making for NICU patients. ❖ Applies relevant clinical information effectively in problem solving for NICU patients. ❖ Demonstrates knowledge of commonly used NICU medications, including indications, actions, and side effects.

Competencies	Enabling Competencies
	❖ Safely performs diagnostic and therapeutic procedures in the NICU while maintaining infection control and patient safety.

Competencies	Enabling Competencies
COL 1. Works effectively with physicians, and allied health professionals, aware of his/her roles, responsibilities, and respect expertise of team members COL 2. Engages in shared decision-making with physicians, respiratory therapists, lactation consultants, and others	❖ Works collaboratively with physicians and the healthcare team, recognizing personal responsibilities, respecting professional expertise, and actively contributing to coordinated, high-quality care for NICU patients. ❖ Balances independent responsibilities with active participation in a multidisciplinary team to support patient outcomes. ❖ Identifies when to delegate or refer patient care to ensure safe and effective management. ❖ Provides regular updates on patient status to preceptors, physicians, and other team members.

Communicator

Competencies	Enabling Competencies
COM 1. Communicates effectively with physicians and allied health professionals COM 2. Collects accurate and documents relevant clinical information COM 3. Uses empathetic, clear, and supportive communication to engage families in the care of their neonates.	❖ Utilizes patient-centered communication skills to obtain relevant clinical information. ❖ Maintains clear, accurate, and timely documentation of neonatal nursing encounters. ❖ Presents clinical findings accurately and professionally to the healthcare team. ❖ Conveys clinical information in an understandable manner to patients, families, and the care team. ❖ Encourages parental involvement in care and decision-making.

Health Advocate

Competencies	Enabling Competencies
HA 1. Provides emotional support and advocacy for parents. HA 2. Promote health, safety, rights, and well-being of neonates and their families through education, early risk identification, timely escalation, and support of family-centered care.	❖ Assesses the family's ability to access and utilize available health and social services, identifies potential barriers, and provides guidance or referrals to support the patient's care and well-being. ❖ Applies the principles of patient safety and healthcare quality by following best practices, minimizing risks, and ensuring high standards of care in all clinical activities.

Leader

Competencies	Enabling Competencies
LED 1. Uses clinical judgment to support safe care decisions LED 2. Demonstrates leadership by guiding and coordinating patient care, managing resources, making timely decisions, and promoting a safe, organized, and effective NICU environment.	❖ Utilizes clinical reasoning to support safe and appropriate care for NICU patients. ❖ Promotes and supports safe care practices for patients. ❖ Manages workload efficiently while maintaining a healthy work-life balance. ❖ Identifies urgent neonatal situations and notifies the preceptor or CI in a timely manner.

Scholar

Competencies	Enabling Competencies
S 1. Engages in ongoing continuous professional development education and skills S 2. Applies current evidence, guidelines, and best practices to neonatal nursing care under supervision.	❖ Participates in ongoing education to enhance professional knowledge and skills. ❖ Delivers learning activities by setting clear objectives and selecting appropriate teaching methods. ❖ Contributes to academic and clinical initiatives aimed at improving patient outcomes and safety. ❖ Uses NICU protocols and clinical guidelines appropriately. ❖ Integrates theory with clinical practice.

Professional

Competencies	Enabling Competencies
P 1. Practices within legal, ethical, and professional standards P 2. Demonstrates accountability, integrity, and compassion	❖ Practices with compassion and professionalism, asking for support when appropriate. ❖ Adheres to the legal and ethical standards of nursing practice by following professional guidelines, maintaining patient confidentiality and patients' rights, and making decisions in accordance with established laws and ethical principles. ❖ Exhibits reliable attendance and timeliness for clinical duties and educational session. Identifies strengths and learning gaps.

Duration: As per program modules

Setting: Intermediate NICU (Level II)

Supervision: Clinical Instructor and Preceptor

Educational Activities: Half-day activity, Interactive lectures, Discussion, Demonstration

WORKPLACE-BASED ASSESSMENTS

Required DOPS:

1. Medication Administration
2. Oxygen Therapy
3. NGT/OGT Insertion and Feeding
4. Nebulization
5. Suctioning
6. Health Teaching
7. Vaccination
8. Phototherapy

In-Training Evaluation Report (ITER):

End-of-rotation comprehensive assessment with emphasis on foundational competencies

Case-Based Learning

- Case Based Discussion 1
- Case Based Presentation 1

Progression Criteria

- Complete all DOPS with satisfactory performance
- Manage one patient independently
- Achieve minimum 70% in ITER
- Demonstrate readiness for increased patient load

Rotation 3

Advance Neonatal Health Assessment

ROTATION OVERVIEW

Introduction to high-acuity neonatal intensive care for critically ill neonates.

ROTATION OBJECTIVES

By the end of this rotation, the trainee will be able to:

Advanced Clinical Practice

- Apply broad clinical knowledge
- Analyze complex differential diagnoses and prioritize appropriate nursing interventions
- Respond to urgent cases using judgment
- Apply advanced evidence-based practice

Advanced Technical Skills

- Aseptic technique and wound care
- Assist with surfactant therapy
- Manage complex medications and use of nebulizer
- Safely assist in total parenteral nutrition (TPNA) Administration according to intuitional policy.
- Assist with umbilical lines
- Provide safe nursing management for mechanically ventilated neonate according to NICU protocol
- Manage enteral feeding
- Provide incubator care

- Applying suctioning
- Tracheostomy care
- Blood transfusion management

At the end of this rotation, the trainee will:

Clinical Nurse Expert

Competencies	Enabling Competencies
CN 1. Demonstrates advanced clinical expertise in the care of critically ill neonates by performing comprehensive assessments, managing different cases, medication, and therapies, and responding effectively to emergencies. CN 2. Utilizes foundational and clinical knowledge to plan secondary prevention for critically ill neonates. CN 3. Identifies and manages urgent cases independently, applying sound NICU nursing judgment.	❖ Applies thorough and precise knowledge of key neonatal critical care concepts to guide clinical decision-making and patient management. ❖ Recognizes relevant differential diagnoses and plans suitable nursing care for critically ill neonates. ❖ Demonstrates the ability to evaluate and use evidence-base- practice to guide safe and effective clinical decisions. ❖ Exhibits knowledge of NICU medications and their pharmacodynamics, pharmacokinetics, and potential adverse effects. ❖ Follows infection control protocol and performs NICU diagnostic and therapeutic procedures safely, demonstrating knowledge of indications, limitations, and potential complications.

Collaborator

Competencies	Enabling Competencies
COL 1. Collaborates effectively in respectful manner with physicians and allied health professionals, practices within defined roles and responsibilities COL 2. Respects the roles, responsibilities, and expertise of all NICU team members COL 3. Contributes constructively to resolving disagreements or workflow challenges within the NICU team	❖ Demonstrates professionalism by showing respect and courtesy toward trainers, colleagues, and all members of the NICU team, fostering a positive and collaborative work environment. ❖ Effectively manages challenging situations and communicates professionally while functioning independently and collaboratively within a multidisciplinary team. ❖ Recognizes situations where patient care requires escalation or transfer and appropriately delegates or notifies another nurse or healthcare professional to ensure safe and effective care. ❖ Accepts responsibilities appropriately to support patient care and team workflow.

Communicator

Competencies	Enabling Competencies
COM 1. Communicates information in a clear and compassionate manner with family's physicians and the multidisciplinary team COM 2. Escalate any urgent neonatal concerns to the preceptor or medical team within an appropriate period, documenting the communication process.	❖ Demonstrates patient- and family-centered communication skills to effectively gather accurate and relevant clinical information, ensuring that assessment reflects the patient's needs and context. ❖ Effectively presents and discusses clinical findings with preceptors, instructors, and the healthcare team. ❖ Ensures thorough and timely clinical documentation and communicates patient information effectively to families and the care team

Health advocate

Competencies	Enabling Competencies
HA 1. Advocates for the needs of critically ill neonates and their families HA 2. Identifies potential or actual risks to neonatal health and advocates for timely intervention to prevent complications	❖ Supports families in understanding and accessing healthcare and social services, ensuring their needs are met to optimize neonatal outcomes. ❖ Promotes a culture of safety by adhering to protocols, monitoring for hazards, and advocating for safe practices in neonatal care.

Leader

Competencies	Enabling Competencies
LED 1. Enhances patient safety, prioritizes tasks while balancing workload, and promptly recognizes and reports urgent neonatal cases	❖ Manages workload and personal commitments effectively, ensuring integration of practice, learning, and self-care. ❖ Exhibits effective leadership by coordinating care to enhance patient safety, balancing workload efficiently, and making rapid decisions when urgent neonatal situations arise.

Scholar

Competencies	Enabling Competencies
S 1. Applies current research and evidence to neonatal critical care S 2. Plan and deliver a learning activity	❖ Participates in workshops, courses, or in-service training relevant to NICU critical care, patient quality and safety ❖ Actively pursues continuous professional growth through education and reflective practice.

Professional

Competencies	Enabling Competencies
P 1. Adheres to legal, ethical, and professional standards to safeguard both patient welfare and professional integrity P 2. Consistently follow NICU policies and ethical standards during every shift, documenting adherence in the preceptor evaluation log.	❖ Demonstrates compliance with legal and ethical standards to protect patient interests and uphold professional conduct. ❖ Demonstrates leadership through professionalism and consistent punctuality. ❖ Accepts responsibility for assigned neonates and tasks with preceptor supervision. ❖ Follows all NICU safety and infection control protocols during each shift.

Duration: As per program modules

Setting: NICU Level III

Supervision: Clinical Instructor and Preceptor with close supervision

Educational Activities: Half-day activity, Interactive lectures, Discussion, Demonstration.

WORKPLACE-BASED ASSESSMENTS

Required DOPS:

1. Aseptic Technique/Wound Care
2. Assist Surfactant Therapy
3. Medication/Nebulizer
4. Assist TPN Administration
5. Assisting Umbilical Line Insertion
6. Maintaining Mechanical Ventilations/Care
7. Orogastric/Nasogastric Tube and Feeding
8. Care of Infant in Incubator
9. Suctioning
10. Tracheostomy Care
11. Blood Transfusion

In-Training Evaluation Report (ITER):

Comprehensive assessment of high-acuity care competencies

Case-Based Learning

- Case Based Discussion 2 & 3
- Case Presentation 2 & 3

Rotation 4

Neonatal Pathophysiology

Rotation Overview

This rotation focuses on understanding the pathophysiological changes affecting neonates during the perinatal and neonatal periods. It emphasizes the disease mechanisms, risk factors, complications, and the clinical correlation of common neonatal conditions in the NICU.

Rotation Objectives

By the end of this rotation, the trainee will be able to:

Clinical Practice Objectives

- Identify common neonatal pathophysiological changes.
- Correlate disease processes with clinical assessment findings.
- Recognize complications of neonatal disorders.
- Interpret acid–base imbalance and blood gas results.

Technical Skills Objectives

- Perform systematic neonatal assessment.
- Interpret laboratory results, including arterial blood gases (ABGs0.
- Monitor neonates for clinical instability.
- Participate in appropriate clinical interventions

At the end of this rotation, the trainee will:

Clinical Nurse Expert

Competencies	Enabling Competencies
CN 1. Integrate knowledge of common neonatal pathophysiological changes into clinical practice CN 2. Correlate disease processes with comprehensive clinical assessment findings CN 3. Anticipate and recognize complications associated with neonatal disorders CN 4. Interpret acid–base imbalances and blood gas results accurately	❖ Explain underlying disease mechanisms affecting neonates. ❖ Differentiate between normal transitional physiology and pathological changes. ❖ Apply theoretical knowledge to real clinical scenarios in the NICU. ❖ Perform systematic and focused neonatal assessments. ❖ Analyze assessment findings in relation to specific body systems. ❖ Prioritize care based management on identified abnormalities. ❖ Identify early warning signs of deterioration. ❖ Monitor high-risk neonates appropriately. ❖ Escalate concerns promptly and collaborate with the multidisciplinary team. ❖ Analyze ABG values systematically. ❖ Correlate laboratory findings with the neonate's clinical condition.

Collaborator

Competencies	Enabling Competencies
COL 1. Collaborate effectively with the multidisciplinary team to manage neonates COL 2. Communicate patient status clearly to ensure safe and continuous care COL 3. Engage in clinical discussions and care planning COL 4. Advocate for neonates and families through coordinated care	❖ Participate in team discussions and rounds. ❖ Share clinical observations to inform care plans. ❖ Apply evidence-based knowledge in decision-making. ❖ Provide timely updates to the healthcare team. ❖ Use structured handover tools (e.g., SBAR). ❖ Document patient information accurately. ❖ Contribute insights during case reviews. ❖ Support team decision-making. ❖ Reflect on feedback to improve practice. ❖ Identify and communicate patient/family needs. ❖ Facilitate referrals and consultations. ❖ Involve families in care decisions appropriately.

Communicator

Competencies	Enabling Competencies
COM 1. Demonstrate effective communication and patient-centered care in neonatal clinical practice. COM 2. Demonstrate professional documentation and clinical reporting skills within the multidisciplinary team.	❖ Use patient-centered skills to effectively gather relevant information. ❖ Share information with patients/family and other healthcare providers in a clear and understandable manner. ❖ Document clinical nursing encounters accurately, completely, and in a timely and accessible manner. ❖ Present and discuss clinical data/findings effectively with the preceptor, clinical instructor, and other healthcare providers.

Health advocate

Competencies	Enabling Competencies
HA 1. Promote and advocate for the health, safety, and developmental needs of neonates in the NICU. HA 2. Support and empower families through education and family-centered care in the NICU.	❖ Assess neonates' physical and developmental status and report concerns promptly to the multidisciplinary team. ❖ Ensure adherence to infection prevention and control measures specific to NICU environment. ❖ Provide clear education to parents regarding neonatal condition and based on their needs. ❖ Encourage parental involvement in care (e.g., kangaroo care, feeding support) as appropriate.

Leader

Competencies	Enabling Competencies
LED 1. Demonstrate effective leadership and team coordination in daily unit operations LED 2. Ensure safe patient care delivery through adherence to clinical standards and quality measures	❖ Participate in shift endorsement ensuring clarity, accountability, and continuity of care. ❖ Communicate effectively with multidisciplinary team members to resolve operational issues. ❖ Supervise medication administration process and ensure alignment with physician orders and EMAR. ❖ Support implementation of infection control and patient safety protocols.

Scholar

Competencies	Enabling Competencies
S 1. Integrate evidence-based knowledge into clinical practice in NICU care S 2. Engage in continuous learning and knowledge sharing to improve neonatal patient outcomes	❖ Demonstrate the principle of neonatal physiology and common NICU conditions (e.g., RDS, sepsis, prematurity complications). ❖ Apply hospital policies and evidence-based guidelines when providing neonatal care (infection control, medication safety, and thermoregulation). ❖ Identify personal learning needs and seek guidance from preceptors and senior nurses. ❖ Utilize approved clinical resources and hospital protocols to enhance knowledge in neonatal care. ❖ Participate in educational sessions, simulations, or competency-based training within the unit.

Professional

Competencies	Enabling Competencies
P 1. Demonstrate professional accountability and ethical practice in the NICU environment P 2. Exhibit effective communication and teamwork within the multidisciplinary NICU team	❖ Adhere to hospital policies, NICU protocols, and infection prevention standards at all times. ❖ Maintain accurate, timely, and complete documentation in the patient's medical record (EMR). ❖ Demonstrate accountability for assigned neonatal patients under supervision. ❖ Communicate clearly and respectfully with physicians, respiratory therapists, and other healthcare professionals. ❖ Provide accurate and structured handover using approved communication tools (e.g., SBAR). ❖ Engage in family-centered communication, providing updates within scope and under supervision.

Duration: As per program modules

Setting: NICU Level III

Supervision: Clinical Instructor and Preceptor with close supervision

Educational Activities: Half-day activity, Interactive lectures, Discussion, Demonstration

WORKPLACE-BASED ASSESSMENTS

Required DOPS:

1. Aseptic Technique/Wound Care
2. Assist Surfactant Therapy
3. Medication/Nebulizer
4. Assist TPN Administration
5. Assisting Umbilical Line Insertion
6. Maintaining Mechanical Ventilations/Care
7. Oro-gastric/Nasogastric Tube and Feeding
8. Care of Infant in Incubator
9. Suctioning
10. Tracheostomy Care
11. Blood Transfusion

In-Training Evaluation Report (ITER):

Comprehensive assessment of high-acuity care competencies

Case-Based Learning

- Case Based Discussion 2 & 3
- Case Presentation 2 & 3

Rotation 5

Essential Nursing Practices in the NICU

ROTATION OVERVIEW

This rotation prepares trainees to provide safe evidence-based nursing care for critically ill neonates in the NICU. It focuses on professional roles, thermoregulation, fluid and nutritional management, pain control, ventilator care, blood transfusion, procedural care, and discharge planning.

ROTATION OBJECTIVES

Clinical Practice

By the end of this rotation, trainees will be able to:

- Provide safe, evidence-based nursing care to critically ill neonates.
- Perform comprehensive neonatal assessment and participate in daily care planning.
- Identify complications related to prematurity, fluid imbalance, and congenital conditions.
- Apply appropriate pain management and discharge planning principles.

Technical Skills

- Maintain thermoregulation and monitor fluid and electrolyte balance.
- Administer enteral and parenteral nutrition safely.
- Provide nursing care for neonates on respiratory support, including ventilator management.
- Assist with and monitor blood transfusion and pre-/post-procedural care.

At the end of this rotation, the trainee will:

Clinical Nurse Expert

Competencies	Enabling Competencies
CN 1. Demonstrate safe and effective clinical nursing care for critically ill neonates CN 2. Perform technical skills related to neonatal critical care safely and accurately CN 3. Apply professional nursing judgment and communication in the NICU environment	❖ Conduct comprehensive assessment of neonates, including vital signs, growth, and developmental status. ❖ Recognize early signs of deterioration and respond appropriately. ❖ Implement evidence-based interventions for common NICU conditions (e.g., prematurity, sepsis, respiratory distress). ❖ Apply principles of infection control and safety in all nursing procedures. ❖ Maintain thermoregulation and monitor fluid/electrolyte balance in neonates. ❖ Provide enteral and parenteral nutrition according to NICU protocols. ❖ Manage neonates on ventilators, CPAP, or oxygen therapy, including troubleshooting alarms. ❖ Assist with clinical procedures such as blood transfusion, IV insertion, and pre/post-procedural care. ❖ Document nursing care accurately and timely in patient records. ❖ Communicate effectively with the multidisciplinary team, including physicians, respiratory therapists, and parents. ❖ Educate parents on neonatal care, discharge planning, and follow-up needs.

Collaborator

Competencies	Enabling Competencies
COL 1. Effective Team Collaboration COL 2. Coordination of Patient Care	❖ Communicate clearly and respectfully with multidisciplinary team members regarding patient care. ❖ Participate actively in team discussions, handovers, and care planning. ❖ Demonstrate and recognize the of roles and responsibilities of each team member in the NICU. ❖ Assist in coordinating care plans for critically ill neonates with input from physicians, nurses, and allied health staff. ❖ Support safe and timely execution of clinical interventions by collaborating with the team.

Communicator

Competencies	Enabling Competencies
COM 1. Effectively communicate with families and healthcare team regarding neonatal care COM 2. Document and report clinical information accurately and professionally.	❖ Demonstrate clear, empathetic, and culturally sensitive communication with parents and caregivers. ❖ Provide accurate updates on the neonate's condition during rounds and handovers. Collaborate effectively with multidisciplinary team members to ensure continuity of care. ❖ Maintain complete and precise medical records for all nursing interventions. ❖ Use standardized tools and protocols for reporting vital signs, procedures, and patient status. ❖ Communicate critical information promptly to the appropriate healthcare professionals.

Health advocate

Competencies	Enabling Competencies
HA 1. Promote and advocate for the health and well-being of neonates and their families in the NICU HA 2. Support and facilitate evidence-based health promotion practices in the NICU	❖ Identify family and patient needs, preferences, and concerns related to neonatal care. ❖ Educate families about NICU care, procedures, and preventive strategies. ❖ Collaborate with the multidisciplinary team to implement individualized care plans. ❖ Recognize risk factors and implement strategies to prevent complications in neonates. ❖ Advocate for safe and effective clinical practices, including infection prevention and developmental care.

Leader

Competencies	Enabling Competencies
LED 1. Demonstrate effective leadership and coordination of the NICU team to ensure safe, high-quality care for critically ill neonates LED 2. Apply evidence-based clinical decision-making to improve patient outcomes in the NICU	❖ Prioritize nursing tasks and allocate resources efficiently during high-acuity situations. ❖ Communicate clearly and collaboratively with multidisciplinary team members. ❖ Monitor team performance and provide constructive feedback to enhance clinical practice. ❖ Interpret neonatal assessment data to guide care planning and interventions. ❖ Evaluate the effectiveness of interventions and modify care plans accordingly. ❖ Utilize NICU protocols and guidelines to ensure patient safety and quality care.

Scholar

Competencies	Enabling Competencies
S 1. Provide safe, evidence-based clinical care for critically ill neonates in the NICU S 2. Demonstrate technical skills in neonatal procedures and support for high-risk infants	❖ Perform comprehensive neonatal assessments, including vital signs, growth parameters, and clinical status. ❖ Identify and respond appropriately to clinical changes or complications in neonates. ❖ Apply evidence-based interventions for pain management, thermoregulation, and infection prevention. ❖ Administer enteral and parenteral nutrition safely according to guidelines. ❖ Provide care for neonates on respiratory support, including ventilator monitoring and suctioning. ❖ Assist in blood transfusion, exchange transfusion, and other NICU procedures following safety protocols.

Professional

Competencies	Enabling Competencies
P 1. Provide safe and effective clinical care to critically ill neonates in the NICU P 2. Demonstrate technical nursing skills required for advanced NICU care	❖ Perform accurate neonatal assessments (vital signs, growth, and clinical status). ❖ Recognize and respond appropriately to signs of clinical deterioration. ❖ Apply evidence-based nursing interventions for common NICU conditions (prematurity, fluid/electrolyte imbalance, infections). ❖ Maintain thermoregulation and manage fluid, electrolyte, and nutritional requirements safely. ❖ Provide care for neonates on respiratory support, including ventilator monitoring.

Duration: As per program rotation

Setting: NICU Level II and III

Supervision: Clinical Instructor and Preceptor with close supervision

Educational Activities: Half-day activity, Interactive lectures, Discussion, Demonstration

WORKPLACE-BASED ASSESSMENTS

Required DOPS:

1. Aseptic Technique/Wound Care
2. Assist Surfactant Therapy
3. Medication/Nebulizer
4. Assist TPN Administration
5. Assisting Umbilical Line Insertion
6. Maintaining Mechanical Ventilations/Care
7. Orogastric/Nasogastric Tube and Feeding
8. Care of Infant in Incubator
9. Suctioning
10. Tracheostomy Care
11. Blood Transfusion
12. Oxygen Therapy

In-Training Evaluation Report (ITER):

Comprehensive assessment of high-acuity care competencies

Case-Based Learning

- Case Based Discussion 2 & 3
- Case Presentation 2 & 3

Rotation 6

Ethics in Nursing and Care Dimensions

ROTATION OVERVIEW

This rotation introduces junior NICU trainees to essential ethical principles, legal standards, and professional responsibilities in neonatal care. It focuses on ethical decision making, managing moral dilemmas, and applying ethical standards in the care of critically ill neonates.

ROTATION OBJECTIVES

Clinical Practice

By the end of this rotation, trainees will be able to:

- Apply basic ethical principles in NICU patient care.
- Recognizing common ethical issues in neonatal practice (consent, end-of-life care, and patient rights).
- Adhere to legal, professional, and institutional standards.
- Communicate ethically with families and the healthcare team.

Technical Skills

- Participate in ethical discussions and case reviews.
- Document care according to ethical and legal requirements.
- Support informed consent and maintain patient confidentiality.

At the end of this rotation, the trainee will:

Clinical Nurse Expert

Competencies	Enabling Competencies
CN 1. Integrate ethical principles into clinical decision-making in NICU practice CN 2. Demonstrate professional accountability within legal and ethical standards CN 3. Apply professional nursing judgment and communication in the NICU environment	❖ Apply core ethical principles (autonomy, beneficence, non-maleficence, justice) in neonatal care scenarios. ❖ Identify ethical dilemmas related to critically ill neonates (e.g., consent, DNR, limitation of care). ❖ Escalate ethical concerns appropriately through the chain of command. ❖ Adhere to institutional policies and the scope of practice. ❖ Maintain accurate and legally sound documentation. ❖ Protect patient confidentiality and support informed consent processes. ❖ Communicate sensitively with families during critical or end-of-life situations. ❖ Respect cultural, religious, and family values in care planning.

Collaborator

Competencies	Enabling Competencies
COL 1. Effective Team Collaboration COL 2. Coordination of Patient Care	❖ Communicate clearly and respectfully with multidisciplinary team members regarding patient care. ❖ Participate actively in team discussions, handovers, and care planning. ❖ Demonstrate and recognize the of roles and responsibilities of each team member in the NICU. ❖ Assist in coordinating care plans for critically ill neonates with input from physicians, nurses, and allied health staff. ❖ Support safe and timely execution of clinical interventions by collaborating with the team.

Communicator

Competencies	Enabling Competencies
COM 1. Demonstrate ethical and professional communication with families in the NICU. COM 2. Communicate effectively within the multidisciplinary team while upholding ethical standards.	❖ Communicate clearly and compassionately with parents regarding the neonate's condition under supervision. ❖ Respect cultural, religious, and family values during discussions about care. ❖ Maintain confidentiality and privacy when sharing patient information. ❖ Share accurate and timely patient information during handover and case discussions. ❖ Raise ethical concerns appropriately through the chain of command. ❖ Demonstrate respectful and professional communication with all team members.

Health advocate

Competencies	Enabling Competencies
HA 1. Identify and address the health needs and rights of critically ill neonates and their families. HA 2. Promote ethical, family-centered decision-making in the NICU.	❖ Recognize social, cultural, and ethical factors affecting neonatal care and family needs. ❖ Advocate for appropriate care and resources for neonates within the NICU setting. ❖ Escalate concerns regarding gaps in patient care or unmet needs through proper channels. ❖ Support families in understanding treatment options and ethical implications. ❖ Facilitate communication between families and the multidisciplinary team to uphold neonates' best interests.

Leader

Competencies	Enabling Competencies
LED 1. Demonstrate effective leadership and coordination of the NICU team to ensure safe, high-quality care for critically ill neonates LED 2. Apply evidence-based clinical decision-making to improve patient outcomes in the NICU	❖ Prioritize nursing tasks and allocate resources efficiently during high-acuity situations. ❖ Communicate clearly and collaboratively with multidisciplinary team members. ❖ Monitor team performance and provide constructive feedback to enhance clinical practice. ❖ Interpret neonatal assessment data to guide care planning and interventions. ❖ Evaluate the effectiveness of interventions and modify care plans accordingly.

Scholar

Competencies	Enabling Competencies
S 1. Demonstrate the ability to critically reflect on ethical issues and evidence-based practice in NICU care S 2. Engage in continuous learning and knowledge sharing related to ethics in neonatal nursing	❖ Identify ethical issues and relevant evidence in neonatal care scenarios. ❖ Apply ethical reasoning to integrate evidence into clinical decision-making. ❖ Reflect on clinical experiences to improve future practice and patient outcomes. ❖ Participate in case discussions and ethical rounds in the NICU. ❖ Seek feedback from mentors and peers on ethical decision-making. ❖ Share learning and best practices with colleagues to support team development.

Professional

Competencies	Enabling Competencies
P 1 Uphold professional and ethical standards in all aspects of NICU practice P 2 Model ethical behavior and professional conduct within the multidisciplinary team	❖ Adhere to nursing codes of ethics, legal regulations, and institutional policies. ❖ Demonstrate accountability and responsibility in clinical care and documentation. ❖ Maintain patient confidentiality and respect patient rights at all times. ❖ Communicate respectfully and collaboratively with all team members. ❖ Recognize and manage personal biases and conflicts of interest.

Duration: As per program rotation

Setting: NICU Level II and III

Supervision: Clinical Instructor and Preceptor

Educational Activities: Health Teaching, Discussion, Demonstration.

WORKPLACE-BASED ASSESSMENTS

Required DOPS:

N/A

In-Training Evaluation Report (ITER):

Comprehensive assessment of Professionalism and ethical approach

Case-Based Learning

N/A

Rotation 7

Introduction to Research and Evidence-Based Practice

ROTATION OVERVIEW

This rotation introduces senior NICU trainees to nursing research and evidence-based practice (EBP). Trainees learn to appraise research, design basic proposals, and apply evidence to improve neonatal care and clinical decision-making.

ROTATION OBJECTIVES

By the end of this rotation, the trainee will be able to:

Clinical / Professional Application:

Identify research problems relevant to neonatal practice.

Apply evidence-based practice principles in NICU care.

Critically appraise research findings to guide patient care.

Technical / Research Skills:

Apply research methodology and differentiate study designs.

Conduct literature reviews and identify gaps in practice.

Design a basic research proposal or small-scale study.

Analytical / Critical Thinking Skills:

Critique research methods and data analysis.

Integrate evidence with clinical expertise for better outcomes.

Illustrate the principles and history of evidence-based nursing practice.

At the end of this rotation, the trainee will:

Clinical nurse Expert

Competencies	Enabling Competencies
CN 1. Apply evidence-based practice principles to improve NICU patient care CN 2. Critically appraise and utilize nursing research to support clinical practice CN 3. Lead or participate in research initiatives to address clinical practice problems	❖ Integrate current research findings into clinical decision-making for critically ill neonates. ❖ Evaluate the applicability of evidence to specific NICU patient populations. ❖ Collaborate with the healthcare team to implement evidence-based interventions safely. ❖ Conduct literature reviews to identify high quality, relevant research evidence. ❖ Critically analyze research design, methodology, and statistical outcomes. ❖ Summarize and communicate findings to the NICU team to inform patient care decisions. ❖ Identify clinical problems suitable for research or quality improvement projects in the NICU. ❖ Design, plan, and contribute to research proposals or small-scale studies. ❖ Monitor, evaluate, and report outcomes of research or evidence-based interventions to enhance neonatal care quality.

Collaborator

Competencies	Enabling Competencies
COL 1. Work with the multidisciplinary team to integrate research into NICU practice. COL 2. Support team-based quality improvement initiatives using research evidence.	❖ Participate in team discussions about implementing evidence-based interventions. ❖ Seek input from colleagues to adapt research findings to the clinical context. ❖ Facilitate teamwork for planning and evaluating research-informed care initiatives. ❖ Contribute data and observations to support evidence-based QI projects. ❖ Collaborate in monitoring outcomes of research-informed interventions.

Communicator

Competencies	Enabling Competencies
COM 1. Effectively communicate research findings to the NICU team COM 2. Facilitate informed decision-making with families using evidence-based information	❖ Present evidence clearly and concisely in team meetings or case discussions. ❖ Translate complex research terminology into understandable clinical recommendations. ❖ Use visual aids and summaries to support effective communication of evidence. ❖ Explain research-supported care options to families in understandable language. ❖ Discuss risks, benefits, and alternatives using evidence to support clinical decisions.

Health advocate

Competencies	Enabling Competencies
HA 1. Promote patient safety and quality care through evidence-based interventions HA 2. Champion family-centered care using evidence to guide advocacy	❖ Identify clinical practice gaps that could benefit from research-informed solutions. ❖ Advocate for the implementation of evidence-based strategies to improve neonatal outcomes. ❖ Monitor and evaluate the impact of interventions on patient safety and quality of care. ❖ Use research evidence to support family engagement in care planning. ❖ Identify barriers to family-centered interventions and propose solutions. ❖ Advocate for patient rights and ethical care based on research-informed policies.

Leader

Competencies	Enabling Competencies
LED 1. Lead initiatives to implement evidence-based practice in the NICU LED 2. Promote a culture of research, innovation, and continuous learning among NICU staff	❖ Identify opportunities for practice improvement using current research evidence. ❖ Plan and coordinate the implementation of evidence-based interventions in the NICU. ❖ Monitor and evaluate outcomes to ensure interventions improve patient care and safety. ❖ Encourage colleagues to engage in evidence-based practice and quality improvement projects. ❖ Facilitate team discussions on ethical and effective use of research in clinical decision-making.

Scholar

Competencies	Enabling Competencies
S 1. Critically appraise and synthesize evidence to inform NICU practice S 2. Engage in research and quality improvement projects in the NICU	❖ Conduct systematic literature reviews relevant to neonatal nursing issues. ❖ Analyze research methodology, validity, and applicability to practice. ❖ Summarize evidence and make recommendations for clinical implementation. ❖ Develop research questions or hypotheses addressing NICU clinical problems. ❖ Design and implement small-scale research or QI studies under supervision.

Professional

Competencies	Enabling Competencies
P 1. Demonstrate ethical and professional conduct in research and evidence-based practice P 2. Serve as a role model for integrating research into NICU practice	❖ Ensure adherence to ethical standards in research, including informed consent. ❖ Maintain integrity and accuracy in data collection, analysis, and reporting. ❖ Respect confidentiality and patient rights during all research activities. ❖ Mentor junior trainees in critical appraisal and evidence-based practice. ❖ Demonstrate accountability for using evidence to support clinical decisions. ❖ Promote a culture of continuous learning and improvement through research utilization.

Duration: As per program schedule

Setting: Online in the SCFHS E-Learning Service

Supervision: TPC Member

Educational Activities: Research Proposal

WORKPLACE-BASED ASSESSMENTS

Required DOPS:

N/A

In-Training Evaluation Report (ITER):

Proposal Presentation

Rotation 8

Pharmacology in Neonatal Intensive Nursing Care

ROTATION OVERVIEW

This rotation provides senior NICU trainees with advanced knowledge of neonatal pharmacology, including drug classes, pharmacokinetics, pharmacodynamics, indications, adverse effects, and safety. Emphasis is placed on safe drug calculations, administration, monitoring, documentation, and parental education. Integration of pharmacology with neonatal pathophysiology and clinical care.

ROTATION OBJECTIVES

By the end of this rotation, the trainee will be able to:

Advanced Clinical Practice

- Apply pharmacokinetic and pharmacodynamic principles in neonatal drug therapy.
- Recognize and manage adverse drug reactions and emergency medications.
- Integrate pharmacology with pathophysiology for safe, effective neonatal care.

Technical / Professional Skills

- Calculate and safely administer drug doses and IV fluids.
- Document drug administration and monitor patient responses accurately.
- Educate families on neonatal medication administration and preparation.

At the end of this rotation, the trainee will:

Clinical Nurse Expert

Competencies	Enabling Competencies
CN 1. Apply advanced pharmacological knowledge to safe and effective neonatal care. CN 2. Ensure medication safety and prevent errors in the NICU. CN 3. Integrate pharmacology with multidisciplinary care and family education	❖ Select appropriate medications based on neonatal pathophysiology, gestational age, and weight. ❖ Calculate accurate dosages, infusion rates, and choose the correct routes of administration. ❖ Monitor neonates for therapeutic effects, adverse reactions, and drug interactions. ❖ Implement strategies to minimize medication errors, including double-checking and adherence to protocols. ❖ Recognize, report, and manage adverse drug reactions and toxicities promptly. ❖ Maintain accurate and complete documentation of drug administration and patient responses. ❖ Collaborate with physicians, pharmacists, and the healthcare team to optimize drug therapy. ❖ Educate families on safe preparation, administration, and monitoring of medications.

Collaborator

Competencies	Enabling Competencies
COL 1. Work effectively with the multidisciplinary team to optimize neonatal pharmacotherapy COL 2. Coordinate care to ensure safe and timely administration of medications.	❖ Collaborate with physicians and pharmacists to select appropriate medications. ❖ Contribute to treatment planning during case discussions and rounds. ❖ Share knowledge on drug safety and best practices with the team. ❖ Assist in scheduling and prioritizing medication administration in critical situations. ❖ Communicate clearly about IV fluids, infusion rates, and timing with nurses and support staff.

Communicator

Competencies	Enabling Competencies
COM 1. Effectively communicate pharmacological information with the families and the healthcare team COM 2. Facilitate clear, ethical, and timely information exchange within the NICU	❖ Explain the medication purpose, dosage, and side effects to families clearly. ❖ Use appropriate communication strategies during critical or emergencies. ❖ Document and report patient responses accurately to the team. ❖ Communicate adverse drug reactions or errors promptly. ❖ Participate in handovers and multidisciplinary discussions on pharmacotherapy.

Health advocate

Competencies	Enabling Competencies
HA 1. Advocate for the neonates' safety and effective pharmacological care. HA 2. Support equitable access to essential neonatal medications	❖ Identify and report potential risks in medication administration ❖ Promote family-centered care regarding drug therapy. ❖ Escalate concerns about adverse reactions or unsafe practices appropriately. ❖ Ensure high-risk medications are available and correctly stocked. ❖ Participate in discussions regarding the ethical allocation of scarce medications.

Leader

Competencies	Enabling Competencies
LED 1. Demonstrate leadership in implementing safe pharmacological practices LED 2. Promote continuous quality improvement in neonatal drug management	❖ Lead initiatives to reduce medication errors and enhance patient safety. ❖ Supervise junior nurses during medication preparation and administration. ❖ Monitor adherence to NICU protocols and standards. ❖ Participate in audits, drug reviews, and quality improvement projects. ❖ Analyze incidents and implement preventive strategies. ❖ Mentor staff on safe and evidence-based medication practices.

Scholar

Competencies	Enabling Competencies
S 1. Critically appraise and synthesize evidence to inform NICU practice S 2. Engage in research and quality improvement projects in the NICU	❖ Conduct systematic literature reviews relevant to neonatal nursing issues. ❖ Analyze research methodology, validity, and applicability to practice. ❖ Summarize evidence and make recommendations for clinical implementation. ❖ Develop research questions or hypotheses addressing NICU clinical problems. ❖ Design and implement small-scale research or QI studies under supervision.

Professional

Competencies	Enabling Competencies
P 1 Demonstrate ethical, legal, and professional conduct in pharmacological practice. P 2. Model professional behavior and accountability within the NICU team.	❖ Adhere to institutional policies, legal regulations, and ethical guidelines. ❖ Maintain accurate documentation of all drug administrations. ❖ Ensure patient confidentiality and informed consent are upheld. ❖ Serve as a role model in safe and evidence-based medication administration. ❖ Accept responsibility for clinical decisions and actions. ❖ Mentor colleagues on ethical and professional pharmacological practices.

Duration: As per program schedule

Setting: Pharmacy, TPN, formula preparation Unit, NICU 2 (Intermediate Care Unit),NICU 3 (Intensive Care Unit)

Supervision: Clinical Instructor with increased independence, preceptor, and medication nurse

Educational Activities: Medication preparation, calculation and administration

WORKPLACE-BASED ASSESSMENTS

Required DOPS:

N/A

In-Training Evaluation Report (ITER):

Advanced competency assessment with emphasis on independence

Rotation 9

Infection Control and Patient Safety

ROTATION OVERVIEW

This rotation equips senior NICU trainees with the knowledge and skills required to prevent and control infections in neonates. The focus is on hospital-acquired infections, modes of transmission, risk factors, and implementation of infection control measures to ensure safe, infection-free care.

ROTATION OBJECTIVES

By the end of this rotation, the trainee will be able to:

Advanced Clinical Practice

- Explain infection control and patient safety concepts.
- Identify risk factors and causes of neonatal infections.
- Implement preventive measures based on the patient's condition and the source of infection.

Advanced Technical Skills

- Perform correct hand hygiene, donning, gloving, and N95 use.
- Apply NICU infection-control policies and procedures.
- Select appropriate infection-control modalities in practice.

At the end of this rotation, the trainees will:

Clinical Nurse Expert

Competencies	Enabling Competencies
CN 1. Apply advanced pharmacological knowledge to safe and effective neonatal care CN 2. Ensure medication safety and prevent errors in the NICU CN 3. Integrate pharmacology with multidisciplinary care and family education	❖ Select appropriate medications based on neonatal pathophysiology, gestational age, and weight. ❖ Calculate accurate dosages, infusion rates, and choose the correct routes of administration. ❖ Monitor neonates for therapeutic effects, adverse reactions, and drug interactions. ❖ Implement strategies to minimize medication errors, including double-checking and adherence to protocols. ❖ Recognize, report, and manage adverse drug reactions and toxicities promptly. ❖ Maintain accurate and complete documentation of drug administration and patient responses. ❖ Collaborate with physicians, pharmacists, and the healthcare team to optimize drug therapy. ❖ Educate families on safe preparation, administration, and monitoring of medications.

Collaborator

Competencies	Enabling Competencies
COL 1. Work collaboratively with the NICU team to prevent infections COL 2. Engage multidisciplinary teams in infection prevention initiatives	❖ Participate in infection-control audits and rounds. ❖ Coordinate care strategies with nurses, physicians, and infection-control specialists. ❖ Support colleagues in maintaining safe practices. ❖ Contribute to planning and implementing unit-wide infection-control policies. ❖ Participate in discussions about patient-specific infection risks.

Communicator

Competencies	Enabling Competencies
COM 1. Effectively communicate infection-control measures to families of NICU patients COM 2, Communicate effectively with the healthcare team regarding infection risks	❖ Explain the rationale for infection-prevention protocols. ❖ Provide clear guidance on hand hygiene and PPE use for families. ❖ Answer questions regarding neonatal infection risks and preventive care. ❖ Report patient-specific infection concerns promptly. ❖ Share observations of potential breaches in infection-control practices.

Health advocate

Competencies	Enabling Competencies
HA 1. Identify and address infection risks affecting neonatal patients and families HA 2. Promote family-centered infection-prevention practices	❖ Recognize risk factors for neonatal sepsis and hospital-acquired infections. ❖ Advocate for timely interventions to reduce infection risk. ❖ Escalate concerns when preventive measures are not met. ❖ Educate families on safe handling and hygiene practices. ❖ Support families in adhering to isolation or infection precautions.

Leader

Competencies	Enabling Competencies
LED 1. Demonstrate leadership in implementing safe pharmacological practices. LED 2. Promote continuous quality improvement in neonatal drug management.	❖ Lead initiatives to reduce medication errors and enhance patient safety. ❖ Supervise junior nurses during medication preparation and administration. ❖ Monitor adherence to NICU protocols and standards. ❖ Participate in audits, drug reviews, and quality improvement projects. ❖ Analyze incidents and implement preventive strategies. ❖ Mentor staff on safe and evidence-based medication practices.

Professional

Competencies	Enabling Competencies
P 1. Maintain professional and ethical standards in infection prevention P 2. Model professional behavior and leadership in infection control	❖ Adhere to NICU infection-control policies and legal regulations. ❖ Demonstrate accountability in infection-related clinical decisions. ❖ Maintain confidentiality and patient safety during infectious events. ❖ Serve as a role model in adherence to safe practices. ❖ Address non-compliance respectfully and constructively.

Duration: As per program module

setting Infection Control Department, Data Analysis Unit (QMD), NICU 2 (Intermediate Care Unit), NICU 3 (Intensive Care Unit);

Supervision: Clinical Instructor with increasing independence

Educational Activities: Involvement in total quality in patient safety

WORKPLACE-BASED ASSESSMENTS

Required DOPS:

N/A

In-Training Evaluation Report (ITER):

Comprehensive assessment with emphasis on independence and advanced competencies

Case-Based Learning

- Case Based Discussion 1
- Case Based Presentation 1

Rotation 10

Advanced Nursing Care of Critically Ill Neonatal Patients

ROTATION OVERVIEW

This rotation focuses on advanced assessment and care of critically ill neonates. Senior trainees manage multisystem dysfunctions, apply evidence-based practice, and perform advanced monitoring, interventional care, pain management, and ventilator support, while providing holistic, family centered care.

ROTATION OBJECTIVES

By the end of this rotation, the trainee will be able to:

Expert Clinical Practice

- Assess and interpret diagnostic tests for neonatal dysfunction.
- Develop nursing care plans integrating pathophysiology and critical thinking.
- Manage critically ill neonates with multi-system issues safely and effectively.

Expert Technical Skills

- Perform hemodynamic monitoring and ventilator management.
- Provide pre- and post-care for interventional procedures.
- Apply pharmacological and non-pharmacological pain management appropriately.

At the end of this rotation, the trainee will:

CLINICAL NURSE EXPERT

Competencies	Enabling Competencies
CN 1. Apply advanced pharmacological knowledge to safe and effective neonatal care CN 2. Ensure medication safety and prevent errors in the NICU CN 3. Integrate pharmacology with multidisciplinary care and family education	❖ Select appropriate medications based on neonatal pathophysiology, gestational age, and weight. ❖ Calculate accurate dosages, infusion rates, and choose the correct routes of administration. ❖ Recognize, report, and manage adverse drug reactions and toxicities promptly. ❖ Maintain accurate and complete documentation of drug administration and patient responses. ❖ Collaborate with physicians, pharmacists, and the healthcare team to optimize drug therapy.

Collaborator

Competencies	Enabling Competencies
COL 1. Demonstrate effective teamwork in the NICU multidisciplinary environment COL 2. Facilitate inter-professional collaboration for complex neonatal care	❖ Participate actively in daily rounds and care planning discussions. ❖ Respect and integrate the perspectives of physicians, respiratory therapists, and other team members. ❖ Coordinate care activities to ensure safe, timely interventions. ❖ Identify when to escalate concerns to senior staff or other specialties. ❖ Support coordination of complex procedures (e.g., ECMO, high-frequency ventilation).

Communicator

Competencies	Enabling Competencies
COM 1. Effectively communicate critical patient information among the healthcare team COM 2. Engage in empathetic and clear communication with families of critically ill neonates	❖ Use structured handover tools (e.g., SBAR) for accurate patient information exchange. ❖ Report changes in the neonate's condition promptly to physicians and senior staff. ❖ Document assessments, interventions, and responses accurately in the patient record. ❖ Explain medical conditions, procedures, and care plans in understandable terms. ❖ Provide emotional support and address family concerns effectively.

Health advocate

Competencies	Enabling Competencies
HA 1. Advocate for optimal care and rights of critically ill neonates HA 2. Promote preventive and supportive interventions for neonatal health outcomes	❖ Ensure neonates' physiological and developmental needs are met. ❖ Promote family-centered care and involve families in care decisions. ❖ Identify gaps in care and communicate needs to the healthcare team. ❖ Implement evidence-based infection control and safety practices. ❖ Educate the parents on nutrition, developmental care, and follow-up requirements.

Leader

Competencies	Enabling Competencies
LED 1. Demonstrate leadership in clinical decision-making during neonatal emergencies LED 2. Promote a culture of safety and quality in NICU practice	❖ Prioritize interventions and allocate resources during acute events. ❖ Guide team members effectively during resuscitation and stabilization. ❖ Evaluate outcomes of interventions and adjust care plans accordingly. ❖ Identify potential risks and implement preventive measures. ❖ Mentor junior staff on safe practices and adherence to protocols.

Professional

Competencies	Enabling Competencies
P 1. Demonstrate ethical, accountable, and professional behavior in NICU practice P 2. Maintain resilience and self-care to ensure safe and effective practice	❖ Maintain confidentiality and informed consent practices. ❖ Adhere to professional codes of conduct and NICU policies. ❖ Take responsibility for one's own actions and decisions in patient care. ❖ Recognize signs of stress and burnout and implement coping strategies. ❖ Seek support or supervision when facing complex ethical or clinical situations.

Duration: As per program module

setting NICU 2 (Intermediate Care Unit) and NICU 3 (Intensive Care Unit)

Supervision: Clinical Instructor with increasing independence.

Educational Activities: Half-day activity, Interactive lectures, Discussion, Demonstration

WORKPLACE-BASED ASSESSMENTS

Required DOPS:

1. Aseptic technique/ Wound Care
2. Assisting Surfactant Therapy
3. Medication/Nebulizer
4. TPN
5. Assisting with the Insertion of Umbilical Lines
6. Orogastric Nasogastric Tube Insertion and enteral feeding
7. Care of Infant in Incubator
8. Suctioning
9. Tracheostomy Care
10. Blood Transfusion
11. Care of Neonate on Ventilation/CPAP
12. Chest Tube Care
13. Care of Central / PICC Line
14. Inotropes and Vasopressors
15. Mechanical Ventilation Care
16. Assisting LP

In-Training Evaluation Report (ITER):

Comprehensive assessment with emphasis on independence and advanced competencies

Case-Based Learning

- Case Based Discussion 1
- Case Based Presentation 1

Rotation 11

NURSING LEADERSHIP & MANAGEMENT

ROTATION OVERVIEW

Unique leadership and informatics rotations expose trainees to nursing management and leadership responsibilities in advanced practice.

ROTATION OBJECTIVES

Leadership & Management

- Develop patient assignments considering acuity
- Ensure appropriate patient coverage
- Demonstrate knowledge of procedures and protocols
- Delegate effectively with clear accountability
- Implement patient and environmental safety
- Participate in code blue events
- Handle multitask activities

At the end of this rotation, the trainee will:

CLINICAL NURSE EXPERT

Competencies	Enabling Competencies
CN 1. Applies expert neonatal knowledge and critical reasoning to guide complex clinical decisions, prioritize care, and support safe outcomes in high-acuity settings CN 2. Provides clinical direction and oversight to the nursing team, coordinates care activities, and supports effective delegation to ensure continuity and quality of neonatal care CN 3 Integrates patient safety principles, identifies clinical risks, and supports quality improvement initiatives to enhance standards of care within the NICU.	❖ Able to develops patient assignments considering the acuity level of patients, patient status: new admit, planned transfer, and/or discharge. ❖ Ensures appropriate patient coverage during break time . ❖ Displays knowledge of procedures and protocols and demonstrate high standards of practice in one's own work area. ❖ Delegates well, giving clear task accountability and taking into account the strengths, weakness, and development need of staff. ❖ Implements patient and environmental safety practices and follows standard precautions and safety measures in the unit. ❖ Participate actively during code blue in the unit. ❖ Demonstrates ability to handle multitask activities in NICU.

Communicator

Competencies	Enabling Competencies
COM 1. Facilitates precise, timely and professional communication among multidisciplinary NICU teams to ensure coordinated, safe, and high-quality patient care COM 2. Maintains accurate, thorough, and professional records of patient assessments, interventions, and outcomes to support continuity of care and legal compliance	❖ Presents effective intra and interpersonal and communication skills. ❖ Maintains organized, factual, and clinically appropriate records. ❖ Communicate and report plan of care changes from shift to shift ensuring continuity of care. ❖ Constructively manage tension and conflict within the Health Professional Team. ❖ Properly hand over the care of a patient to another health care professional to facilitate continuity of safe patient care.

Health advocate

Competencies	Enabling Competencies
HA 1. Advocate for optimal care and rights of critically ill neonates HA 2. Promote preventive and supportive interventions for neonatal health outcomes	❖ Ensure neonates' physiological and developmental needs are met. ❖ Promote family-centered care and involve families in care decisions. ❖ Identify gaps in care and communicate needs to the healthcare team. ❖ Implement evidence-based infection control and safety practices. ❖ Educate parents on nutrition, developmental care, and follow-up requirements.

Leader

Competencies	Enabling Competencies
LED 1. Demonstrate leadership in clinical decision-making during neonatal emergencies. LED 2. Promote a culture of safety and quality in NICU practice	❖ Prioritize interventions and allocate resources during acute events. ❖ Guide team members effectively during resuscitation and stabilization. ❖ Evaluate outcomes of interventions and adjust care plans accordingly. ❖ Identify potential risks and implement preventive measures. ❖ Mentor junior staff on safe practices and adherence to the protocols.

Professional

Competencies	Enabling Competencies
P 1. Upholds ethical standards, legal requirements, and institutional policies in all aspects of neonatal care and leadership, ensuring professional integrity. P 2. Demonstrates reliability, integrity, and exemplary conduct, serving as a positive role model for peers, junior staff, and interdisciplinary team members. P 3. Engages in continuous professional development, reflective practice, and acquisition of advanced knowledge to maintain competence in neonatal leadership	❖ Delivers the highest quality of care with integrity and compassion. Recognizes limitations and seeks advice and consultations when necessary. ❖ Maintains patient's safety and confidentiality throughout the care process. ❖ Exercises calm, decisive leadership under intense clinical stressors. ❖ Reflects the highest standards of excellence in clinical care and ethical conduct. ❖ Demonstrates punctuality during work for shift and educational event. ❖ Applies new knowledge to clinical decision-making. ❖ Mentors team members based on updated evidence and best practices.

Duration: Four weeks (Module 12)

Setting: Various units with Nurse Managers.

Supervision: Nurse Managers, Team Leaders.

ROTATION ACTIVITIES

Leadership Exposure:

- Shadow Nurse manager / team leaders during daily operations
- Participate in staff meetings and huddles
- Observe staffing and scheduling processes
- Engage in quality improvement discussions
- Attend unit-based governance councils

MODULE

FIRST YEAR TRAINING MODULES

Module I: Foundation of neonatal nursing including Practicum

MODULE DESCRIPTION

Pregnancy, childbirth, and postpartum recovery are generally beyond the scope of the neonatal nursing practice. However, a thorough understanding of these processes is essential to identify the factors that influence fetal development, particularly in high-risk neonates. This module examines common prenatal and perinatal risk factors and their impact on fetal outcomes and the normal physiological changes occurring in a healthy mother. It is designed to provide trainees with fundamental and essential neonatal nursing knowledge and skills, enabling them to deliver safe and high-quality care to normal newborns and those at minor to moderate risk.

Learning Objectives

At the end of this module, trainees will be able to:

1. Explain the roles and professional responsibilities of registered neonatal nurses in maternal and newborn care settings.
2. Describe normal physiological changes during pregnancy, factors affecting fetal development, and the principles of low-risk pregnancy management, including fetal monitoring and risk identification.
3. Perform comprehensive newborn assessments include determination of Apgar scores, estimation of gestational age, and identification of normal versus abnormal findings.
4. Describe the normal newborn growth, development, and expected clinical characteristics.
5. Apply evidence-based principles, including thermoregulation management, to provide safe, competent, and comprehensive nursing care for healthy newborns.
6. Implement essential preventive care measures, including the administration of recommended immunizations and completion of required neonatal screening procedures.

Content Outlines:

- Role and responsibilities of the neonatal nurse (L&D, Nursery, NICU)
- Normal maternal physiological changes by system
- Uncomplicated antepartum, intrapartum, and postpartum care
- Antepartum and intrapartum complications
- Stages of normal labor and management of low-risk labor
- Maternal and neonatal risk factors
- Neonatal extra-uterine adaptation

- Health assessment of healthy newborns (Apgar score, gestational age, physical examination, vital signs, and maternal history)
- Normal growth and development
- Thermoregulation principles, methods, and complication management
- Basic nursing care (bathing, cord care, and eye care), vaccination, and neonatal screening.

Module II: Neonatal Resuscitation and Stabilization of the Newborn

MODULE DESCRIPTION

Neonatal resuscitation skills are essential for all healthcare providers involved in newborn delivery. This module provides trainees with the essential knowledge and skills to resuscitate a newborn following the American Academy of Pediatrics and American Heart Association guidelines.

Learning Objectives

At the end of this module, trainees will be able to:

1. Identify the needed preparation for neonatal resuscitation.
2. Demonstrate the initial steps of neonatal resuscitation.
3. Decide the appropriate action needed to resuscitate a newborn based on newborn-specific parameters.
4. Identify the indications for practicing positive pressure ventilation and chest compression to resuscitate newborns.
5. Apply the American Academy of Pediatric/American Heart Association guidelines to resuscitate newborns in delivery rooms.
6. Illustrate a nurse's role in transporting a neonate.

Content Outlines:

1. Preparation required for neonatal resuscitation.
    a. Anticipation of potential problem(s);
    b. Resuscitation equipment;
    c. Trained personnel.
2. Thermoregulation during resuscitation.
3. Airway management.
4. Stimulation.
5. Positive pressure ventilation.
6. Cardiovascular support and chest compression.
7. Management of special problems during resuscitation (i.e., extreme prematurity, meconium-stained amniotic fluid, choanal atresia, tracheoesophageal fistula, diaphragmatic hernia, hydrops fetalis, omphalocele, and gastroschisis).
8. Immediate post-resuscitation nursing management and stabilization of the condition:
    a. Maintenance of airway and ventilation;
    b. Fluid and electrolyte management;
9. Controversies in neonatal resuscitation.
10. Withholding and discontinuing resuscitation.
11. Transportation of neonates:
    a. Types of transportation;
    b. Emergency transfer;
    c. Arrival at the referring hospital.

Module III: Neonatal Pathophysiology

MODULE DESCRIPTION

This module helps trainees recognize the nature of neonatal health problems. This emphasizes the pathophysiological changes that occur because of the disease and homeostatic changes in the neonates. The mechanisms, etiology, risk factors, and complications of neonatal disease processes have been emphasized.

Learning Objectives

At the end of this module, trainees will be able to:

1. Describe the common pathophysiological changes occurring during the perinatal and neonatal period.
2. Identify related pathophysiological changes in the assessment of common neonatal disorders in different body systems.
3. Interpret complications related to pathological conditions.
4. Interpret abnormalities related to acid-base balance and blood gases.

Content Outlines:

1. Alterations of cardiovascular function:
    a. Fetal circulation;
    b. Neonatal circulation.
2. Cyanotic and acyanotic congenital heart disease.
3. Congestive heart failure.
4. Alterations of pulmonary function:
    a. Respiratory distress syndrome;
    b. Transient tachypnea of the newborn;
    c. Pulmonary air leaks;
    d. Persistent pulmonary hypertension in infants;

e. Meconium aspiration syndrome;

f. Apnea;

g. Neonatal hypoxia;

h. Diaphragmatic hernia.

5. Alterations of digestive function:

a. Impairment in digestion, absorption, and nutrition;

b. Disorders in biliary metabolism and transport;

c. GIT structural abnormalities (cleft palate, cleft lip, esophageal atresia, tracheoesophageal fistula, biliary atresia, duodenal atresia, pyloric stenosis, and Hirschsprung disease);

d. Necrotizing enterocolitis;

e. Diarrhea.

6. Alterations of hematologic function:

a. Neonatal jaundice;

b. Disorders of erythrocytes;

c. Disorders of coagulation and platelets.

7. Alteration in metabolic function:

a. Inherited metabolic disorders;

b. Common metabolic errors.

8. Alterations of genitourinary function:

a. Structural abnormalities;

b. Urinary tract infection;

c. Hydronephrosis;

d. Hydrocele;

e. Ambiguous genitalia;

f. Hypospadias;

g. Bladder extrophy.

9. Neurologic function alterations:
    a. Structural malformation;
    b. Intraventricular/intracranial hemorrhage;
    c. Hypoxic-ischemic encephalopathy (HIE);
    d. Seizure disorders;
    e. Hydrocephalus.
10. Endocrine function alterations:
    a. Mechanism of hormonal alteration;
    b. Infant of diabetic mother;
    c. Hypoglycemia;
    d. Congenital hypothyroidism.
11. Musculoskeletal alterations:
    a. Skeletal dysplasia;
    b. Developmental dysplasia of the hip (DDH);
    c. Birth trauma.
12. Alterations in immunity, inflammation, and infection:
    a. Congenital infection;
    b. Neonatal sepsis;
    c. Shock.
13. Alteration in fluid and electrolytes.

Module IV: Essential Nursing Practices in the NICU

MODULE DESCRIPTION

The module equips trainees with common advanced practices in the NICU, developing them into safe and competent nurses capable of delivering quality care to critically ill neonates admitted with urgent, life-threatening conditions. It focuses on the professional roles and physical responsibilities of NICU nurses. The basic fluid and nutritional requirements of the ill neonates were also explored. Nursing implications for the appropriate assessment of pre- and post-procedural care are also discussed.

Learning Objectives

At the end of this module, trainees will be able to:

1. Demonstrate effective management of neonatal critical care nursing units.
2. Identify fetal malformations that need surgical correction.
3. Describe the role of neonatal nurses in controlling heat balance in premature infants.
4. Describe commonly used complementary and alternative medicines in the NICU such as kangaroo care (skin-to-skin holding) and infant massage.
5. Identify the risk factors associated with fluid and electrolyte imbalances.
6. Maintain appropriate fluid and electrolyte balance, especially in extremely premature and low birth weight infants.
7. Provide the basic nutritional requirements of preterm and high-risk infants while avoiding physiological stress related to the delivery of enteral and parenteral nutrition.
8. Describe the mechanisms, behavioral responses, and long-term consequences of neonatal pain.
9. Use pharmacological and non-pharmacological measures to alleviate pain.

10. Demonstrate the ability to assess, plan, and provide evidence-based nursing care for a neonate on a ventilator.
11. Describe the nursing management for neonates with a blood transfusion or exchange transfusion.
12. Elaborate pre-and postprocedural care related to birth, prematurity, illness, or congenital malformations.
13. Develop a discharge plan for a neonate in the NICU.

Content Outlines:

- Fetal therapy:
  - Fetal malformation requiring surgical correction;
  - Multidisciplinary collaborative approach to fetal therapy.
- Thermoregulation:
  - Heat loss and heat production;
  - Mechanism of neonatal heat regulation;
  - Factors affecting thermoregulation in neonates;
  - Neutral thermal environment;
  - Radiant warmer/incubator care;
  - Skin care.
- Neonatal developmental support.
- Intravenous access management:
  - Peripheral access;
  - Peripherally inserted central catheter (PICC) line;
  - Umbilical catheterization.
- Fluid and electrolyte management:
  - Reviewing fluid and electrolyte balances;
  - Distribution of body fluids and electrolytes;

- Movement of body fluids and electrolytes;
- Regulation of body fluids and electrolytes;
- Calculation of fluid requirements.
- Nutritional Management
- Nutritional needs of neonates;
- Nutritional assessment;
- Types and methods of feeding;
- Types of enteral feeds;
- Parenteral nutrition (PN);
- Management of total parenteral nutrition (TPN).

- Pain and pain relief:
  - Biology of pain and sedation;
  - Pain processing;
  - Pain management.
- – Airway Management:
  - Positioning;
  - Suctioning: nasopharyngeal, oropharyngeal, endotracheal tube, and tracheostomy;
  - Tracheostomy tube: stoma care, change, suctioning, and decannulation.
- Oxygenation and ventilation management:
  - Pulse oximetry monitoring;
  - Oxygen therapy: indications, safe use, and side effects;
  - Endotracheal tube intubation and extubation;
  - Auto-positive end-expiratory pressure calculation;
  - High-frequency oscillatory ventilation;
  - Manual ventilation devices;

- Mechanical ventilation: conventional mode;
- Noninvasive positive pressure ventilation;
- Weaning from mechanical ventilation;
- Arterial blood gas analysis; Chest tube management.

- Cardiac management:
  - Arterial catheter: insertion assistance and management;
  - Cardiac monitoring;
  - Electrocardiography (ECG);
  - Echocardiography (indications and nursing care);
  - Cardiac catheterization (pre-, during, and post-procedure nursing care).
- Wound healing and care:
  - Drain/wounds: care and management.
- Other diagnostic/ management procedures:
  - X-ray imaging;
  - Ultrasonographic imaging;
  - Magnetic resonance imaging (MRI);
  - Genetic testing;
  - Bladder aspiration/catheterization;
  - Lumber puncture;
  - Cool Cap;
  - Defibrillation;
  - Neonatal screening.
- Discharge plan

Module V: Ethics in Nursing and Care Dimensions

MODULE DESCRIPTION

This module examines the ethical theories, legal and professional standards, and key ethical issues in nursing and healthcare. It emphasizes ethical decision making, resolution of moral dilemmas, and the integration of ethical principles, regulatory requirements, and standards of practice, including issues related to critically ill neonatal patients.

Learning Objectives

At the end of this module, trainees will be able to:

1. Examine the nature and role of ethical theories in guiding sound ethical decision making in workplace settings.
2. Discuss the ethical and legal context of professional nursing practice.
3. Examine key ethical issues occurring in nursing and related health care contexts.
4. Discuss processes for achieving desired moral outcomes in nursing and healthcare domains.
5. Analyze conflicting duties and rights inherent in moral dilemmas.
6. Discuss the impact of current issues related to health care delivery.
7. Ethical reasoning is used to synthesize standards of practice, ethical principles, and legal and regulatory requirements for resolving ethical dilemmas.
8. Discuss ethical issues relevant to critically ill neonatal patients.

Content Outlines:

A. Introduction to moral and legal concepts.

B. Credentialing and licensing.

C. Autonomy and paternalism.

D. Life and death.

E. Public health.

F. Ethical issues related to neonatal intensive care.

SECOND-YEAR TRAINING MODULES

Module VI: Introduction to Research and Evidence-Based Practice

MODULE DESCRIPTION

At the end of this module, trainees will be able to:

1. Define the basic concepts of research methodology.
2. Differentiate between research designs.
3. Describe the scientific process and its use in nursing research.
4. Design a research proposal project.
5. Explain the steps of the research process in the proposal and/or conduct of the circumscribed nursing research project.
6. Identify research problems and the literature review process related to nursing practice.
7. Compare and contrast research designs.
8. Discuss appropriate statistical techniques in data analysis.
9. Critique current studies of nursing practice.
10. Describe the utilization of research findings.

11. Define the historical perspective of EBP.
12. Define and applying evidence-based nursing practice principles identified through nursing research. Please refer to Appendix 3 for the Nursing Research Project Guidelines.

Content Outlines:

A. Overview of nursing research.

B. Research methodology and process.

C. Research designs.

D. Data collection and analyses.

E. Evidence-based research and application.

Module VIII: Advanced Neonatal Health Assessment

MODULE DESCRIPTION

The Advanced Health Assessment Module provides trainees with the opportunity to apply their theoretical knowledge to perform comprehensive physical examinations and health assessments of critically ill neonates. The module also helps trainees develop the skills and techniques required for comprehensive assessments within the legal/ethical framework of the nursing profession. Systematic health assessments and critical thinking skills will be used to analyze and document the obtained data.

Learning Objectives

At the end of this module, trainees will be able to:

- Describe health assessment components.
- Identify the antenatal history affecting neonatal health.
- Identify the techniques of physical examination.

- Use a systematic approach in performing health assessments of critically ill neonates.
- Discriminate between normal and abnormal findings of screening physical assessment.
- Demonstrate competency in performing a systematic health assessment of critically ill neonates.
- Document health assessment findings.

Content Outlines:

1. History-taking techniques.
2. Assessment of premature and extremely low birth weight infants.
3. Systematic physical assessment following the head-to-toe approach, including the assessment of
    a. General appearance;
    b. Skin;
    c. Lymph nodes;
    d. Head and neck;
    e. Respiratory system;
    f. Cardiovascular system
    g. Abdomen;
    h. Genitourinary system;
    i. Back and extremities;
    j. Neurology.
4. Nursing documentation using system approved in the health care organization.

Module IX: Pharmacology in Neonatal Intensive Nursing Care

MODULE DESCRIPTION

This module was designed to enhance the trainees' knowledge of pharmacotherapy for the common classifications of drugs used to care for neonates. Pharmacokinetic and pharmacodynamic principles, their clinical applications, and the use of pharmacological agents in the prevention of illness and the restoration and maintenance of health are emphasized. The module also covers the indications for correct drug choice, usual dose, route of administration, pharmacological mechanisms associated with drug interactions, adverse effects, and contraindications for use. Drug toxicity, anesthetic agents, and vaccines were also considered.

Learning Objectives

At the end of this module, trainees will be able to:

1. Describe the principles of pharmacokinetics and pharmacodynamics and drug interactions in neonates.
2. Discuss the factors affecting the action and use of medications in neonates.
3. Distinguish between neonates' and other children's responses to drug therapy.
4. Integrate pharmacology, pathophysiology, and symptomatology.
5. Recognize the effect of antenatal drugs on neonates' health.
6. Discuss the factors affecting medication errors and the strategies to avoid them.
7. Identify the emergency medications in the NICU.
8. Interpret the adverse reactions associated with drug therapy.
9. Identify the indications for correct drug choice, usual dose, routes of administration, pharmacological mechanisms, contraindications, toxicity, and allergies to drugs used in the NICU.

10. Illustrate the common medication used in the NICU to manage different body system disorders.
11. Identify the anesthetic agents and analgesics commonly used in pediatric practices.
12. Calculate drug dosage and infusion flow rate following different rules and methods.
13. Apply safety measures in relation to neonatal drug administration.
14. Document drug practice using appropriate format.
15. Describe the vaccinations needed in the NICU.
16. Select the appropriate routes for medication administration.
17. Check types, rates, amounts, and indications of different IV fluids prescribed to newborns.
18. Discuss the nursing responsibilities associated with the holistic management of drug therapy.
19. Describe the nurse's role in ethical and legal issues related to prescribing and administering drugs.
20. Teach parents about drug preparation and administration of medication before patient discharge.

Content Outlines:

1. Introduction to neonatal pharmacology.
2. Pharmacokinetics.
3. Pharmacodynamics.
4. Factors affecting the action and use of medications in neonates.
5. Drug calculations and routes of administration.

6. Mechanisms of action, interactions, contraindications, adverse reactions, toxicity, and allergies of drugs used in the NICU.
7. Pregnancy drugs and their effect on neonates.
8. Emergency drugs.
9. IV fluid used in the NICU.
10. Common medications used in the NICU included ampicillin, gentamicin, ferrous sulfate, multivitamins, cefotaxime, caffeine citrate, furosemide, vancomycin, surfactants, ibuprofen/indomethacin, phenytoin, metolazone, and sodium bicarbonate (Appendix A).
11. Vaccinations in the NICU.
12. Drug documentation.
13. Medication errors.
14. Nurses' responsibilities in drug administration and monitoring.
15. Parents' education related to drug administration.

Module X: Infection Control and Patient Safety

MODULE DESCRIPTION

Infections, particularly hospital-acquired ones, are an important cause of neonatal morbidity and mortality. Healthcare- associated infections (HAIs) are nosocomial infections. Direct contact is the most important and frequent mode of transmission of nosocomial infections. Therefore, the best way to prevent cross-infection in the NICU is thorough handwashing. This module aims to equip neonatal nurses with the knowledge and experience of infection-related aspects, means of control, and preventive measures applicable to the care of neonates required to deliver safe and infection-free nursing care to NICU patients.

Learning Objectives

At the end of this module, trainees will be able to:

1. Explain infection control and patient safety concepts.
2. Demonstrate the infection-control-related policy and procedures in the neonatal unit.
3. Correctly apply infection control principles and guidelines.
4. Correctly perform handwashing, donning, and gloving as well as the N95 test.
5. Compare between hand hygiene and hand scrub.
6. Implement and select appropriate infection control modalities based on the patient's condition.
7. Identify risk factors for neonatal sepsis.
8. Discuss the causes of infection in neonates.
9. Describe modes of transmission of infection in the NICU.
10. Provide effective nursing preventive measures for infectious neonates based on the source of infection.

Content Outlines:

1. Infection control in the NICU:
    a. HAIs/nosocomial infections.
2. Host defenses in the newborn:
    a. Physical defenses;
    b. Cellular immunity;
    c. Phagocyte function;
    d. Humoral immunity.
3. Risk factors for neonatal sepsis:

a. Neonatal factors;

b. Environmental factors.

4. Causes of infection in neonates.
5. Modes of transmission of infection.
6. Common infectious diseases in neonates, based on the source of infection:
    a. Bacterial infection in the newborn;
    b. Viral infection;
    c. Systemic fungal infection;
    d. Congenital infection.
7. Preventive measures to control infection, including staff vaccination.

Module XI: Advanced Nursing Care of Critically Ill Neonatal Patients

MODULE DESCRIPTION

This module places significant emphasis on the trainees' ability to recognize and evaluate complex problems associated with the dysfunction of different body systems. It includes concepts related to specialized knowledge and skills as well as advance care planning that are required to ensure the quality and holistic care of critically ill neonates and their families. It develops trainees' critical reasoning and skills using EBP data to develop nursing care plans.

Learning Objectives

At the end of this module, trainees will be able to:

- Analyze the appropriate tests used to diagnose dysfunction in different body systems of critically ill infants.
- Integrate knowledge of pathophysiological processes in developing a nursing care plan for critically ill neonates with dysfunctions in different body systems.

- Synthesize critical thinking skills for caring for critically ill neonates with dysfunctions in different body systems.
- Demonstrate hemodynamic monitoring used in critically ill neonates with dysfunction in different body systems.
- Demonstrate competence in providing pre- and post care for critically ill neonates undergoing interventional techniques.
- Use pharmacological and non-pharmacological measures to alleviate a neonate's pain.
- Demonstrate patient care management and monitoring of neonates on mechanical ventilation.

Content Outlines:

Nursing care of extremely premature/low birth weight infants:

- Risk factors;
- Assessment;
- Care of very-low-birth-weight (VLBW) infants.
- Fluid and nutritional requirements of premature and VLBW infants.
- Retinopathy of prematurity.

Nursing care of neonates with cardiovascular disorders:

- Common diagnostic procedures
- Cyanotic and acyanotic congenital heart disease;
- Rhythm disturbances;
- Congestive heart failure;
- Coarctation of aorta and posterior descending artery (PDA);
- Pre-/post-operative cardiac management.

Nursing care of neonatal respiratory disorder:

- Common diagnostic procedures;
- Respiratory distress syndrome;
- Transient tachypnea of the newborn;
- Pulmonary air leaks;
- Pneumonia;
- Persistent pulmonary hypertension;
- Meconium aspiration syndrome;
- Pulmonary hemorrhage;
- Plural effusion;
- Apnea;
- Neonatal hypoxia;
- Congenital anomalies affecting respiratory function;
- Diaphragmatic hernia.

Nursing care of neonates with gastrointestinal (GI) disorders:

- Common Diagnostic Procedures
- Problems with ingestion.
- Cleft plate and cleft lip;
- Esophageal atresia and tracheoesophageal fistula;
- Gastroesophageal reflux;
- Pyloric stenosis;
- Problems with digestion.
- Biliary atresia;
- Duodenal atresia;

- Problems with elimination.
- Hirschsprung disease;
- Necrotizing enterocolitis;
- Short gut syndrome;

Nursing care of neonates with hematologic disorders:

- Common diagnostic procedures;
- Neonatal jaundice;
- Anemia;
- Polycythemia;
- Common coagulation disorders in newborns;
- Blood and blood component therapy/exchange transfusion.

Nursing care of neonates with genitourinary disorders:

- Common diagnostic procedures;
- Assessment of the genitourinary system;
- Urinary tract infection;
- Acute renal failure;
- Hydronephrosis;
- Ureteral obstruction;
- Hydrocele;
- Ambiguous genitalia;
- Hypospadias;
- Bladder extrophy;

Nursing care of neonates with neurologic disorders:

- Common diagnostic procedures;
- Intraventricular/intracranial hemorrhage;
- HIE;
- Seizure disorders;
- Birth injury
- Hydrocephalus;
- Central nervous system (CNS) infection: meningitis and encephalitis.

Nursing care of neonates with endocrine disorders:

- Common diagnostic procedures;
- Infant of diabetic mother;
- Congenital hypothyroidism.

Nursing care of neonates with musculoskeletal disorders:

- Skeletal dysplasia;
- DDH;
- Birth trauma.

Nursing care of neonates with metabolic disorders:

- Prenatal and neonatal diagnosis of inherited metabolic disorders; – Neonatal screening;
- Common metabolic errors.

Nursing care of neonates with infection:

- Common diagnostic procedures;
- Congenital infection; – Neonatal sepsis; – Shock.

Competencies

Develop a nursing care plan for neonates with different health problems (one for each system).

Module XII: Nursing Leadership and Management

Learning Objectives

At the end of this module, trainees will be able to:

1. Analyze the components of organizational structure and culture.
2. Apply theories of effective leadership and management within selected health care arenas.
3. Utilize the skills of nursing processes, critical thinking, ethical decision-making, communication, and therapeutic nursing interventions in managing culturally competent and cost-effective care of client groups across the wellness/illness continuum.
4. Collaborate with multidisciplinary healthcare team members in prioritizing and coordinating quality and cost-effective healthcare.
5. Demonstrate leadership and management of a caregiving team comprising individuals with varied cultural backgrounds and levels of clinical knowledge and competencies.
6. Utilize inquiry and research skills to enhance one's knowledge base, facilitate change, and improve quality of care.
7. Demonstrate professional accountability for effective leadership in nursing practice.
8. Contribute to organizational strategic planning and its implementation at different levels within healthcare organizations.

Content Outlines:

A. Organizational structure and culture.

B. Application of leadership and management theories.

C. Organizational and personal mission, vision, and goals.

D. Critical thinking, problem solving, and effective decision-making.

E. Quality and risk management.

F. Budgeting, cost, care delivery models, and staffing.

G. Communication, motivation, and team building.

H. Change and conflict management.

I. Role transition and delegation.

J. Strategic planning and strategic management.

K. Career planning.

IX. CONTINUUM OF LEARNING

This includes the learning that should occur at each key stage of progression within a specialty. Trainees are reminded of Continuous Professional Development (CPD). Trainees should consider the necessity of CPD for every healthcare provider to meet the demands of their vital profession. The following table shows how this role is progressively expected to develop throughout the junior, senior, and consultant levels of practice.

Undergraduate	D1 (Junior Level)	D2 (Senior Level)	Expert Level
Non-practicing	Dependent/supervised practice	Minimum supervision and guidance, attaining competence in related knowledge /skills	Independent practice/provide supervision
Obtain basic health science and foundational level to core discipline knowledge	Obtain fundamental knowledge related to core clinical problems of the specialty	Demonstrate skilled performance in the activity with enhanced theoretical knowledge and understanding and give a rationale for the practice Demonstrate and apply the knowledge and understanding in relation to relevant policies, procedures, and guidelines Participate in problem- solving through critical analysis and evaluation of more complex situations.	Demonstrate competent performance in all the activities specified without direct supervision based on independently problem-solving complex situations and provide solutions through critical analysis and evaluation
Internship to the practice of discipline	Apply clinical skills such as physical examination and practical procedures related to the core presenting problems and procedures of the specialty	Analyze and interpret the findings from clinical skills to develop appropriate differential diagnoses and management plan for the patient	Supervise and instruct others in a range of activities related to their role and responsibilities Apply knowledge, demonstrate, and research to relevant policies, procedures, and guidelines to critically analyze and improve practice

X. EDUCATIONAL ACTIVITIES

(TEACHING AND LEARNING STRATEGIES AND METHODS)

Teaching & Learning

Clinical, Academic, and Scholarly Content of the Program-Specific Learning Activities:

The training program is a competency-based curriculum, wherein the trainer and trainee use different strategies to teach and acquire various types of knowledge and skills throughout the program. In addition, different methods may enhance teaching and learning in diverse settings to guide trainers and trainees. It addresses the essential elements necessary for the practical preparation, implementation, and facilitation of teaching and learning, focusing on the competencies required for mastery.

In addition, it identifies opportunities for teaching and learning in daily clinical practice. Moreover, it informs students on how to apply well-known learning and teaching theories from higher education and healthcare contexts to teaching practice, how to utilize a comprehensive range of teaching methods, and how to develop a reflective approach to teaching and learning that can be utilized for continued professional development. Teaching and learning are accomplished through educational activities conducted in diverse settings. These activities could be arranged in the clinic, inpatient wards, simulation lab, or academic activities in rotation or during the weekly academic day. Other practices as part of educational activities that may enhance trainees' learning and professional development include implementing a mentorship program and reflective practice in the postgraduate curriculum. The Educational Methods were chosen as follows:

- Maintain congruence between objectives/competencies and methods;

- Use multiple educational methods;
- Select educational methods that are feasible in terms of resources.

Educational Activities:

Educational Activities (EA) are part of the trainee training program that involves teaching and learning activities to acquire specialty competencies. EA conveys knowledge, skills, attitudes, and professional behaviors. Therefore, they should focus on holistic development, practical skills, problem-solving abilities, and personal growth. Furthermore, this study can be conducted within a broader scope to assist in learning and growth across multiple cognitive, social, emotional, and physical domains. These activities include experiential learning, group projects, skill-building exercises, and mentoring programs. These activities can be conducted in both formal and informal educational settings.

The educational framework for advanced nursing practice diploma training programs is grounded in the principles of adult learning theory. Trainees are expected to recognize the significance of their learning journey and assume an active role in both the content and processes of their education and learning. Training programs implement the adult learning concept across most EA, placing responsibility for learning requirements on the trainees themselves.

Through various EA, the Advanced Nursing Practice Diploma training program aims to fulfill the competencies outlined in the curriculum. The program was designed to develop both cognitive and technical skills, while fostering an understanding of their application within the context of the Advanced Nursing Practice Diploma training program. Furthermore, training encompasses practical procedures and interpretative techniques delivered in a sequential and integrated manner through lectures, tutorials, seminars, and hands-on apprenticeships.

EA plays a vital role in health-training programs by equipping health professionals with essential knowledge, values, and skills. Additionally, EA

facilitates the dissemination of knowledge, encourages healthy practices and enhances health professionals' competencies, ultimately contributing to improved overall wellbeing and safety.

Program administration should actively support EA by ensuring that protected time is allocated for trainees to attend and participate. Trainees should be encouraged to meaningfully engage in educational and scholarly activities as part of their professional development. The program's EA encompasses the following themes:

1. Academic Activity
2. Practical-Based Learning
3. Skills Training and Procedures
4. Scholarly Projects
5. Professional and Personal Development.

Simulation:

As a national supervising body, the SCFHS initiated a move toward integrating simulations into advanced nursing practice diplomas in NICU training programs.

Simulations involve the creation of artificial clinical scenarios through which trainees can learn. This process has educational advantages, such as learning and practicing how to deal with rare and/or high-risk clinical scenarios and rare procedures, while practicing in a controlled, standardized environment with immediate, effective feedback that significantly impacts knowledge, skills, and attitude.

The scenarios for the simulation are as close to real clinical situations as possible, including team members, equipment, and environment, followed by timely and effective feedback. According to McGaghie et al., effective feedback has three key components: planning, prebriefing, and feedback provision.

The use of simulations in advanced nursing practice diplomas in NICU training programs is necessary, especially in competency-based curricula. The Advanced Nursing Practice Diploma in the NICU program aims to graduate skilled, competent, and independent physicians, while maintaining a focus on quality and patient safety. Practically, a high level of variability may exist when using simulations to implement competency-based curricula, and the nature of Neonatal Critical Care is likely to increase this variability. Establishing standardized needs assessment methods for simulations may pose a challenge to any national organizational body dealing with various ongoing postgraduate training programs.

Simulation Topics are given as Examples.

1. NRP
2. PICC Line Management
3. Chest Tube Management in Neonates
4. Mechanical Ventilation for Critically Ill Newborns

Mandatory course:

Skill / Behavior Course name	Simulation Delivery Method	Designated Time in Academic Calendar	Remarks
Neonatal Resuscitation Program (NRP)	Lecture Demonstration	4 days / year Learning methods: Discussion Demonstration Target trainee: Neonatal intensive care diploma trainee	Objectives On completion of this activity, trainee should be able to: Demonstrate knowledge of the NRP algorithm. Perform airway management including bag-mask ventilation and intubation. Establish vascular access and administer medications during neonatal resuscitation. Apply effective chest compressions in neonates. Function effectively as part of a multidisciplinary resuscitation team using closed-loop communication This activity will be evaluated from different stakeholder to assure the beneficial to the participants and improve quality: Evaluation by Simulation Center -: Feedback on logistics, equipment, and environment II. Evaluation by Residents -: Self-assessment of knowledge and skills, confidence in NRP.

Skill / Behavior Course name	Simulation Delivery Method	Designated Time in Academic Calendar	Remarks
			Post course evaluation form include activity, quality, benefit, faculty, and time evaluation
Mechanical Ventilation for Critically Ill Newborns	LectureDemonstration	3 days / year Learning methods: Discussion Demonstration Target trainee: Neonatal intensive care diploma trainee	Objectives On completion of this activity, resident should be able to: Identify indications for mechanical ventilation in neonates. Set up and initiate mechanical ventilation using appropriate modes and settings. Adjust ventilator parameters based on blood gases, oxygen saturation, and clinical status. Recognize and manage complications related to mechanical ventilation (e.g., air leaks, desaturation, hypercarbia, volutrauma). Communicate effectively within the healthcare team during respiratory emergencies. Demonstrate safe weaning strategies and criteria for extubation. This activity will be evaluated from different stakeholder to assure the beneficial to the participants and improve quality:

Skill / Behavior Course name	Simulation Delivery Method	Designated Time in Academic Calendar	Remarks
			Evaluation by Simulation Center -: Assess logistics, equipment, and faculty performance. Evaluation by Residents -: Evaluate relevance, clarity, confidence improvement. III. Evaluation by faculty -: Assess learner engagement, achievement of objectives. Post course evaluation form include activity, quality, benefit, faculty, and time evaluation

Skill / Behavior Course name	Simulation Delivery Method	Designated Time in Academic Calendar	Remarks
Neonatal Resuscitation Program (NRP)	Lecture Demonstration	4 days / year Learning methods: Discussion Demonstration Target trainee: Neonatal intensive care diploma trainee	Objectives On completion of this activity, resident should be able to: 1. Demonstrate knowledge of the NRP algorithm. 2. Perform airway management including bag-mask ventilation and intubation. 3. Establish vascular access and administer medications during neonatal resuscitation. 4. Apply effective chest compressions in neonates. 5. Function effectively as part of a multidisciplinary resuscitation team using closed-loop communication. This activity will be evaluated from different stakeholder to assure the beneficial to the participants and improve quality: **I. Evaluation by Simulation Center -:** Feedback on logistics, equipment, and environment **II. Evaluation by Residents -:** Self-assessment of knowledge and skills, confidence in NRP. Post course evaluation form include activity, quality, benefit, faculty, and time evaluation

Skill / Behavior Course name	Simulation Delivery Method	Designated Time in Academic Calendar	Remarks
PICC Line Management	Lecture Demonstration	4 days / year **Learning methods:** Lecture Demonstration Practice Target trainee: Neonatal intensive care diploma trainee	**Objectives** On completion of this activity, resident should be able to: 1. Demonstrate proper preparation and sterile techniques for PICC insertion. 2. Identify anatomical landmarks and appropriate vein selection in neonates. 3. Insert a PICC line safely using simulation task trainers. 4. Secure and dress the PICC line appropriately. 5. Recognize and manage common complications (e.g., malposition, infection, and occlusion). 6. Provide family-centered education regarding PICC line care This activity will be evaluated from different stakeholder to assure the beneficial to the participants and improve quality: **I. Evaluation by Simulation Center -:** Feedback forms for quality improvement. **II. Evaluation by Residents -:** Self-reflection surveys on confidence/skill gain. Post course evaluation form include activity, quality, benefit, faculty, and time evaluation

Skill / Behavior Course name	Simulation Delivery Method	Designated Time in Academic Calendar	Remarks
Chest Tube Management in Neonates	Lecture Demonstration	2 days / year **Learning methods:** Lecture Demonstration Practice Target trainee: Neonatal intensive care diploma trainee	**Objectives** On completion of this activity, resident should be able to: 1. Identify indications and contraindications for neonatal chest tube insertion. 2. Prepare and assemble the required equipment. 3. Perform safe chest tube insertion and secure it properly. 4. Monitor chest tube function and address common problems. 5. Recognize and manage potential complications. 6. Document the procedure and communicate findings effectively. This activity will be evaluated from different stakeholder to assure the beneficial to the participants and improve quality: **I. Evaluation by Simulation Center -:** Assess equipment and scenario quality **II. Evaluation by Residents -:** Evaluate clarity of learning objectives and usefulness Post course evaluation form include activity, quality, benefit, faculty, and time evaluation

XI. ASSESSMENT AND EVALUATION

1. Purpose of Assessment

Assessments play a vital role in the success of postgraduate training. This assessment guides trainees and trainers in achieving defined standards, learning outcomes, and competencies. Simultaneously, assessment provides feedback to learners and faculty regarding curriculum development and implementation, teaching methods, and quality of the learning environment. A reliable and valid assessment is essential for examining curriculum alignment with respect to objectives, learning methods, and assessment tools. Finally, the assessment ensures patients and the public that health professionals are safe and competent.

Assessment serves the following purposes:

a. **Assessment for learning:** also known as formative assessment; trainers utilize information from trainees' performance to diagnose their learning needs and tailor instructions for improvement. This enables faculty members and educators to use information on the trainees' knowledge, understanding, and skills to deliver timely, specific, and constructive feedback. In addition, it fosters the development of trainees' metacognitive and practical skills, encourages reflection and self-regulated learning, and ultimately helps them become lifelong learners.

b. **Assessment of learning:** also referred to as summative assessment. This approach is designed to evaluate whether trainees have achieved their intended learning outcomes. It is typically scored and contributes to high-

stakes decisions including the progression, certification, and completion of training.

c. **System of assessment:** This represents the relationship between multiple collated assessment methods, where formative and summative assessments are integrated, complementary, and aligned throughout a specialty training program. It is blueprinted (mapped) against the curriculum roles, competencies, and outcomes. The overall system blueprint, which differs from the exam blueprint, articulates how diverse assessment tools collectively provide evidence of competence. It may include varying levels of detail according to its purpose and is also known as "assessment mapping." This mapping outlines the competencies to be assessed by all types of assessment methods to build a comprehensive, balanced, and fit-for-purpose assessment strategy and helps identify areas where assessment is lacking or needs strengthening.

d. **Feedback and evaluation:** as assessment outcomes serve as quality that enhance to learning experience, support trainees' profession and help to determine the suitability of different level of summative assessment. High-quality feedback should be specific, actionable, longitudinal, and promote self-assessment. Narrative and meaningful feedback on trainees' performance in work-based assessment and evaluation forms should inform structured action plans, support deliberate practice, and facilitate trainee improvement and progression.

For the sake of the organization, assessments will be further classified into two main categories: *Formative* and *Summative*.

2. Formative Assessment

2.1 General Principles

Formative assessment should be integrated into the curriculum design, grounded in best practices and evidence-based approaches, and aligned with stated competencies and appropriate tools.

Purpose of formative assessment:

Formative assessment aims to actively support trainees' growth by guiding learning, verifying progression, and ensuring that they acquire competencies essential for high-quality professional practice across all health disciplines.

- Enhance learning by offering trainees opportunities to practice, receive immediate feedback, measure their performance, and identify areas for further development and improvement.
- Drive learning and optimize the training process by clarifying the expectations of trainees and motivating them to actively pursue suitable training and experience.
- Provide robust and comprehensive evidence that trainees are progressing toward fulfilling curriculum standards throughout the training program.
- Ensure that trainees acquire the required competencies across all domains of effective healthcare practices.
- Confirm that trainees possess the essential foundational knowledge, skills, and professional attitudes required for their specialties.
- Confirm that trainees are advancing appropriately in their performance relative to their training stage.

Trainees, as adult learners, should actively seek feedback and use it to develop their performance throughout their journey from "novice" to "mastery" levels of competence. Formative assessment (also referred to as continuous or ongoing

assessment) is a component of assessment deliberately distributed across the academic year to provide trainees with timely, meaningful, and actionable feedback that drives learning and improvement.

Specified time should be allocated for trainees to meet with their program director or to review performance reports and logs (e.g., ITER, logbook, workplace-based assessment tools). Trainees are expected to assume ownership of their development through self-directed learning. The input from the formative assessment tools is integrated at the end of the year to inform decisions on whether individual trainees will advance to the next training level. The formative assessment instruments are periodically reviewed and updated as needed to ensure alignment with the SCFHS guidelines and standards.

Consistent with best practices in health profession education, formative assessment will have the following features tailored to the targeted competencies:

a. Multisource: Select all appropriate tools, including relevant workplace-based assessments, according to competency, training level, and rotation.
b. Comprehensive: Cover all learning domains (i.e., knowledge, skills, and attitude—professional behavior).
c. Relevant: Focus on workplace-based observations for performance in authentic practice settings.
d. Milestone-oriented competency: Reflect on the trainees' expected competencies that match their developmental level.

Formative assessment tools:

Learning Aspects	Assessment Formats
Knowledge	Specific Academic Tasks including • Quizzes • Case Based Discussion* (CBD) and • Seminar Evaluation** • End-of-year written promotion examination will be at the end of the 1st year.
Skills	• Objective Structured Clinical Examination (OSCE) will be as case simulation for 1st and 2nd year. • Research activity. • Logbook • Community Activities (i.e. Patient Safety or Quality improvement project)
Attitude ***	• In-Training Evaluation Reports (ITERs) • Direct Observation of procedural Skills (DOPS)

Case Based Discussion:

Case study of a patient cared for by a trainee in a clinical setting. The case presentations should include the following:

- Neonates medical and surgical history;
- Diagnosis/treatment history;
- Nursing diagnosis with appropriate assessment findings;
- Current neonatal nursing care plans, identifying the optimal outcomes.

The presentation should last approximately 15 minutes, with the trainee facilitating post-presentation discussions. The case study evaluation form must be completed and signed by the clinical instructor and trainee (see Appendix).

Seminar Evaluation: One group seminar will be held in each training year. Seminar topics were selected by the trainee and approved by the assigned clinical instructor and program director.

End-of-year written Promotion Examination: This written progress test will be conducted at the end of the first year of the program. Successful completion will enable the trainee to advance to the second training year. The exam's main objective is to assess the theoretical knowledge and critical thinking skills of trainees in relation to the topics and clinical experience covered in the first training year. The exam format, including the number of items, eligibility criteria, and pass scores, is in accordance with the SCFHS Examination Rules and Regulations available on the SCFHS website.

***In-Training Evaluation Reports (ITERs):** The ITERs could include attitude aspects in addition to knowledge and skills level of the trainees during their placement at the training center. In this program, the reports aim to provide objective feedback obtained from those involved in the training process (i.e., the preceptors). The continuous evaluation reports used in the program are as follows:

- Feedback from the assigned clinical instructor: This feedback should be obtained and documented every month as needed (Appendix).
- Feedback from the assigned preceptor: This feedback should be obtained and documented every month as needed (Appendix).
- Feedback from the assigned head nurse/nurse manager: This feedback should be obtained every month as needed (Appendix).

2.2.1 Work-based assessment:

Work-based assessment (WBA) is occasionally used interchangeably with workplace-based assessment (WPBA), which refers to the direct observational assessment of a trainee in a real work environment. This has recently been referred to as a supervised learning event (SLE). WBA is among the most

recognized and widely utilized approach for enhancing learning through formative assessment and feedback.

Numerous WBA tools assess a range of competencies, including communication and consultation skills, clinical decision-making and reasoning, and patient management in contexts where diagnostic uncertainty, resource constraints, and public health considerations may exist. Moreover, WBA tools facilitate the assessment of more complex domains, including professionalism, procedural skills, and the ethical and legal aspects inherent to clinical practice, which may not be adequately evaluated using traditional assessment methods.

2.2.2 Educational Activity (Non-WBA assessment)

EAs are a part of the trainee training program that involves teaching and learning activities to acquire specialty competencies. Examples of contributions to EA can be, but are not limited to, journal clubs, lectures, morbidity and mortality rounds, grand rounds, and research and scholarly activities.

All formative assessment tools used for formative assessment purposes MUST abide by the **Scoring Categories and Scaling Definitions** in the SCFHS policies.

To attain the optimum training level outcome, the candidate must complete the compulsory requirement of all selected formative assessment tools.

The following are examples of a summary table of tools and their descriptions for one of the specialties, which are for illustrative purposes and do not necessarily fulfill all quality standards: (Additional details on formative assessment and WBA are provided in the formative assessment documents included in the accompanying materials.)

Doesn't Meet Expectation	Borderline	Meets Expectation	Exceeds Expectation
(<50%)	(50–69.99%)	(>70–89.99%)	(>90%)

Advance Nursing Practice Diploma training program

Formative Assessment (2025)

Gen./Sub.	Level	Knowledge					Skills					Attitude
		SOE	EYPT-n't	Academic Activities	CBD	EYPT-Local	OSCE/OSPE	Research	DOPS	Logbook	others	ITERS
Advance Nursing Practice Diploma training program	D1			√	√	√	√		√	√	√	√
	D2			√	√		√	√	√	√	√	√

SOE: Structured Oral Exam **EYPT-n't:** International Exam **EYPT-Local:** Progress Test

DOPS: Direct observation of procedural Skills **OSCE:** Objective Structured Clinical Examination **CBD:** Case-based Discussion

OSPE: Objective Structured Practical Examination **ITER:** In-Training Evaluation Report

Others: Assignment, Quizzes, Review question, Lecturio Platform

Advanced Nursing Practice Diploma in Neonatal Intensive Care							
Training Level (e.g. D2, D1..etc)							
Assessment Tool	Program Requirement (*Total count if applicable*)	Details & Description (all per academic year)	Final Scoring				Score's Utility (Marking vs. Feedback)
			Clear Pass	**Borderline Pass**	**Borderline Fail**	**Clear Fail**	
			69.5%-100%	59.5-69.5%	59.4-50%	< 50%	
			#Performed / # required *100 %	# performed / # required *100 %	# performed / # required *100 %	# performed / # required *100 %	
General Comments (Delete this row from final table)			- All formative assessment tools used for formative or summative assessments purposes MUST abide by the marking result categories in the SCFHS policies (Clear Pass - Borderline Pass - Borderline Fail - Clear Fail). - If using Marking in the Assessment Tool, it would be converted to percent (%) and matched to final scoring above. - If using Number performed for the Assessment Tool, the equation above to covert the overall too percent (%) to report score is used. - Refer to the SCFHS "FA Tools List Summary" for the description and conduction instructions of each Tool to assist choosing them - Refer to the SCHFS Shared slides regarding the regulation of how the tools below can be used. - Refer to the SCHFS Shared slides on how to calculate the final score whether you are using a Marking method or performed number and converting it to final score in percent to be reported as (Clear Pass - Borderline Pass - Borderline Fail - Clear Fail)				

Advanced Nursing Practice Diploma in Neonatal Intensive Care							
Academic Activities	Health Teaching Case Study Case Presentation Mock OSCE Academic Half Day	1. Health Teaching – Trainees will conduct health teaching to a selected participant. (Ex. Health teaching about proper breastfeeding will be conducted to the mother at Mat. OPD.) 2. Case Study- Trainees must be discussed one case per week. 3.Case	69.5%-100% **Formative Assessment**	59.5-69.5% **Formative Assessment**	59.4-50% **Formative Assessment**	< 50% **Formative Assessment**	# performed / # required *100 %

		presentation- Trainees are required to attend and present at least two cases per academic year 4.Mock OSCE - OSCE cases simulation will be prepared by the scientific committee and conducted as preparation of the trainees for the final					

		Clinical exam. <u>Academic Half day-</u> It will cover the required topics, competencies, and lectures, and the trainees must be involved in the development and delivery of the topics under faculty supervision will be reserved per week.					

Advanced Nursing Practice Diploma in Neonatal Intensive Care							
EYPT-Local (progress test)	1 time SCFHS Promotion Exam	Final Exam for the first year trainees to determine their promotion to 2nd year.	69.5%-100% **Clear Pass Formative Assessment**	59.5-69.5% **Borderline Pass Formative Assessment**	59.4-50% **Borderline Fail Formative Assessment**	< 50% **Clear Fail Formative Assessment**	# performed / # required *100 %
CBD	3 CBD	Minimum three case based discussion during the academic year	69.5%-100% **Formative Assessment**	59.5-69.5% **Formative Assessment**	59.4-50% **Formative Assessment**	< 50% **Formative Assessment**	# performed / # required *100 %
OSCE/OSPE	OSCE 6 Station	OSCE will be done once/year, with a minimum of six stations (Trainees will practice for the final clinical	69.5%-100% **Clear Pass formative Assessment**	59.5-69.5% **Borderline Pass formative Assessment**	59.4-50% **Borderline Fail formative Assessment**	< 50% **Clear Fail formative Assessment**	

		exam) Results on the OSCE is for formative feedback purposes only and not for pass/fail purposes.					
Research	1 Research proposal	Trainees are required to take the SCFHS E-modules (research) and give proof of completion or certificate, AND trainees are to complete at least one	**Clear Pass Formative Assessment**	**Borderline Pass Formative Assessment**	**Borderline Fail Formative Assessment**	**Clear Fail Formative Assessment**	

		research proposal in the academic year at second year					
Logbook	4 Logbooks for 2nd year 6 Logbooks for 1st year Refer to SCFHS "Mumaris"	Trainees need to submit the mandated logbooks before the academic year-end. They can submit as many as they want as long as it will not go below the required and the highest score will be selected	69.5%-100% **Formative Assessment**	59.5-69.5% **Formative Assessment**	59.4-50% **Formative Assessment**	< 50% **Formative Assessment**	# performed / # required *100 %

		and recorded.					
DOPs	24 Competencies	Competencies check off (each competency is evaluated three times at different sessions)	69.5%-100% **Formative Assessment**	59.5-69.5% **Formative Assessment**	59.4-50% **Formative Assessment**	< 50% **Formative Assessment**	# performed / # required *100 %
Other	1. Lecturio Platform	It is an Online Platform that provide lectures for easy understanding and is an additional medium for the trainees to	69.5%-100% **Formative Assessment**	59.5-69.5% **Formative Assessment**	59.4-50% **Formative Assessment**	< 50% **Formative Assessment**	

		improve or enhance their knowledge and skills. In every lecture, there are exam questions for the trainees' learning assessment. There is also a question bank that will help trainees for review.					
	2.Assignment 3. Quizzes 4. Review question	Assignments: Given to the trainees to improve their grade	69.5%-100% **Formative Assessment**	59.5-69.5% **Formative Assessment**	59.4-50% **Formative Assessment**	< 50% **Formative Assessment**	# performed / # required *100 %

		or scores and to enhance their knowledge. Quizzes: Given before the final exam of every module. Review Questions: This is given as preparation for promotion exam or the trainees' final written exam with rationalization.					

Advanced Nursing Practice Diploma in Neonatal Intensive Care							
ITERS	SCFHS	Every month: a minimum of (10) ITER should be completed per year	**Clear Pass Formative Assessment**	**Borderline Pass Formative Assessment**	**Borderline Fail Formative Assessment**	**Clear Fail Formative Assessment**	

Appendix A provides the information on Assessment mapping

2.3. Promotion of the trainee:

Trainee promotion from one level to the next is determined in accordance with the SCFHS regulations and applicable bylaws. This is generally based on the successful completion of the curriculum's required assessments, EA, evaluation forms, and specialty-specific requirements, as well as satisfactory overall performance and fulfillment of any remediation or action plans, if applicable. Furthermore, noncompliance with these requirements may result in disciplinary actions under SCFHS regulations, which may include repeating the entire academic year or a portion thereof.

2.4. Final In-Training Evaluation Report (FITER)

FITER is a comprehensive final evaluation required at the end of training to determine trainees' readiness for independent practice. Its format and content are governed by the SCFHS regulations and may evolve over time. Submission of the FITER is part of the process for certification eligibility in accordance with the SCFHS requirements.

Summative Assessment

3.1 General Principles

Summative assessment is the assessment component primarily designed to make informed decisions regarding the trainees' competence and readiness to progress or enter independent practice. Unlike formative assessment, it does not principally aim to provide constructive feedback, but rather to judge whether the required standards have been fulfilled. For additional details, please refer to the General Bylaws and Executive Policy of Assessment (available online at www.scfhs.org).

Learning Domain	Summative Assessment Tools	Passing Score
Knowledge	- Final Written Examination	MCQs 80-120 MCQ
Skills	- Objective Structured Clinical Examinations (OSCE)	At least borderline pass in each tool according to the standard setting method used by the executive administration of assessment
Attitude	FITER: In-Training Evaluation Report	Successfully pass FITER

TABLE: Summary of Summative Assessment Tools

3.2 Final Specialty Examinations

Final Clinical Examination Blueprint

		DIMENSIONS OF CARE				
		Health Promotion and Illness Prevention 1±1 Station(s)	**Acute** 5±1 Station(s)	**Chronic** 3±1 Station(s)	**Psychological Aspects** 1±1 Station(s)	**# Station(s)**
DOMAINS FOR INTEGRATED CLINICAL ENCOUNTER	**Patient Care** 7±1 Station(s)	1-2	1-2	1-2		3-7
	Patient Safety and Procedural Skills 1±1 Station(s)		1-2			1-2
	Professional Behaviors 0±1 Station(s)		1-2			1-2
	Total Stations	1-2	3-6	1-2	0	5-11

*Main blueprint framework adapted from the Medical Council of Canada Blueprint Project.

For additional details on the final examinations, please refer to the general bylaws of training in postgraduate programs and general assessment bylaws (available online: www.scfhs.org).

3.3 Certification of Training-Completion

The Certification of Training Completion and the trainees' eligibility for final examinations are governed by the SCFHS regulations and policies. Trainees must fulfill all the requirements outlined by the SCFHS and their training program, including successful completion of rotations, assessments, and any additional mandated components (please refer to www.scfhs.org). This certification is issued and approved by the supervisory committee or its equivalent, according to the SCFHS policies

XII. PROGRAM AND COURSE EVALUATION

The SCFHS applies various measures to evaluate the implementation of this curriculum. The training outcomes of this program were reviewed using the quality assurance framework endorsed by the Central Training Committee of the SCFHS. The trainee assessment results (both formative and summative) were analyzed and mapped against the curriculum content. Additional indicators incorporated into the evaluation process included the following:

- Annual trainees' satisfaction survey reports.
- Reports from trainees' evaluation of faculty members.
- Reports from trainees' evaluation of training rotations.
- Annual survey data from program directors.
- Data obtained through program accreditations and accreditation review reports.
- Reports gathered from direct field communications with trainees and trainers.
- Quality reports and metrics from Standard & Quality Departments (e.g., Scientific Council reports, Training Center Reports, Code Blue data and reports, and related surveys).

Goal-Based Evaluation: The achievement of the intended outcomes or competencies will be evaluated at the end of each stage to assess the effectiveness of curriculum delivery. Any deficiencies will be addressed in the subsequent stage by utilizing the time allocated to train-selected topics and professional sessions.

In addition to expert subject matter input and best practices drawn from benchmarked international programs, the SCFHS will apply a robust approach to ensure that this curriculum incorporates all the relevant data available at the time of its future revisions.

XIII. POLICIES AND PROCEDURES

This curriculum outlines the means, materials, and learning objectives that trainees and trainers will use to achieve the identified educational outcomes. The SCFHS maintains a comprehensive set of "General Bylaws of Training in Postgraduate Programs" and "Executive Policies" published on the official SCFHS website that governs all training-related processes. These include, but are not limited to, general bylaws of training, assessment, and accreditation, as well as executive policies on admission, registration, formative assessment and promotion, examination, trainees' representation and support, duty hours, and leaves, all of which are examples of regulations that must be implemented. Under this curriculum, the trainees, trainers, and supervisors are required to adhere to the most current versions of these bylaws and policies, which are accessible online through the official SCFHS website.

XIV. APPENDICES

1. Appendix A; Example of Academic Half-Day Topics.
2. Appendix B: Research Requirements Form.
3. Appendix C: Simulation example.
4. Appendix D: List of common medication used in NICU.
5. Appendix E: list of common disease in NICU.
6. Appendix F: Advance Nursing Practice in NICU Competencies
7. Appendix G: References

Appendix A: Academic Half-Day Topics

The following is a table with example topics illustrating half-day activities as they span more than one year (or a cycle of teaching if more than one year is required to cover all topics):

The illustrative purposes are as follows. Details of the topics/cases, frequency, levels, and years must be clearly outlined and aligned with the mapping.

Academic Week	*Date and time*	*Section*	*Sessions*
6	November 8, 2026 12:00 – 16:00	Neonatal resuscitation and stabilization of the newborn.	• Preparation required for neonatal resuscitation
			• Thermoregulation during resuscitation
			• Airway management, simulation, positive pressure ventilation, chest compression, Controversies in neonatal resuscitation, withholding and discontinuing resuscitation
			• Transportation of neonates
7	November 15, 2026 12:00 – 16:00	Common Essential Nursing Practices in the NICU	• Nursing care of neonate on continuous positive airway pressure (CPAP)
			• Chest tube management
			• Tracheostomy care and suctioning
			• Blood transfusion and exchange transfusion
8	November 22, 2026 12:00 – 16:00	Arterial blood gas	• Understand nursing responsibilities in ABG sampling
			• Identify common errors
			• Apply prevention strategies
			• ABG interpretation.

Academic Week	*Date and time*	*Section*	*Sessions*
9	November 26, 2026 12:00 – 16:00	Ethics problem in NICU	• Ethical decision-making
			• Ethical and legal context of professional, ethical issues
			• Ethical principles and legal/regulatory requirements in the resolution of ethical dilemmas

Appendix B (Research Requirements)

The illustrative purposes are as follows. Additional details on frequency, levels, and years must be clearly outlined and aligned with the mapping.

2.2.6 RESEARCH ROTATION

Number of rotation months	First year	Second year	Total
	0	1	1

2.2.7. RESEARCH ASSESSMENT TOOLS

Trainee:	ID Number:				
Date:	Specialty Area for Research				
Program Director:	Mark Obtained:				
Percentage:					
SCIENTIFIC NURSING RESEARCH	0	1	2	N/A	REMARKS
The title page includes the following:					
Topic					
Candidate's name and surname					
Course name					
Timely submission					
/8					
The table of contents includes the following:					
Headings and sub-headings are included.					
Numbering for the headings and sub-headings are included.					
Headings' page numbers are included.					
Headings and sub-headings correspond with those in text.					
/8					
Abstract					
The abstract addresses the title, introduction, purpose, methodology, plan of work, and time schedule.					
The abstract contains keywords					

Trainee:	ID Number:				
Date:	Specialty Area for Research				
Program Director:	Mark Obtained:				
Percentage:					
SCIENTIFIC NURSING RESEARCH	0	1	2	N/A	REMARKS
/4					
Introduction:					
Background information to the clinical problem is provided.					
The importance of conducting the research is stated.					
/4					
Problem statement:					
The problem statement is clear.					
The problem statement includes the topic, target group, and setting.					
/4					
Purpose and objectives:					
The purpose of the intended research is stated.					
Measurable objectives to support the purpose are stated.					
/4					
Literature review:	0	1	2	N/A	REMARKS
The literature review is relevant to the research problem.					
Mainly primarily sources are reviewed.					

Trainee:	ID Number:				
Date:	Specialty Area for Research				
Program Director:	Mark Obtained:				
Percentage:					
SCIENTIFIC NURSING RESEARCH	0	1	2	N/A	REMARKS
The confidentiality of data is described.					
/6					
Data collection method and analysis:					
The data collection method is described.					
The data collection instrument is explained in detail.					
The reliability and validity of the data collection method and instrument are described.					
An appropriate data analysis method and statistical tests are selected and described.					
/8					
List of sources					
A detailed list of sources is included using Harvard style.					
The list of sources appears on a separate page.					
A variety of up to date sources are consulted.					
The sources correspond with the in – text citations.					
The sources are ordered alphabetically (according to author surname).					
The sources are not numbered.					

Trainee:	ID Number:				
Date:	Specialty Area for Research				
Program Director:	Mark Obtained:				
Percentage:					
SCIENTIFIC NURSING RESEARCH	0	1	2	N/A	REMARKS
The appendices appear after the list of sources.					
/14					
General:	0	1	2	N/A	REMARKS
The research report is neat.					
The research steps flow systematically.					
The research report is free of spelling errors.					
The grammar is correct.					
Effort has clearly been made.					
The research report is submitted on time.					
The plagiarism report is less than 15%.					
/14					
Appendix:					
The consent form and participant information sheet are included.					
The plagiarism report is included.					
/4					
TOTAL /100					

Trainee:	ID Number:				
Date:	Specialty Area for Research				
Program Director:	Mark Obtained:				
Percentage:					
SCIENTIFIC NURSING RESEARCH	0	1	2	N/A	REMARKS

Comments of program director:

_____

___

_____

___

_____

___

Name of program director:_____

Signature: _____

Date:

_____

Trainee Name:

_____

Signature:

_____

Date:

_____

Appendix C (Simulation)

Contents

1. Contents
2. Introduction
    I. Rationale:
    II. Overview
    III. Goal
    IV. Objectives
    V. Target Audience
    VI. Prerequisite Knowledge and Skills
    VII. General information
3. Teaching Methods and Learning Activities
    I. Timetable distribution:
    II. Theory:
    III. Lecture
    IV. Lecture
    V. Lecture
    VI. Skills Session
    VII. Skill session 1
    VIII. Simulation
    IX. Case:
    X. Case:
4. Course Evaluation

I. Evaluation by simulation centre -:

II. Evaluation by residents -:

III. Evaluation by faculty -:

5. References

6. Appendices

I. Moulage

II. Standardized patients

III. Instructors Information Sheet

7. Approval Signatures

1. ACTIVITY DESCRIPTION

Simulation Curriculum – Neonatal Resuscitation Program (NRP)

1. Overview

This course is a structured simulation program designed for educational and training purposes that enhances knowledge, clinical skills, and decision-making abilities through lectures, hands-on skill sessions, and high-fidelity simulation scenarios.

II. Rationale:

Neonatal resuscitation is a critical life-saving skill required by the healthcare providers involved in the care of newborns. Simulation-based training provides a safe, standardized, and effective method for practicing high- and low-frequency events. It enhances both technical skills and team communication and improves neonatal outcomes.

III. Goal

Equipping participants with the knowledge, psychomotor skills, and teamwork competencies required to perform effective neonatal resuscitation.

IV. Objectives

At the end of this activity, participant will be able to:

1. Demonstrate knowledge of the NRP algorithm.
2. Perform airway management including bag-mask ventilation and intubation.
3. Establish vascular access and administer medications during neonatal resuscitation.
4. Apply effective chest compressions in neonates.

5. Function effectively as part of a multidisciplinary resuscitation team using closed-loop communication

V. Target Audience

Neonatal intensive care diploma trainee

VI. Prerequisite Knowledge and Skills

Neonatal resuscitation program certificate NRP

VII. General information

Duration of Session:	5 hours
Frequency of activity / year:	4/year
Number of Trainees per Session:	6
Ratio of instructors:	1:3

2. Teaching Methods and Learning Activities

I. Timetable distribution:

Time	Title	Objectives	Method	Location	Group Name	Educator Name
30 min	Introduction & Orientation	Familiarize with goals & expectations	discussion	Class	All	NRP instructor
45 min	NRP Algorithm	Recognize the initial steps and decision-making	Lecture	Class	All	NRP instructor
45 min	Airway & Breathing	Review airway maneuvers and ventilation	Lecture	Class	All	NRP instructor
30 min	Circulation & Medications	Identify compressions & meds	Lecture	Class	All	NRP instructor
60 min	Demonstration NRP	Apply NRP steps	Demonstration	Skill lab	All	NRP instructor

II. Theory section:

I. Lecture (NRP Algorithm)

Activity Title:	NRP Algorithm
Total time:	45min
Faculty:	NRP instructor
Learning Objectives:	Demonstrate the initial assessment, thermal regulation, oxygen use, and algorithm flow.
Participants for this session:	All trainees
Content Description:	Review of the initial steps in newborn resuscitation.
Lecture room requirement:	NRP algorithm, radiant warmer, NRP mannequins, airway kits, UVC kits, laryngoscopes, medications
Trainees assessment	Performance checklist

Lecture 2

Activity Title:	Airway & Breathing
Total time:	45min
Faculty:	NRP instructor
Learning Objectives:	Demonstrate positioning, bag-mask ventilation, and intubation indications.
Participants for this session:	All trainees
Content Description:	Apply Ventilation corrective steps (MR SOPA), devices.
Lecture room requirement:	NRP algorithm, radiant warmer, NRP mannequins, airway kits, UVC kits, laryngoscopes, medications
Trainees' assessment	Performance checklist

Lecture 3

Activity Title:	Circulation & Medications
Total time:	30 min
Faculty:	NRP instructor
Learning Objectives:	Perform chest compressions, coordinate with ventilation, and administer epinephrine.
Participants for this session:	All trainees
Content Description:	Apply Compressions technique, vascular access (UVC, IO), medication dosing
Lecture room requirement:	NRP algorithm, radiant warmer, NRP mannequins, airway kits, UVC kits, laryngoscopes, medications
Trainees assessment	Performance checklist

III. Skills *Session*

I. Skill session 1

Session Title:	Neonatal Resuscitation Skills		
Total time:	45 min		
Faculty:	NRP instructor		
Learning Objectives:	Demonstrate the NRP step		
Participants for this Session:	All trainees		
Content Description	Applying NRP steps		
Station	**Equipment**	**Quantity**	**Provided by**
1 Airway management	NRP mannequins, airway kits, UVC kits, laryngoscopes, epinephrine syringes	2	Center
2 chest Compressions on neonatal mannequin	NRP mannequins, airway kits, UVC kits, laryngoscopes, epinephrine syringes	2	Center
3 Umbilical venous catheter insertion / vascular access	NRP mannequins, airway kits, UVC kits, laryngoscopes, epinephrine syringes	2	Center
Trainees' assessment	Performance checklist		

VI. simulation:

I. Case:

Case Title	Term Newborn with Apnea	
Total time	30 min	
Lead Faculty/ Course Director:	NRP instructor	
learning Objectives of the session:	Apply initial steps, perform effective PPV, and recognize need for intubation.	
Case Description (Expanded case title and General Description of what will happen during the case)	Full-term baby, poor respiratory effort, responds to ventilation.	
Venue	Skill lab	
Patient Information	**MRN/Name**:123123	**Age: 7 day**
	Weight:2kg	**Gender: Male**
Case Presentation	Full-term baby, poor respiratory effort, responds to ventilation.	
Past medical/surgical/ family history	Pervious insertion chest tube	

Case Title	Term Newborn with Apnea

Narrative Case Description (Phase Progression):			
Phase Name	**Patient Parameter**	**Anticipated response/reaction**	**Notes**
PPV step	HR:90 bpm RR: 35bpm Osat:88	Position, suction, PPV start	
Transition Time / Action	Improvement with PPV		
Phase Name	**Patient Parameter**	**Anticipated response/reaction**	**Notes**
Attempted PPV steps	Vitally stable	Infant stable	
Transition Time / Action	**5 minutes**		
Clinical Diagnosis and "Correct" Treatment /Management0	Diagnosis: Desaturation Management: Do Suctioning, provide PPV, adjust FIO2		
Number/role of Participants	Patient: 1	Learners: 3	Confederate: nursing assistance
Station	**Equipment**	**Quantity**	**provided by**

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

Case Title		Term Newborn with Apnea	
1	• NRP mannequins • Airway kits • UVC kits, laryngoscopes, epinephrine syringes.	2	center
Trainees assessment	Performance checklist		

Activity Evaluation

This activity will be evaluated by different stakeholders to ensure benefits to the participants and improve quality.

I. Evaluation by Simulation Center -:

- Feedback on logistics, equipment, and environment

II. Evaluation by Residents -:

- Self-assessment of knowledge and skills, confidence in NRP

III. Evaluation *by faculty -:*

Observation checklists, performance assessment, feedback

Reference:

- American Academy of Pediatrics, Neonatal Resuscitation Program (NRP) 9th Edition.
- Weiner GM, Zaichkin J. *Textbook of Neonatal Resuscitation*. AAP, 2021.

Appendices

I. Moulage

- Simulated neonatal.

II. Standardized Patient

- Not applicable (mannequin-based).

III. Instructors Information Sheet

#	Name	Role	Level	Specialty (as in SCFHS)	SCFHS #	Mobile	Email
1							
2							
3							
4							

Approval signature:

Appendix D

List of Common Medications Used in the NICU

Class	Generic Name
Antibiotics	1- Ampicillin 2- Gentamicin 3- Cloxacillin – Oxacillin – Flucloxacillin 4- Cefotaxime 5- Ceftazidime 6- Fluconazole 7- Meropenem 8- Amphotericin B (lipid Complex) 9- Vancomycin 10- Amikacin 11- Cefazolin 12- Ceftazidime 13- Metronidazole 14- Erythromycin Ointment 15- Ofloxacin Eye drops
Inotropes	1- Dopamine 2- Dobutamine 3- Epinephrine 4- Nor-epinephrine
Cardio	1- Adenosine 2- Hydralazine 3- Atropine 4- Enoxaparin 5- Amlodipine 6- Esmolol 7- Ibuprofen 8- KCL infusion 9- Heparin 10- Captopril 11- Phosphate Sandoz
CNS	1- Midazolam 2- Morphine 3- Fentanyl 4- Flumazenil 5- Phenobarb 6- Phenytoin 7- Levetiracetam 8- Naloxone 9- Rocuronium 10- Diazepam 11- Phenobarbitone

Appendix E: List of common disease in NICU.

List of Common Diseases in the NICU

System	Common diseases
Respiratory	1- Congenital pneumonia 2- RDS 3- Tetralogy of Fallot (TOF) with pulmonary atresia 4- Preterm with RDS 5- Pulmonary hypertension 6- Hypoplastic lung 7- Meconium aspiration 8- Bronchopulmonary dysplasia (BPD) 9- Laryngomalacia 10- Pulmonary airleak syndrome 11- Transient tachypnea of the newborn (TTN) 12- Meconium aspiration syndrome (MAS) 13- Persistent pulmonary hypertension of the newborn (PPHN)
Cardiac	1- AV heart block 2- Tricuspid atresia 3- PDA 4- Coarctation of aorta 5- Complex cyanotic congenital heart disease 6- Hydrops fetalis, 7- Hypo-plastic left heart 8- Double outlet right ventricle (DORV) 9- Transposition of the great arteries (TGA)
Digestive	1- Imperforated anus 2- Abdominal mass 3- Duodenal/jejunal atresia 4- Gastrochisis/omphalocoele 5- Tracheoesophageal fistula (TEF) 6- Cleft lip and palate 7- Diaphragmatic hernia 8- Neonatal ascites 9- Omphalocele 10- Necrotizing enterocolitis (NEC)
Urinary	1- Polycystic kidney 2- Cystic hygroma 3- Single hypo-plastic kidney 4- Bilateral hydronephrosis 5- Bladder extrophy 6- Hypospadias

Appendix F: Advance Nursing Practice in NICU Competencies

	Advance Nursing Practice in NICU Competencies
	Competency Check Offs
1	Neonatal Physical Assessment
2	Medication Administration
3	Aseptic Wound Care
4	Hand Hygiene and Proper Gloving
5	Pain Assessment Re Assessment and Management
6	Point of Care Testing Blood Glucose
7	Restraints Use and Monitoring
8	Blood and Blood Products Administration
9	Vaccination
10	Peripheral Intravenous (PIV) Device Insertion, Maintenance, Care and Discontinuation
11	Peripherally Inserted Central Catheter Care and Maintenance
12	Orogastric Nasogastric Tube Insertion and enteral feeding
13	Tracheostomy Care (Suctioning, Cleaning and Changing a Dressing)
14	Arterial Catheter Insertion (Assisting), Care, Blood Sampling and Removal
15	Assist in administration of Surfactant Therapy

	Advance Nursing Practice in NICU Competencies
16	Assistance in Central Line Insertion Removal and the Provision of Nursing Care
17	Assistance in Chest Tube Insertion, Removal and the Provision of Nursing Care
18	Assisting with Lumbar Puncture
19	Assisting with the Insertion of Umbilical Lines
20	External Defibrillation
21	Interpretation of Cardiotocography Trace (CTG)
22	Maintaining Mechanical Ventilation
23	Nasotracheal Suctioning
24	Immediate Newborn Care
	Total
	SOE Competencies
1	Discharge Planning From NICU
2	Inotropes and Vasopressors
3	Sedation and Analgesia
4	Sarnat and Thompson Scoring
5	Care of Infant in Incubator
	Total

Appendix-G

References:

In APA

In APA

1. Beal, M. D., Kinnear, J., Anderson, C. R., Martin, T. D., Wamboldt, R., & Hooper, L. (2017). The effectiveness of medical simulation in teaching medical students critical care medicine: a systematic review and meta-analysis. Simulation in Healthcare, 12(2), 104–116.
2. Cook, D. A., Erwin, P. J., & Triola, M. M. (2010). Computerized virtual patients in health professions education: a systematic review and meta-analysis. Academic Medicine, 85(10), 1589–1602.
3. Cook, D. A., Hatala, R., Brydges, R., Zendejas, B., Szostek, J. H., Wang, A. T., ... & Hamstra, S. J. (2011). Technology-enhanced simulation for health professions education: a systematic review and meta-analysis. Jama, 306(9), 978–988.
4. Lynagh, M., Burton, R., & Sanson-Fisher, R. (2007). A systematic review of medical skills laboratory training: where to from here? Medical Education, 41(9), 879–887.
5. So, H. Y., Chen, P. P., Wong, G. K. C., & Chan, T. T. N. (2019). Simulation in medical education. Journal of the Royal College of Physicians of Edinburgh, 49(1), 52–57.

This Curriculum Template document has been reviewed and updated utilizing the following references:

1. Frank, J. R., Snell, L., Cate, O. T., Holmboe, E. S., Carraccio, C., Swing, S. R., ... & Harris, P. (2010). Competency-based medical education: Theory to practice. *Medical Teacher*, *32*(8), 638–645. https://doi.org/10.3109/0142159X.2010.501190
2. Royal College of Physicians and Surgeons of Canada. (2015). Competency-Based Medical Education. Retrieved from https://www.royalcollege.ca
3. Frank, J. R., Snell, L., Sherbino, J., & Boucher, A. (2015). *CanMEDS 2015 Physician Competency Framework Series I*. Ottawa: Royal College of Physicians and Surgeons of Canada.
4. Norcini, J., Anderson, M. B., Bollela, V., Burch, V., Costa, M. J., Duvivier, R., Hays, R., Mackay, M. F. P., Roberts, T., & Swanson, D. (2018). 2018 Consensus framework for good assessment. *Medical Teacher*, *40*(11), 1102–1109. https://doi.org/10.1080/0142159X.2018.1500016
5. General Medical Council. (2019). *Designing and maintaining postgraduate assessment programmes*. Retrieved from https://www.gmc-uk.org
6. Royal College of Paediatrics and Child Health (RCPCH). (2019). RCPCH Progress: Paediatric curriculum for excellence assessment strategy, Paediatrics specialty postgraduate training (Version 1.2). General Medical Council.
7. The World Federation for Medical Education. (2015). WFME Global Standards for Quality Improvement: Postgraduate Medical Education (Revised ed.). https://formacionenradiologia.files.wordpress.com/2018/09/wfme-2015-global-standards-for-postgraduate-medical-education.pdf

8. The World Federation for Medical Education. (2023). WFME Global Standards for Quality Improvement: Postgraduate Medical Education (3rd ed.). https://wfme.org/wp-content/uploads/2023/03/WFME-STANDARDS-FOR-POSTGRADUATE-MEDICAL-EDUCATION_2023.pdf

Module reference book:

1. Core curriculum for neonatal intensive care nursing fifth edition
2. Physical Assessment of the Newborn , A Comprehensive Approach to the Art of Physical Examination Sixth Edition
3. MERENSTEIN & GARDENERS HANDBOOK of Neonatal Intensive Care fifth edition.
4. Fluids & Electrolyte made Incredibly Easy Sixth edition clinical editor laura M, Willis.
5. Ready reference for microbe 4th edition APIC
6. Nursing leadership and management:
    - Marquis, B. L., & Huston, C. J. (2020). Leadership Roles and Management Functions in Nursing: Theory and Application (10th ed.). Lippincott Williams & Wilkins (LWW).
7. Neonatal and Pediatric Pharmacology therapeutic principles in practice 4th edition



@SchsOrg
www.scfhs.org.sa

الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties