



**FACULTY OF
PAEDIATRICS**

ROYAL COLLEGE OF
PHYSICIANS OF IRELAND

HIGHER SPECIALIST TRAINING IN

NEONATOLOGY

OUTCOME-BASED EDUCATION - OBE CURRICULUM



This curriculum of Higher Specialist Training in Neonatology was developed in 2024 by a team of Neonatologists led by Dr Lisa McCarthy and Dr Brian Walsh, National Specialty Directors, and the RCPI Education Department. The Curriculum undergoes an annual review process by the National Specialty Director(s) and the RCPI Education Department. The Curriculum is approved by the Specialty Training Committee and the Faculty of Paediatrics.

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1.0	July 2024	Mariangela Esposito	New OBE Curriculum

National Specialty Directors' Foreword

The remit of the Neonatologist spans from antenatal counselling of high-risk and at-risk pregnancies (in conjunction with obstetric specialists), management of prematurity, caring for sick and healthy full-term newborns including infants born with congenital anomalies, to long-term follow-up of infants at risk of complications including neuro-disability. Incorporated into practice is counselling of parents with a fetus and child at significant risk of longer-term health problems.

The Neonatal HST curriculum has been developed to equip future Neonatologists with the knowledge and skill set to deliver appropriate, competent, professional care across this broad range of neonatal conditions. This 2024 revised edition of the curriculum has been amended and edited to align with the Outcome Based approach to Education (OBE).

A move to OBE is a key initiative of the RCPI strategic plan and aims to enhance training at both BST and HST levels. This approach is designed to improve education and assessment, by focusing on demonstrating competency rather than focusing on a time-based model of educational assessment.

The Neonatal HST curriculum has been adapted for OBE, by focusing on the demonstration of specific targeted outcomes and goals in key areas of neonatal training. These goals and outcomes were initially adapted from previous curricula, and then reviewed and set via a workshop of experienced neonatal consultants from a range of institutions nationally.

It is our expectation that the revised OBE structure of the curriculum will clarify and facilitate goal setting for Trainees and their Trainers and enhance the training experience.

Dr Lisa McCarthy, National Specialty Director

Dr Brian Wash, National Specialty Director

Table of Contents

<i>National Specialty Directors' Foreword</i>	1
1. INTRODUCTION	3
1.1. Purpose of training	4
1.2. Purpose of the curriculum.....	4
1.3. How to use the curriculum.....	4
1.4. Reference to rules and regulations.....	4
1.5. Overview of Curriculum Sections and Training Goals	5
2. EXPECTED EXPERIENCE	6
2.2. Clinics, Ward Rounds, Consultations and Complicated Cases	9
2.3. Procedural/Practical/Surgical Skills in Neonatology.....	10
2.4. In-house commitments	10
2.5. Assessments and Evaluations	10
2.6. Research, Audit and Teaching Experience.....	10
2.7. Teaching Attendance.....	11
2.8. Overview of Expected Experience	11
3. CORE PROFESSIONAL SKILLS	13
Partnership	14
Performance	15
Practice	16
4. TRAINING GOALS IN NEONATOLOGY	17
Training Goal 1 – The Fetus.....	18
Training Goal 2 – Stabilisation of the Newborn	19
Training Goal 3 – Ongoing care of the newborn	20
Training Goal 4 – Procedural Skills	26
Summary Table of Procedural Skills	27
Training Goal 5 – End-of-life Care	29
Training Goal 6 – Post-discharge Care	30
Training Goal 7 – Regional Organisation of Perinatal Care.....	31
Training Goal 8 – Integrated Care of the Newborn	32
5. APPENDICES	33
ASSESSMENT APPENDIX	34
Workplace-Based Assessments and Evaluations	34
TEACHING APPENDIX	37
Neonatology Teaching Attendance Requirements	38

1. INTRODUCTION

This section includes an overview of the Higher Specialist Training programme and of this Curriculum document.

1.1. Purpose of training

This programme is designed to provide training and professional development necessary to work as a Consultant Neonatologist. This is achieved by completing Neonatology training in approved training posts, under the supervision of certified Trainers, in order to satisfy the outcomes listed in the Curriculum. Each post provides Trainees with a named Trainer and the programme is under the direction of the National Specialty Directors for Neonatology.

1.2. Purpose of the curriculum

The purpose of the curriculum is to define the relevant processes, contents, outcomes and requirements to be achieved. The curriculum is structured to delineate the overarching goals, outcomes, expected learning experiences, instructional resources and assessments that comprise your Higher Specialist Training (HST) programme. It provides a feedback framework for successful completion of HST programme.

In keeping with developments in medical education and to ensure alignment with international best practice and standards, the Royal College of Physicians (RCPI) has implemented an Outcomes Based Education (OBE) approach. This curriculum design differs from traditional minimum based requirement designs in that the learning process and desired end-product of training (outcomes) are at the forefront of the design to provide the essential training opportunities and experiences to achieve those outcomes.

1.3. How to use the curriculum

Trainees and Trainers should use the Curriculum as a basis for goal-setting meetings, delivering feedback, and completing assessments, including appraisal processes (Quarterly Assessments/End of Post Assessment, End of Year Evaluation). Therefore, it is expected that both Trainees and Trainers familiarise themselves with the Curriculum and have a good working knowledge of it.

Trainees are expected to use the curriculum as a blueprint for their training and record specific feedback, assessments and training events on ePortfolio. The ePortfolio should be updated frequently during each training placement.

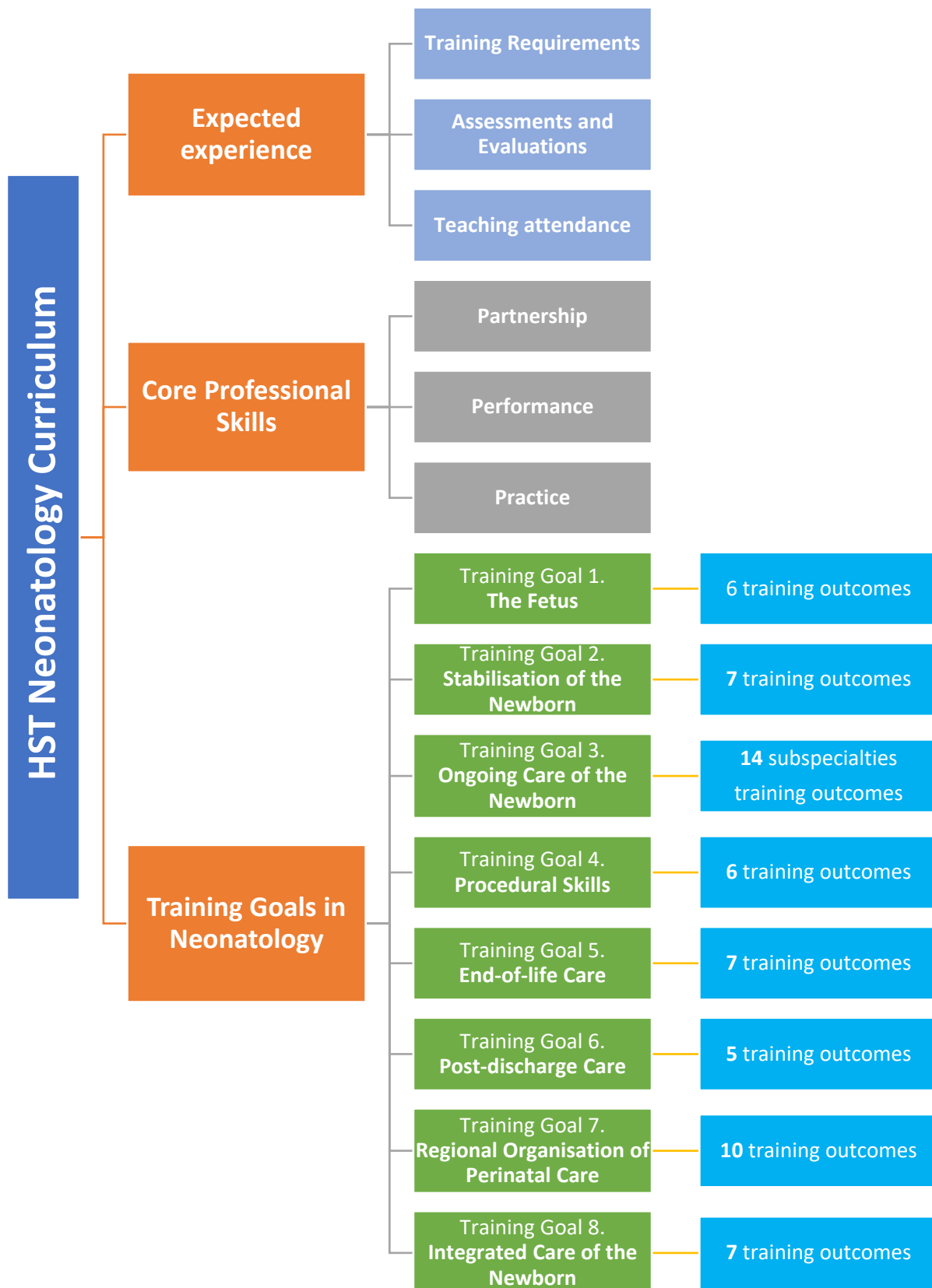
It is important to note that ePortfolio is a digital repository designed to reflect curriculum requirements. It facilitates recording of progress through HST and evidence that training is valid and appropriate. While a complete ePortfolio is essential for HST certification, Trainees and Trainers should always refer to the curriculum in the first instance for information on the requirements of the training programme.

Please note: It is the responsibility of the Trainee to keep an up-to-date ePortfolio throughout the programme as it reflects their individual training experience and it documents that they have successfully met training standards as expected by the Medical Council.

1.4. Reference to rules and regulations

Please refer to the Training Handbook for rules and regulations associated with training. Policies, procedures, relevant documents, and Training Handbooks can be accessed on the RCPI website by following [this link](#).

1.5. Overview of Curriculum Sections and Training Goals



2. EXPECTED EXPERIENCE

This section details the training experience and the service provision tasks that all Trainees are expected to complete throughout the Higher Specialist Training.

2.1. Duration and Organisation of Training

The duration of HST in Neonatology is 3 years.

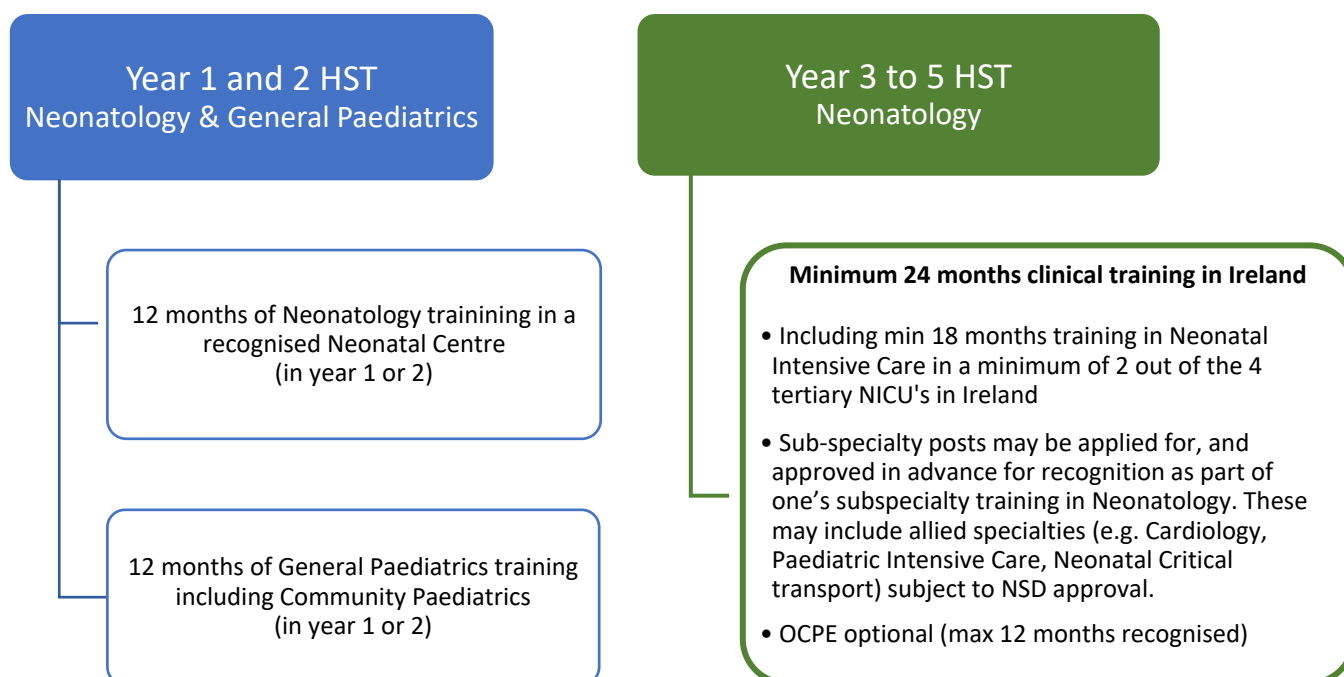
Training in Neonatology builds on a broad basic and early specialist training in General Paediatrics. Eligibility criteria for Neonatal Sub-specialist Training includes Basic Specialist Training (BST) in Paediatrics (2 years minimum) and successful completion of year 1 and 2 of the Higher Specialist Training Programme in General Paediatrics.

Training in pre- and postoperative care of the surgical and cardiac infant, and neonatal transport (NNTP) may be provided by a six-month rotating post within the Dublin PICU and NNTP network.

Up to 6 months of training in a relevant, pre-approved paediatric subspecialty may be counted towards NST (e.g. neonatology in a paediatric hospital, cardiology etc), but strict criteria will apply for post recognition.

In addition, up to a maximum of 12 months of pre-approved Out of Clinical Programme Experience (OCPE) may be accredited towards completion of training. This may encompass either overseas experience in a formal training fellowship or research leading to a postgraduate degree, subject to NSDs approval.

Overview of organisation and duration of Training



Site and duration

- A minimum of 24 months clinical training in Ireland.

- This must include a **minimum of 18 months training in Neonatal Intensive Care in 2 out of the 4 tertiary NICU centres in Ireland** (National Maternity Hospital, The Coombe Women and Infants Hospital, The Rotunda and Cork University Maternity Hospital). It is also anticipated that once the National Children's Hospital is operational, Trainees may additionally rotate through this site as part of their clinical training subject to NSD review and requirements. The 18 months (minimum) training in tertiary Neonatal Intensive Care should be a dedicated period of neonatal training where Trainees gain experience in all aspects of neonatal care as specified in the curriculum. This requirement cannot be met through on-call alone, e.g. during OCPE posts.

- Sub-specialty posts may be applied for, and approved, **in advance** for recognition as part of one's subspecialty training in Neonatology. These may include allied specialties (e.g. Cardiology or Paediatric Intensive Care) and Neonatology in the tertiary paediatric centres or with the Neonatal Transport service (NNTP), subject to NSD approval.

Core training: The Neonatology specialty training builds on and further develops the knowledge and skills acquired during the first two years of the HST Paediatrics programme.

The practice of Neonatology involves the treatment of newborn infants at all levels of care from healthy newborns to those who require special and intensive care. An element of counselling is also incorporated within the practice, especially with regards to parents whose fetus is at significant risk.

- Trainees in Neonatology must participate in care and management of the fetus and newborn in collaboration with maternal fetal medicine specialists and paediatric subspecialists. Trainees must be competent in the management of the critically ill newborn infant, including techniques of resuscitation, airway support, electric vital signs monitoring, temperature control and nutritional support.
- Trainees in Neonatology must have experience in the transport of the sick newborn and have a full understanding of the principles and practice of regionalisation of perinatal care including transfer of high-risk pregnancies to appropriate centres.
- Trainees in Neonatology must participate in multidisciplinary teams which include nursing and allied health staff in the care of newborns and their families.

Out of Clinical Programme Experience (OCPE): Up to a maximum of one year of pre-approved out of clinical programme experience (OCPE) may be accredited towards the completion of training, for overseas fellowship programmes (of structured and supervised training in Neonatology) or research leading to a postgraduate degree. This OCPE year (research or clinical) must be preapproved, and retrospective credit cannot be applied.

Training Principles: During the period of training the Trainee must take increasing responsibility for seeing patients, undertaking ward consultations, making decisions and operating at a level of responsibility which would prepare them for practice as an independent Consultant. Supervision should be particularly close during the first one or two years. Particularly experienced Trainees may undertake the running of an outpatient clinic on their own without direct consultant supervision later in the programme. At the start of training year, Trainees must fill out a Personal Goals form with their Trainer and upload it on ePortfolio; the form should be agreed and signed by both Trainee and Trainer.

Generic Professional Skills: Generic knowledge, skills and attitudes support competencies that are common to good medical practice in all the medical and related specialties. It is intended that all

Trainees should re-affirm those competencies during HST. No timescale of acquisition is imposed, but failure to make progress towards meeting these important objectives at an early stage would cause concern about a Trainee's suitability and ability to become an independent specialist.

Recording of Evidence of training: The target numbers for training items in the following sections represent the recording recommendations to document evidence of relevant and varied clinical experience; it is understood that actual number of training experiences is likely to be well in excess of these numbers.

We recommend that feedback, relevant training events and procedures are logged in the ePortfolio over the course of the HST scheme.

2.2. Clinics, Ward Rounds, Consultations and Complicated Cases

Attendance at clinics, participation in ward rounds and consultations are required elements of all posts throughout the programme. The timetable and frequency of attendance should be agreed with the assigned Trainer at the beginning of the post.

This table provides an overview of the expected experience a Trainee should gain regarding clinics attendance, ward rounds, consultations and specific cases. These activities should be recorded on ePortfolio using the respective form.

The numbers expressed in this table are indicative of the general frequency expected by Trainees in each of these training activities. Each Trainee may have different training needs; hence, it is recommended to check with the assigned Trainer the most appropriate frequency for each of these training activities.

NEONATOLOGY CLINICS			
Outpatient Clinics	Timeline	Expected Experience	ePortfolio Form
Neonatal follow-up clinic	Over the course of HST	Attend at least 12 clinics, to be recorded in ePortfolio	Clinics
Fetal medicine clinic	Over the course of HST	Attend at least 6 clinics, to be recorded in ePortfolio	
WARD ROUNDS AND CONSULTATIONS			
Type	Timeline	Expected Experience	ePortfolio Form
Ward Rounds – Consultant-led	Per each year of training	At least 3 per week. Record 40 in ePortfolio	Clinical Activities
Ward Rounds – SpR-led, including handover	Per each year of training	At least 1 per week. Record 40 in ePortfolio	
Antenatal Counselling	Over the course of HST	At least 20, to be recorded in ePortfolio	
COMPLICATED CASES/EMERGENCIES			
Type	Timeline	Expected Experience	ePortfolio Form
Complicated cases and/or emergencies in Neonatal medicine	Over the course of HST	At least 20, to be recorded in ePortfolio	Cases
Neonatal Transport	Over the course of HST	At least 10, to be recorded in ePortfolio	

2.3. Procedural/Practical/Surgical Skills in Neonatology

Trainees are expected to complete a recommended minimum number of certain procedures which are essential in Neonatal Medicine.

To record the procedures, simply log these on ePortfolio and complete the related DOPS Assessment as indicated in the summary table included in the [Training Goal 4 – Procedural Skills](#), in this curriculum.

2.4. In-house commitments

Trainees are expected to attend a series of in-house commitments as follows:

- Attend and record on ePortfolio at least **1 Grand Rounds per month**, over the course of HST
- Attend and record on ePortfolio at least **2 Journal Club per month**, over the course of HST
- Attend and record on ePortfolio at least **2 Radiology conference per month**, over the course of HST
- Attend and record on ePortfolio at least **2 MDT Meeting per month**, over the course of HST
- Attend and record on ePortfolio at least **1 Seminar per year of training**

2.5. Assessments and Evaluations

Trainees are expected to:

- Complete **4 quarterly assessments per training year** (1 evaluation per quarter, i.e. every 3 months); and/or complete **1 end of post assessment at the end of each post** (if the end of a post coincides with the end of a year, this form can be filled in place of the quarterly assessment form. The two forms are equivalent)
- Complete **1 end of year evaluation at the end of each training year**
- Complete **4 Case Based Discussion per training year**
- Complete **2 MiniCEX per training year**
- Complete the **recommended number of DOPS** as outlined in the [Summary Table of Procedural Skills](#)
- Complete workplace-based assessments (CBD, DOPS, MiniCEX) and Feedback Opportunities relevant to the training outcomes, as agreed with the assigned Trainer.

For more information on assessment and evaluations, please refer to the [Assessment Appendix](#) at the end of this document.

2.6. Research, Audit and Teaching Experience

Trainees are expected to complete the following activities:

- Deliver **12 teaching sessions** (to include tutorials, lectures, bedside teaching, etc.) over the course of HST
- Deliver **1 oral or poster presentation**, per each year of HST
- Start at least **1 Audit or Quality Improvement Project**, per each year of HST
- Attend **1 National or International Meeting**, per each year of HST
- Be involved in the development of **2 Neonatal Guidelines**, over the course of HST

In addition, it is desirable, but not expected that Trainees aim to:

- Complete **1 research project**, over the course of HST
- Complete **1 publication**, over the course of HST
- Attend **1 committee**, over the course of HST
- Achieve **1 additional qualification**, over the course of HST
- Partake in **1 management experience**, over the course of HST

2.7. Teaching Attendance

Specialist Registrars are expected to attend all the courses and study days as detailed in the [Teaching Appendix](#), at the end of this document.

2.8. Overview of Expected Experience

Experience Type	Expected	ePortfolio form
Rotation Requirements	Complete all requirements related to the posts agreed in accordance with the Neonatal Training Handbook (access here)	n/a
Personal Goals	At the start of each year of training year complete a Personal Goals form on ePortfolio, agreed with Trainer and signed by both Trainee & Trainer	Yearly Personal Goals
On-call Commitments	Partake in on-call commitments as per requirements in your training site and record attendance on ePortfolio	Clinical Activities
Clinics	Attend Clinics as outlined in the table above and as agreed with your Trainer. Record attendance on ePortfolio	Clinics
Ward Rounds/Consultations	Gain experience in clinical handover and ward rounds as outlined above and as agreed with your Trainer. Record attendance per each post on ePortfolio	Clinical Activities
Cases	Get exposure to emergencies/complicated cases as outlined above and as agreed with your Trainer. Record attendance on ePortfolio.	Cases
Procedure and Skills	Perform the procedures as outlined in the Summary Table (Training Goal 4) and as agreed with your Trainer. Record on ePortfolio. Complete and record the respective DOPS as indicated.	Procedures, Skills and DOPS
Deliver Teaching	Record at least 12 occurrences on ePortfolio over the duration of training where you have delivered teaching (including tutorials, lectures, bedside teaching).	Delivery of Teaching
Research	<u>Desirable Experience</u> : actively participate in research and present research at conferences or national/international meetings	Research Activities
Publication	<u>Desirable Experience</u> : complete 1 publication during the training programme	Additional Professional Activities
Presentation	Deliver 1 oral presentation or poster per each year of training	Additional Professional Activities
Audit	Complete and report on an audit or Quality Improvement (QI) per year of training, either to start, continue or complete	Audit and QI

Attendance at Educational Activities	Each month attend at least 1 Grand Round, 1 Journal Club, 1 Radiology Conference, 1 MDT Meeting. Attend 1 Seminar and 1 Lecture per year. Record attendance on ePortfolio	Attendance at In-House Activities
National/International Meetings	Attend 1 per year of training	Additional Professional Activities
Development of Neonatology Guidelines	Record at least 2 opportunities of involvement in the development of Neonatal Guidelines over the course of HST	Policies & Guidelines
Committee Attendance	<u>Desirable Experience</u> which can be recorded on ePortfolio	Additional Professional Activities
Additional Qualifications	<u>Desirable Experience</u> which can be recorded on ePortfolio	Additional Professional Activities
Management Experience	<u>Desirable Experience</u> which can be recorded on ePortfolio	Management Experience
Teaching Attendance	Attend courses and Study Days as detailed in the Teaching Appendix	Teaching Attendance
Quarterly Assessment	Complete a Quarterly Assessment/End of Post Assessment with your Trainer 4 times each year. Discuss your progress, complete the form and upload it on ePortfolio.	Quarterly Assessments/End-of-Post Assessments
Workplace-based Assessment	Complete all the workplace-based assessment as outlined above and as agreed with your Trainer. Record attendance on ePortfolio using the respective form.	CBD/DOPS/Mini-CEX
End of Year Evaluation	Prepare for your End of Year Evaluation by ensuring your portfolio is up to date and your End of Year Evaluation form is initiated with your Trainer.	End of Year Evaluation

3. CORE PROFESSIONAL SKILLS

This section includes the Irish Medical Council guidelines for medical professional conduct, regarding Partnership, Performance and Practice.

These principles are woven within training experience and feedback is formally provided in the Quarterly/End of Post Assessments and End of Year Evaluation.

Partnership

Communication and interpersonal skills

- Facilitate the exchange of information, be considerate of the interpersonal and group dynamics, and have a respectful and honest approach
- Engage with patients and colleagues in a respectful manner
- Actively listen to the thoughts, concerns, and opinions of others
- Consider data protection, duty of care and appropriate modes of communication when exchanging information with others

Collaboration

- Collaborate with patients, their families, and your colleagues to work in the best interest of the patient, for improved services and to create a positive working environment
- Work cooperatively with colleagues and team members to deliver an excellent standard of care
- Seek to build trust and mutual respect with patients
- Appropriately share knowledge and information, in compliance with GDPR guidelines
- Take on-board available, relevant feedback

Health Promotion

- Communicate and facilitate discussion around the effect of lifestyle factors on health and promote the ethical practice of evidence-based medicine
- Seek up-to-date evidence on lifestyle factors that:
 - negatively impact health outcomes
 - increase risk of illness
 - positively impact health and decrease risk factors
- Actively promote good health practices with patients individually and collectively

Caring for patients

- Take into consideration patient's individuality, personal preferences, goals, and the need to provide compassionate and dignified care
- Be familiar with
 - Ethical guidelines
 - Local and national clinical care guidelines
- Act in the patient's best interest
- Engage in shared decision-making and discuss consent

Performance

Patient safety and ethical practice

- Put the interest of the patient first in decisions and actions
- React in a timely manner to issues identified that may negatively impact the patient's outcome
- Follow safe working practices that impact patient's safety
- Understand ethical practice and the medical council guidelines
- Support a culture of open disclosure and risk reporting
- Be aware of the risk of abuse, social, physical, financial, and otherwise, to vulnerable persons

Organisational behaviour and leadership

- The activities, personnel and resources that impact the functioning of the team, hospital, and health care system
- Understand and work within management systems
- Know the impacts of resources and necessary management
- Demonstrate proficient self-management

Wellbeing

- Be responsible for own well-being and health and its potential impact on the provision of clinical care and patient outcomes
- Be aware of signs of poor health and well-being
- Be cognisant of the risk to patient safety related to poor health and well-being of self and colleagues
- Manage and sustain your own physical and mental well-being

Practice

Continuing competence and lifelong learning

- Continually seek to learn, improve clinical skills and understand established and emerging theories in the practice of medicine
- Meet career requirements including those of the medical council, your employer, and your training body
- Be able to identify and optimise teaching opportunities in the workplace and other professional environments
- Develop and deliver teaching using appropriate methods for the environment and target audience

Reflective practice and self-awareness

- Bring awareness to your actions and decisions and engage in critical appraisal of your own work to drive lifelong learning and improve practice
- Pay critical attention to the practical values and theories which inform everyday practice
- Be aware of your own level of practice and your learning needs
- Evaluate and appraise your decisions and actions with consideration as to what you would change in the future
- Seek to role model good professional practice within the health service

Quality assurance and improvement

- Seek opportunities to promote excellence and improvements in clinical care through the audit of practice, active engagement in and the application of clinical research and the dissemination of knowledge at all levels and across teams
- Gain knowledge of quality improvement methodology
- Follow best practices in patient safety
- Conduct ethical and reproducible research

4. TRAINING GOALS IN NEONATOLOGY

This section includes the Neonatology Training Goals that Trainees should achieve by the end of the Higher Specialist Training.

Each Training Goal is broken down into specific and measurable Training Outcomes.

To demonstrate evidence of training and progression in each Training Outcome, Trainees should record workplace-based assessments (DOPS, MiniCEX, CBD) and Feedback Opportunities on ePortfolio.

It is recommended to agree on the most appropriate type of training and assessment methods with the assigned Trainer.

Training Goal 1 – The Fetus

By the end of HST the Trainee is expected to demonstrate an in-depth understanding of the management of the fetus and carers, and to competently manage complications that may arise during birth.

OUTCOME 1 – ASSESS NORMAL FETAL GROWTH AND DEVELOPMENT

For the Trainee to understand how to assess normal fetal growth and development.

OUTCOME 2 – INTERPRET ANTENATAL SCREENING, IMAGING AND TESTS IN DIAGNOSIS OF FETAL ABNORMALITIES

For the Trainee to recognise common congenital abnormalities identifiable in the fetus and interpret related screening tests, imaging and diagnostic tests.

OUTCOME 3 – RECOGNISE MATERNAL CONDITIONS WHICH AFFECT FETAL GROWTH

For the Trainee to recognise common maternal conditions which affect fetal growth and development.

OUTCOME 4 – UNDERSTAND INDICATIONS AND OUTCOMES OF COMMON FETO-PLACENTAL INTERVENTIONS

For the Trainee to understand the indications and outcomes of common feto-placental interventions.

OUTCOME 5 – COUNSEL PARENTS OF A HIGH-RISK PREGNANCY

For the Trainee to Counsel parents of a high-risk pregnancy, including pregnancies with a known fetal abnormality and those at risk of delivering an extremely preterm infant.

OUTCOME 6 – CONSIDER THE SURVIVAL OF EXTREMELY PRETERM NEWBORNS AND COUNSEL PARENTS

For the Trainee to consider the survival and long-term neurodevelopmental outcome data of extremely preterm newborns by week of gestation, and to counsel parents in anticipating the birth of an extremely preterm infant, including the discussion of management options at the threshold of viability.

Training Goal 2 – Stabilisation of the Newborn

By the end of HST the Trainee is expected to be capable of stabilising a newborn and competently manage challenges that may arise.

OUTCOME 1 – PERFORM STABILISATION OF THE NEWBORN

For the Trainee to perform neonatal resuscitation adhering to resuscitation guidelines.

OUTCOME 2 – PERFORM COMPETENT THERMAL MANAGEMENT OF THE NEWBORN

For the Trainee to perform competent thermal management of the newborn, demonstrating knowledge of thermoregulatory principles in the newborn, including of the thermoneutral environment.

OUTCOME 3 – PERFORM ADVANCED AIRWAY SUPPORT

For the Trainee to perform advanced airway support, including endotracheal intubation during resuscitation of the newborn.

OUTCOME 4 – LEAD A RESUSCITATION TEAM

For the Trainee to demonstrate an ability to competently lead and communicate effectively with the resuscitation team.

OUTCOME 5 – COMMUNICATE WITH CAREGIVERS OF A NEWBORN REQUIRING STABILISATION

For the Trainee to communicate clearly with carers of an infant who requires stabilisation in the delivery room including infants who do not respond to resuscitation.

OUTCOME 6 – INITIATE MANAGEMENT OF THE SICK NEWLY BORN INFANT

For the Trainee to show a diagnostic approach and appropriate initial management of the sick newly born infant.

OUTCOME 7 – PERFORM AND INTERPRET AN ASSESSMENT OF GESTATIONAL AGE

For the Trainee to perform and interpret an assessment of gestational age, using appropriate score.

Training Goal 3 – Ongoing care of the newborn

By the end of HST the Trainee is expected to demonstrate the ability to examine, assess and manage neonates who present with different conditions. The Trainee is expected to communicate clearly and empathetically with carers of a newborn with medical conditions and counsel them appropriately.

RESPIRATORY

OUTCOME 1.1 – ASSESS AND MANAGE A NEONATE WITH RESPIRATORY PROBLEMS

For the Trainee to assess and manage a neonate with a range of respiratory problems, including, but not limited to:

- Respiratory distress syndrome
- Transient tachypnoea of the newborn (TTN)
- Meconium aspiration syndrome
- Pulmonary hypoplasia
- Air leak conditions
- Chronic lung disease
- Pulmonary hypertension
- Apnoea

OUTCOME 1.2 – PROVIDE RESPIRATORY SUPPORT TO A RANGE OF NEONATAL RESPIRATORY CONDITIONS

For the Trainee to provide respiratory support to a range of neonatal respiratory conditions, using a range of modalities including continuous positive airway pressure (CPAP), conventional ventilation and high-frequency ventilation, using blood gases and non-invasive monitoring to manage ventilation and oxygenation.

CARDIOVASCULAR AND CENTRAL LINES

OUTCOME 2.1 – ASSESS THE NEONATAL CARDIOVASCULAR SYSTEM

For the Trainee to take a focused history and examination of the neonatal cardiovascular system, including understanding cardiac monitoring.

OUTCOME 2.2 – VASCULAR ACCESS

Understand the indication for the complications and management of vascular access including umbilical arterial and venous lines, peripheral arterial and venous cannula and PICC lines.

OUTCOME 2.3 – ASSESS AND MANAGE CARDIAC CONDITIONS IN NEONATES

For the Trainee to assess and manage the following cardiac conditions in neonates, including, but not limited to:

- Abnormal blood pressure and cardiac output in the neonate
- Congenital cardiac conditions

- Arrhythmias of the neonate
- Cardiac failure
- Cyanotic heart disease
- Patent ductus arteriosus in the preterm neonate

OUTCOME 2.4 – INTERPRET RESULTS OF ELECTROCARDIOGRAPH AND CARDIAC IMAGING

For the Trainee to interpret the results of electrocardiograph and cardiac imaging in the neonate.

NEUROLOGICAL AND NEUROMUSCULAR

OUTCOME 3.1 – TAKE A NEONATAL NEUROLOGICAL HISTORY AND PERFORM A NEUROLOGICAL EXAMINATION

For the Trainee to take a neonatal neurological history and perform an examination which is appropriate for age and gestation.

OUTCOME 3.2 – ASSESS AND MANAGE NEUROLOGICAL AND NEUROMUSCULAR CONDITIONS IN NEONATES

For the Trainee to assess and manage a range of neurological and neuromuscular conditions in neonates, including, but not limited to:

- Hypotonia
- Neonatal encephalopathy
- Neonatal stroke
- Periventricular haemorrhage
- Seizure disorders
- White matter injury
- Neural tube defect
- Hydrocephalus
- Mild, moderate and severe problems of neurodevelopment
- Neonatal abstinence syndrome

OUTCOME 3.3 – PERFORM AND INTERPRET BEDSIDE AEEG RECORDINGS

For the Trainee to perform and interpret bedside aEEG recordings (cerebral function monitoring/amplitude integrated EEG).

HAEMATOLOGICAL

OUTCOME 4.1 – PRACTICE SAFE AND EFFECTIVE USE OF BLOOD COMPONENTS

For the Trainee to practice safe and effective use of blood components using the principles of patient blood management, considering parental, ethical, safety issues and resource management.

OUTCOME 4.2 – INVESTIGATE AND MANAGE HAEMATOLOGICAL CONDITIONS

For the Trainee to investigate and manage haematological conditions, including but not limited to:

- Coagulopathies
- Thrombocytopenia

- Anaemias
- Isoimmune haemolytic disease

OUTCOME 4.3 – NEONATAL EXCHANGE TRANSFUSION

For the Trainee to understand the principles and the process of neonatal exchange transfusion.

METABOLIC AND ENDOCRINE**OUTCOME 5.1 – SCREEN FOR, INVESTIGATE AND MANAGE A RANGE OF METABOLIC AND ENDOCRINE DISORDERS**

For the Trainee to screen for, investigate and manage metabolic and endocrine disorders in neonates (e.g. hypoglycaemia/hyperglycaemia) involving subspecialty consultation.

OUTCOME 5.2 – RECOGNISE AND INSTITUTE EMERGENCY TREATMENT FOR INBORN ERRORS OF METABOLISM

For the Trainee to recognise and institute emergency treatment for inborn errors of metabolism.

OUTCOME 5.3 – NATIONAL SCREENING PROGRAMME

For the Trainee to understand and ensure conformity to the national screening programme.

RENAL**OUTCOME 6.1 – MANAGE FLUID AND ELECTROLYTE PROBLEMS**

For the Trainee to manage fluid and electrolyte problems, including those in preterm babies and those with surgical problems.

OUTCOME 6.2 – MANAGE AND INVESTIGATE ANTENATALLY AND POSTNATALLY DIAGNOSED RENAL DISORDERS

For the Trainee to manage and investigate antenatally and postnatally diagnosed renal disorders.

OUTCOME 6.3 – RECOGNISE AND INSTITUTE TREATMENT FOR ACUTE AND CHRONIC RENAL FAILURE

For the Trainee to recognise and institute treatment for acute and chronic renal failure.

OUTCOME 6.4 – PERFORM URETHRAL CATHETERISATION AND FAMILIARISE WITH SUPRAPUBIC ASPIRATION (DESIRABLE)

For the Trainee to perform urethral catheterisation and be familiar with suprapubic aspiration.

NUTRITION**OUTCOME 7.1 – ASSESS AND INVESTIGATE POOR GROWTH AND NUTRITION**

For the Trainee to assess and investigate poor growth and nutrition

OUTCOME 7.2 – ANTICIPATE AND PREVENT NUTRITIONAL DEFICIENCIES

For the Trainee to anticipate and prevent nutritional deficiencies, including osteopenia of prematurity and faltering growth.

OUTCOME 7.3 – PRESCRIBE AND MANAGE PARENTERAL NUTRITION IN SICK AND PRETERM INFANTS

For the Trainee to prescribe and manage parenteral nutrition in sick and preterm infants, understand benefits and potential complications of longer-term venous access insertion and benefits and side effects of parenteral nutrition.

OUTCOME 7.4 – UNDERSTAND IMPORTANCE OF BREASTFEEDING

For the Trainee to understand importance of breastfeeding, support caregivers' choices regarding feeding.

GASTROINTESTINAL AND HEPATOBILIARY**OUTCOME 8.1 – DIAGNOSE AND MANAGE NECROTISING ENTEROCOLITIS**

For the Trainee to diagnose and manage necrotising enterocolitis and liaise with surgical team when indicated.

OUTCOME 8.2 – MANAGE CONGENITAL GASTROINTESTINAL DISEASE

For the Trainee to manage congenital gastrointestinal diseases including, but not limited to, pre-operative management of:

- Bowel atresia
- Abdominal wall defect

OUTCOME 8.3 – POST-OPERATIVE CARE

To be familiar with post-operative care of infants' post-abdominal surgery including stoma management.

OUTCOME 8.4 – DIAGNOSE, INVESTIGATE AND MANAGE MALABSORPTION SYNDROMES AND NUTRITIONAL DEFICIENCIES

For the Trainee to diagnose, investigate and manage malabsorption syndromes and nutritional deficiencies with specialist support as appropriate.

OUTCOME 8.5 – INVESTIGATE SUSPECTED GASTROINTESTINAL TRACT (GIT) ANOMALIES OR DISEASE

For the Trainee to investigate suspected gastrointestinal tract (GIT) anomalies or disease.

OUTCOME 8.6 – INVESTIGATE AND MANAGE JAUNDICE

For the Trainee to investigate and manage acute and prolonged jaundice.

OUTCOME 8.7 – INVESTIGATE AND MANAGE HEPATOBILIARY DISEASE AND ADOPT A MULTIDISCIPLINARY APPROACH

For the Trainee to investigate and manage hepatobiliary disease and adopt a multidisciplinary approach where necessary.

INFECTIONS**OUTCOME 9.1 – INVESTIGATE AND MANAGE NEONATAL INFECTIONS**

For the Trainee to investigate and manage neonatal infections e.g. septicaemia, meningitis, urinary tract infection.

OUTCOME 9.2 – PERFORM A SEPTIC WORK UP

For the Trainee to perform a septic work up, including blood culture, urine sample and lumbar puncture.

OUTCOME 9.3 – GUIDELINES PERTAINING TO THE PREVENTION OF PERINATAL TRANSMISSION

For the Trainee to gain familiarity with the guidelines pertaining to the prevention of perinatal transmission of HIV, Hepatitis B, Hepatitis C and relevant pathogens.

OUTCOME 9.4 – INVESTIGATE AND MANAGE NEONATAL VIRAL INFECTIONS

For the Trainee to investigate and manage neonatal viral infections e.g. Herpes simplex, neonatal varicella, CMV.

OUTCOME 9.5 – ADVOCATE AND SUPPORT INFECTION CONTROL POLICIES AND PRACTICE IN THE NEONATAL UNIT

For the Trainee to advocate and support infection control policies and practice in the neonatal unit.

DERMATOLOGY**OUTCOME 10.1 – PARTICIPATE IN THE MANAGEMENT OF SKIN CARE IN THE NEWBORN**

For the Trainee to participate in the management of skin care in the newborn at all gestations.

OUTCOME 10.2 – RECOGNISE AND MANAGE COMMON SKIN CONDITIONS

For the Trainee to recognise and manage common skin conditions in the newborn.

OUTCOME 10.3 – RECOGNISE SEVERE AND LIFE-THREATENING CONGENITAL SKIN CONDITIONS

For the Trainee to recognise severe and life-threatening congenital skin conditions e.g. epidermolysis bullosa, severe ichthyosis and management in consultation with dermatologists and other disciplines as indicated.

OPHTHALMOLOGY**OUTCOME 11.1 – RETINOPATHY OF PREMATURITY**

For the Trainee to have knowledge of screening and management of preterm infants for retinopathy of prematurity.

OUTCOME 11.2 – SCREEN FOR EYE DISORDERS ON NEWBORN EXAMINATION

For the Trainee to screen for eye disorders on term newborn examination.

ENT**OUTCOME 12.1 – UNDERSTAND MANAGEMENT AND AETIOLOGY OF ENT PROBLEMS**

For the Trainee to understand management and aetiology of congenital and acquired problems of the ear, nose and throat.

OUTCOME 12.2 – REFERRAL FOR TRACHEOSTOMY

For the Trainee to understand the indications for referral for a tracheostomy

OUTCOME 12.3 – UNDERSTAND FEEDING PROBLEMS ASSOCIATED WITH CLEFT PALATE AND PIERRE-ROBIN SEQUENCE

For the Trainee to understand feeding problems associated with cleft palate and Pierre-Robin sequence.

MUSCULOSKELETAL**OUTCOME 13 – NEONATAL MUSCULOSKELETAL CONDITIONS**

For the Trainee to diagnose common neonatal musculoskeletal conditions, including, but not limited to:

- Congenital hip dysplasia
- Congenital talipes
- Limb anomalies
- Plagiocephaly
- Torticollis

CONGENITAL ANOMALIES**OUTCOME 14 – INFANTS WITH CONGENITAL ANOMALIES**

For the Trainee to assess, investigate and conduct MDT referrals for infants with congenital anomalies. Conditions including, but not limited to: Trisomy 21; disorders of sexual development; etc.

Training Goal 4 – Procedural Skills

By the end of HST the Trainee is expected to perform the procedures required for the care of the sick neonate and to demonstrate knowledge of the relevant anatomy and physiology, indications, risks and complications both pharmacological and non-pharmacological.

OUTCOME 1 – DESCRIBE ANATOMY, PHYSIOLOGY, INDICATIONS, RISKS OF PROCEDURES

For the Trainee to describe the relevant anatomy and physiology, indications for and risks of common neonatal procedures.

OUTCOME 2 – PERFORM SPECIFIC PROCEDURES AND SKILLS

For the Trainee to be competent in performing the following procedures:

- Emergency thoracocentesis needle
- Intercostal drain
- Nasogastric tube
- Nasopharyngeal airway
- Percutaneous central lines (PICC)
- Umbilical arterial and venous lines
- Peripheral arterial catheter
- Peripheral venous catheter
- Urinary catheter
- Airway suction
- Positive pressure ventilation (mask)
- Laryngeal mask
- Endotracheal intubation (Term infant)
- Endotracheal intubation (Preterm infant)
- Providing mechanical ventilation
- High frequency oscillation ventilation (HFOV)
- Providing inhaled Nitric Oxide (iNO)
- Blood sampling (peripheral, capillary and central line)
- Blood culture
- Lumbar puncture
- ECG
- aEEG
- Surfactant administration
- Exchange transfusion¹
- Thoracocentesis
- Intercostal drain insertion
- Fetal medicine counselling
- Antenatal counselling
- Prescribing total parenteral nutrition (TPN)
- Prescribing of blood products
- Nasogastric tube insertion

¹ Rare procedure – not everyone might have the opportunity to perform this procedure. For specific rare procedures the potential for simulation-based training could be reviewed.

OUTCOME 3 – PERFORM AND INTERPRET SPECIFIC PROCEDURES (DESIRABLE BUT NOT MANDATORY)

It is **desirable**, where appropriate, for the Trainee to gain experience in performing the following procedures:

- Cranial USS
- Functional echocardiography
- Advanced vascular access including ultrasound-guided line placement
- Suprapubic aspirate
- CSF drainage from an indwelling ventricular device/reservoir
- Paracentesis
- Pericardiocentesis

OUTCOME 4 – MANAGE COMPLICATIONS OF PROCEDURES

For the Trainee to manage complications of common neonatal procedures, including but not limited to those listed above.

OUTCOME 5 – COMMUNICATE WITH CARERS REGARDING PROCEDURE

For the Trainee to communicate with carers regarding risks and benefits of the procedure, including appropriate consent.

OUTCOME 6 – DEMONSTRATE AWARENESS OF LIMITATIONS

For the Trainee to demonstrate awareness of own limitations and seek help when appropriate.

Summary Table of Procedural Skills

This table summarises the **expected training frequency per each procedure**. The Trainee should log the procedures on ePortfolio and complete the related DOPS Assessment as indicated. Of note the expected training frequency per each procedure is per each year of clinical training, while the DOPS assessments are over the duration of the programme.

Please note: for the outcomes included in this table, the numeric minimum requirements are only indicative. Achieving the number of procedures indicated here does not equate to achieving competency in the procedure. The Trainee is expected to seek feedback from their Trainer who would advise whether competency is achieved, or additional training is necessary.

PROCEDURAL/PRACTICAL/SURIGAL SKILLS			
Type	Expected experience per each year of training (log experience on ePortfolio)	DOPS Assessment – Expected to perform over duration of programme	ePortfolio Form
Emergency thoracocentesis with a needle	2-4 to be recorded in ePortfolio	1 to be recorded in ePortfolio	
Intercostal drain insertion	2-4 to be recorded in ePortfolio	1 to be recorded in ePortfolio	
Nasogastric tube	1 to be recorded in ePortfolio	1 to be recorded in ePortfolio	

Nasopharyngeal airway	2 to be recorded in ePortfolio	1 to be recorded in ePortfolio	Procedures, Skills and DOPS ²
Percutaneous central lines	7-10 to be recorded in ePortfolio	1 to be recorded in ePortfolio	
Umbilical arterial and venous lines	7-10 to be recorded in ePortfolio	3 to be recorded in ePortfolio	
Peripheral arterial catheter	2 to be recorded in ePortfolio	3 to be recorded in ePortfolio	
Peripheral venous catheter	10 to be recorded in ePortfolio	3 to be recorded in ePortfolio	
Urinary catheter	2 to be recorded in ePortfolio	1 to be recorded in ePortfolio	
Positive pressure ventilation (mask)	10 to be recorded in ePortfolio	5 to be recorded in ePortfolio	
Endotracheal intubation TERM	10 to be recorded in ePortfolio	5 to be recorded in ePortfolio	
Endotracheal intubation PREM	10-15 to be recorded in ePortfolio	5 to be recorded in ePortfolio	
Mechanical Ventilation	20 to be recorded in ePortfolio	5 to be recorded in ePortfolio	
HFOV	5-10 to be recorded in ePortfolio	3 to be recorded in ePortfolio	
iNO	5-10 to be recorded in ePortfolio	3 to be recorded in ePortfolio	
Blood sampling (peripheral, capillary, arterial and central line)	10 to be recorded in ePortfolio	5 to be recorded in ePortfolio	
Blood culture	10 to be recorded in ePortfolio	1 to be recorded in ePortfolio	
Surfactant administration	10 to be recorded in ePortfolio	5 to be recorded in ePortfolio	Procedures, Skills and DOPS
Lumbar puncture	5-10 to be recorded in ePortfolio	5 to be recorded in ePortfolio	
Prescribing TPN	5 to be recorded in ePortfolio	1 to be recorded in ePortfolio	
Suprapubic aspirate	1 to be recorded in ePortfolio (desirable not expected)	1 to be recorded in ePortfolio (desirable not expected)	
Drainage CSF reservoir	1 to be recorded in ePortfolio (desirable not expected)	1 to be recorded in ePortfolio (desirable not expected)	
Paracentesis	1 to be recorded in ePortfolio (desirable not expected)	1 to be recorded in ePortfolio (desirable not expected)	
Exchange transfusion	1 to be recorded in ePortfolio (desirable not expected)	1 to be recorded in ePortfolio (desirable not expected)	
Pericardiocentesis	1 to be recorded in ePortfolio (desirable not expected)	1 to be recorded in ePortfolio (desirable not expected)	
Functional echocardiography	1 to be recorded in ePortfolio (desirable not expected)	1 to be recorded in ePortfolio (desirable not expected)	
Cranial USS	1 to be recorded in ePortfolio (desirable not expected)	1 to be recorded in ePortfolio (desirable not expected)	

² Please note the difference between logging a procedure and completing a DOPS assessment. Logging a procedure: the Trainee should log a minimum number of procedures as indicated in this curriculum. To log a procedure on ePortfolio, the Trainee does not need the involvement of their Trainer. Completing a DOPS: the Trainee should complete a minimum number of DOPS as indicated in their curriculum. A DOPS (Direct Observation of Practical Skills) is a workplace-based assessment during which the Trainee is observed and assessed by an Assessor. An Assessor can be anyone with more experience than the Trainee. A copy of the DOPS assessment will be sent to your assigned Trainer on ePortfolio. Your Trainer will have to fill in the form for acknowledgement before it can appear as complete on your ePortfolio.

Training Goal 5 – End-of-life Care

By the end of HST the Trainee is expected to manage end-of-life care in neonates, recognising the value of a multi-disciplinary approach to the carers of a dying infant.

OUTCOME 1 – DEMONSTRATE KNOWLEDGE OF ETHICAL ISSUES RELATED TO END-OF-LIFE CARE

For the Trainee to demonstrate knowledge of ethical issues related to end-of-life care in line with national guidelines, including but not limited to:

- Borderline viability (awareness of attitudes)
- Congenital malformations including antenatal MDT assessment
- Non-initiation of resuscitation
- Palliative care

OUTCOME 2 – COUNSEL CAREGIVERS IN A SENSITIVE AND APPROPRIATE FASHION

For the Trainee to counsel caregivers in a sensitive and appropriate fashion.

OUTCOME 3 – UNDERSTAND THE CORONIAL PROCESS

For the Trainee to understand that all deaths of newborn infants are referred to the coroner, and the process that this involves.

OUTCOME 4 – REQUEST POST-MORTEM EXAMINATION WHEN NECESSARY

For the Trainee to recognise the role and importance of post-mortem examination and to be able to request it when necessary.

OUTCOME 5 – DOCUMENTATION AND COMMUNICATION

For the Trainee to gain experience in and understand the importance of documentation and communication after the death of an infant.

OUTCOME 6 – MANAGE THE CARE OF INFANTS AND FAMILIES REQUIRING PALLIATIVE CARE

For the Trainee to manage the care of infants and families requiring palliative care, demonstrating knowledge of evidence-based practice in the palliative management of infants with life-limiting conditions. Referral to palliative care specialists when necessary. Provide appropriate follow up.

OUTCOME 7 – PARTICIPATE IN SUPPORTING AND DEBRIEFING HEALTHCARE TEAM

For the Trainee to participate in supporting and debriefing healthcare team when dealing with end-of-life care in neonates.

Training Goal 6 – Post-discharge Care

By the end of HST the Trainee is expected to assess and manage the infant at risk and plan for a long-term healthcare approach.

OUTCOME 1 – IDENTIFY INFANTS WHO REQUIRE FOLLOW UP

For the Trainee to be able to identify infants who require follow up after discharge from neonatal unit and identify appropriate follow up.

OUTCOME 2 – PARTICIPATE IN DISCHARGE PLANNING

For the Trainee to participate in MDT discharge planning

OUTCOME 3 – ADDRESS CHILD PROTECTION ISSUES

To follow principle of “Children First” policies and identify infants who have child protection issues and refer to appropriate social work/services.

OUTCOME 4 – PARTICIPATE IN FOLLOW-UP OF HIGH-RISK INFANTS AND THEIR FAMILIES

For the Trainee to participate in the follow-up of high-risk infants and their families, including liaison with relevant MDT and community services.

OUTCOME 5 – INFANTS WITH COMPLEX MEDICAL NEEDS

For the Trainee to understand the evolving care requirements of children with complex long-term medical needs, including the importance of subspecialist input.

Training Goal 7 – Regional Organisation of Perinatal Care

By the end of HST the Trainee is expected to organise and manage the safe and appropriate transfer of the sick newborn to and regional centres.

OUTCOME 1 – UNDERSTAND NATIONAL MODEL OF CARE

For the Trainee to understand the national model of care in Neonatology.

OUTCOME 2 – UNDERSTAND ORGANISATION OF NEONATAL SERVICES

For the Trainee to understand the organisation of neonatal services into level 1, 2, 3, 4 units and patient flow into the different units including networked care.

OUTCOME 3 – MANAGE RETRO TRANSFER IN LINE WITH SLÁINTECARE

For the Trainee to understand and manage transfer of patients to regional and local units in collaboration with general paediatrics and community paediatrics colleagues.

OUTCOME 4 - DEMONSTRATE KNOWLEDGE OF FETAL CONDITIONS REQUIRING IN-UTERO TRANSFER

For the Trainee to demonstrate knowledge of fetal conditions requiring in-utero transfer.

OUTCOME 5 – DEMONSTRATE KNOWLEDGE OF MATERNAL CONDITIONS REQUIRING IN-UTERO TRANSFER

For the Trainee to demonstrate knowledge of maternal conditions requiring in-utero transfer.

OUTCOME 6 – IDENTIFY INFRASTRUCTURAL, ORGANISATIONAL AND LOGISTICAL ISSUES RELATING TO NATIONAL NEONATAL TRANSPORT

For the Trainee to identify infrastructural and organisational issues relating to national neonatal transport.

OUTCOME 7 – INITIATE RESUSCITATION AND STABILISE THE SICK INFANT IN A NON-CRITICAL CARE ENVIRONMENT

For the Trainee to initiate resuscitation and stabilise the sick infant in a non-critical care environment.

OUTCOME 8 – DISCUSS THE FACTORS AFFECTING THE TYPE OF TRANSPORT UNDERTAKEN IN DIFFERENT CLINICAL SITUATIONS

For the Trainee to discuss the factors affecting the type of transport undertaken in different clinical situations.

OUTCOME 9 – PARTICIPATE IN COMMUNICATION WITH REFERRING CENTRES AND TRANSPORT TEAMS

For the Trainee to participate in communication with referring centres and transport teams on issues relating to transport of sick or preterm infants.

OUTCOME 10 – DEMONSTRATE ABILITY TO LEAD A TRANSPORT TEAM

For the Trainee to demonstrate ability to lead a transport team and to establish appropriate communication with clinical team and families.

Training Goal 8 – Integrated Care of the Newborn

By the end of HST the Trainee is expected to understand their role in the co-ordination and provision of complex care for their patients by subspecialists and the multidisciplinary team.

OUTCOME 1 – CARE OF THE NEWBORN AND CARERS' COUNSELLING

For the Trainee to be competent in the all-encompassing care of the newborn, including the well newborn and those requiring special and intensive care, as well as counselling carers of the fetus at significant risk in an emotionally and culturally appropriate fashion.

OUTCOME 2 – COUNSEL CARERS ABOUT THE IMPACT OF LONG-TERM ILLNESS

For the Trainee to Counsel carers about the impact of long-term illness on the child and family.

OUTCOME 3 – PARTICIPATE IN MULTIDISCIPLINARY MANAGEMENT OF HIGH-RISK PREGNANCIES

For the Trainee to participate in the multidisciplinary decision-making of high-risk pregnancies, including pregnancies with known fetal abnormalities.

OUTCOME 4 – DEMONSTRATE A COLLABORATIVE APPROACH WITHIN THE MULTIDISCIPLINARY TEAM

For the Trainee to demonstrate a collaborative approach within a multidisciplinary team to provide post-natal care to the newborn during their in-patient stay and out-patient follow-up.

OUTCOME 5 – INVESTIGATE AND MANAGE CONDITIONS WITH SUBSPECIALISTS

For the Trainee to investigate and manage the following conditions in consultation with appropriate subspecialist, including but not limited to:

- Congenital cardiac disease
- Renal and genito-urinary anomalies
- GI surgical conditions (e.g., abdominal wall defects, intestinal atresias and stenosis)
- Congenital endocrine issues (eg hypothyroid)
- Disorders of immune function
- Genetic conditions
- Neonatal tumours and malignancies

OUTCOME 6 – COORDINATE HOME-BASED CARE WITH COMMUNITY SERVICES

For the Trainee to coordinate home-based care with community services for infants on home care (e.g. home oxygen therapy).

OUTCOME 7 – DEMONSTRATE A COLLABORATIVE APPROACH TO DEVELOPING PROTOCOLS

For the Trainee to demonstrate a collaborative approach to developing relevant clinical protocols and guidelines (for example guidelines relating to the prevention and management of Perinatal sepsis, hand washing and infection control measures in clinical practice).

5. APPENDICES

This section includes two appendices to the Curriculum.

The first one is about Assessment (i.e. Workplace Based Assessments, Evaluations etc).

The second one is about Teaching Attendance (i.e. Taught Programme, Specialty-Specific Learning Activities and Study Days)

ASSESSMENT APPENDIX

Workplace-Based Assessments and Evaluations

The expression “workplace-based assessments” (WBA) defines all the assessments used to evaluate Trainees’ daily clinical practices employed in their work setting. It is primarily based on the observation of Trainees’ performance by Trainers. Each observation is followed by a Trainer’s feedback, with the intent of fostering reflective practice.

Relevance of Feedback for WBA

Although “assessment” is the keyword in WBA, it is necessary to acknowledge that feedback is an integral part and complementary component of WBA. The main purpose of WBA is to provide specific feedback for Trainees. Such feedback is expected to be:

- **Frequent:** the opportunities to provide feedback are preferably given by directly observed practice, but also by indirectly observed activities. Feedback is expected to be frequent and should concern a low-stake event. Rather than being an assessor, the Trainer is an observer who is asked to provide feedback in the context of the training opportunity presented at that moment.
- **Timely:** preferably, the feedback should be a direct conversation between Trainer and Trainee in a timeframe close to the training event. The Trainee should then record the feedback on ePortfolio in a timely manner.
- **Constructive:** the recorded feedback would inform both Trainee’s practice for future performance and committees for evaluations. Hence, feedback should provide Trainees with behavioural guidance on how to improve performance and give committees the context that leads to a rating, so that progression or remediation decisions can be made.
- **Actionable:** to improve performance and foster behavioural change, feedback should include practical and contextualised examples of both Trainee’s strengths and areas for improvement. Based on these examples, it is necessary to outline a realistic action plan to direct the Trainee towards remediation/improvement.

Types of WBAs in use at RCPI

There is a variety of WBAs used in medical education. They can be categorised into three main groups: *Observation of performance*; *Discussion of clinical cases*; *Feedback*; *Mandatory Evaluations*.

As WBAs at RCPI we use *Observation of performance* via MiniCEX and DOPS; *Discussion of clinical cases* via CBD; *Feedback* via Feedback Opportunity.

Mandatory Evaluations are bound to specific events or times of the academic year, for these at RCPI we use: Quarterly Assessment/End of Post Assessment; End of Year Evaluation; Penultimate Year Evaluation; Final Year Evaluation.

Recording WBAs on ePortfolio

It is expected that WBAs are logged on an electronic portfolio. Every Trainee has access to an individual ePortfolio where they must record all their assessments, including WBAs. By recording assessments on this platform, ePortfolio serves both the function to provide an individual record of the assessments and to track Trainees' progression.

Formative and Summative Assessment

The Trainee can record any WBA either as formative or summative with the exception of the *Mandatory Evaluations* (Quarterly/End of Post, End of Year, Penultimate Year, Final Year evaluations).

If the WBA is logged as formative, the Trainee can retain the feedback on record, but this will not be visible to an assessment panel, and it will not count towards progression. If the WBA is logged as summative it will be regularly recorded and it will be fully visible to assessment panels, counting towards progression.

WORKPLACE-BASED ASSESSMENTS	
<i>CBD Case Based Discussion</i>	<p>This assessment is developed in three phases:</p> <ol style="list-style-type: none"> 1. Planning: The Trainee selects two or more medical records to present to the Trainer who will choose one for the assessment. Trainee and Trainer identify one or more training goals in the curriculum and specific outcomes related to the case. Then the Trainer prepares the questions for discussion. 2. Discussion: Prevalently, based on the chosen case, the Trainer verifies the Trainee's clinical reasoning and professional judgment, determining the Trainee's diagnostic, decision-making and management skills. 3. Feedback: The Trainer provides constructive feedback to the Trainee. <p>It is good practice to complete at least one CBD per quarter in each year of training.</p>
<i>DOPS Direct Observation of Procedural Skills</i>	<p>This assessment is specifically targeted at the evaluation of procedural skills involving patients in a single encounter. In the context of a DOPS, the Trainer evaluates the Trainee while they are performing a procedure as a part of their clinical routine. This evaluation is assessed by completing a form with pre-set criteria, then followed by direct feedback.</p>
<i>MiniCEX Mini Clinical Examination Exercise</i>	<p>The Trainer is required to observe and assess the interaction between the Trainee and a patient. This assessment is developed in three phases:</p> <ol style="list-style-type: none"> 1. The Trainee is expected to conduct a history taking and/or a physical examination of the patient within a standard timeframe (15 minutes). 2. The Trainee is then expected to suggest a diagnosis and management plan for the patient based on the history/examination. 3. The Trainer assesses the overall Trainee's performance by using the structured ePortfolio form and provides constructive feedback.
<i>Feedback Opportunity</i>	<p>Designed to record as much feedback as possible. It is based on observation of the Trainees in any clinical and/or non-clinical task. Feedback can be provided by anyone observing the Trainee (peer, other supervisors, healthcare staff, juniors). It is possible to turn the feedback into an assessment (CDB, DOPS or MiniCEX)</p>
MANDATORY EVALUATIONS	
<i>QA Quarterly Assessment</i>	<p>As the name suggests, the Quarterly Assessment recurs four times in the academic year, once every academic quarter (every three months). It frequently happens that a Quarterly Assessment coincides with the end of a post, in which case the Quarterly Assessment will be substituted by completing an End of Post Assessment. In this sense the two Assessments are interchangeable, and they can be completed using the same form on ePortfolio.</p>
<i>EOPA End of Post Assessment</i>	<p>However, if the Trainee will remain in the same post at the end of the quarter, it will be necessary to complete a Quarterly Assessment. Similarly, if the end of a post does not coincide with the end of a quarter, it will be necessary to complete an End of Post Assessment to assess the end of a post. This means that for every specialty and level of training, a minimum of four Quarterly Assessment and/or End of Post Assessment will be completed in an academic year as a mandatory requirement.</p>
<i>EOYE End of Year Evaluation</i>	<p>The End of Year Evaluation occurs once a year and involves the attendance of an evaluation panel composed of the National Specialty Directors (NSDs); the Specialty Coordinator attends too, to keep records of and facilitate the meeting. The assigned Trainer is not supposed to attend this meeting unless there is a valid reason to do so. These meetings are scheduled by the respective Specialty Coordinators and happen sometime before the end of the academic year (between April and June).</p>
<i>PYE Penultimate Year Evaluation</i>	<p>The Penultimate Year Evaluation occurs in place of the End of Year Evaluation, in the year before the last year of training. It involves the attendance of an evaluation panel composed of the National Specialty Directors (NSDs) and an External Member who is a recognised expert in the Specialty outside of Ireland; the Specialty Coordinator attends too, to keep records of and facilitate the meeting. The assigned Trainer is not supposed to attend this meeting unless there is a valid reason to do so.</p>
<i>FYE Final Year Evaluation</i>	<p>In the last year of training, the End of Year Evaluation is conventionally called Final Year Evaluation, however, its organisation is the same as an End of Year Evaluation.</p>

TEACHING APPENDIX

RCPI Taught Programme

The new RCPI Taught Programme consists of a series of modular elements spread across the years of training.

Delivery will be a combination of self-paced online material, live virtual tutorials, and in-person workshops, all accessible in one area on the RCPI's virtual learning environment (VLE), RCPI Brightspace.

The live virtual tutorials will be delivered by Tutors related to this specialty and they will use specialty-specific examples throughout each tutorial. Trainees will be assigned to a tutorial group and will remain with their tutorial group for the duration of HST.

Trainees will receive their induction content and timetable ahead of their start date on HST. Trainees must plan the time to complete their requirements and must be supported with the allocation of study leave or appropriate rostering.

As the HST Taught Programme is a mandatory component of HST, it is important that Trainees are released from service to attend the Virtual Tutorials and, where possible facilitated with the use of teaching space in the hospital.

Specialty-Specific Learning Activities (Courses & Workshops)

Trainees will also complete specialty-specific courses and/or workshops as part of the programme.

Trainees should always refer to their training curriculum for a full list of requirements for their HST programme. When not sure, Trainees should contact their Programme Coordinator.

Study Days

Study days vary from year to year, they comprise a rolling schedule of hospital-provided topic-specific educational days and national/international events selected for their relevance to the HST curriculum.

Trainees are expected to attend the majority of the study days available and **at least 6 per training year**.

Neonatology Teaching Attendance Requirements

