



McGill University
Obstetrics and Gynecology Residency Training Program
Goals and Objectives

Neonatal Intensive Care Unit Rotation

Overview

The Royal Victoria Hospital is a Level III nursery, having a close relationship with the Maternal-Fetal Medicine program and the McGill Reproductive Centre, within the Department of Obstetrics and Gynecology of McGill University. In addition, the Royal Victoria Hospital is actively participating in the Fetal Diagnostic and Treatment Centre (composed of neurosurgeons, geneticists, obstetricians, pediatric cardiologists and neonatologists), a multidisciplinary team where complex fetal problems are discussed.

Goal

The primary goal of the resident's NICU rotation of 4 weeks is to provide a comprehensive level of knowledge of Neonatal-Perinatal medicine that will assist in his/her future role as a consultant in Obstetrics and Gynecology. In a high-risk referral centre, the emphasis will be focused on fetal medicine, neonatal resuscitation and post-natal management of preterm infants.

Objectives

This will be accomplished through the attainment of the general objectives below. At the end of the rotation the PGY ObGyn Resident will have a working knowledge of:

- Neonatal resuscitation
- Neonatal complications resulting from various maternal, obstetrical, or fetal problems and their appropriate management and expected outcome

Orientation

The rotation in NICU of 4 weeks total will take place at the McGill University teaching site:

- **McGill University Health Centre's Royal Victoria Hospital (RVH)**
- **Jewish General Hospital (JGH)**

On their first day of their NICU rotation the Residents are to report to the NICU of their assigned site; **JGH**: Pavilion B 5th floor and **RVH**: C7.70 NICU Conference Room (C7.70) at 7:45 am. They will observe morning sign-out and will receive comprehensive orientation to the NICU and resuscitation room with a staff neonatologist.

Specific Objectives and CanMEDS competencies

The role of **medical expert** is central to the function of the obstetrician-gynaecologist, and draws on the competencies for the roles of **scholar, communicator, health advocate, manager, collaborator, and professional**.

1. Medical Expert

Knowledge

At the completion of this rotation the resident will:

- Be familiar with neonatal intubation.
- Know basic survival and morbidity statistics of preterm infants
- Understand the neonatal implications of fetal distress in labour
- Have a basic understanding of the course and challenges in caring for preterm and other complicated neonates.
- Know the aspects of pregnancy, labor and delivery which affect the neonate
- Have an understanding of appropriate management and expected outcomes of neonatal complications resulting from:
 - Prematurity
 - Macrosomia
 - Birth asphyxia
 - Fetal growth restriction
 - Assisted vaginal delivery
 - Congenital anomalies
 - Maternal medical complications and systemic diseases
- Have an understanding of the psychology of pregnancy and maternal/infant interaction

Technical skills

At the completion of this rotation the resident should have developed the skill to:

- Perform full neonatal resuscitation
- Management of hypoglycemia in the immediate newborn period
- Elicit a history and perform a physical examination that meets the standards in neonatology and are problem-solving oriented
- Be familiar with neonatal intubation.

2. Communicator

Upon completion of a rotation in Neonatology, the residents should be able to

- Gather information not only about the disease of the fetus and newborn but also about the family's beliefs, concerns and expectations about the illness while considering the influence of factors such as socioeconomic background and spiritual values
- Present the patient's problem(s) clearly, concisely and correctly
 - a) Verbally, in the clinical setting or formal presentation

- b) In a written medical record or consultation report (in a standard or problem-oriented format)
- Understand and demonstrate the importance of cooperation and communication with allied health professionals in the neonatal-perinatal interdisciplinary team (obstetricians, nurses, social workers, respiratory therapists and other pediatric consultants)
- Listen effectively and establish therapeutic relationships with patients and their families
- Deliver information to the family in a human manner and in a manner that is understandable, encourages discussion and promotes their involvement in the decision-making processes.
- Physician Relationship: The resident will actively participate in pediatric consultations with antepartum patients.
- Verbal Skills: The resident should be familiar with the questions and concerns of parents and be able to communicate this in a caring empathic way.

3. Collaborator

Upon completion of a rotation in Neonatology, the residents should be able to:

- Function as an effective consultant to, and when required consult with, other medical and non-medical healthcare providers who collaborate regularly with neonatal-perinatal medicine
- Participate and contribute to interdisciplinary team meetings, recognizing and using each team member's expertise, as well as taking on a leadership role when appropriate
- Develop a patient care plan, including investigation, treatment and continuing care/preparation for discharge, in collaboration with the members of the interdisciplinary team and the primary community pediatrician/family physician
- Team Relations
 - a) Work with respiratory therapists at resuscitation
 - b) Work closely with RNs with the neonatal care in the NICU
 - c) Observe pediatric consultations with antepartum patients
 - d) The resident must understand the importance of collaboration in emergency settings and how best to achieve this

4. Manager

Upon completion of a rotation in Neonatology, the residents should be able to:

- Understand the importance of shared responsibility for health care provision in a multidisciplinary setting
- Organize work effectively, prioritizing urgent problems and delegating in a feasible and timely manner
- Utilize information technology to optimize patient care, life-long learning and other activities

- Understand the importance of principles of cost-effectiveness and continuous quality assurance/improvement relevant to perinatal-neonatal care
- Time Management: the resident will develop and appreciation of allocation of resources on this rotation by: observation of NICU closures, ventilator use and regional triage

5. Health Advocate

Upon completion of a rotation in Neonatology, the residents should be able to:

- Demonstrate leadership in clinical care and act as an advocate for further improvements in outcome for the fetus and newborn
- Recognize determinants of maternal health that directly or indirectly affect fetal, newborn or infant health (i.e. poverty, unemployment, education, social support system, communicable diseases, tobacco or substance abuse)
- Identify “at risk” patients or families and assess the family’s ability to access various services in the health and social system
- Exercise and advocacy role when allocating needed resources for patients and families, taking into account the context of societal needs

6. Scholar

Upon completion of a rotation in Neonatology, the residents should be able to:

- Critically appraise sources of medical information
- Make clinical decisions and judgments based on evidence-based medicine for the benefit of both patient and family
- Demonstrate autonomy in learning and professional development through ongoing self-directed acquisition of basic science, clinical knowledge and growth of professional roles
- Demonstrate the ability to teach, supervise and evaluate medical students.
- Actively promote and contribute to the education of families
- The resident will be expected to act as a health advocate by facilitating for the parents in number of ways.
- The resident will learn about predisposing factors to prematurity and counsel appropriately.

7. Professional

Upon completion of a rotation in Neonatology, the residents should be able to:

- Deliver the highest quality care with integrity, honesty and compassion.
- Exhibit appropriate personal and interprofessional behaviors
- Demonstrate knowledge of and ability to obtain informed consent (knowledge of the ethical decision-making process)

- Understand tolerance for ambiguity and uncertainty and the possibility of error in ethical decision-making: flexibility and willingness to adjust appropriately to changing circumstances
- Demonstrate the understanding and application of federal and provincial legislation, case law and institutional regulations relevant to the practice of neonatology
- Gain an appreciation of the specialty of pediatrics through personal experience with pediatrician-neonatologist and in the nicu
- Maintain patient confidentiality as a priority in their practice.

Evaluation

Residents will be evaluated by the NICU staff on the above goals and objectives by means of the standard monthly global evaluation form (MRESOne45). This includes the evaluation by the physicians of the Resident's interpersonal and communication skills, and professionalism. The Resident will also need to complete an evaluation of their NICU rotation (on-line MRES-one45), to contribute to future improvements.

Recommended Readings

- Neonatal Resuscitation Textbook, 5th Edition. publications@cps.ca.
- Neonatology: Management, Procedures, On-Call Problems, Diseases and Drugs. 6th Edition. 2009. Gomella, Tricia Lacy with M. Douglas Cunningham and Fabien G. Eyal.
- Neonatal-Perinatal Medicine: Diseases of the Fetus and Infant , 9th Edition, by Fanaroff, Avroy A. , Martin, Richard J. , Walsh, Michele C.

Website:

Canadian Pediatric Society resources and practice guidelines: <http://www.cps.ca/>