

Discipline of Obstetrics & Gynecology

PGY1

Junior Obstetrics Rotation Objectives



Revised July 2024



PGY1 Obstetrics and Gynecology

Overall Goal and Objectives:

- The overall goal of this PGY1 rotation is for the resident to gain exposure to the workings of the labour and delivery unit, with the aim to gain confidence in basic skills in obstetrics as well as performing cesarean sections
- The learner will be paired with a senior resident mentor during these blocks
- The learner will also have exposure to gynecologic clinics, surgery, rounding, and consultations as a secondary objective
- This two-three block rotation occurs at the Health Sciences site with the following general objectives:
 - Function as a member of the team on the obstetrics and/or gynecology floors with the occasional role of team leader
 - Garner experience with urgent and emergent issues that arise through the case room and emergency department
 - Gain confidence with basic OR skills, suturing and relevant anatomy
 - Work with various general obstetricians and gynecologists

MEDICAL EXPERT

Definition: As Medical Experts, Obstetrician/Gynecologists integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional values in their provision of high-quality and safe patient-centred care. Medical Expert is the central physician Role in the CanMEDS Framework and defines the physician's clinical scope of practice.

Key and Enabling Competencies:

1. Practice medicine within their defined scope of practice and expertise:

- Demonstrate a commitment to high-quality care of their patients
- Integrate the CanMEDS Intrinsic Roles into their practice of Obstetrics and Gynecology
- Demonstrate the competencies of Surgical Foundations
- Apply knowledge of the clinical and biomedical sciences relevant to Obstetrics and Gynecology:
 - Physiology of: Sexual function, Reproduction, including the menstrual cycle throughout the woman's lifespan, Pregnancy and the puerperium, Fetal

development

- Pathology of the female reproductive system and genitalia
- Microbiology of gynecologic, antenatal, and postpartum infections
- Principles of and indications for genetic screening and testing
- Complications of invasive procedures, including chorionic villus sampling and amniocentesis
- Principles of antepartum care 1.4.8.1. Effects of underlying medical, surgical, social, psychosocial, and mental health disorders on maternal and fetal health, and appropriate management of any implications for maternal or fetal health 1.4.8.2. Health optimization for pregnant women and those planning pregnancy, including appropriate diet and supplements, immunizations, exercise, cervical cancer screening, avoidance of substance use, and screening for common mental health disorders such as depression 1.4.8.3. Antepartum fetal surveillance in the normal and high-risk pregnancy, including appropriate use of obstetric ultrasound 1.4.8.4. Outcomes of pregnancies complicated by fetal anomaly/anomalies or cytogenetic abnormalities, including aneuploidy 1.4.8.5. Safety of pharmacotherapy in pregnancy, including knowledge of appropriate resources to obtain detailed information 1.4.8.6. Indications for transfer to appropriate facilities for obstetrics patients requiring higher levels of maternal and/or neonatal care

An **extensive level** of knowledge is required for the following:

- Antepartum care
 - Maternal and fetal physiology
 - Fetal development
 - Genetic screening, testing and counseling, including but not limited to:
 - Complications from invasive procedures, including but not limited to chorionic villus sampling and amniocentesis
 - Outcomes of pregnancies complicated by fetal anomaly(ies) or aneuploidy
 - Antepartum assessment of normal pregnancy and identification of high-risk features
 - The effects of underlying medical, surgical, social, and psychosocial conditions on maternal and fetal health, and appropriate management of any complications for maternal or fetal health imposed by such conditions
 - Antepartum fetal surveillance in the normal and high-risk pregnancy including appropriate use of obstetrical ultrasound
 - Safety of pharmacotherapy in pregnancy, including but not limited to knowledge of appropriate resources to obtain detailed information

- The pathophysiology, prevention, investigation, diagnosis, prognosis and/or management of:
 - Preterm labour and birth
 - Premature rupture of membranes
 - Antepartum hemorrhage
 - Post-term pregnancy
 - Twin pregnancy
 - Fetal growth restriction
 - Immune and non-immune hydrops fetalis
 - Maternal alloimmunization
 - Gestational diabetes mellitus and diabetes preceding pregnancy
 - Gestational hypertension
 - Infections in pregnancy, including but not limited to viral, bacterial, and parasitic

- The pathophysiology, investigation, diagnosis, and/or management, including counseling and/or referral for grief support, of:
 - Intrauterine fetal demise in the second and third trimesters, including but not limited to the risks and benefits of medical and surgical management

- Obstetric delivery
 - Indications for Cesarean section
 - Maternal and neonatal risks and benefits of Cesarean section
 - Risks and benefits of vaginal delivery after a previous Cesarean section

- Postpartum care
 - Physiology of the puerperium
 - Complications during the puerperium
 - Etiology and management, medical and surgical, of early and delayed postpartum hemorrhage
 - Etiology and management of puerperal infection
 - Breastfeeding: benefits of and complications related to, including but not limited to mastitis and abscess
 - Contraception
 - Recognition of risk factors for depression and identification of psychosocial support

- Operating room set-up
 - Patient positioning for safe and optimal surgical access and exposure
 - Patient positioning to reduce risk of unintended injury, including but not limited to nerve, crush, burn, and pressure trauma

- Positioning of equipment, monitors, and ancillary apparatus
- Positioning of surgeon, assistant, and others for optimal surgical performance
- Surgical Anatomy
 - Embryology of the pelvic and abdominal viscera
 - Anatomy and physiology of the pelvis and abdomen: anterior abdominal wall, viscera, bony structures, muscles, blood vessels, lymphatics, nerves, cervix, uterus, fallopian tubes, and ovaries
 - Course of the ureter and the major vessels through the lower abdomen and pelvis
 - Structures of the pelvic floor and their relationship to other pelvic structures
- Preoperative planning:
 - Components of informed consent: risks, benefits, complications, alternatives
 - Preoperative assessment for identification of co-morbid conditions which may require consultations with other specialists
 - Practice guidelines for perioperative prophylaxis: antibiotics and anti-coagulants
 - Practice guidelines for preoperative consultations: medicine, anesthesia, urology, nursing, intensive care unit (ICU)
- Postoperative Care:
 - Surgical wound hematoma and infection, including abscess
 - Surgical wound dehiscence
 - Identification of risk factors for venous thromboembolism and appropriate management of same

A **working level** of knowledge is required for the following:

- Obstetric anesthesia, including the risks and benefits of general anesthesia, spinal anesthesia, epidural anesthesia and narcotics
- Medical diseases in pregnancy
- Triplets and higher order multiple gestations
- Neonatal care
 - Principles of neonatal resuscitation
 - Neonatal morbidities resulting from prematurity, macrosomia, birth asphyxia, fetal growth restriction, assisted vaginal delivery, congenital anomalies, and/or maternal disease, including their appropriate management

Preoperative and postoperative care

- Principles of normal and impaired wound healing
- Basic surgical principles including wound closure

- Principles and appropriate management of postoperative pain and nausea
- Management of postoperative medical and surgical complications, including indications for consultation with other specialties and/or the use of invasive hemodynamic monitoring and ventilatory support

1. Knowledge of Anatomy and Physiology

1. Demonstrate an appropriate level of understanding of the anatomy and pathophysiology of common obstetrical and gynecologic problems
2. Demonstrate a baseline level of knowledge of the anatomy of the abdomen, reproductive tract and perineum

2. Data Gathering

1. Identify and explore issues to be addressed in a patient encounter effectively, including the patient's context and preferences
2. Elicit a history that is relevant, concise and accurate to context and preferences for the purposes of prevention and health promotion, diagnosis and/or management
3. Perform a focused physical examination that is relevant and accurate for the purposes of prevention and health promotion, diagnosis and/or management
4. Identify potential perioperative risk factors
5. Select medically appropriate investigative methods in a resource-effective and ethical manner including imaging techniques and laboratory investigations
6. Demonstrate effective clinical problem solving and judgment to address patient problems, including interpreting available data and integrating information to generate differential diagnoses and management plans
7. Demonstrate the ability to perform a rapid and appropriate assessment of a hemodynamically unstable patient
8. Obtain appropriate informed consent for therapies

3. Patient Management

1. Demonstrate an understanding of diagnosis and management of common conditions in obstetrics and gynecology
2. Triage obstetrical patient appropriately and develop skills to manage the labour and delivery ward
3. Interpret fetal heart tracings
4. Recognize the need for urgent or emergent medical intervention depending on patient condition and presentation

4. Procedural Skills

Obstetrics Develop competency in:

- a) Triage assessments
- b) Accurate assessment of cervical dilatation, fetal presentation and position
- c) Spontaneous vaginal delivery
- d) Suturing and knot tying
- e) Artificial rupture of membranes
- f) Simple perineal repairs
- g) Assistance at Cesarean section
- h) Patient counseling and administration of methods for induction of labour

Gynecology Develop competency in:

- a) common office procedures including, speculum examination, Pap smear, bimanual examination, insertion of IUCD, endometrial biopsy
- b) suturing and knot tying
- c) assistance at laparoscopy and laparotomy

Surgical skills

The categorized list reflects the level of technical skill competency for each surgical procedure expected after completion of a residency program in Obstetrics and Gynecology. It is recognized that not all skills will be attained to this level during the Junior Obstetrics rotation.

Obstetric procedures

- Low transverse Cesarean section, primary and repeat, including low transverse, low vertical or classical Cesarean section
- Cesarean hysterectomy
- Non-surgical and surgical management of moderate and severe post-partum hemorrhage, including the use of uterine compression sutures

Neonatal Care

- Basic neonatal resuscitation

Related to all surgical skills:

- Obtain informed consent for procedures
- Document and disseminate information related to procedures performed and their outcomes
- Arrange adequate follow-up for procedures performed

COMMUNICATOR

1. Establish therapeutic relationships with patients and families to optimize management and effect treatment goals
2. Demonstrate appropriate communication skills and listen effectively during interactions with members of the multidisciplinary healthcare team and administrative staff
3. Learn how to convey bad news with empathy to patients and families at a level appropriate for training
4. Maintain clear, timely and appropriate charting

COLLABORATOR

1. Cooperate and work effectively with colleagues and other professionals on the service
2. Understand the roles of the various team members in a multidisciplinary setting and work well within the team

MANAGER

1. Prioritize patient care needs and delegate appropriate tasks to junior learners to optimize clinical efficiency
2. Utilize resources effectively to balance patient care, learning needs, and work-life activities
3. Consider cost effectiveness in decision making

HEALTH ADVOCATE

1. As *Health Advocates*, Obstetricians and Gynecologists responsibly use their expertise and influence to advance the health and well-being of individual patients, communities, and populations.
2. Identify opportunities for patient counselling regarding general health practices that may affect their pregnancy or general women's health
3. Identify the need for patient education regarding lifestyle modifications to optimize recovery and long term health
4. Describe the practice communities that they serve
5. Identify opportunities for advocacy, health promotion and disease prevention in the communities that they serve, and respond appropriately
6. Appreciate the possibility of competing interests between the communities served and other populations
7. Identify the determinants of health of the populations, including barriers to access to care and resources
8. Identify vulnerable or marginalized populations within those served and respond appropriately

SCHOLAR

1. As *Scholars*, Obstetricians and Gynecologists demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.
2. Utilize self-directed learning to acquire basic knowledge of common ob/gyn conditions

3. Critically appraise the literature regarding the diagnosis and treatment of issues in general medicine and demonstrate the use of evidence based medicine in decision making
4. Participate in the teaching of medical students and other junior learners, as well as patients/families, as appropriate.

PROFESSIONAL

1. As *Professionals*, Obstetricians and Gynecologists are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour.
2. Be prompt and prepared for patient management in conjunction with staff, senior residents and nurses
3. Demonstrate professional attitudes and behavior in interactions with patients and all healthcare personnel
4. Communicate with senior residents and/or attending staff and request assistance in patient management when appropriate
5. Show the utmost respect for patient confidentiality issues
6. Demonstrate knowledge and an understanding of the professional, legal and ethical codes of practice
 - Describe medical protective procedures and the role of the Canadian Medical Protective Association in areas of patient-physician dispute
 - Demonstrate knowledge of accepted guidelines for ethical interactions with industry, related to research, education, or substandard care
7. Fulfill the regulatory and legal obligations required of current practice
8. Demonstrate accountability to professional regulatory bodies
9. Recognize and respond to others' unprofessional behaviours in practice
10. Participate in peer review
11. Balance personal and professional priorities to ensure personal health and a sustainable practice
12. Strive to heighten personal and professional awareness and insight
13. Recognize other professionals in need and respond appropriately