Obstetrics and Gynecology: General Obstetrics and Gynecology Rotation Objectives: PGY-1, Transition to Discipline and Foundations of Discipline

CanMEDS Framework: Medical Expert, Communicator, Collaborator, Leader, Health Advocate, Scholar, and Professional.

General Obstetrics Learning Objectives

This rotation is intended to provide the resident with a clinical opportunity to develop a working level of knowledge of maternal and fetal physiology, antepartum, intrapartum, and postpartum care. The PGY-1 resident will acquire a defined body of knowledge and procedural skills which are used to collect and interpret data, make appropriate clinical decisions, and carry out diagnostic and therapeutic procedures within the boundaries of their level of training.

Medical Expert

- Conduct a detailed history and physical examination of an obstetrical patient in the antepartum and intrapartum period, including pelvic exam and assessment of relevant obstetrical parameters, both fetal and maternal.
- Demonstrate knowledge of common obstetrical and gynecological conditions to enable appropriate diagnosis and treatment plans.
- Demonstrate competency in obstetrical skills such as: interpretation of FHR monitoring, conducting spontaneous vaginal deliveries (SVD), artificial rupture of membranes (ARM), episiotomy, repair of perineal lacerations, and assistance with caesarean sections.
- Provide pre-operative counselling to patients, including assessment and discussion of individualized peri-operative risks.
- Care for post-operative and post-partum patients, addressing their concerns, as well as recognizing and managing complications.

Other Educational Objectives

Working level of knowledge is required for the following:

1. Antepartum Care
   1.1 Maternal and fetal physiology
   1.2 Antepartum assessment of normal pregnancy
   1.3 Antepartum fetal surveillance in normal pregnancy
   1.4 Genetic screening, testing, and counseling
   1.5 Effects of underlying medical, surgical, social and psychosocial conditions on fetal and maternal health, and management of the same
   1.6 Antepartum surveillance in high-risk pregnancies

2. Obstetric Complications
   The pathophysiology, prevention, investigation, diagnosis, prognosis, and management of:
   2.1 Preterm labour and birth
   2.2 Preterm, premature rupture of membranes
   2.3 Antepartum hemorrhage
   2.4 Post-term pregnancy
   2.5 Gestational hypertension
   2.6 Gestational diabetes
   2.7 Fetal growth restriction
   2.8 Alloimmunization
   2.9 Viral infections in pregnancy

Rotation Information

Rotation Contacts:
Lois Hole Hospital
Dr. Billy Wong
Dr. Val Capstick – TTD Block Only

Grey Nuns Community Hospital
Dr. Dr. Sandra Baydock

Reading material:
Refer to the resident Google drive.

Rotation duration:
4 Blocks

Vacation and time off:
1 Block vacation during the PGY 1 year.

Review of rotation objectives:
Rotation objectives should be reviewed with the resident soon after their rotation begins.

EPAs
All Transition to Discipline should be completed and Foundations EPA’s should be attempted.

Transition to Discipline (TD) EPAs:
TD 1: Uncomplicated obstetric assessment
TD 2: Uncomplicated gynecologic assessment

Foundations of Discipline:
FD 1: Low-risk prenatal care
FD 2: Fetal well-being and basic ultrasound
FD 3: Common obstetric hospital presentations
FD 4: Managing labor and birth
FD 5a: Uncomplicated cesarean section
FD 6a: Normal post-partum care
FD 6b: Common postpartum complications
FD 7: Urgent gynecologic assessment

EPAs Continues on page 2
Educational Objectives Continued:

3. Intrapartum Care
   3.1 Anatomy, physiology, and mechanisms of normal labour
   3.2 Anatomy, physiology, and mechanisms of normal vaginal delivery
   3.3 Assessment of labour progress
   3.4 Indications for, methods of and complications of augmentation of labour
   3.5 Indications for, methods of, and potential complications of labour induction
   3.6 Intrapartum assessment of maternal health
   3.7 Intrapartum assessment of fetal health including interpretation of intermittent auscultation, electronic fetal monitoring, basic ultrasound imaging, and cord blood gas sampling
   3.8 Recognition and management of intrapartum infection
   3.9 Recognition and management of shoulder dystocia
   3.10 Recognition and management of cord prolapse
   3.11 Understanding methods of Obstetric anesthesia
   3.12 Apgar scoring

4. Obstetric Delivery
   4.1 Indications for assisted vaginal delivery and Cesarean section
   4.2 Maternal and neonatal risks and benefits of assisted vaginal delivery and Cesarean section
   4.3 Risks and benefits of vaginal delivery after previous Cesarean section
   4.4 Recognition and management of a non-vertex presentation

5. Postpartum Care
   5.1 Etiology and management of postpartum hemorrhage
   5.2 Recognition and initial management of critically ill surgical patients
   5.3 Recognition and management of shock
   5.4 Etiology and management of sepsis
   5.5 Breastfeeding benefits and complications
   5.6 Family planning
   5.7 Understanding risk factors and screening questions for postpartum depression
   5.8 Diagnosis and management of a venous thromboembolic event
   5.9 Recognition and management of postpartum wound complications (ex: wound dehiscence, and wound infections)
   5.10 Management of surgical complications including fever, low urine output, chest pain, shortness of breath, ileus

Technical Skills
The resident will demonstrate an understanding of the indications, risks and benefits, limitations, and role of the following investigative techniques specific to the practice of obstetrics and gynecology, and will be competent in their interpretation:

1. Serology and Microbiology
   1.1 Maternal serum screening for aneuploidy and neural tube defects
   1.2 Screening for Group B streptococcus in pregnancy
   1.3 Culture and serology for sexually transmitted diseases
   1.4 Wet mount of vaginal discharge
   1.5 Urinalysis, urine microscopy, and urine culture

2. Imaging
   2.1 Dating and anatomical ultrasound
   2.2 Biophysical profile
   2.3 Doppler studies and geography for thromboembolic disease

3. Cytology, Histopathology
   3.1 Cervical cytology
1. **Other Assessments**
   1.1 Fetal assessment: non-stress test, contraction stress test

**Obstetrical Procedures**

Following the completion of this rotation, The PGY-1 resident must be competent to independently perform the following procedures and discuss with the patient the risks, benefits, and complications of these interventions as well as any available non-surgical treatment alternatives and the consequences of the absences of the procedure:

1. Artificial rupture of membranes
2. Application of scalp electrode
3. Establishment of IV access
4. Speculum examination for the confirmation of ruptured membranes
5. Insertion of vaginal prostaglandin for induction of labour

The junior resident will understand and be able to perform with supervision:

1. Spontaneous vaginal delivery
2. Episiotomy and repair
3. Management of shoulder dystocia, cord prolapse, postpartum and antepartum hemorrhage

The junior resident will understand but may not have the opportunity to see or perform:

1. Low transverse cesarean section
2. Third and fourth-degree perineal tears
3. Vaginal breech extraction
4. Endotracheal intubation, and advanced cardiac life support skill, insertion of arterial line or central venous catheter

**General Gynecology Learning Objectives**

Upon completion of his/her training, the resident in gynecology at a post-graduate year (PGY) one level must have a working understanding of the general physical and psychological health of women as it pertains to reproduction. This includes an understanding of the normal function and the pathological processes and diseases that affect the female external genitalia and the pelvic viscera (including the vagina, cervix, uterus, fallopian tubes, and ovaries) the lower urinary tract, and the bowel. The resident must have an understanding of embryology and normal female development, and the unique biochemistry, physiology, anatomy, and gross and microscopic pathology of the genitourinary tract and neuroendocrine axis.

Management of a patient with a gynecologic condition will require that the resident has the ability to:

1. Take a history of the patient’s problem
2. Conduct a complete physical examination including pelvic exam
3. Demonstrate an understanding of the value and significance of laboratory, radiological and other diagnostic studies
4. Discuss the relative merits of various treatment alternatives
5. Demonstrate awareness of indications, contraindications, types, variations, complications, and risks and benefits of surgical and non-surgical treatments
6. Be aware of the perioperative and postoperative problems that might arise following surgery on the genitourinary tract
Upon completion of the PGY-1 rotation in general gynecology, the resident will have acquired the following competencies and must demonstrate both knowledge (cognitive skill) and technical ability in the approach to problems in the practice of general gynecology. The PGY-1 general gynecology resident will possess knowledge of the following clinical conditions or problems encountered commonly in the practice of general gynecology. This list should be considered in its totality and not be considered as comprehensive for all disorders in the practice of this specialty.

A working level of knowledge is required for the following:

1. **Reproduction and Endocrine Disorders**
   - Normal reproductive physiology, and; the pathophysiology, investigation, diagnosis, and management of:
     1.1 Menstrual irregularity
     1.2 Abnormal uterine bleeding
     1.3 Amenorrhea (primary and secondary)
     1.4 Galactorrhea
     1.5 Hirsutism
     1.6 Polycystic ovarian disease
     1.7 Menopause

2. **Human Sexuality**
   - 2.1 Normal sexual function
   - 2.2 Etiology and management of dyspareunia and vaginismus

3. **Contraception**
   - 3.1 Methods of contraception; including the various mechanisms of action, the indications, contraindications, risks and benefits and possible complications for the use of each method
   - 3.2 Strategies to promote adherence to contraceptive methods and encourage safe sex behaviors

4. **Violence against Women**
   - 4.1 Identify features of abused women (both physical and psychological) and have an approach for screening for intimate partner violence
   - 4.2 Knowledge of appropriate protocols for the acute medical management of rape victims, including post-coital contraception.
   - 4.3 Appropriate referral for legal assistance and psychological counseling for victims of physical, emotional and sexual abuse

5. **Pregnancy Loss or Termination**
   - The pathophysiology, investigation, diagnosis, and management (including counselling and referral for grief support) of:
     - 5.1 Spontaneous abortion in the first trimester
     - 5.2 Ectopic pregnancy
     - 5.3 Termination of pregnancy in the first trimester
     - 5.4 Termination of pregnancy in the second trimester

6. **Gynecologic Infections**
   - The epidemiology, pathophysiology, investigation, diagnosis, and management of:
     - 6.1 Vaginal and vulvar infections
     - 6.2 Sexually transmitted infections
     - 6.3 Acute pelvic inflammatory disease

7. **Other Non-Malignant Gynecologic Conditions**
   - The pathophysiology, investigation, diagnosis, and management of:
     - 9.1 Benign pelvic masses, including rupture and torsion
9.2 Acute and chronic pelvic pain
9.3 Endometriosis
9.4 Surgical wound hematoma and infection (including abscess)

8. Preoperative and Postoperative Care
   1.1 Perioperative risk factors and their assessment
   1.2 The principles and appropriate use of nutritional support
   1.3 The principles of normal and impaired wound healing
   1.4 The principles and appropriate use of various classes of analgesics for postoperative pain control
   1.5 The recognition and management of postoperative medical and surgical complications, including bleeding, fever, low urinary output, hypotension, chest pain, shortness of breath, delirium, ileus and indications for consultation with other specialties

Procedural and Technical Skills

The PGY-1 resident must acquire a wide variety of technical skills in the practice of general gynecology. The following is a detailed list of required technical skills, including surgical skills. This list should be considered in its totality and not considered as exhaustive for all disorders in general gynecology. The PGY-1 resident will demonstrate an understanding of the indications, risks, and benefits, interpretation, limitations, and role of the following investigative techniques specific to the practice of general gynecology.

1. Serology and Microbiology
   1.1 Serial hCG assays in the diagnosis of failing or ectopic pregnancy
   1.2 Tumour markers; including Ca-125, hCG, and alpha-fetoprotein
   1.3 Culture and serology for sexually transmitted diseases
   1.4 Urinalysis, urine microscopy, and urine culture

2. Imaging
   2.1 Transabdominal ultrasound for gynecologic disease
   2.2 Transvaginal ultrasound for gynecologic disease
   2.3 CT scan and MRI scan of the pelvis
   2.4 Doppler studies and angiography for thromboembolism

3. Cytology and Histopathology
   3.1 Cervical cytology
   3.2 Cervical polypectomy
   3.3 Endocervical curettage
   3.4 Endometrial biopsy
   3.5 Vulvar and vaginal biopsy

4. Therapeutic Technologies
   The PGY-1 resident will have an understanding of the physics and technological application of the following therapeutic modalities, including the risks, benefits, and complications of these approaches.
   4.1 Electrocautery
   4.2 Global endometrial ablation

Surgical Skills

The list of surgical skills is divided into categories reflecting the frequency with which these procedures are encountered during residency training in general gynecology, as well as in the general practice of the specialty. The categorized list also reflects the level of technical skill competency for each surgical procedure expected upon completion of the PGY-1 rotation in gynecology.
A. Surgical Procedures List
The PGY-1 resident in general gynecology will understand and be able to assist attending staff on the following procedures. The resident will be able to explain the indications for each of these procedures, as well as the perioperative preparation and management of complications. He/she should be able to manage a patient before, during, and after all of the following procedures. The resident must be able to discuss with the patient the risks, benefits, and complications of these surgical treatments, as well as any available non-surgical treatment alternatives and the consequences of the absence of surgical treatment.

1. Open Gynecologic Procedures
   1.1 Pfannenstiel incision
   1.2 Vertical midline incision
   1.3 Total abdominal hysterectomy
   1.4 Salpingo-oophorectomy
   1.5 Oophorectomy
   1.6 Ovarian cystectomy

2. Vaginal Gynecologic Procedures
   2.1 Drainage and marsupialization of Bartholin’s gland abscess
   2.2 Vaginal hysterectomy
   2.3 Cervical conization

3. Endoscopic Procedures
   3.1 Diagnostic laparoscopy (including assessment of tubal patency)
   3.2 Laparoscopic sterilization
   3.3 Global endometrial ablation
   3.4 Salpingectomy and linear salpingostomy for the management of ectopic pregnancy
   3.5 Laparoscopic lysis of adhesions
   3.6 Cautery of endometriosis

4. Other Gynecologic Procedures
   4.1 Dilation and curettage for incomplete abortion and dysfunctional uterine bleeding
   4.2 Fractional D&C for postmenopausal bleeding
   4.3 Insertion and removal of an intrauterine contraceptive device

Communicator

2. Establish therapeutic relationships with patients and their families, characterized by understanding, trust, empathy, and confidentiality.
3. Obtain and synthesize relevant history from patients, families, and the community.
4. Discuss appropriate information with the patient, her family, and other health care providers that facilitate optimal health care.
5. Ability to maintain clear, accurate, timely, and appropriate documentation.

To achieve these objectives as a communicator, the resident must demonstrate:
6. The ability to obtain informed consent for medical and surgical therapies.
7. The ability to record accurately and succinctly data collected from patients, laboratory tests, and radiological studies.
8. The ability to communicate (oral or written) conclusions based on these data to patients and their families, referring physicians and other involved health care personnel.
9. Demonstrates excellent interpersonal skills when working with patients, families, and other members of the health care team and an awareness of the unique personal, psychosocial, cultural, and ethical issues that surround individual patients with obstetric problems.
10. The ability to prepare and present information to colleagues and other trainees (if applicable).
11. The ability to prepare accurate, concise, and complete admission histories, discharge summaries and operative and delivery notes.
Collaborator

The PGY-1 resident must be able to consult effectively with other physicians and with other health care providers and contribute effectively to a multidisciplinary health care team.

To achieve these objectives as a collaborator, the resident must be able to:
1. Function competently in the initial management of patients with conditions that fall within the realm of other medical or surgical specialties.
2. Demonstrate the ability to function effectively and, where appropriate for the level of training, provide leadership in a multidisciplinary health care team, showing respect, consideration, and acceptance of other team members and their opinions while contributing personal specialty-specific expertise.
3. Identify and understand and respect the significant roles, expertise, and limitations of other members of a multidisciplinary team required to optimally achieve a goal related to patient care, medical research, medical education, or administration.

Leader

1. Manage resources effectively to balance patient care and learning needs
2. Work effectively and efficiently in a health care organization

To achieve these objectives as a manager, the resident should be able to:
4. Effectively triage the labour and delivery unit and working with the nursing team to optimize patient care.
5. Triage emergency problems in case room and as they enter the assessment room
6. Able to recognize personal limitations and seek assistance when necessary,

Health Advocate

The PGY-1 resident must be able to:
1. Identify the critical determinants of health affecting patients.
2. Contribute effectively to improved health of patients and communities.
3. Recognize and respond to those issues where advocacy is appropriate.

To achieve these objectives, the resident will:
1. Identify the important determinants of health for individual patients.
2. Seek to understand the medical and psychosocial context for individual patients
3. Make clinical decisions for an individual patient balancing her needs against the needs of the general population against the available resources.
4. Facilitate or provide access to or resources about medical care for patients even when care is not provided personally or locally or when that care is not readily accessible, i.e., therapeutic abortion.
5. Advise patients about local and regional resources available for support, education, and rehabilitation.
6. Discuss the critical function and role of various professional organizations, including the Society of Obstetricians and Gynecologists of Canada, in support of obstetricians in the provision and maintenance of optimal health for Canadian women.

Scholar

1. To be able to critically appraise sources of medical information and appropriately integrate new information into clinical practice.
2. Initiate scholarly activities such as quality improvement, or establishing a research question pertinent to obstetrics and gynecology and conducting the literature review
3. Facilitate patient and peer education, placing new research findings in an appropriate and clinically relevant context.

To achieve these objectives, the resident will:
4. Identify gaps in personal knowledge and skill and develop strategies to correct them by self-directed reading, discussion with colleagues, and on-going procedural experience.
5. Identify gaps in knowledge or skill within the field of obstetrics to generate the clinical questions that will drive research to understand the basic principles of basic and applied clinical research, especially epidemiology and biostatistics.

6. Be able to critically appraise and summarize the literature on a given subject and judge whether a research project or publication is sound, ethical, unbiased, and clinically valuable.

7. Use medical research appropriately in clinical care by appropriately adapting research findings to the individual patient situation.

**Professional**

The PGY-1 resident must:

1. Deliver the highest quality of medical care with integrity, honesty, compassion, and respect
2. Exhibit appropriate personal and interpersonal professional behaviours
3. Practice medicine in a way that is consistent with the ethical obligations of a physician

To achieve these general objectives in the role of a professional, the resident must:

1. Endeavor to monitor learning and seek feedback by attempting EPAs regularly.
2. Foster a caring, compassionate, and respectful attitude towards patients, families, and other members of the health care team.
3. Provide ethical medical care and seek advice or second opinion appropriately in ethically difficult situations.
4. Monitor patients appropriately and provide appropriate follow up medical care, particularly after starting a new treatment or following a surgical procedure.
5. Maintain patient confidentiality at all times.
6. Complete reports, letters, and summaries in a timely fashion and maintain medical records that are consistently accurate, informative, and legible.
8. Be able to deal with professional intimidation and harassment.
9. Understand one's own limits and recognize when to seek help
10. Show self-discipline, responsibility, and punctuality in attending to ward duties, in the operating room, and at meetings and other activities, and be a moral and ethical role model for others.
11. Be able to delegate clinical and administrative responsibilities appropriately.
12. Be able to balance professional and personal life.

**CanMEDS Framework:** Medical Expert, Communicator, Collaborator, Leader, Health Advocate, Scholar, Professional.

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<th>Revisions</th>
<th>Approved at RPC Meeting</th>
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<td>CanMEDS Roles Updated</td>
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