

Obstetrics and Gynecology: Obstetrics Objectives: PGY 2, Foundations of Discipline and Core

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

General Obstetrics Learning Objectives

A specialist in Obstetrics and Gynaecology is a physician with special education and expertise in the field of women's health and reproduction. He/she has the appropriate medical, surgical, obstetrical, and gynaecologic knowledge and skills for the prevention, diagnosis, and management of a broad range of conditions affecting women's general and reproductive health. As well as providing clinical care and education in normal and complicated obstetrics and gynecology, he/she may contribute significantly to research.

Two levels of knowledge and proficiency are referred to in this document.

An *extensive level* refers to an in-depth understanding of an area, from basic science to clinical application, and possession of skills to manage a problem independently in the area.

A *working-level* indicates a level of knowledge that is sufficient for the clinical management of a condition, and an understanding of an approach or technique sufficient to counsel and recommend it, without having personally achieved mastery of that approach or techniques.

This rotation is intended to provide the resident with a clinical opportunity to progress beyond a working level of knowledge to an in-depth understanding of maternal and fetal physiology, antepartum, intrapartum, and postpartum care.

The PGY 2 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

Cognitive Skills

An extensive 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
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 Intrauterine fetal demise
 - 2.6 Gestational hypertension
 - 2.7 Gestational diabetes

Rotation Information

Rotation Contacts

Lois Hole Hospital
Dr. Rebecca Rich

Reading material:
See resident Google drive

Rotation duration:
10 Blocks

Vacation and time off:
Refer to PARA guidelines and vacation policy.

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

Assessment:
RAH has two interim evaluations and one final evaluation. GNH has one midpoint evaluation and one final evaluation.

EPAs

Residents should be working towards completing all foundations of Discipline EPAs and Surgical Foundations EPAs.

As residents progress, Core EPAs should be attempted.

1. Intrapartum Care
 - 1.1 Anatomy, physiology, and mechanisms of normal labour
 - 1.2 Anatomy, physiology, and mechanisms of normal vaginal delivery
 - 1.3 Assessment of labour progress
 - 1.4 Indications for, methods of and complications of augmentation of labour
 - 1.5 Indications for, methods of, and potential complications of labour induction
 - 1.6 Intrapartum assessment of maternal health
 - 1.7 Intrapartum assessment of fetal health including interpretation of intermittent auscultation, electronic fetal monitoring, basic ultrasound imaging, and cord blood gas sampling
 - 1.8 Recognition and management of intrapartum infection
 - 1.9 Recognition and management of shoulder dystocia
 - 1.10 Recognition and management of cord prolapse
2. Obstetric Delivery
 - 2.1 Indications for assisted vaginal delivery and Cesarean section
 - 2.2 Maternal and neonatal risks and benefits of assisted vaginal delivery and Cesarean section
 - 2.3 Risks and benefits of vaginal delivery after previous Cesarean section
3. Postpartum Care
 - 3.1 Etiology and management of postpartum hemorrhage
 - 3.2 Recognition and management of shock
 - 3.3 Etiology and management of sepsis
 - 3.4 Breastfeeding benefits and complications
 - 3.5 Family planning
 - 3.6 Understanding risk factors and screening questions for postpartum depression

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

1. Antepartum Care
 - 1.1 Genetic screening, testing, and counseling
 - 1.2 Effects of underlying medical, surgical, social and psychosocial conditions on fetal and maternal health and management of the same
 - 1.3 Antepartum surveillance in high-risk pregnancies
2. Obstetric Complications
The pathophysiology, prevention, investigation, diagnosis, prognosis, and management of:
 - 2.1 Insulin-dependent diabetes
 - 2.2 Multiple gestations: twins, monochorionic and dichorionic, triplets & higher-order multiple gestations
 - 2.3 Second-trimester pregnancy loss
 - 2.4 Fetal growth restriction
 - 2.5 Alloimmunization
 - 2.6 Viral infections in pregnancy
3. Intrapartum Care
 - 3.1 Obstetric anesthesia
 - 3.2 Apgar scoring
4. Obstetric Delivery
 - 4.1 Recognition and management of a non-vertex presentation
 - 4.2 Indications for and risks of mid-cavity or rotational forceps
5. Postpartum Care
 - 5.1 Diagnosis and management of a venous thrombotic event
 - 5.2 Recognition and management of postpartum wound complications (ex: wound *dehiscence*, *wound infection*)

Technical Skills

The PGY2 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 & Gynaecology, 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 Screening
 - 2.2 Biophysical profile & doppler flow studies
 - 2.3 Doppler studies and geography for thromboembolic disease
3. Cytology, Histopathology
 - 3.1 Cervical cytology
4. Other Assessments
 - 4.1 Fetal assessment: non-stress test, contraction stress test
 - 4.2 Obstetric Procedures:

Obstetric Procedures

Following the completion of PGY2 RAH rotation, The PGY2 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. Spontaneous vaginal delivery
2. Episiotomy & repair
3. Artificial rupture of membranes
4. Application of scalp electrode
5. Insertion IUPC

The PGY2 resident will understand and be able to perform with supervision:

- 1 Repair of perineal and vaginal tears including 3rd & 4th-degree tears and cervical lacerations
- 2 Low forceps delivery
- 3 Vacuum extraction
- 4 Low transverse cesarean section, primary, and repeat
- 5 Abdominal delivery of multiple gestations (assist with)
- 6 Manual removal of a placenta
- 7 Vaginal breech delivery (assist with)
- 8 Management of shoulder dystocia, cord prolapse, and antepartum hemorrhage

The PGY2 resident will understand but may not have the opportunity to see or perform:

- 1 Low vertical or classical cesarean section
- 2 Vaginal breech delivery / Vaginal breech extraction
3. Repair of wound dehiscence
4. Endotracheal intubation, and advanced cardiac life support skills

General Gynecology Learning Objectives

Upon completion of training, the resident is expected to be a competent specialist capable of assuming an independent consultant's role in gynecology. He/she must have acquired the necessary knowledge, skills, and attitudes for appropriate and competent management of a wide range of gynecological conditions. The resident must have the ability to develop a trusting and effective partnership with female patients necessary to achieve successful outcomes in gynecologic health and illness throughout a woman's life.

The resident must also demonstrate the knowledge, skills, and attitudes relating to gender, culture, and ethnicity pertinent to reproductive health care, and can appropriately incorporate gender, culture, and ethnic perspectives into research methodology, data presentation, and analysis. Additionally, the resident must understand the impact of various factors, including fear, anxiety, depression, socioeconomic status, and domestic violence on pain, patient satisfaction, and treatment outcomes.

Upon completion of his/her training, the resident in gynecology at a PGY2 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:

- Take a history of the patient's problem
- Conduct a complete physical examination
- Demonstrate an understanding of the value and significance of laboratory, radiological and other diagnostic studies
- Discuss the relative merits of various treatment alternatives
- List and discuss the indications, contraindications, types, variations, complications, and risks and benefits of surgical and non-surgical treatments
- Discuss the significance of perioperative and postoperative problems that might arise following surgery on the genitourinary tract

Upon completion of the second PGY2 rotation in general gynecology, the resident will have acquired the following competencies and will function effectively as a:

Medical Expert

The resident must demonstrate both knowledge (cognitive skill) and technical ability in the approach to problems in the practice of general gynecology.

Cognitive Skills

The PGY2 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.

Extensive knowledge is required for the following:

1. Reproduction and Endocrine Disorders

The reproductive physiology, and the physiology, investigation, diagnosis, and management of:

- 1.1 Menstrual irregularity
- 1.2 Dysfunctional uterine bleeding

2. Human Sexuality

- 2.1 Normal sexual function

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 safer sex behaviors

4. Violence against Women

- 4.1 Identify features of abused women (both physical and psychological)
- 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 abuse and rape

5. Pregnancy Loss or Termination

The pathophysiology, investigation, diagnosis, and management (including counseling and referral for grief support) of:

- 5.1 Spontaneous abortion in the first trimester
- 5.2 Ectopic pregnancy
- 5.3 Intrauterine fetal demise in the second and third trimester
- 5.4 Termination of pregnancy in the second trimester

6. Gynecologic Infections

The epidemiology, pathophysiology, investigation, diagnosis, or management of:

- 6.1 Vaginal and vulvar infections
- 6.2 Sexually transmitted infections
- 6.3 Acute pelvic inflammatory disease

7. Urogynecology

The pathophysiology, investigation, diagnosis, and/or management of:

- 7.1 Acute and recurrent urinary tract infections
- 7.2 Postoperative voiding dysfunction

8. Other Non-Malignant Gynecologic Conditions

The pathophysiology, investigation, diagnosis, and management of:

- 8.1 Benign pelvic masses, including rupture and torsion
- 8.2 Acute and chronic pelvic pain
- 8.3 Endometriosis
- 8.4 Surgical wound hematoma and infection (including abscess)

9. Preoperative and Postoperative Care

- 9.1 Perioperative risk factors and their assessment
- 9.2 The principles and appropriate use of nutritional support
- 9.3 The principles of normal and impaired wound healing
- 9.4 The principles and appropriate use of narcotics and NSAIDs for postoperative pain control
- 9.5 The management of postoperative medical and surgical complications, including indications for consultation with other specialties.

A working level of knowledge is required for the following:

1. Reproduction and Endocrine Disorders

The pathophysiology, investigation, diagnosis, and/or management of:

- 1.1 Amenorrhea (primary and secondary)
- 1.2 Galactorrhea
- 1.3 Hirsutism
- 1.4 Polycystic ovarian disease
- 1.5 Menopause

2. Human Sexuality

- 2.1 Etiology and management dyspareunia, vulvodynia and vaginismus

3. Infertility

- 3.1 Indications for and interpretation of first phase evaluations, i.e. Semen analysis, HSG the effectiveness and complications of current standard treatments for infertility

4. Urogynecology

The indications and limitations of urodynamic testing and the pathophysiology, investigation, diagnosis, and treatment of:

- 4.1 Pelvic organ prolapses, including pessary care
- 4.2 Stress urinary incontinence
- 4.3 Urge urinary incontinence

5. Gynecologic Oncology

- 5.1 The principles of colposcopy, including its limitations and the indications for referral for colposcopic assessment

6. Other Non-Gynecologic Conditions

The pathophysiology, investigation, diagnosis, and management of:

- 6.1 Colorectal disease; including diverticular disease, colon, and rectal cancer, inflammatory bowel disease and appendicitis
- 6.2 Breast conditions; including benign breast disease, breast cancer screening

Technical Skills

The PGY2 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.

Diagnostic Procedures and Techniques

The PGY2 resident will demonstrate an understanding of the indications, risks, and benefits, limitations and role of the following investigative techniques specific to the practice of general gynecology and will be competent in their interpretation.

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 and MRI of the pelvis
 - 2.4 Doppler studies and angiography for thromboembolic disease
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

Therapeutic Technologies

The PGY2 resident will have a working knowledge of the physics and technological application of the following therapeutic modalities, including the risks, benefits, and complications of these approaches.

1. Electrocautery
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 second PGY2 rotation in gynecology.

Surgical Procedures List A

Following the completion of the RAH General Ob Gyn rotation, the PGY2 resident must be competent to perform the following procedures in List A. independently. 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
2. **Vaginal Gynecologic Procedures**
 - 2.1 Drainage and marsupialization of Bartholin's gland abscess
3. **Endoscopic Procedures**
 - 3.1 Diagnostic laparoscopy (including assessment of tubal patency, laparoscopic sterilization and global endometrial ablation).
4. **Other Gynecologic Procedures**
 - 4.1 Dilation and curettage for incomplete abortion
 - 4.2 D&C for postmenopausal bleeding and abnormal uterine bleeding
 - 4.3 Insertion and removal of an intrauterine contraceptive device

Surgical Procedures List B

The PGY2 resident in general gynecology will understand and be able to perform with assistance the following procedures in List B. The resident will be able to explain the indications for each of these procedures, as well as the perioperative management and complications.

1. **Open Gynecologic Procedures**
 - 1.1 Vertical midline incision
 - 1.2 Total abdominal hysterectomy
 - 1.3 Salpingo-oophorectomy
 - 1.4 Oophorectomy
 - 1.5 Ovarian cystectomy
2. **Vaginal Gynecologic Procedures**
 - 2.1 Vaginal hysterectomy
 - 2.2 Cervical conization
3. **Endoscopic Procedures**
 - 3.1 Salpingectomy and linear salpingotomy for management of ectopic pregnancy
 - 3.2 Laparoscopic lysis of adhesions
 - 3.3 Cautery of endometriosis

Communicator

Communication skills are essential for obtaining information from and conveying information to patients and their families. Furthermore, these abilities are critical to eliciting patients' beliefs, concerns, and expectations about their illness and are also key factors impacting patients' health.

To provide humane, high-quality care, obstetricians establish effective relationships with patients, other physicians, and other health professionals. Communication skills are essential for obtaining information from and conveying information to patients and their families. Furthermore, these abilities are critical in eliciting patients' beliefs, concerns, and expectations about their illnesses, and for assessing key factors impacting on patients' health.

The PGY2 resident in obstetrics must be able to:

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

To achieve these objectives as a communicator, the resident must demonstrate:

4. The ability to obtain informed consent for medical and surgical therapies.
5. The ability to record accurately and succinctly data collected from patients, laboratory tests and radiological studies.
6. 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.
7. Evidence of good interpersonal skills when working with patients, families, and other members of the health care team awareness of the unique personal, psychosocial, cultural and ethical issues that surround individual patients with obstetric problems.
8. The ability to prepare and present information to colleagues and other trainees (if applicable) both informally (e.g., ward rounds) and formally (e.g., Grand Rounds, scientific meetings).
9. The ability to prepare accurate, concise and complete operative notes.

Collaborator

PGY2 residents must learn to effectively and respectfully work with senior residents, consultant Obstetricians, family doctors, midwives, and specialists in other fields; anesthesia and diagnostic imaging.

The PGY2 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, 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

The PGY2 resident must acquire the ability to prioritize and effectively execute tasks through teamwork with colleagues and make appropriate decisions when allocating resources.

- 1 Able to recognize personal limitations and seek assistance when necessary
- 2 Manage resources effectively to balance patient care and learning needs.
- 3 Work effectively and efficiently in a health care organization.
- 4 Utilize information technology to optimize patient care, life-long learning.

To achieve these objectives as a manager, the resident should:

4. Effectively manage the labour and delivery unit including minimizing patient wait times and work with nursing for best patient care.
5. Triage emergency problems.
6. Involvement in quality improvement rounds.

Health Advocate

Obstetricians and Gynecologists must recognize the importance of advocacy activities in responding to the challenges represented by those social, environmental, and biological factors that determine the health of patients and society. Health advocacy is an essential and fundamental component of health promotion that occurs at the level of the individual patient, the practice population, and the broader community. Health advocacy is appropriately expressed both by the individual and collective responses of obstetricians in influencing public health and policy.

The PGY 2 resident must:

1. Identify the important 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 as a manager, the resident should

1. Identify the important determinants of health for individual patients.
2. Make clinical decisions for an individual patient balancing her needs against the needs of the general population against the available resources.

3. Facilitate 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.
4. Advise patients about local and regional resources available for support, education, and rehabilitation.
5. Discuss the important 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.
6. Participate in program-specific health initiatives i.e. GOC Pap smear campaign.

Scholar

Obstetricians and Gynecologists must engage in a lifelong pursuit of mastery of their domain of professional expertise. They must constantly critically evaluate and modify their clinical practice in the context of new information, usually in the form of clinically relevant research. They recognize the need to be continually learning and appropriately integrating research findings into clinical practice while modeling these competencies for others. Through their scholarly activities, they contribute to the generation, collection, appraisal, understanding, and dissemination of accurate and relevant health care knowledge for women, and facilitate the education of their colleagues, students, patients, and others.

The PGY 2 resident should be able to:

1. Critically appraise sources of medical information and appropriately integrate new information into clinical practice.
2. Facilitate patient and peer education, placing new research findings in the appropriate and clinically relevant context.

To achieve these objectives as a manager, the resident should

3. 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.
4. To identify gaps in knowledge or skill within the field of obstetrics to generate the clinical questions that will drive research.
5. 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

Obstetricians and Gynecologists have a unique societal role as professionals with a distinct body of knowledge, skills, and attitudes dedicated to improving the health and well-being of women. They are committed to the highest standards of excellence in clinical care and ethical conduct, and to continually perfecting mastery of their discipline.

The PGY2 resident must:

1. Endeavour to monitor learning by regularly attempting EPAs.
2. Deliver the highest quality of medical care with integrity, honesty, compassion, and respect.
3. Exhibit appropriate personal and interpersonal professional behaviours.
4. 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:

5. Foster a caring, compassionate and respectful attitude towards patients, families, and other members of the health care team.
6. Provide ethical medical care and seek advice or second opinion appropriately in ethically difficult situations.
7. Monitor patients appropriately and provide appropriate follow up medical care, particularly after starting a new

- treatment or following a surgical procedure.
8. Always maintain patient confidentiality.
 9. Complete reports, letters, and summaries in a timely fashion and maintain medical records that are consistently accurate, informative and legible.
 10. Understand medical protective procedures and the role of the Canadian Medical Protective Association in areas of patient-physician dispute.
 11. Be able to deal with professional intimidation and harassment.
 12. 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.
 13. Be able to delegate clinical and administrative responsibilities appropriately.
 14. Can balance professional and personal life

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Revisions	Approved at RPC Meeting
CanMEDS Roles Updated	December 9, 2019