Objectives of Training and Specialty Requirements
PGY2 General Obstetrics & Gynecology
January 2015

Objectives of Training

Definition
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 and obstetrical and gynaecologic knowledge and skills for the prevention, diagnosis and management of a broad range of conditions affecting women's reproductive health. As well as providing clinical care and education in normal and complicated obstetrics and gynaecology, 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 independently a problem in the area.

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

General Objectives

Upon completion of the rotation, the PGY2 resident in obstetrics and gynaecology must have a working 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. Specifically, he/she will begin to develop an understanding of normal and abnormal changes in physiology and anatomy occurring in the pregnant and postpartum states.

Management of a patient with either an obstetric or a gynaecologic 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
3. understand the value and significance of laboratory, radiological and other diagnostic studies
4. understand the relative merits of various treatment alternatives
5. understand the indications, contraindications, types, variations, complications, and risks and benefits of surgical and non-surgical treatments
6. Understand the significance of perioperative and postoperative problems that might arise following surgery on the genitourinary tract

Specific Objectives

At the completion of training, the resident will have acquired the following competencies and will function effectively as:

1. **MEDICAL EXPERT / CLINICAL DECISION-MAKER**

   **Definition**
   Obstetricians and gynaecologists possess 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 discipline and expertise. Their care is characterized by up-to-date, ethical, and cost-effective clinical practice and effective communication in partnership with patients, other health care providers, and the community. The role of *medical expert/clinical decision-maker* is central to the function of obstetricians and gynaecologists, and draws on the competencies included in the roles of scholar, communicator, health advocate, manager, collaborator, and professional.

1.1 General Objectives

   The PGY2 resident obstetrician and gynaecologist must demonstrate:
   - diagnostic and therapeutic skills for effective and ethical patient care
   - the ability to access and apply relevant information to clinical practice
   - recognition of personal limitations of expertise, including the need for appropriate patient referral and continuing medical education

1.2 Specific Objectives

   In order to achieve these objectives, the resident must demonstrate both knowledge (cognitive skill) and technical ability in the approach to problems in the practice of obstetrics and gynaecology.

1.2.1 Cognitive Skills

   The PGY2 resident obstetrician and gynaecologist will have knowledge of the following clinical conditions or problems encountered commonly in the practice of obstetrics and gynaecology. During the PGY2 rotation the resident will begin to develop knowledge and clinical skills in general obstetrics and gynecology.

   An *extensive level* of knowledge is required for the following:
   - **Obstetric Complications**
     The pathophysiology, prevention, investigation, diagnosis, and/or management of:
     - premature rupture of membranes
     - antepartum haemorrhage
     - post-term pregnancy
     - fetal demise
- **Intrapartum Care**
  - Anatomy, physiology, mechanisms and complications of labour
  - Anatomy, physiology, mechanisms and complications of vaginal delivery
  - indications for, methods and complications of labour induction
  - assessment of labour progress
  - indications for, methods and complications of augmentation of labour
  - intrapartum assessment of maternal health
  - intrapartum assessment of fetal health, including intermittent auscultation, electronic fetal monitoring, basic ultrasound imaging and fetal scalp pH determination
  - intrapartum infection

- **Obstetric Delivery**
  - indications for assisted vaginal delivery and Cesarean section
  - maternal and neonatal benefits and risks of assisted vaginal delivery and Cesarean section
  - risks and benefits of vaginal delivery after a previous Cesarean section
  - Obstetric anesthesia including risks and benefits of general anesthesia, spinal anesthesia, epidural anesthesia, pudendal nerve block and narcotics
  - Principles of neonatal resuscitation

- **Postpartum Care**
  - Physiology of and complications of the puerperium
  - etiology and management (medical and surgical) of early and delayed postpartum hemorrhage
  - etiology and management of sepsis
  - benefits of breastfeeding
  - family planning
  - recognition of risk factors for depression and support in psychosocial adjustment

- **Reproduction and Endocrine Disorders**
  - normal reproductive physiology,

  The pathophysiology, investigation, diagnosis, and/or management of:
  - menstrual irregularity
  - dysfunctional uterine bleeding
  - polycystic ovarian disease
  - premenstrual syndrome

- **Contraception**
  - methods of contraception, including the various mechanisms of action, and the indications, contraindications, risks and benefits, and possible complications for use of each method
  - strategies to promote adherence contraceptive methods and encourage safe sex behaviours
• **Violence against Women**
  • identifying risk factors for violence and features of abused women

• **Pregnancy Loss**
The pathophysiology, investigation, diagnosis, and/or management of:
  • spontaneous abortion in the first trimester
  • intrauterine fetal demise in the second trimester, including the risks and benefits of dilation and evacuation
  • ectopic pregnancy
  • first trimester termination of pregnancy

• **Gynecologic Infections**
The pathophysiology, investigation, diagnosis, and/or management of:
  • vaginal and vulvar infections
  • sexually transmitted infections, including acute and chronic pelvic inflammatory disease and the gynaecologic aspects of HIV, hepatitis, tuberculosis and syphilis

• **Other Non-Malignant Gynaecologic Conditions**
The pathophysiology, investigation, diagnosis, and management of:
  • benign pelvic masses, including rupture and torsion
  • acute and chronic pelvic pain
  • endometriosis

• **Operative considerations**
  • Surgical wound hematoma and infection (including abscess)
  • Components of informed consent (risks, benefits, complications, alternatives)
  • Pre-operative assessment
  • National and regional guidelines for peri-operative prophylaxis
  • National and regional guidelines for preoperative consultation
  • Different anesthetic options for laparoscopy and hysteroscopy
  • Indications for and administration of regional anesthesia
  • Common oral and parenteral narcotics, anti-inflammatories and other peri-operative pain control measures
  • Patient positioning for safe and optimal surgical access and exposure
  • Patient positioning to reduce risk of unintended injury
  • Positioning of equipment, monitors and ancillary apparatus
  • Principles and appropriate use of nutritional support
  • Principles of normal and impaired wound healing
  • Principles and appropriate management of postoperative pain and nausea
  • the 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

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

1. **Antepartum care**
• antepartum assessment of normal pregnancy
• genetic screening, testing and counseling, and the outcomes of pregnancies complicated by fetal anomaly(ies) or aneuploidy
• Basic principles of use of prescription and non-prescription medication in pregnancy
• Antepartum fetal surveillance in the normal and high-risk pregnancy including appropriate use of ultrasound

2. Obstetric Complications
• Second trimester pregnancy loss
• Preterm labour and birth
• Gestational diabetes
• Multiple gestation
• Gestational hypertension
• Recurrent pregnancy loss

1.2.2 Technical Skills
The PGY2 resident obstetrician and gynaecologist will begin to develop a variety of technical skills in the practice of obstetrics and gynaecology. The following is a detailed list of technical skills, including surgical skills which should be developed by completion of the PGY2 year. This list should be considered in its totality, and not be considered as exhaustive for all disorders in specialty practice.

1.2.2.1 Diagnostic Procedures and Techniques
The obstetrician and gynaecologist in practice will utilize a number of diagnostic procedures and techniques. The PGY2 resident will understand the indications, risks and benefits, limitations and role of the following investigative techniques specific to the practice of obstetrics and gynaecology, and will be competent in their interpretation.

a. Serology and Microbiology
• maternal serum screening for aneuploidy and neural tube defects
• screening for Group B Streptococcus in pregnancy
• serial hCG assays in the diagnosis of failing or ectopic pregnancy
• tumour markers, including Ca-125, hCG, and alpha-fetoprotein
• culture and serology for sexually transmitted diseases
• wet mount of vaginal discharge
• urinalysis, urine microscopy, and urine culture

b. Imaging
• obstetric ultrasound: screening and targeted (in each trimester) and biophysical profile and Doppler flow studies
• transabdominal ultrasound for gynaecologic disease
• transvaginal ultrasound for gynaecologic disease
• CT and MRI scanning of the pelvis
• hysterosalpingography
- intravenous pyelography
- Doppler studies and angiography for thromboembolic disease

c. Cytology and Histopathology
- cervical cytology
- vulvar and vaginal biopsy
- cervical biopsy and polypectomy
- endometrial biopsy
- endocervical curettage
- Pap smear
d. Other Investigations
- fetal assessment: nonstress test, fetal scalp pH determination
- Hysterosalpingography
- Assessment of ruptured membranes/ferning
- Non-stress test
- Fetal scalp determination

1.2.2.2 Therapeutic Technologies
The PGY2 resident obstetrician and gynaecologist 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.
- electrocautery
- endometrial ablation (thermal and microwave)

1.2.2.3 Surgical Skills
The list of surgical skills is divided into categories reflecting the frequency with which these procedures are encountered during residency training in obstetrics and gynaecology 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 after completion of a residency training program in obstetrics and gynaecology.

a. Surgical Procedures List A
The PGY2 resident will develop skills in performing the following procedures in List A. By the completion of PGY2 they should be able to perform these skills independently. He/she should be able to manage a patient prior to, 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.

Obstetric Procedures
- spontaneous vaginal delivery, including shoulder dystocia and delivery of non-vertex presentation
- vaginal delivery of twin gestation
- vacuum extraction
• (forceps delivery: outlet, low)
• episiotomy and repair
• repair of perineal and vaginal tears (1st and 2nd degree tears)
• low transverse Cesarean section (primary and repeat)
• evacuation of the pregnant uterus (suction evacuation in the first trimester, curettage for retained products)
• manual removal of the placenta

Open Gynaecologic Procedures
• Pfannenstiel incision
• vertical midline incision
• ovarian cystectomy

Other Gyne procedures
• marsupialization of Bartholin’s gland abscess
• Dilatation and curettage
• Insertion of an IUD

Endoscopic Procedures
• Appropriate laparoscopic entry (including closed, open, and visual entry and selection of alternate sites)
• diagnostic laparoscopy (including assessment of tubal patency)
• laparoscopic sterilization
• diagnostic hysteroscopy
• hysteroscopic endometrial sampling and polyp removal

b. Surgical Procedures List B
By the completion of PGY2 the resident will understand and be able to perform, although not independently:
• Repair of third and fourth degree tears
• Vaginal delivery of the non-vertex presentation (e.g., face, brow etc)
• Low forceps assisted delivery/vacuum extraction
• Surgical management of severe postpartum hemorrhage
• Total abdominal hysterectomy
• Laparoscopic assisted vaginal hysterectomy

2. COMMUNICATOR

Definition
To provide humane, high-quality care, obstetricians and gynaecologists 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.

2.1 **General Objectives**

The PGY2 resident obstetrician and gynaecologist must be able to:
- establish therapeutic relationships with patients and their families characterized by understanding, trust, empathy, and confidentiality
- obtain and synthesize relevant history from patients, families, and/or community
- discuss appropriate information with the patient, her family, and other health care providers that facilitates optimal health care. This also implies the ability to maintain clear, accurate, and appropriate records

2.2 **Specific Objectives**

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

2.2.1 the ability to obtain informed consent for medical and surgical therapies

2.2.2 the ability to record accurately and succinctly data collected from patients, laboratory tests and radiological studies and to communicate (oral or written) conclusions based on these data to patients and their families, referring physicians and other involved health care personnel

2.2.3 evidence of good interpersonal skills when working with patients, families, and other members of the health care team

2.2.4 an awareness of the unique personal, psychosocial, cultural and ethical issues that surround individual patients with obstetric or gynaecologic problems

2.2.5 the ability to prepare and present information to colleagues both informally (e.g., ward rounds) and formally (e.g., Grand Rounds, scientific meetings)

2.2.6 the ability to provide information to the general public and media about areas of local concern relevant to the practice of obstetrics and gynaecology

3. **COLLABORATOR**

**Definition**

The Canadian model closely integrates primary health care providers and midwives with obstetricians and gynaecologists in the provision of health care for women. This underlies the need for residents to develop excellent skills as collaborators. They also must learn to effectively and respectfully work with specialists in other fields, including anesthesia, diagnostic radiology, pathology, pediatrics, internal medicine including endocrinology and medical oncology, radiation oncology, general surgery, and urology.

3.1 **General Objectives**

The PGY2 resident obstetrician and gynaecologist must be able to:
- consult effectively with other physicians
- consult effectively with other health care personnel
• contribute effectively to a multidisciplinary health care team

3.2 **Specific Objectives**

To achieve these objectives as a collaborator, the resident must be able to:

3.2.1 function competently in the initial management of patients with conditions that fall within the realm of other medical or surgical specialties

3.2.2 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

3.2.3 identify and understand 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

4. **MANAGER**

**Definition**

Obstetricians and gynaecologists function as managers when they make everyday practice decisions involving resources, coworkers, tasks, policies, and their personal lives. They do this in the settings of individual patient care, practice organizations, and in the broader context of the health care system. Thus, specialists require the abilities to prioritize and effectively execute tasks through teamwork with colleagues, and make systematic decisions when allocating finite health care resources. Obstetricians and gynaecologists can also assume a managerial role through involvement in health care administration and in professional organizations.

4.1 **General Objectives**

The PGY2 resident obstetrician and gynaecologist should be able to:

• manage resources effectively to balance patient care, learning needs and outside activities
• allocate finite health care resources wisely
• work effectively and efficiently in a health care organization
• utilize information technology to optimize patient care, life-long learning and practice administration

4.2 **Specific Objectives**

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

4.2.1 be able to effectively manage a clinical and surgical practice, including the follow up of normal and abnormal test results, and triage of emergency problems

4.2.2 understand the principles of quality assurance in the practice of obstetrics and gynaecology, and be able to conduct morbidity and mortality reviews

4.2.3 understand population-based approaches to the provision of medical care, including the costs and benefits of the various screening tests available for obstetric diagnosis and gynaecologic disease

4.2.4 understand how health care governance influences patient care, research and educational activities at the local, provincial and national level
4.2.5 be able to function effectively in local, regional and national specialty associations (professional or scientific) to promote better health care for women

5. **HEALTH ADVOCATE**

**Definition**
Obstetricians and gynaecologists 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 and gynaecologists in influencing public health and policy.

5.1 **General Objectives**
The PGY2 resident obstetrician and gynaecologist will:

- identify the important determinants of health affecting patients
- contribute effectively to improved health of patients and communities
- recognize and respond to those issues where advocacy is appropriate

5.2 **Specific Objectives**
In order to achieve these objectives as an advocate, the resident should be able to:

5.2.1 identify the important determinants of health for an individual patient, identify which determinants are modifiable, and adapt the treatment approach accordingly

5.2.2 make clinical decisions for an individual patient, balancing her needs against the needs of the general population and against the available resources

5.2.3 facilitate medical care for patients even when that care is not provided personally or locally (e.g., therapeutic abortion)

5.2.4 advise patients about the local and regional resources available for support, education and rehabilitation

5.2.5 provide direction to hospital administration regarding compliance with national clinical and surgical practice guidelines

5.2.6 provide medical care for women understand the important function and role of various professional organizations, including the Society of Obstetricians and Gynaecologists of Canada (SOGC) in the support of obstetricians and gynaecologists in this country and in the provision and maintenance of optimal health care for Canadian women

6. **SCHOLAR**

**Definition**
Obstetricians and gynaecologists must engage in a lifelong pursuit of mastery of their domain of professional expertise. They recognize the need to be continually learning and model this for others. Through their scholarly activities, they contribute to the appraisal, collection, and understanding of health care knowledge for women, and facilitate the education of their students, patients, and others.

6.1 **General Objectives**
The PGY2 resident obstetrician and gynaecologist must:
• develop, implement, and monitor a personal continuing education strategy
• be able to critically appraise sources of medical information
• facilitate patient and peer education
• try to contribute to the development of new knowledge in the field of obstetrics and gynaecology

6.2 **Specific Objectives**

In order to achieve these general objectives as a scholar, the resident must:

6.2.1 develop a habit of life-long learning, utilizing information technology for referencing cases, literature review and participation in basic or applied clinical research

6.2.2 identify gaps in personal knowledge and skill, and develop strategies to correct them by self-directed reading, discussion with colleagues, and ongoing procedural experience

6.2.3 understand the principles of basic and applied clinical research, including biostatistics

6.2.4 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. **PROFESSIONAL**

**Definition**

Obstetricians and gynaecologists 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.

7.1 **General Objectives**

The PGY2 resident obstetrician and gynaecologist must:

• deliver the highest quality of medical care with integrity, honesty, compassion, and respect
• exhibit appropriate personal and interpersonal professional behaviours
• practice medicine in a way that is consistent with the ethical obligations of a physician

7.2 **Specific Objectives**

In order to achieve these general objectives in the role of a professional, the resident must:

7.2.1 foster a caring, compassionate and respectful attitude for patients, families, and other members of the health care team

7.2.2 provide medical care that is ethical, and seek advice or second opinion appropriately in ethically difficult situations

7.2.3 maintain patient confidentiality at all times

7.2.4 understand medical protective procedures and the role of the Canadian Medical Protective Association in areas of patient-physician dispute

7.2.5 be able to deal with professional intimidation and harassment
7.2.6 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

7.2.7 be able to appropriately delegate clinical and administrative responsibilities

7.2.8 have the ability to balance professional and personal life

7.2.9 reliably discharge his/her responsibilities at the end of the shift in order to ensure continuity of care

7.2.10 recognize the limitations in his/her knowledge and skills and seek appropriate backup from a senior colleague or supervisor

7.2.11 have an awareness of the existence and content of the CMA code of ethics and its application to the practice of medicine in Canada.