

OBJECTIVES FOR PGY3, PGY4, AND PGY5 CORE OBSTETRICS ROTATION

DEFINITION

A specialist in Obstetrics and Gynaecology is a physician with special education and expertise in the field of women's health and reproduction. They have 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, they 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 training, the resident is expected to be a competent specialist capable of assuming an independent consultant's role in obstetrics. They must have acquired the necessary knowledge, skills and attitudes for appropriate and competent management of a wide range of obstetrical conditions. The resident must have the ability to develop the trusting and effective partnership with patients necessary to achieve successful outcomes in normal and complicated pregnancies.

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

Upon completion of training, the resident in obstetrics and gynaecology must have a working understanding of the normal function and the pathological processes and diseases that affect the external genitalia and the pelvic viscera (including the vagina, cervix, uterus, fallopian tubes, and ovaries), the lower urinary tract, and the bowel. This includes an understanding of embryology and normal development, and the unique biochemistry, physiology, anatomy, and gross and microscopic pathology of the genitourinary tract. Specifically, there must be a complete 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 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

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 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, leader, collaborator, and professional.

General Objectives

The fully-trained obstetrician must demonstrate:

- diagnostic and therapeutic skills for effective and ethical patient care
- the ability to access and apply relevant information to clinical practice
- effective consultation services with respect to patient care, education, media relations and legal opinions
- recognition of personal limitations of expertise, including the need for appropriate patient referral and continuing medical education

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.

COGNITIVE SKILLS

The resident will possess knowledge of the following clinical conditions or problems encountered commonly in the practice of obstetrics. This list should be considered in its totality, and not be considered as comprehensive for all disorders in the practice of this specialty.

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

Antepartum care

- maternal and fetal physiology
- fetal development
- antepartum assessment of normal pregnancy
- genetic screening, testing and counseling, including the complications from invasive procedures like chorionic villus sampling and amniocentesis, and the outcomes of pregnancies complicated by fetal anomaly(ies) or aneuploidy
- the effects of underlying medical, surgical, social, and psychosocial conditions on maternal and fetal health, and appropriate management of such

- antepartum fetal surveillance in the normal and high-risk pregnancy

Obstetric Complications

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

- second trimester pregnancy loss
- preterm labour
- premature rupture of membranes
- antepartum haemorrhage
- gestational diabetes and insulin dependent diabetes preceding pregnancy
- gestational hypertension
- multiple gestation
- fetal growth restriction
- viral infections in pregnancy, including HIV
- post-term pregnancy
- fetal demise
- abnormal presentation at term
- immune and non-immune hydrops
- alloimmunization
- cervical cerclage
- amniocentesis for the assessment of fetal lung maturity
- second trimester genetic amniocentesis

Intrapartum Care

- anatomy, physiology, and mechanisms of normal labour
- anatomy, physiology, and mechanisms of normal 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

Postpartum Care

- etiology and management (medical and surgical) of early and delayed postpartum hemorrhage
- etiology and management of endometritis, abscess, septic thrombophlebitis and sepsis
- benefits of breastfeeding

- family planning
- recognition of risk factors for depression and support in psychosocial adjustment
- prevention, recognition & treatment of deep venous thrombosis

Violence against Women

- identifying features of abused women
- appropriate referral for legal assistance and psychological counseling for victims of abuse and rape

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

Obstetrical Anesthesia

- pain management for labor and delivery, including the risks and benefits of general anesthesia, spinal anesthesia, epidural anesthesia, pudendal nerve block, and narcotics

Neonatal Care

- the principles of acute neonatal resuscitation
- the neonatal complications resulting from prematurity, macrosomia, birth asphyxia, assisted vaginal delivery, congenital anomaly(ies), and/or maternal medical complications, including their appropriate management and expected outcome

Preoperative and Postoperative Care

- perioperative risk factors and their assessment
- the principles and appropriate use of nutritional support
- the principles of wound healing
- the principles and appropriate use of narcotics and NSAIDs for postoperative pain control
- 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 and renal dialysis.

TECHNICAL SKILLS

The fully-trained obstetrician and gynaecologist must possess a wide variety of technical skills in the practice of obstetrics. The following is a detailed list of required technical skills, including surgical skills. This list should be considered in its totality, and not be considered as exhaustive for all disorders in specialty practice.

Diagnostic Procedures and Techniques

The obstetrician and gynaecologist in practice will utilize a number of diagnostic procedures and techniques. The fully trained 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 will be competent in their interpretation.

Serology and Microbiology

- maternal serum screening for aneuploidy and neural tube defects
- screening for Group B Streptococcus in pregnancy
- TORCH screening to identify possible congenital viral infections
- culture and serology for sexually transmitted diseases
- wet mount of vaginal discharge
- urinalysis, urine microscopy, and urine culture

Imaging

- obstetric ultrasound: screening and targeted (in each trimester) and biophysical profile and Doppler flow studies
- intravenous pyelography
- Doppler studies, V/Q scans and angiography for thromboembolic disease

Other Investigations

- fetal assessment: nonstress test, contraction stress test, and fetal scalp pH determination

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 in general practice. 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.

Surgical Procedures List A

The resident must be competent to *independently* perform the following procedures in List A. They 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 and the consequences of the absence of surgical treatment.

Obstetric Procedures

- amnioinfusion
- spontaneous vaginal delivery, including shoulder dystocia
- vaginal delivery of twin gestation, including second twin, breech extraction
- vacuum extraction
- outlet forceps delivery
- low forceps delivery

- episiotomy and repair
- repair of perineal and vaginal tears, including third and fourth degree tears and cervical - - lacerations
- low transverse Cesarean section (primary and repeat)
- abdominal delivery of multiple gestation pregnancies
- classical Cesarean section
- breech extraction at Cesarean section
- evacuation of the pregnant uterus (suction evacuation in the first trimester, curettage for retained products)
- manual removal of the placenta
- placement of pudendal block
- ligation of ovarian and uterine vessels
- B Lynch and square suture placement
- placement of Bakri balloon
- Cesarean hysterectomy

Associated Open Gynaecologic Procedures

- Pfannensteil incision
- vertical midline incision
- salpingo-oophrectomy
- oophrectomy
- ovarian cystectomy
- repair of wound dehiscence

Surgical Procedures List B

The following procedures in List B are those that the resident will understand and be able to perform, though they may not have actually acquired sufficient skill in residency to *independently* perform them. The resident will be able to explain the indications for each of these procedures, as well as the perioperative management and complications.

Obstetric Procedures

- external cephalic version
- dilation and evacuation in the second trimester
- vaginal breech delivery
- cystotomy repair

Surgical Procedures List C

The following procedures in List C are those that the resident will understand but *not* be expected to be able to perform. They should be able to describe the principles of these procedures, the indications for referral and the perioperative management and

complications.

Obstetric Procedures

- chorionic villus sampling
- cordocentesis
- intrauterine transfusion
- second trimester genetic amniocentesis
- amniocentesis for fetal lung maturity studies

Other

- ureteric reimplantation
- percutaneous nephrostomy
- appendectomy
- line insertion for invasive monitoring or administration of intravenous nutrition
- bowel injury repair

2. Communicator

Definition

To provide humane, high-quality care, obstetricians establish effective relationships with patients and their families, 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.

General Objectives

The resident 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, timely and appropriate records

Specific Objectives

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

- the ability to obtain informed consent for medical and surgical therapies
- 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
- evidence of good interpersonal skills when working with patients, families,

and other members of the health care team, including family physicians, midwives, nurses and paramedics involved in maternity care, as well as junior residents and medical students.

- an awareness of the unique personal, psychosocial, cultural and ethical issues that surround individual pregnant patients
- the ability to prepare and present information to colleagues and other trainees, both informally (e.g., ward rounds) and formally (e.g., Grand Rounds, scientific meetings) including formal teaching to the clinical clerks
- the ability to provide information to the general public and media about areas of local concern relevant to the practice of obstetrics
- the ability to prepare accurate, concise, and complete operative notes.

3. Collaborator

Definition

The Canadian model closely integrates primary health care providers and midwives with obstetricians 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 emergency room physicians, anesthesia, diagnostic radiology, pediatrics, internal medicine, general surgery, and urology.

General Objectives

The resident must be able to:

- consult effectively with other physicians
- consult effectively with other health care providers, including nursing and midwifery
- contribute effectively to a multidisciplinary health care team

Specific Objectives

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

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

4. Leader

Definition

Obstetricians function as leaders 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 can also assume a leadership role through involvement in health care administration and in professional organizations.

General Objectives

The resident 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

Specific Objectives

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

- 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 via their role as primary consultant on Labor and Delivery.
- administrate the distribution of junior residents, family practice residents and medical students on a daily basis
- demonstrate an understanding of the principles of quality assurance in the practice of obstetrics, and be able to conduct morbidity and mortality reviews, once every three months.
- demonstrate an understanding of population-based approaches to the provision of medical care, including the costs and benefits of the various screening tests available for obstetric diagnosis and disease
- demonstrate an understanding of how health care governance influences patient care, research and educational activities at the local, provincial and national level
- 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 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.

General Objectives

The resident 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

Specific Objectives

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

- identify the important determinants of health for an individual patient, highlight which determinants are modifiable, and adapt the treatment approach accordingly
- make clinical decisions for an individual patient, when necessary balancing her needs against the needs of the general population and against the available resources
- facilitate medical care for patients even when that care is not provided personally or locally or when that care is not readily accessible (e.g., coordinating maternal transfers)
- advise patients about the local and regional resources available for support, education and rehabilitation
- provide direction to hospital administration regarding compliance with national clinical and surgical practice guidelines
- discuss 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 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.

General Objectives

The resident must:

- develop, implement, and monitor a personal continuing education strategy
- be able to critically appraise sources of medical information
- facilitate patient and peer education
- give a teaching session at least once per week, for a minimum of 30 minutes to junior residents and other learners on service.
- try to contribute to the development of new knowledge in the field of obstetrics and gynaecology

Specific Objectives

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

- develop a habit of life-long learning, utilizing information technology for referencing cases, literature review and participation in basic or applied clinical research
- identify gaps in personal knowledge and skill, and develop strategies to correct them by self-directed reading, discussion with colleagues, and ongoing procedural experience
- understand the principles of basic and applied clinical research, including biostatistics
- 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
- participate in and mentor junior residents preparing for Journal Club
- teach medical students and junior residents

7. Professional

Definition

Obstetricians 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.

General Objectives

The resident 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

Specific Objectives

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

- foster a caring, compassionate and respectful attitude towards patients, families, and other members of the health care team
- provide medical care that is ethical, and seek advice or second opinion appropriately in ethically difficult situations
- monitor patients appropriately and provide appropriate follow up medical care, particularly after starting a new treatment or following a surgical procedure
- maintain patient confidentiality at all times
- complete reports, letters and summaries in a timely fashion and maintain medical records that are consistently accurate, informative and legible.
- understand medical protective procedures and the role of the Canadian Medical Protective Association in areas of patient-physician dispute
- be able to deal with professional intimidation and harassment
- show self-discipline, responsibility and punctuality in attending to ward duties, in the operating room, and at meetings and other activities
- schedule monthly, in a timely fashion
- complete evaluations on medical students fully and in a timely fashion
- be a moral and ethical role model for others (e.g., junior residents)
- be able to appropriately delegate clinical and administrative responsibilities
- administer the daily activities of medical students and junior residents on service

To have the ability to balance professional and personal life

NOTE: CBD Curriculum Map and EPAs - <https://med.uottawa.ca/obs-gyne/postgraduate-education/residency-training-program/competency-based-medical-education>

Last Revised: September 2021