Canmeds Objectives of Training and Specialty Requirements in Obstetrics and Gynaecology

General Obstetrics and Gynecology Rotation RAH – **PGY1 level**

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, 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 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.

Outline

1. Medical Expert

 1.1 Cognitive skills

 1.1.1 Extensive knowledge

 1.1.2 Working knowledge

 1.2 Interpretive skills

 1.3 Technical skills

 1.3.1 Performed independently

 1.3.2 Performed with supervision

2. Communicator

3. Collaborator

4. Leader

5. Health Advocate

6. Scholar

7. Professional

PGY1 General Obstetrics 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.

1. Medical Expert / Clinical Decision Maker:

 1.1 Cognitive Skills:

* + 1. A *working* level of knowledge is required for the following:

a. Antepartum Care

* Maternal and fetal physiology
* Antepartum assessment of normal pregnancy
* Antepartum fetal surveillance in normal pregnancy
* Genetic screening, testing, and counseling
* Effects of underlying medical, surgical, social and psychosocial conditions on fetal and maternal health, and management of the same
* Antepartum surveillance in high risk pregnancies

b. Obstetric Complications

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

* Preterm labour and birth
* Preterm, premature rupture of membranes
* Antepartum hemorrhage
* Post-term pregnancy
* Intrauterine fetal demise
* Gestational hypertension
* Gestational diabetes
* Multiple gestation: twins, monochorionic and dichorionic, triplets & higher order multiple gestations
* Second trimester pregnancy loss
* Fetal growth restriction
* Alloimmunization
* Viral infections in pregnancy

c. Intrapartum Care

* Anatomy, physiology, and mechanisms of normal labour
* Anatomy, physiology, and mechanisms of normal vaginal delivery
* Assessment of labour progress
* Indications for, methods of and complications of augmentation of labour
* Indications for, methods of, and potential complications of labour induction
* Intrapartum assessment of maternal health
* Intrapartum assessment of fetal health including interpretation of intermittent auscultation, electronic fetal monitoring, basic ultrasound imaging, and cord blood gas sampling
* Recognition and management of intrapartum infection
* Recognition and management of shoulder dystocia
* Recognition and management of cord prolapse
* Obstetric anaesthesia
* Apgar scoring

d. Obstetric Delivery:

* Indications for assisted vaginal delivery and Cesarean section
* Maternal and neonatal risks and benefits of assisted vaginal delivery and Cesarean section
* Risks and benefits of vaginal delivery after previous Cesarean section
* Recognition and management of a non-vertex presentation
* Indications for and risks of mid-cavitary or rotational forceps

e. Postpartum Care:

* Etiology and management of postpartum hemorrhage
* Recognition and management of shock
* Etiology and management of sepsis
* Breastfeeding benefits and complications
* Family planning
* Understanding risk factors and screening questions for postpartum depression
* Diagnosis and management of a venous thrombolic event
* Recognition and management of postpartum wound complications (ex: wound dehiscience, wound infection)

1.2. ***Technical Skills:*** The PGY1 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:

a. Serology and Microbiology:

* maternal serum screening for aneuploidy and neural tube defects
* screening for Group B streptococcus in pregnancy
* culture and serology for sexually transmitted diseases
* wet mount of vaginal discharge
* urinalysis, urine microscopy, and urine culture

b. Imaging:

* dating and anatomical ultrasound
* biophysical profile
* doppler studies and geography for thromboembolic disease

c. Cytology, Histopathology:

* cervical cytology

d. Other Assessments:

* fetal assessment: non-stress test, contraction stress test

1.3 ***Obstetric Procedures:***

a. Following completion of PGY1 rotation, The PGY1 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:

* artificial rupture of membranes
* application of scalp electrode
* establishment of IV access
* speculum examination for the confirmation of ruptured membranes
* insertion of vaginal prostaglandin for induction of labor

b. The PGY1 resident will understand and be able to perform with supervision:

* spontaneous vaginal delivery
* episiotomy and repair
* management of shoulder dystocia, cord prolapse, postpartum and antepartum hemorrhage

c. The PGY1 resident will understand but may not have the opportunity to see or perform:

* low transverse cesarean section
* 3rd and 4th degree perineal tears
* vaginal breech extraction
* endotracheal intubation, and advanced cardiac life support skills

#### 2. 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 patient’s health.

###### Definition

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

2.1 General Objectives

a. The PGY1 resident in obstetrics 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

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

2.2.3 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

2.2.4 evidence of good 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

2.2.5 the ability to prepare and present information to colleagues and other trainees (if applicable)

2.2.6 the ability to prepare accurate, concise and complete admission histories, discharge summaries and operative and delivery notes

3. Collaborator: PGY1 residents must learn to effectively and respectfully work with other residents, consultant Obstetricians, family doctors, and specialists in other fields.

3.1. General Objectives: The PGY1 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.

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 for 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

3.2.3 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

4. Leader

Definition: The PGY1 resident must acquire the abilities to prioritize and effectively execute tasks through teamwork with colleagues and make appropriate decisions when allocating resources.

4.1General Objectives

• manage resources effectively to balance patient care and learning needs

• work effectively and efficiently in a health care organization

• utilize information technology to optimize patient care and life-long learning.

4.2 Specific Objectives: To achieve these objectives as a manager, the resident should be able to:

4.2. effectively triage the labour and delivery unit including minimizing patient wait times and working with nursing for best patient care

4.2.2 triage emergency problems in case room as they enter assessment room

5. Health Advocate:

***Definition***

Obstetricians must recognize the importance of advocacy activities in responding to the challenges presented 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.

5.1 General Objectives

The PGY 1 resident must be able to:

• 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:

5.2.1 The PGY1 resident will identify the important determinants of health for individual patients

5.2.2 Make clinical decisions for an individual patient balancing her needs against the needs of the general population against the available resources.

5.2.3 Facilitate medical care for patients even when care is not provided personally or locally or when that care is not readily accessible, ie. therapeutic abortion.

5.2.4 Advise patients about local and regional resources available for support, education, and rehabilitation.

5.2.5 Discuss the important function and role of various professional organizations, including the Society of Obstetricians and Gynaecologists of Canada in the support of obstetricians in the provision and maintenance of optimal health for Canadian women.

6. Scholar

***Definition***

Obstetricians 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.

6.1 General Objectives:

• to be able to critically appraise sources of medical information and appropriately integrate new information into clinical practice

• facilitate patient and peer education placing new research findings in appropriate and clinically relevant context.

6.2 Specific Objectives:

6.2.1 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.

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

6.2.3 to understand the basic principles of basic and applied clinical research, especially epidemiology and 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.

6.2.5 use medical research appropriately in clinical care by appropriately adapting research findings to the individual patient situation.

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 PGY1 obstetrician 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 towards 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 monitor patients appropriately and provide appropriate follow up medical care, particularly after starting a new treatment or following a surgical procedure

7.2.4 maintain patient confidentiality at all times

7.2.5 complete reports, letters and summaries in a timely fashion and maintain medical records that are consistently accurate, informative and legible.

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

7.2.7 be able to deal with professional intimidation and harassment

7.2.8 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

7.2.9 be able to appropriately delegate clinical and administrative responsibilities

7.2.10 have the ability to balance professional and personal life

PGY 1 General Gynecology Objectives

Upon completion of residency 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 the 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 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 his/her training, the resident in gynecology at a PGY1 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

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

Specific Objectives

Upon completion of the second PGY1 rotation in general gynecology, the resident will have acquired the following competencies and will function effectively as:

1. Medical Expert / Clinical Decision-Maker

1.1 Specific Objectives

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

1.1.1 COGNITIVE SKILLS

The PGY1 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.

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

a. Reproduction and Endocrine Disorders

Normal reproductive physiology, and;

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

- menstrual irregularity

- dysfunctional uterine bleeding

- amenorrhea (primary and secondary)

- galactorrhea

- hirsutism

- polycystic ovarian disease

- menopause

b. Human Sexuality

* normal sexual function
* etiology and management of dyspareunia and vaginismus

c. Contraception

- methods of contraception; including the various mechanisms of action, the indications, contraindications, risks and benefits and possible complications for use of each method

-strategies to promote adherence to contraceptive methods and encourage safer sex behaviors

d. Violence against Women

- identify features of abused women (both physical and psychological)

- Knowledge of appropriate protocols for the acute medical management of rape victims, including post-coital contraception.

- Appropriate referral for legal assistance and psychological counseling for victims of abuse and rape

e. Infertility

- multiple etiologies of infertility

- appropriate indications for subspecialty referral

- indications for and interpretation of initial infertility investigations

f. Pregnancy Loss or Termination

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

- spontaneous abortion in the first trimester

- ectopic pregnancy

 - termination of pregnancy in the first trimester

- termination of pregnancy in the second trimester

g. Gynecologic Infections

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

 - vaginal and vulvar infections

 - sexually transmitted infections

 - acute pelvic inflammatory disease

i. Urogynecology

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

- acute and recurrent urinary tract infections

- postoperative voiding dysfunction

- pelvic organ prolapse

- stress urinary incontinence

- urge urinary incontinence

j. Other Non-Malignant Gynecologic Conditions

The pathophysiology, investigation, diagnosis and management of:

- benign pelvic masses, including rupture and torsion

- acute and chronic pelvic pain

- endometriosis

- surgical wound hematoma and infection (including abscess)

 k. Preoperative and Postoperative Care

- perioperative risk factors and their assessment

- the principles and appropriate use of nutritional support

- the principles of normal and impaired 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

 specialities.

 **l.** Pediatric and Adolescent Gynecology

The pathophysiology, investigation, diagnosis, management and/or possible psychosocial ramifications of:

- abnormal vaginal discharge and bleeding in children or adolescents

- the medico-legal aspects of consent and confidentiality specific to this age group

 - contraception

- developmental anomalies

- delayed puberty

m. Gynecologic Oncology

- the principles of colposcopy and the indications for referral for colposcopic assessment

n. Other Non-Gynecologic Conditions

The pathophysiology, investigation, diagnosis and management of:

- colorectal disease; including diverticular disease, colon and rectal cancer, inflammatory bowel disease and appendicitis

- breast conditions; including benign breast disease, breast cancer screening

1.2.2 TECHNICAL SKILLS

The PGY1 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.

1.2.2.1 Diagnostic Procedures and Techniques

The PGY1 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.

a. Serology and Microbiology

- 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

- urinalysis, urine microscopy and urine culture

b. Imaging

 - transabdominal ultrasound for gynaecologic disease

- transvaginal ultrasound for gynaecologic disease

 - CT and MRI of pelvis

 - Doppler studies and angiography for throboembolic

c. Cytology and Histopathology

- cervical cytology

- cervical polypectomy

- endocervical curettage

- endometrial biopsy

 - Vulvar and vaginal biopsy

1.2.2.2 Therapeutic Technologies

The PGY1 resident will have a understanding of the physics and technological application of the following therapeutic modalities; including the risks, benefits and complications of these approaches.

- electrocautery

- global endometrial ablation

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 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 PGY1 rotation in gynecology.

 a. Surgical Procedures List A

The PGY1 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 management and complications. 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 and the consequences of the absence of surgical treatment.

Open Gynaecologic Procedures

- Pfannensteil incision

- vertical midline incision

- total abdominal hysterectomy

- salpingo-oophorectomy

- oophorectomy

- ovarian cystectomy

Vaginal Gynaecologic Procedures

 - drainage and marsupialization of Bartholin’s gland abscess

 - vaginal hysterectomy

 - cervical conization

Endoscopic Procedures

 - diagnostic laparoscopy (including assessment of tubal

 patency)

- laparoscopic sterilization

- global endometrial ablation

- salpingectomy and linear salpingostomy for management of ectopic pregnancy

- laparoscopic lysis of adhesions

- cautery of endometriosis

Other Gynaecologic Procedures

 - dilation and curettage for incomplete abortion and

 dysfunctional uterine bleeding

- fractional D&C for postmenopausal bleeding

- insertion and removal of an intrauterine contraceptive

 device

2. COMMUNICATOR:

*Definition:* As Communicators, gynecologists effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

2.1 The junior resident in gynecology must be able to:

- develop rapport, trust, and ethical therapeutic relationships with patients and families

- accurately elicit and synthesize relevant information and perspectives of patients and families, colleagues and other professionals

- accurately convey relevant information and explanations to patients and families, colleagues, and other professionals

- develop a common understanding on issues, problems, and plans with patients and families, colleagues, and other professionals to develop a shared plan of care

- convey effective oral and written information about a medical encounter (including the ability to maintain clear, accurate, timely and appropriate records)

- prepare accurate, concise, and complete operative notes

3. COLLABORATOR:

*Definition:* As collaborators, gynecologists effectively work within a healthcare team

to achieve optimal patient care.

3.1 The junior resident in gynecology must be able to:

- participate effectively and appropriately in an interprofessional healthcare team

- effectively work with other health professionals to prevent, negotiate, and resolve interprofessional conflict

4. MANAGER:

*Definition:* As managers, gynecologists are integral participants in healthcare organizations, organizing sustainable practices, making decisions about allocating resources, and contributing to the effectiveness of the healthcare team.

4.1 The junior resident in gynecology must be able to:

- participate in activities that contribute to the effectiveness of their healthcare organizations and systems

- manage their practice and career effectively, balancing patient care, learning needs, and outside activities

- allocate finite healthcare resources appropriately

- serve in administration and leadership roles, as appropriate.

5. HEALTH ADVOCATE:

*Definition:* As health advocates, gynecologists responsibly use their expertise and influence to advance the health and well-being of individual patients, communities, and populations.

5.1 The junior resident in gynecology must be able to:

- respond to individual patient health needs and issues as part of patient care

- respond to health needs of the communities that they serve

- identify the determinants of health of the populations that they serve

- promote the health of individual patients, communities, and populations

6. SCHOLAR:

*Definition:* As scholars, gynecologists demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

6.1 The PGY1 in gynecology must be able to:

- maintain and enhance professional activities through ongoing learning

- critically evaluate information and its sources, and apply this appropriately to practice decisions

- facilitate the learning of patients, families, students, residents, and other health professionals, the public, and others, as appropriate.

- contribute to the creation, dissemination, application, and translation of new medical knowledge and practices in the field of gynecology.

7. PROFESIONAL:

*Definition:* As professionals, gynecologists are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour.

7.1 The junior resident in gynecology must be able to:

- demonstrate a commitment to their patients, profession, and society through ethical practice

- demonstrate a commitment to their patients, profession, and society through participation in profession-led regulation.

- demonstrate a commitment to physician health and sustainable practice