

# Goals and Objectives of Training and Specialty Requirements Urogynecology 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.

### Specific Objectives:

At the completion of the Urogyne rotation, 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 fully-trained 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
- 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

### 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**

At completion of the Urogynecology rotation the resident will have knowledge of the following clinical conditions or problems encountered commonly in the practice of obstetrics and gynaecology. 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 An *extensive level* of knowledge is required for the following:

#### ANATOMY

**TERMINAL OBJECTIVE:** Know the normal anatomy of the bladder and the urethra and the organic and functional abnormalities of the genitourinary tract

**ENABLING OBJECTIVES:**

The Resident should know:

- 1) the innervation, blood supply and lymphatic drainage of the bladder and urethra
- 2) the normal anatomic relationships of the bladder, urethra, vagina and urogenital diaphragm
- 3) the retropubic space anatomy
- 4) the normal anatomic relationships of the ureters and their alterations associated with pelvic floor relaxation

#### HISTORY AND PHYSICAL EXAMINATION

**TERMINAL OBJECTIVE:** To take a complete history and perform a physical examination to determine the patient's symptoms and signs

**ENABLING OBJECTIVES (History):**

The Resident should understand:

- 1) current terminology:

- a. urinary incontinence
  - b. stress incontinence (symptom and sign)
  - c. urge incontinence
  - d. urgency
  - e. frequency
  - f. nocturia
  - g. dysuria
  - h. enuresis
- 2) extent of disability due to symptoms
  - 3) the influence of other organ systems on lower urinary tract symptoms
  - 4) psychosocial and psychosexual behaviour as it relates to the chief complaint
  - 5) past medical and surgical history
  - 6) the possible relation between presenting symptoms and actual medication

#### ENABLING OBJECTIVES (Physical examination):

The Resident should:

- 1) do a physical exam including a neurological evaluation
- 2) perform a thorough pelvic examination including examining the bladder base and urethra at rest and with stress
- 3) identify and characterize specific pelvic floor defects including: anterior compartment, posterior compartment and apical compartment
- 4) do a rectal exam to evaluate the levator ani muscle tone and voluntary anal contraction
- 5) objectively demonstrate incontinence
- 6) elicit a bulbocavernosus reflex
- 7) perform a “Q—tip” test

### CYSTOMETRY

TERMINAL OBJECTIVE: To perform and interpret a cystometric evaluation

#### ENABLING OBJECTIVES:

The Resident should:

- 1) Know the information it provides
- 2) Understand current terminology;
  - a. residual urine
  - b. first sensation
  - c. maximum cystometric capacity
  - d. effective cystometric capacity
  - e. compliance
  - f. contractility
- 3) Understand the concept of subtractive cystometry, provocative cystometry and the importance of postural changes
- 4) Be aware of different methods of pressure recording, media, routes and rates of filling

### PROFILOMETRY

TERMINAL OBJECTIVE: Understand urethral closure pressure profilometry

**ENABLING OBJECTIVES:**

The Resident should understand:

- 1) The information it provides
- 2) Current terminology:
  - a. maximum urethral pressure
  - b. maximum urethral closure pressure
  - c. functional urethral length
  - d. total urethral length
  - e. leak point pressure
- 3) The difference between static and dynamic urethral closure pressure profiles
- 4) The different measuring techniques and their limitations

**UROFLOWMETRY**

**TERMINAL OBJECTIVE:** To interpret uroflowmetry

**ENABLING OBJECTIVES:**

The Resident should know:

- 1) What information it provides
- 2) The current terminology:
  - a. flow time
  - b. time to maximal flow
  - c. peak and average flow rate
  - d. voided volume
  - e. flow rate pattern
- 3) Different methods of uroflowmetry as well as their limitations
- 4) The significance of abnormal flow patterns

**ELECTROMYOGRAPHY**

**TERMINAL OBJECTIVE:** Know the theory of electromyography and its clinical applications

**ENABLING OBJECTIVES:**

The Resident should know:

- 1) The methods of recording EMO activity
- 2) Its relevance to neuropathic disorders

**CYSTOSCOPY**

**TERMINAL OBJECTIVE:** The resident should be able to perform competent endoscopic examination

**ENABLING OBJECTIVES:**

The Resident should:

- 1) Demonstrate proficiency in the use of cystoscopic instruments
- 2) Describe normal and abnormal findings
- 3) Describe the limitations of cystoscopy as a diagnostic procedure
- 4) Know when to refer a patient for biopsy

## PHARMACOLOGY

**TERMINAL OBJECTIVE:** Understand drug interaction with lower urinary tract function

**ENABLING OBJECTIVES:**

The Resident should have knowledge of:

- 1) Neurotransmission
- 2) The effects of cholinergic and anticholinergic drugs
- 3) The effects of sympathomimetic and sympatholytic (a and b) drugs
- 4) The effect of estrogen and progesterone
- 5) Adverse effects of drugs

## INTRAOPERATIVE INJURIES

**TERMINAL OBJECTIVE:** Know how to prevent and recognize operative and obstetric injuries to the urinary tract and know the techniques of repair

**ENABLING OBJECTIVES:**

The Resident should understand:

- 1) The normal and possible abnormal anatomical relationships of the ureters, bladder and urethra
- 2) The accepted precautions necessary to prevent injury
- 3) The investigations used to recognize injury
- 4) The techniques for immediate and delayed repair

## FISTULAE

**TERMINAL OBJECTIVE:** Recognize and understand the management of urinary tract fistulae

**ENABLING OBJECTIVES:**

The Resident should know:

- 1) Classification
- 2) Clinical Presentation
- 3) Diagnostic Procedures
- 4) Treatment

## URINARY TRACT IN PREGNANCY

**TERMINAL OBJECTIVE:** Knowledge of the morphologic and physiologic changes that occur in pregnancy

**ENABLING OBJECTIVES:**

The Resident should know:

- 1) Changes in renal function
- 2) Ureteric changes
- 3) Postural effects

## RETENTION AND OVERFLOW INCONTINENCE

TERMINAL OBJECTIVE: Understand voiding difficulties

### ENABLING OBJECTIVES:

The Resident should know:

- 1) Terminology
  - a. overflow incontinence
  - b. slow stream
  - c. hesitancy
  - d. acute retention
  - e. chronic retention
- 2) Pathophysiology
- 3) Clinical Presentation
- 4) Investigation
- 5) Management

## GENUINE STRESS INCONTINENCE (GSI)

TERMINAL OBJECTIVE: Diagnose and manage genuine stress incontinence

### ENABLING OBJECTIVES:

The Resident should know:

- 1) terminology:
  - a. genuine stress incontinence
- 2) pathophysiology
- 3) clinical presentation
  - a. demonstration of incontinence and of an anatomic defect
- 4) Investigation needed to establish the diagnosis
  - a. urinalysis
  - b. residual urine
  - c. cystometry
  - d. profilometry
  - e. indications for uroflowmetry and urethroscopy
- 5) treatment
  - a. non—surgical
    - fluid management
    - physiotherapy (Kegel exercises and adjuncts)
    - pharmacotherapy
    - pessary
  - b. surgical

## DETRUSOR OVERACTIVITY

TERMINAL OBJECTIVE: Understand the etiology, diagnosis and management of detrusor over activity

### ENABLING OBJECTIVES:

The Resident should understand:

- 1) Terminology
  - a. stable bladder
  - b. unstable bladder
  - c. detrusor hyperreflexia
  - d. idiopathic detrusor instability
- 2) Pathophysiology
- 3) Clinical presentation
- 4) Diagnostic procedures
  - a. cystometry
- 5) Treatments including
  - fluid management
  - bladder retraining
  - urgency suppressive strategies (Kegel exercises)
  - pharmacotherapies

## INFECTIONS

**TERMINAL OBJECTIVE:** To diagnose and manage urethritis, cystitis and pyelonephritis in the pregnant and non-pregnant patient

**ENABLING OBJECTIVES:**

**A. Cystitis and Pyelonephritis**

The Resident should understand:

- 1) current terminology:
  - a) Significant bacteriuria
  - b. Pyuria
  - c. Asymptomatic bacteriuria
  - d. Reinfection
  - e) Relapse
- 2) Pathophysiology
- 3) Clinical presentation
- 4) Laboratory diagnosis
- 5) Prophylaxis and treatment

**B. Urethritis**

The Resident should understand:

- 1) Current terminology:
- 2) Pathophysiology
- 3) Clinical presentation
- 4) Laboratory diagnosis
- 5) Prophylaxis and treatment

## URETHRAL DISORDERS

**TERMINAL OBJECTIVE:** To diagnose and manage urethral syndrome, non-infectious urethritis, atrophic urethritis, and urethral diverticula

**ENABLING OBJECTIVES:**

The Resident should understand:

- 1) Current terminology
  - a..urethral syndrome
- 2) Pathophysiology
- 3) Clinical presentation
- 4) Laboratory diagnosis
- 5) Prophylaxis and treatment

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

**EMBRYOLOGY**

**TERMINAL OBJECTIVES:** Know the organogenesis of the female genitourinary system.

**ENABLING OBJECTIVES:**

The Resident should understand:

- 1) The relationship of the urogenital ridge to the subsequent development of the (3) successive sets of excretory organs
- 2) The development and position of the mature kidney and ureter
- 3) The development of structural abnormalities (e.g. pelvic kidney and ureteral duplication)
- 4) The contributions of the urogenital sinus and the allantois to the normal and abnormal development of the bladder, urethra (and glands), vulva and vagina

**PHYSIOLOGY**

**TERMINAL OBJECTIVES:** Comprehend the functions of the bladder and urethra during filling and emptying

**ENABLING OBJECTIVES:**

The Resident should know:

- 1) The basic circuits (loops) involved in central nervous system control of micturition
- 2) The peripheral (autonomic and somatic) nervous control of micturition
- 3) Volume pressure relationships during bladder filling and emptying
- 4) The sphincteric mechanism of the urethra during bladder filling and emptying

**RADIOGRAPHY**

**TERMINAL OBJECTIVE:** Know the different radiography techniques used for evaluation of anatomy and physiology of the female urinary tract

**ENABLING OBJECTIVES:**

The Resident should understand:

- 1) the information provided by and the limitation of:
  - a. plain abdominal x-ray
  - b. voiding cystourethrography (static and fluoroscopic)
  - c. bead—chain cystourethrography
  - d. video cystourethrography with pressure recording
  - e. positive pressure urethrography

f. intravenous pyelogram

## NEOPLASIA

TERMINAL OBJECTIVE: Recognize the significance of lower urinary tract neoplasia

### ENABLING OBJECTIVES:

The Resident should understand:

- 1) Classification
- 2) Clinical presentation
- 3) Indications for biopsy and referral
- 4) The criteria for management

### 1.2.2 TECHNICAL SKILLS

The fully-trained obstetrician and gynaecologist must possess a wide variety of technical skills in the practice of obstetrics and gynaecology. 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.

#### 1.2.2.1 **Office Skills**

The fully-trained resident in obstetrics and gynecology will have the capacity to fit a patient with stress incontinence with or without pelvic organ prolapse with a suitable pessary. The graduate will also have the ability to describe and effect appropriate follow-up.

#### 1.2.2.2 **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 fully trained resident must be competent to *independently* perform the following procedures in List A 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.

#### **Vaginal Procedures**

- cystocele

- rectocele
- enterocele
- vaginal Hysterectomy

#### **Abdominal Procedures**

- abdominal hysterectomy and bilateral salpingoophorectomy
- identification of ureters on the pelvic side wall
- cystotomy with visualization of both ureteric orifices and demonstrate patency
- examination of the pelvic and abdominal cavity

#### **b. Surgical Procedures List B**

The following procedures in List B are those that the fully trained resident in Obstetrics and Gynecology will understand and be able to perform, though he/she 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.

- sacrospinous ligament fixation
- colpoelisis
- retropubic urethropexy (modified Burch)
- tension free vaginal tape (TVT or TVT-O)
- vaginal vault suspension (abdominal sacrovaginopexy)
- LAVH, TLH
- suprapubic catheter insertion

#### **c. Surgical Procedures List C**

The following procedures in List C are those that the fully trained resident in Obstetrics and Gynecology will understand but *not* be expected to be able to perform. He/she should be able to describe the principles of these procedures, the indications for referral and the perioperative management and complications.

- Martius graft advancement
- fistula repair
- suburethral diverticulum repair
- tension free mesh (TVM) for vaginal repairs
- laparoscopic retropubic urethropexy
- laparoscopic sacrocolpopexy

#### ***Other***

- ureteroureterostomy
- ureteric reimplantation
- percutaneous nephrostomy

## **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 fully-trained 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 fully-trained 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 fully-trained 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, maintenance of patient waiting lists, 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 fully-trained 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 fully-trained 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 fully-trained 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