

OBJECTIVES FOR GYNECOLOGY ONCOLOGY - (PGY4, PGY5)

CANMEDS 2005 ROLES	KEY COMPETENCIES	METHODS TO FACILITATE ACHIEVEMENT OF COMPETENCY
<p>1. MEDICAL EXPERT</p> <p>a) <i>Knowledge</i></p>	<p>A. <u>Diagnostic Techniques And Staging</u> The resident should acquire sufficient knowledge of diagnostic techniques and staging protocols to diagnose appropriately and stage gynecological malignancies.</p> <p>B. <u>Gynecologic Pathology</u> The resident should be able to identify, on the basis of gross visual and microscopic evaluation, lesions that are premalignant or malignant and distinguish them from benign disorders. Moreover, the resident should understand the genesis of malignant tumors, the biologic behavior of premalignant and malignant tumors, and be able to recognize important characteristics and prognostic features of such lesions. Finally, the resident should understand the principles of basic laboratory techniques such as frozen section histochemical staining and immunohistochemical staining.</p> <p>C. <u>Physiology And Pathophysiology</u> The resident should have sufficient knowledge of physiology and pathophysiology to manage women with</p>	<ul style="list-style-type: none"> • Daily inpatient rounds with attending staffs • Outpatient clinics (ORCC) where discussions of new and follow up patients managements take place • Weekly surgical/gyne oncology resident teaching with staff & informal small group discussion sessions with staffs and fellow on service • Weekly combined multidisciplinary gyne oncology/pathology case discussions • Self-directed and suggested reading • Resident gyne oncology/ pathology lecture series as part of the academic half day curriculum • Quarterly gynecologic oncology Journal club • gynecologic oncology M+M round every 2 to 3 months • Palliative care/ symptom management discussions as part of informal discussion as part of daily inpatient management and disposition planning

	<p>gynecologic malignancies.</p> <p>D. <u>Pharmacology</u> The resident should know pharmacologic characteristics of the commonly used agents in managing gynecologic oncology patients</p> <p>E. <u>Radiation and Medical Oncology</u> The resident should have sufficient knowledge of general medical oncology, radiation oncology, and gynecologic oncology principles to permit adequate pre- treatment evaluation and management of the gynecologic oncology patient and to select appropriate consultants when indicated.</p> <p>F. <u>Palliative Care</u> The resident should have sufficient exposure to and comfortable in :</p> <ul style="list-style-type: none">• Managing common distressing symptoms of women suffering from terminal gynecologic cancers• Discuss the indications, contraindications and side effects of commonly used narcotic analgesics• Describe the management of obstructive uropathy• Describe the pathophysiology of bowel obstruction	
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	<ul style="list-style-type: none"> • Describe the medical and surgical management options for bowel obstruction • Be comfortable with patients' (and family) inquiries on death and dying; • Be familiar with the available resources in the community for care of terminally ill patients; 	
b) Technical skills	<p>A. <u>Surgical Procedures</u> The resident should have sufficient training and surgical exposure to a variety of simple and complex surgical procedures that is applicable to a general gynecology surgical practice</p>	<ul style="list-style-type: none"> • Supervised performance of procedures in outpatient clinic and selected operating room settings • Four available full days of operating rooms exposure per week • Surgical anatomy lab as part of AHD • Daily rounds on postoperative patients where managements strategies are discussed with attending
2. COMMUNICATOR	<p>A. To understand the issues involved in communicating a cancer diagnosis and treatment plan with patients and their families</p> <p>B. To convey complicated medical information and related issues in simple terms to patients and their families</p> <p>C. To communicate care plans clearly and precisely to all members of the multidisciplinary teams</p> <p>D. To develop the ability to communicate with the multidisciplinary team in times of medical and/or family crises</p>	<ul style="list-style-type: none"> • Observation and participation in family meetings held by attending staff • Observation of nursing interaction and families • Participation as lead physician in new patient counseling under staff supervision

3. COLLABORATOR	<p>A. To communicate effectively and in a timely manner with consulting services for efficient and optimal patient care</p> <p>B. To collaborate with all members of the multidisciplinary team to clearly and precisely outline patients' care plans</p> <p>C. To work in a collaborative manner with students and allied health professional learners</p>	<ul style="list-style-type: none"> ● Daily interaction with consultation services and staff physicians for optimal patient care ● Participation as integral team member in daily patient rounds and ward/'bullit' rounds ● Coordinate patient care for patients in a multidisciplinary environment
4. LEADER	<p>A. To effectively balance time between patient care, learning and stress management</p> <p>B. To manage and recognize effects of fatigue on patient care and safety</p> <p>C. To effectively prioritize heavy workloads and personal commitments</p> <p>D. To understand the basic principles and implement strategies for risk management in oncology</p>	<ul style="list-style-type: none"> ● Discussion of time issues with attending staff ● Participation in morbidity and mortality reviews
5. HEALTH ADVOCATE	<p>A. To familiarize oneself with the relative costs of different diagnostic and treatment modalities</p> <p>B. To familiarize oneself with available programs and current screening strategies for health maintenance and promotion from an individual and population perspective as applicable to various gynecologic cancers</p> <p>C. To demonstrate proficiency with obtaining informed consent</p>	<ul style="list-style-type: none"> ● Discussion of cost and issues on rounds with attending staff physicians and pharmacists ● Participation in family discussions and patients counseling sessions ● Discussion of futility and ethics with staff physicians and nurses ● Participation in obtaining informed consents for surgical procedures and clinical trials participations

	D. To demonstrate an understanding of the concept of futility in the management of oncology patients	
6. SCHOLAR	A. To have a basic understanding of the process to submit an academic publication or presentation in oncology B. To demonstrate a basic understanding of research study design as applicable to oncology C. To demonstrate an ability to critically appraise current literature as applicable to oncology D. To facilitate the education of other learners in a multidisciplinary team	<ul style="list-style-type: none"> ● Presentation at Resident Core Lecture series as part of AHD/mentorship learning model ● Presentation at Journal Club and M+M rounds
7. PROFESSIONALISM	A. To demonstrate a commitment to patients and profession through ethical practice	<ul style="list-style-type: none"> ● Direct observation and feedback from multidisciplinary team members based on daily interactions with the resident

Medical Expert Objectives

General Requirements

The general objectives of the rotation are to provide the trainee with comprehensive exposures and knowledge of surgical oncology with emphasis on screening, prevention, diagnosis, and treatment of premalignant and malignant conditions of the female reproductive organs.

Specific Requirements

The trainee will be competent at managing all pre and postoperative issues in a patient with cancer with appropriate consultations to other medical and surgical specialists. For each anatomic site, the trainee will be expected to have complete understanding of the epidemiology of the disease, the presenting signs and symptoms, the natural history of the disease, the histopathology, required investigations, and available treatment options together with associated common complications. The trainee will be familiar with the principles of palliative care and approaches to terminal illness.

Peri-Operative Care

The trainee will develop the ability to:

- Understand factors relating to the assessment of operative risk
- Recognize and understand the implications for perioperative care of cardiovascular disorders, respiratory disorders, endocrine-metabolic disorders, hematologic disorders, hepatic and gastrointestinal disorders, autoimmune disorders, neurologic disorders, psychiatric disorders
- Recognize and understand the implications to surgery of the physiologic changes of aging
- Recognize the implications to surgery of important or commonly used drugs
- Understand the basis for the development of the following:
 - identify risk factors for, and prescribe measures to prevent the following postoperative complications: bacterial endocarditis, myocardial ischemia and infarction, deep venous thrombosis, pulmonary embolism, atelectasis, pneumonia
- Understand the principles related to: anesthetic pre-medication and skin/wound preparation
- Understand the principles and techniques of asepsis and antisepsis
- Understand the basis for the development of compression or traction injuries during surgical procedures and measures necessary to avoid such injuries (e.g. patient positioning)
- Understand the basic indications, contraindications and complications relating to the use of various forms of local, regional and general anesthesia

- Understand and identify the principles of management of the following intra operative complications: Unexpected bleeding, injuries to bowel, bladder, and ureters
- Identify sites and techniques for establishing intravenous access in resuscitation, elective surgical settings, and long-term intravenous therapy; understand the rationale for selecting specific sites and techniques, contraindications, potential complications, and measures to avoid such complications
- Identify the indications, techniques of administration (oral, parenteral, epidural, patient-controlled etc), contraindications and complications of analgesic drugs
- Understand the bases for the development of postoperative problems such as the following and identify the measures to diagnose appropriately and prescribe the measures necessary to treat such problems:
 - deep vein thrombosis, pulmonary thromboembolism, atelectasis, pneumonia, hypoxemia, hypercarbia, respiratory failure, oliguria, myocardial ischemia and infarction, congestive heart failure, arrhythmia, hypotension, hypertension, fever, bacteremia, delirium, gastro duodenal stress ulcer, pressure palsy and ulcers, ileus.
- Identify the events and mediators of normal wound healing, their time course, and their clinical relevance
- Differentiate healing by primary closure, delayed primary closure, and secondary intention and identify indications for their planned use
- Understand the basis for the use of various suture materials, staples, other methods of wound closure, drains and drainage methods, and the implantations for wound healing and related complications
- Identify factors associated with impaired wound healing and wound dehiscence, and measures to minimize their effect
- Identify principles of wound management including the use of skin grafts and tissue flaps
- Understand the principles of cross-matching of blood and the indications, contraindications, and complications of the administration of uncross-matched, type-specific, and cross-matched blood
- Understand the physiologic basis for fluid, electrolyte, and acid-base management of the surgical patient, including body water compartments; composition, osmotic activity and oncotic pressure of body fluids; water and electrolyte exchange; mechanisms of osmoregulation and volume regulation; buffer systems and mechanisms of acid-base homeostasis
- Prescribe appropriate fluid and electrolyte management in terms of maintenance requirements, correction of existing deficits, replacement of ongoing losses, and monitoring of fluid and electrolyte status
- Diagnose and prescribe appropriate treatment for fluid, electrolyte, and acid-base disturbances, on the basis of clinical manifestations and interpretation of blood gases and serum and urine biochemistry, including metabolic acidosis and alkalosis, respiratory acidosis and alkalosis, mixed acid-base disturbances, hyponatremia, hypernatremia, syndrome of inappropriate ADH release, diabetes insipidus

- Identify the composition of conventional intravenous solutions and understand the indications for their use and potential adverse effects in surgical patients
- Identify and distinguish shock arising from various causes in pathophysiologic terms and by interpretation of a relevant history, physical examination, and investigations; prescribe appropriate management
- Identify potential indications, contraindications, techniques, and complications of invasive and non-invasive hemodynamic and physiologic monitoring including ECG, transcutaneous oxygen saturation, BP monitoring non-invasive or by arterial line, end-tidal CO₂, central venous pressure, pulmonary artery catheter
- Understand basic concepts related to the use of mechanical ventilation
- Identify the factors in clinical and laboratory assessment which contribute to an evaluation of nutritional state
- Identify the implications of malnutrition for the surgical patient
- Understand the rationale and clinical indications for and the use of various enteral and parenteral routes of nutritional support
- Identify complications related to the use of enteral and parenteral nutrition and their management
- Identify the management of acute metabolic problems including disturbances of calcium, potassium, sodium, glucose, magnesium
- Identify the ethical and legal principles relating to confidentiality and access to health records, record-keeping, informed consent, obtaining permission for autopsy, autonomy, paternalism, beneficence, non-maleficence, withholding resuscitative measures, organ donation, brain death, professional misconduct, allocation of resources, effective communication, relation of patient care and cost effectiveness
- Identify risk factors for surgical wound infection and expected rates of surgical wound infection according to classification of wound type; understand the rationale for and prescribe measures to minimize its occurrence; and prescribe appropriate treatment
- Identify patterns of antimicrobial activity, potential adverse effects and drug interactions, and clinical dosing considerations for antibiotics

Vulvar Cancer

The trainee will develop the ability to:

- discuss the epidemiology of vulva carcinoma
- discuss the signs and symptoms associated with premalignant and malignant lesions of the vulva
- classify and describe histologically benign vulva lesions
- Perform vulvar biopsies for diagnosis

- describe the indications, contraindications and complications of surgical excision and laser ablation for premalignant lesions and squamous cell carcinoma in situ of the vulva
- perform wide local excision as appropriate for the purpose of diagnosis and treatment
- discuss the indications and contraindications for simple vulvectomy, radical vulvectomy and inguinofemoral lymphadenectomy in the treatment of vulva diseases
- describe the common complications associated with radical vulvectomy and groin node dissection
- know the FIGO staging for carcinoma of the vulva
- know prognosis associated with different stages of vulvar cancer
- aware of the role of adjuvant radiation therapy in the management in women with cancer of the vulva
- familiar with common non squamous cell malignancies of the vulva and discuss their clinical presentation, principles of management and prognosis

Carcinoma of the Vagina

The trainee will develop the ability to:

- know the general incidence and risk factors for VAIN and carcinoma of the vagina
- describe the most common pathologic subtypes of carcinoma of the vagina and their pattern of spread
- know the FIGO staging system for carcinoma of the vagina
- know the signs and symptoms of carcinoma of the vagina
- describe and perform the following diagnostic tests: colposcopy, Schiller's test and directed biopsy
- discuss indications, contraindications, and complications associated with surgical treatment of carcinoma of the vagina
- discuss the indications, contraindications together with the common associated complications in the use of radiation therapy for carcinoma of the vagina
- discuss the genital changes caused by intrauterine exposure to Diethylstilboestrol and the association with clear cell adenocarcinoma of the vagina

Carcinoma of the Cervix

The trainee will develop the ability to:

- know the general incidence and the risk factors for cervical dysplasia and carcinoma of the cervix
- familiar with the underlying principles and challenges behind the screening programs for cancer of the cervix including frequency of screening, technique of the smear, interpretation of results and management of abnormal results
- describe the histopathology of the normal transformation zone and its role in the pathogenesis of cervical intraepithelial neoplasia
- perform cervical biopsies and endocervical curettage

- discuss the indications, contraindications and complications of cervical conization, cryotherapy, laser therapy and loop electrosurgical procedure for treatment of cervical dysplasia
- list the common signs and symptoms of invasive carcinoma of the cervix
- establish a plan of investigation for women with carcinoma of the cervix and know the FIGO classification of staging of cervical cancer
- discuss the indications, contraindications, potential advantages and complications of radical surgery for carcinoma of the cervix
- discuss the indications, contraindications, potential advantages and complications of combined chemo radiation therapy for carcinoma of the cervix
- describe the regional lymphatic spread pattern of cancer of the cervix, its implication on treatment and prognosis
- expose the retroperitoneal structures including the ureters and iliac vessels at surgery
- discuss the indications, contraindications, and potential complications of pelvic exenteration in the treatment of recurrent cervical carcinoma

Carcinoma of the Endometrium

The trainee will develop the ability to:

- explain the general incidence and risk factors for carcinoma of the endometrium
- discuss the presenting signs and symptoms in women with carcinoma of the endometrium
- discuss the role of ultrasound in the investigation of a patient with post-menopausal bleeding and discuss the indications and accuracy of cytology, endometrial biopsies and uterine curettage
- describe the histopathology of the normal post-menopausal endometrium, simple hyperplasia, atypical hyperplasia, and carcinoma
- establish a plan of investigation and familiar with the FIGO classification for surgical staging of carcinoma of the endometrium
- aware of the standard surgical staging procedures for treatment of adenocarcinoma of the endometrium
- describe the regional lymphatic spread of carcinoma of the endometrium and its implication in the recommendation of surgical staging
- discuss the role of adjuvant radiation therapy in women with carcinoma of the endometrium
- describe the roles of hormonal therapy and chemotherapy for patients with recurrent or advanced carcinoma of the endometrium

Carcinoma of the Ovary / Fallopian tubes

The trainee will develop the ability to:

- know the epidemiology of carcinoma of the ovary and fallopian tubes
- list the signs and symptoms associated with cancer of the ovary

- describe the gross appearance, clinical behaviour and pattern of spread of ovarian cancer
- know the general histopathologic classification (WHO) of ovarian tumours
- discuss the appropriate pre-operative investigations of women with suspected ovarian cancer
- describe the management of an ovarian tumour discovered on routine pelvic examination in different age groups; pre-menarcheal, adolescent, reproductive years and post-menopausal
- know the FIGO staging system for carcinoma of the ovary
- describe the standard surgical staging procedure for carcinoma of the ovary
- be familiar with the retroperitoneal approach for debulking of ovarian cancer, the omentectomy and lymph node sampling
- describe major intra-operative and post-operative complications associated with debulking surgery
- discuss the difficulties in screening for ovarian cancer
- be familiar with indications for chemotherapy and the chemotherapeutic agents that are active in ovarian cancer
- familiar with the side effects related to different chemotherapy drugs and their mode of action
- understand the role of tumour markers in diagnosis and follow up of patients with ovarian cancers
- perform a paracentesis and know the indications, contraindications and complications
- list and describe the indications and principles of radiation therapy for women with cancer of the ovary
- describe the signs and symptoms related to fallopian tube carcinoma
- describe appropriate surgery for fallopian tube carcinoma
- discuss principles of post-operative treatment for carcinoma of the fallopian tube

Gestational Trophoblastic Neoplasia

The trainee will develop the ability to:

- know the general incidence, risk factors, and prognosis of gestational trophoblastic neoplasia
- describe the pathophysiology of complete and partial hydatidiform mole, invasive mole and choriocarcinoma
- know the investigations required to make a diagnosis and treat patients with gestational trophoblastic neoplasia
- describe the methods of evacuating a hydatidiform mole and their respective indications, contraindications and complications
- plan the follow-up care of patients after evacuation of hydatidiform mole
- list the indications for initiating chemotherapy in trophoblastic disease
- discuss the investigations required in persistent trophoblastic disease

- familiar with the chemotherapy agents and regimens active in persistent hydatidiform mole and choriocarcinoma
- know the poor prognostic factors associated with persistent GTN and how they affect cure rates
- advise patients concerning contraception and future fertility in the follow up period

Technical Procedural Skills

The trainee will develop the ability to:

Be able to perform competently :

- Dilatation and Curettage for post menopausal bleeding
- Cone biopsy
- Diagnostic and therapeutic excision of vulvar lesions
- Paracentesis
- Exploratory laparotomy using various incisions techniques
- Complete assessment of intra abdominal organs at the time of laparotomy
- Lysis of intra abdominal adhesions
- TAH/ BSO/Infracolic Omentectomy
- Exposure and identification of important retroperitoneal structures

Be able to recognize and assist with:

- Intra operative injuries to GI and GU tracts and their proper surgical corrections
- Retroperitoneal lymphadenectomy
- Radical surgical procedures as applicable to Gynecologic Oncology (hysterectomy, vulvectomy, exenteration)

Radiation Therapy

The trainee will develop the ability to:

- identify the role of radiation therapy for women with gynecological malignancies;
- discuss the indications and the principles of external radiation and intracavitary radiation for women with advanced cancer of cervix;
- discuss the indications for adjuvant post-operative radiation therapy in women with carcinoma of the endometrium and carcinoma of the cervix;
- discuss the role of radiation therapy in women with carcinoma of the ovary;
- discuss the factors that limit dosage to the normal surrounding pelvic tissues including the rectum, bladder and vagina;
- discuss the acute and long-term complications of radiation therapy on the GI and GU tracts

Palliative Care

The trainee will develop the ability to:

- describe the common distressing symptoms of women suffering from terminal gynecologic cancers;
- describe the anatomic structures responsible for pain in women with advanced cancer of the cervix;
- discuss the indications, contraindications and side effects of commonly used narcotic analgesics in patients with advanced cancer of the cervix;
- describe the management of obstructive uropathy in advanced cancer of the cervix;
- describe the pathophysiology of bowel obstruction in women with advanced cancer of the ovary;
- describe the medical and surgical management options for bowel obstruction in women with advanced cancer of the ovary including indications and contraindications for surgery;
- discuss with patients the diagnosis and prognosis associated with their cancer;
- be comfortable with patients' (and family) inquiries on death and dying;
- be familiar with the available resources in the community for care of terminally ill patients

PGY4/PGY5 Administrative Requirements

Residents are required to be an integral part of the Gynecological Oncology Team.

Specific patients related responsibilities include:

Ward

Service rounds should be done at 07:00 hours each morning during the week so that the main problems for the day can be planned and appropriate arrangements can be made. A second ward round should be done in the evening and appropriate sign over of critically ill patients to the on-call residents and attending physicians. This should include follow up of all imaging studies done during the day and ensuring that all appropriate interventions had been performed. The resident together with the Gyn Oncology fellow are responsible for timely completion of all discharge summaries and proper progress note being recorded on each in patient daily.

NOTE: PGY1 Residents rotating through the Gynecology Oncology service will be responsible for Ward duty while senior resident/fellow(s) are in the O.R. The expectations of the Gynecology Oncology rotation are to understand the management of patient care and follow-up. This is not a surgical exposure rotation for the PGY-1.

Operating Room

- residents are required to attend the O.R. and will be actively involved to the level of which will be proportional to his/her ability.
- all patients admitted pre-op for surgery should have a pre-operative note which includes:
 - a brief summary of the clinical indication for the surgery;
 - reports of relevant tests including barium enema, chest x-ray, pulmonary function tests, hemoglobin, ECG, etc.;
 - relevant medical problems clearly documented;
 - planned procedure
- operative notes should begin with a clinical note which is a brief summary of the indication for the procedure. It should then be followed by a section entitled "Findings" which lists the disease status, the time of surgery, the size and site of the metastasis, the presence of pelvic and/or periaortic adenopathy including description of size, omental metastasis, liver metastasis sites and size, intra or superficial, peritoneal deposits, the presence of disease or absence of disease on the diaphragm. Documentation should also be made of the presence of ascites, bowel metastasis and the presence or absence of gallbladder stones. This should then be followed by a description of the residual disease after the surgery, the stated procedure and a description of the actual operative report. Copies of the O.R. report should be sent to the referring physician as well as the patient's general practitioner.

The residents are responsible for minor procedures on all patients including paracentesis and thoracentesis.

Clinics

- Clinic schedules will be given to the resident at the start of rotation
- Clinics at the General Campus are held at the Ottawa Regional Cancer Centre on Tuesdays starting at 9 am
- Residents may see all new patients as well as follow-ups and patients on chemotherapy and are an integral part of the Gynecologic Oncology team
- PGY1 Residents required to attend cancer clinic unless urgent patient care issues on the ward or in chemo daycare.

Rounds

- Residents are expected to do patient rounds at 07:00 hours Monday to Friday. In addition, business rounds should be conducted in the evening Monday to Friday
- Residents are responsible for timely discharge summary and O.R. reports as indicated (complete < 24 hours)
- Residents are expected to attend the O.R. on time
- Residents are expected to be present at Gynecology/Pathology and quarterly divisional journal club rounds at the General Campus on Wednesdays and Tuesdays respectively when requested
- Residents are responsible for documenting all results, i.e. Chest x-ray, labs within 12 hours of the test being performed
- Residents are expected to perform weekend patient rounds in collaboration with the attending on call physician
- PGY1 Residents have the responsibility to maintain the daily patient list
- Types of Rds
 - Tumor Board - Wed. at 9:15 am on 4th floor of eye institute building in CAPE conference room. Residents don't present patients

O.R. Days

NOTE: Weekly OR schedules are available in the Gynecology Oncology office – Hilary Gore – hgore@toh.ca

- Time schedule - all ORs start at 8am, except Wed. at 8:30 am.
- Patients that are scheduled for a robotic procedure are usually in the room by 7:50 am
- Cancellations - check daily OR schedule night before for any cancellations
- Roles –

- Role of the resident is not to do simple hysterectomies, but to become comfortable with the retroperitoneum, dissection, difficult entry
- Fellow's role is to learn to do lymphadenectomy and radical procedures.
- There can be quite a bit of overlap, therefore best to discuss with fellow OR-specific learning objectives

Miscellaneous Information

- Research
 - Please speak to your Gynecology Oncology Rotation Supervisor
- Wound Dressings
 - Wound dressings are not to be removed until 72h post-op as some evidence has shown that keeping the dressing on decreases post-op infections.
 - Dressing should be removed only if >50% saturated, and replaced with a fresh dressing (please write order on the chart for the nurse to do this)
- Care of the Diabetic Patient
 - Some evidence has shown that diabetic patients who have elevated intra-operative glucose values have worse post-operative outcomes, mainly infectious in nature.
 - A standardized process of determining who will be getting intra-operative glucose measurements has been developed and published by the Ottawa team. What you need to know is the following:
 - Any diabetic who has a capillary BG>15 intra-operatively will need a referral to internal medicine while in hospital. There is a dedicated medicine service who deals with this, called SURG. You need to ask for medicine consults when you call locating.

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

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