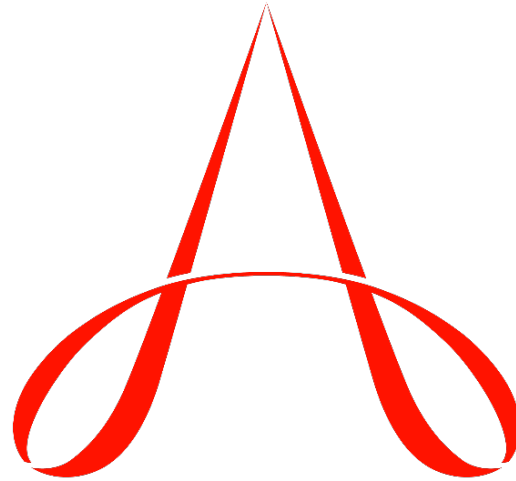




Supplemental Guide: Gynecologic Oncology



ACGME

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Milestones Supplemental Guide

This document provides additional guidance and examples for the Gynecologic Oncology Milestones. This is not designed to indicate any specific requirements for each level, but to provide insight into the thinking of the Milestone Work Group.

Included in this document is the intent of each Milestone and examples of what a Clinical Competency Committee (CCC) might expect to be observed/assessed at each level. Also included are suggested assessment models and tools for each subcompetency, references, and other useful information.

New in this version of the milestones are harmonized milestones that have been kept intentionally relatively consistent across specialties and across levels of the educational program (residency and fellowship). The CCC might be expected to find that fellows come in at a higher level (perhaps Level 3-4 rather than Level 1-2) for the harmonized milestones, as new fellows will have presumably progressed to higher levels of similar milestones prior to residency completion.

Review this guide with the CCC and faculty members. As the program develops a shared mental model of the Milestones, consider creating an individualized guide (Supplemental Guide Template available) with institution/program-specific examples, assessment tools used by the program, and curricular components.

Additional tools and references, including the Milestones Guidebook, Clinical Competency Committee Guidebook, and Milestones Guidebook for Residents and Fellows, are available on the [Resources](#) page of the Milestones section of the ACGME website.

Patient Care 1: Surgical Care of Gynecologic Cancer – Open Techniques	
Overall Intent: To have the knowledge and clinical experience necessary to safely perform and demonstrate progressive technical skill in open gynecologic oncology procedures	
Milestones	Examples
<p>Level 1 <i>Independently selects appropriate procedures for benign gynecologic conditions</i></p> <p><i>Proficiently performs benign gynecologic or basic cancer-specific procedures</i></p>	<ul style="list-style-type: none"> ● Identifies patients appropriate for wide local excision, cold knife cone, and hysterectomy ● Performs wide local excision, cold knife cone, and hysterectomy
<p>Level 2 <i>Proposes appropriate cancer-specific procedures</i></p> <p><i>Effectively assists during radical cancer-specific procedures</i></p>	<ul style="list-style-type: none"> ● Identifies patients appropriate for radical hysterectomy, radical vulvectomy, and cancer staging/debulking ● Assists with radical hysterectomy, radical vulvectomy, and cancer staging/debulking procedures
<p>Level 3 <i>Selects appropriate cancer-specific procedures</i></p> <p><i>Performs radical cancer-specific procedures</i></p>	<ul style="list-style-type: none"> ● Performs radical hysterectomy, radical vulvectomy, and staging / debulking procedures ● Performs lymphadenectomy
<p>Level 4 <i>Independently adapts surgical plan based on unforeseen intraoperative events</i></p> <p><i>Independently and proficiently performs radical cancer-specific procedures</i></p>	<ul style="list-style-type: none"> ● Proficient with radical hysterectomy, radical vulvectomy, staging/ debulking procedures ● Restores normal anatomy with severe adhesions ● Manages unexpected intra-operative complications
<p>Level 5 <i>Independently manages complicated or multidisciplinary procedures for patients with multiple comorbidities</i></p> <p><i>Identifies innovative techniques and approaches from the literature or other disciplines</i></p>	<ul style="list-style-type: none"> ● Coordinates multidisciplinary surgical team such as a reconstructive flap in conjunction with an exenterative procedure
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Direct observation ● Global evaluation ● Multisource feedback ● Oral examination ● Portfolio ● Simulation assessment
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●

Notes or Resources	<ul style="list-style-type: none">● Atlas of Pelvic Surgery. Malignant Disease: Special Procedures. http://www.atlasofpelvicsurgery.com/10MalignantDisease/chapter10index.html. 2021.● National Comprehensive Cancer Network (NCCN). NCCN Guidelines. https://www.nccn.org/guidelines/category_1. 2021.● Society of Gynecologic Oncology (SGO). ConnectED. https://connected.sgo.org/. 2021.● Surgical textbooks
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Patient Care 2: Surgical Care of Gynecologic Cancer – Minimally Invasive Surgical Techniques Overall Intent: To have the knowledge and clinical experience necessary to safely perform and demonstrate progressive technical skill in minimally invasive gynecologic oncology procedures	
Milestones	Examples
Level 1 <i>Independently selects appropriate procedures for benign gynecologic conditions</i> <i>Proficiently performs benign gynecologic or basic cancer-specific procedures</i>	<ul style="list-style-type: none"> ● Lists appropriate route of hysterectomy based on patient and uterine factors and safely performs a vaginal and minimally invasive hysterectomy
Level 2 <i>Proposes appropriate cancer-specific procedures</i> <i>Effectively assists during radical cancer-specific procedures</i>	<ul style="list-style-type: none"> ● Understands indications for sentinel lymph node assessment in endometrial cancer ● Functions as first assistant to facilitate safe minimally invasive surgery staging procedures
Level 3 <i>Selects appropriate cancer-specific procedures</i> <i>Performs radical cancer-specific procedures</i>	<ul style="list-style-type: none"> ● Identifies indications for pelvic lymphadenectomy ● Safely performs pelvic lymphadenectomy with supervision
Level 4 <i>Independently adapts surgical plan based on unforeseen intraoperative events</i> <i>Independently and proficiently performs radical cancer-specific procedures</i>	<ul style="list-style-type: none"> ● Describes staging for non-mapping sentinel lymph node in endometrial cancer ● Independently performs minimally invasive surgical dissection (e.g., lymphadenectomy) ● Troubleshoots technical and logistic obstacles to performing minimally invasive surgical procedures
Level 5 <i>Independently manages complicated or multidisciplinary procedures for patients with multiple comorbidities</i> <i>Identifies innovative techniques and approaches from the literature or other disciplines</i>	<ul style="list-style-type: none"> ● Coordinates complex surgery for a patient with morbid obesity who has endometrial cancer and a large ventral hernia ● Proposes a new strategy for less invasive staging based on literature from other fields
Assessment Models or Tools	<ul style="list-style-type: none"> ● Direct observation ● Global evaluation ● Multisource feedback ● Oral examination ● Portfolio ● Simulation assessment
Curriculum Mapping	<ul style="list-style-type: none"> ●

Notes or Resources	<ul style="list-style-type: none">● Atlas of Pelvic Surgery. Malignant Disease: Special Procedures. http://www.atlasofpelvicsurgery.com/10MalignantDisease/chapter10index.html. 2021.● NCCN. NCCN Guidelines. https://www.nccn.org/guidelines/category_1. 2021.● SGO. ConnectED. https://connected.sgo.org/. 2021.● Surgical textbooks
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Patient Care 3: Management Chemotherapy and Targeted Therapeutics Overall Intent: To appropriately use chemotherapy and targeted therapies to manage/treat gynecologic malignancies	
Milestones	Examples
Level 1 <i>Discusses commonly used chemotherapy agents, targeted therapeutics, and common toxicities</i>	<ul style="list-style-type: none"> ● Cites resources such as national guidelines for essential indications for cancer therapies ● Is aware of dose limiting toxicities of commonly prescribed chemotherapies
Level 2 <i>Proposes appropriate options for treatment based on guidelines</i>	<ul style="list-style-type: none"> ● Selects right treatment based on stage, toxicity, and goals of therapy
Level 3 <i>Selects appropriate chemotherapy agents and targeted therapies for treatment based on observed toxicities and guidelines</i>	<ul style="list-style-type: none"> ● Effectively reduces dose based on new patient symptoms and lab values (e.g., anticancer toxicities)
Level 4 <i>Independently adapts chemotherapy agents and targeted therapies based on genetics, tumor testing, and/or toxicities</i>	<ul style="list-style-type: none"> ● Uses both germline and tumor testing to develop individualized treatment plans for recurrent ovarian cancer
Level 5 <i>Independently manages acute and long-term toxicities and makes appropriate referrals to other members of the interdisciplinary team</i>	<ul style="list-style-type: none"> ● Proactively works with other specialties to manage rare complications of therapy
Assessment Models or Tools	<ul style="list-style-type: none"> ● Clinical case reviews ● Direct observation ● Medical record (chart) audit ● Tumor board
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● American Society of Clinical Oncology (ASCO). Guidelines, Tools, & Resources. https://www.asco.org/practice-patients/guidelines. 2021. ● NCCN. NCCN Guidelines. https://www.nccn.org/guidelines/category_1. 2021. ● Textbooks

Patient Care 4: Peri-Operative Care (Pre-, Intra-, and Post-)	
Overall Intent: To effectively avoid, identify, and manage conditions/situations/complications that impact peri-operative care	
Milestones	Examples
Level 1 <i>Assesses peri-operative surgical risk and manages routine peri-operative care</i>	<ul style="list-style-type: none"> ● Identifies comorbid conditions (renal/heart disease, obesity, thromboembolic disease, dementia) and their contribution to peri-operative risk ● Identifies the appropriate use of intra-operative antibiotics ● Manages the care of uncomplicated post-operative patients: fluid management, post-operative milestones
Level 2 <i>Employs standardized care protocols and recognizes common peri-operative complications</i>	<ul style="list-style-type: none"> ● Uses institutional Enhanced Recovery After Surgery (ERAS) protocol ● References American College of Chest Physicians (CHEST) guidelines for venous thromboembolism prevention ● Recognizes urinary retention or oliguria
Level 3 <i>Manages patients with complex peri-operative needs and common peri-operative complications</i>	<ul style="list-style-type: none"> ● Manages urinary retention or oliguria ● Manages peri-operative anticoagulation for patients with venous thromboembolism ● Manages cystotomy
Level 4 <i>Independently manages patients with complex peri-operative needs and complex peri-operative complications, integrating principles of critical care</i>	<ul style="list-style-type: none"> ● Understands the indications for and principles behind massive transfusion protocol ● Engages in collaborative discussion with anesthesia ● Independently manages post-operative ureteral injury or acute abdomen ● Independently escalates care as appropriate
Level 5 <i>Identifies gaps in peri-operative management and complications to be addressed in quality improvement/research initiatives</i>	<ul style="list-style-type: none"> ● Coordinates multidisciplinary discussion for complex patients ● Engages in root cause analysis ● Leads morbidity/mortality discussion
Assessment Models or Tools	<ul style="list-style-type: none"> ● Chart review ● Direct observation ● Multisource feedback ● Oral examination ● Patient care conferences
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● American College of Surgeons (ACS). ACS NSQIP Surgical Risk Calculator. https://riskcalculator.facs.org/RiskCalculator/. 2021. ● National clinical guidelines ● Textbooks

Patient Care 5: Palliative Symptom Management	
Overall Intent: To assess, manage, and optimize cancer/treatment-related symptoms	
Milestones	Examples
Level 1 <i>Takes a complete cancer and treatment-related symptom history</i>	<ul style="list-style-type: none"> ● Assesses cancer pain and symptoms of therapy (nausea, constipation) ● Assesses social support
Level 2 <i>Manages uncomplicated symptoms integrating standardized symptom assessment tools</i>	<ul style="list-style-type: none"> ● Proposes initial management for fatigue, neuropathy, or palmar-plantar erythrodysesthesia ● Uses standardized symptom assessment tools
Level 3 <i>Manages complex symptoms</i>	<ul style="list-style-type: none"> ● Manages refractory pain, bowel obstruction, ascites, dyspnea
Level 4 <i>Coordinates multidisciplinary management of complex and refractory symptoms</i>	<ul style="list-style-type: none"> ● Coordinates a multidisciplinary team (gynecology oncology, radiation oncology, anesthesiology, pain management) to address refractory symptoms ● Identifies the need for nerve blocks, lidocaine infusions, palliative radiation, or G-tubes
Level 5 <i>Applies innovative approaches to symptom management</i>	<ul style="list-style-type: none"> ● Creates research study to evaluate new treatment option ● Conducts a quality improvement (QI) project to systematically assess pain among cancer patients
Assessment Models or Tools	<ul style="list-style-type: none"> ● Chart review ● Direct observation ● Multisource feedback ● Patient care conference ● Patient feedback
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● ASCO. Guidelines, Tools, & Resources. https://www.asco.org/practice-patients/guidelines. 2021. ● Center to Advance Palliative Care (CAPC). Symptom Management. https://www.capc.org/training/symptom-management/. 2021. ● Gyn Oncology textbooks ● NCCN. NCCN Guidelines. https://www.nccn.org/guidelines/category_1. 2021. ● Palliative Care Network of Wisconsin (PCNOW). Fast Facts and Concepts. https://www.mypcnw.org/fast-facts/. 2021.

Medical Knowledge 1: Anatomy	
Overall Intent: Acquires and uses extensive knowledge of relevant anatomy in gynecologic cancer surgery	
Milestones	Examples
<p>Level 1 <i>Demonstrates knowledge of pelvic anatomy</i></p> <p><i>Applies knowledge of normal pelvic anatomy in the surgical setting to reduce surgical complication and morbidity</i></p>	<ul style="list-style-type: none"> ● Identifies pelvic organs, external genitalia, pelvic floor, musculoskeletal structures, vascular supply, and pelvic organ innervation ● Proactively identifies the ureter and protects it from injury during hysterectomy
<p>Level 2 <i>Demonstrates knowledge of normal retroperitoneal and upper abdominal anatomy.</i></p> <p><i>Applies knowledge of pelvic anatomy distorted by gynecologic cancer in complex surgical setting to reduce surgical complication and morbidity</i></p>	<ul style="list-style-type: none"> ● Identifies retroperitoneal, porta-hepatis, splenic, and upper abdominal anatomy ● Performs ureterolysis to move the ureter into a safe position ● Opens pelvic spaces
<p>Level 3 <i>Applies knowledge of pelvic, retroperitoneal, and upper abdominal anatomy distorted by gynecologic cancer in a straightforward surgical setting to reduce surgical complications and morbidity</i></p> <p><i>Applies knowledge of pelvic anatomy, upper abdominal and retroperitoneal anatomy when reviewing diagnostic studies</i></p>	<ul style="list-style-type: none"> ● Removes an enlarged obturator lymph node without injury to the obturator nerve ● Removes an enlarged para-aortic lymph node without injuring the vena cava ● Identifies point of ureteral obstruction in patient with a hydronephrosis
<p>Level 4 <i>Applies knowledge of pelvic, retroperitoneal, and upper abdominal anatomy distorted by gynecologic cancer in a complex surgical setting to reduce surgical complications and morbidity</i></p> <p><i>Applies knowledge of pelvic anatomy, upper abdominal and retroperitoneal anatomy when planning complex surgical intervention</i></p>	<ul style="list-style-type: none"> ● Safely performs en bloc pelvic resection of uterus and sigmoid colon ● Uses imaging studies to plan complex surgery for removal of pelvic sidewall recurrence

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<p>Level 5 <i>Applies knowledge of pelvic and abdominal anatomy to complex surgical cases and identifies areas for surgical innovation and quality improvement</i></p>	<ul style="list-style-type: none"> ● Engages with other surgical consultants to gain novel surgical skills such as lymphovenous bypass or creation of a myocutaneous flap
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Case-based assessment ● Direct observation
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● Anatomic text and gynecologic oncology texts ● Clinical case reviews ● Surgical case logs and evaluations of surgical cases ● Tumor board or other conferences utilizing imaging

Medical Knowledge 2: Medical Diseases in Gynecologic Cancer – Organ System Disorders Overall Intent: To have sufficient knowledge of systemic disease and comorbid conditions to safely treat gynecologic oncology patients	
Milestones	Examples
Level 1 <i>Demonstrates knowledge of common medical conditions that can affect patient outcomes</i>	<ul style="list-style-type: none"> • Interprets hemoglobin A1C level and diastolic blood pressure levels • Recognizes acquired or inherited clotting disorders
Level 2 <i>Applies knowledge of common medical co-morbidities to optimize patient outcomes</i>	<ul style="list-style-type: none"> • Understands rationale for tight glucose control peri-operatively and develops effective plan • Differentiates mechanisms of action and half-life of common classes of anticoagulants and appropriately manages for safe peri-operative care • Modifies surgical plan to optimize peri-operative outcome in patients with abnormal hemoglobin A1C or blood pressure
Level 3 <i>Demonstrates knowledge of complex organ system disorders, metabolic derangements, and coagulopathies</i>	<ul style="list-style-type: none"> • Is aware of competing effects of medical conditions (e.g., congestive heart failure, renal failure, coagulopathies) and administration of chemotherapy • Effectively integrates dose limiting toxicities and mechanism of clearance of anticancer therapies with coexisting medical conditions
Level 4 <i>Applies knowledge of complex organ system disorders to optimize patient outcomes</i>	<ul style="list-style-type: none"> • Recognizes severe or specialized medical comorbidities that require multidisciplinary care to achieve best outcomes
Level 5 <i>Applies an evidence-based approach to innovative management of the gynecologic cancer patient with complex medical conditions</i>	<ul style="list-style-type: none"> • Organizes and runs multidisciplinary patient care conference for complex patient requiring several specialties • Develops strategies and implements changes to medical record to identify cross-reactions between current medications and planned chemotherapies
Assessment Models or Tools	<ul style="list-style-type: none"> • Clinical case reviews • Observation during rounds and at time of new patient evaluations • Tumor board
Curriculum Mapping	<ul style="list-style-type: none"> •
Notes or Resources	<ul style="list-style-type: none"> • Chemotherapy textbooks • Gynecologic oncology textbooks • Internal medicine textbooks or equivalent online resources

Medical Knowledge 3 Genetics, Cancer Biology, and Immunology	
Overall Intent: To understand and incorporate basic principles underlying cancer biology to effectively treat patients	
Milestones	Examples
<p>Level 1 <i>Demonstrates knowledge of basic genetics and common hereditary cancer syndromes in gynecologic cancer</i></p> <p><i>Demonstrates knowledge of basic carcinogens and gynecologic cancer prevention strategies</i></p>	<ul style="list-style-type: none"> ● Is aware of the common hereditary syndromes associated with increased risk of ovarian cancer ● Counsels patients on risk factors for cervical cancer and can explain ways to modify risk
<p>Level 2 <i>Applies knowledge of basic cancer genetics to patient counseling</i></p> <p><i>Demonstrates knowledge of basic cancer biology and immunology</i></p>	<ul style="list-style-type: none"> ● Takes thorough screening history for gynecologic cancers and recognizes patterns of disease suggestive of inherited risk, such as young age onset, multiple rare cancers) ● Identifies common genetic aberrations in cancer and relevance of targeted therapies such as angiogenesis, oncogenes, tumor suppressor genes, immune system components
<p>Level 3 <i>Demonstrates knowledge of less common hereditary cancer syndromes and genetic alterations</i></p> <p><i>Demonstrates knowledge of targeted therapeutic principles and cancer immunotherapy</i></p>	<ul style="list-style-type: none"> ● Recognizes patterns of malignancies suggesting rare inherited syndromes such as Li-Fraumeni syndrome and is aware of pathogenic germline alternations ● Demonstrates knowledge of poly ADP ribose polymerase (PARP) inhibitor maintenance therapy and treatment of patients with ovarian cancer
<p>Level 4 <i>Applies knowledge of hereditary cancer syndromes to optimize patient outcomes</i></p> <p><i>Applies knowledge of cancer biology and immunology to develop treatment plans for patients with gynecologic cancers</i></p>	<ul style="list-style-type: none"> ● Determines need for screening and/or preventative surgery based upon genetic syndrome ● Effectively develops plan for fertility preservation in high-risk familial cancer setting ● Expresses the rationale underlying the use of immune checkpoint inhibitors in microsatellite instability-high (MSI-H) tumors
<p>Level 5 <i>Investigates and applies evidence-based principles of genetics to optimize patient outcomes</i></p> <p><i>Investigates and applies evidence-based principles of cancer biology and/or immunology to optimize patient outcomes</i></p>	<ul style="list-style-type: none"> ● Develops a translational or clinical trial investigating application of a novel targeted inhibitor in gynecologic cancers
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Clinical case reviews ● Tumor board presentations

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	<ul style="list-style-type: none">• Weekly didactic problem-based learning scenarios
Curriculum Mapping	<ul style="list-style-type: none">•
Notes or Resources	<ul style="list-style-type: none">• Gynecologic oncology textbooks• NCCN. NCCN Guidelines. https://www.nccn.org/guidelines/category_1. 2021.• SGO white papers• Tumor biology coursework or relevant text

Medical Knowledge 4: Radiation Therapy – Radiation Biology and Physics Overall Intent: To have the knowledge and clinical experience necessary to integrate radiation therapy in to the care of patients with gynecologic cancer	
Milestones	Examples
Level 1 <i>Discusses common therapeutic radiation techniques</i> <i>Demonstrates knowledge of common complications of radiation therapy</i>	<ul style="list-style-type: none"> ● Knows the differences between external beam radiotherapy, brachytherapy (high-dose rate, low-dose rate), and intensity-modulated radiation therapy (IMRT) ● Knows acute and late complications of radiation, bone marrow, diarrhea, bowel obstruction, vaginal stenosis
Level 2 <i>Demonstrates knowledge of the indications for adjuvant and primary therapy</i> <i>Demonstrates knowledge of initial evaluation of patients with radiation toxicities</i>	<ul style="list-style-type: none"> ● Identifies appropriate candidates for chemo-radiation therapy for advanced cervical cancer ● Identifies appropriate candidates for vaginal brachytherapy for endometrial cancer ● Understands importance of total radiation dose to evaluation of toxicity
Level 3 <i>Demonstrates knowledge of basic radiation biology</i> <i>Demonstrates knowledge of management strategies for radiation complications</i>	<ul style="list-style-type: none"> ● Discusses properties of specific radiation sources: electrons, protons, photons ● Discusses sub-lethal injury and therapeutic ratio in relation to radiation therapy ● Understands how fractionation reduces radiation-related injury ● Develops a plan for vaginal dilation to reduce vaginal stenosis risk
Level 4 <i>Applies comprehensive knowledge of radiation therapy to optimize patient outcomes</i> <i>Applies knowledge of management strategies for complex radiation complications</i>	<ul style="list-style-type: none"> ● Understands the differences in long-term complications between high-dose rate and low-dose rate ● Discusses the risk/benefit of IMRT and when this should be applied ● Suggests hyperbaric oxygen therapy for management of complex pelvic fistula secondary to radiation injury
Level 5 <i>Investigates principles of innovative radiation therapy in collaboration with a radiation oncologist</i> <i>Investigates novel management strategies for radiation complications</i>	<ul style="list-style-type: none"> ● Investigates intraoperative radiation for recurrent gynecologic cancer ● Investigates a novel drug for radiation-induced diarrhea
Assessment Models or Tools	<ul style="list-style-type: none"> ● Case-based assessment ● Direct observation ● Tumor board evaluation
Curriculum Mapping	<ul style="list-style-type: none"> ●

Notes or Resources	<ul style="list-style-type: none">● ASCO. Guidelines, Tools, & Resources. https://www.asco.org/practice-patients/guidelines. 2021.● American Society for Radiation Oncology (ASTRO). Clinical Practice Guidelines. https://www.astro.org/Patient-Care-and-Research/Clinical-Practice-Statements/Clinical-Practice-Guidelines. 2021.● Gynecologic Oncology Educational Series (GYOEDU). https://www.gyoedu.org/. 2021.● NCCN. NCCN Guidelines. https://www.nccn.org/guidelines/category_1. 2021.● SGO. ConnectED. https://connected.sgo.org/. 2021.● SGO. ConnectED: 2021-2022 SGO Fellows Bootcamp. https://connected.sgo.org/content/2021-2022-sgo-fellows-bootcamp. 2021.● SGO national guidelines● Textbooks
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Medical Knowledge 5: Chemotherapy and Targeted Therapeutics	
Overall Intent: To have the knowledge and clinical experience necessary to integrate chemotherapy in to the care of patients with gynecologic cancer	
Milestones	Examples
Level 1 <i>Demonstrates knowledge of commonly used systemic therapies</i>	<ul style="list-style-type: none"> • Knows that carboplatin and paclitaxel is first line therapy for ovarian cancer • Knows that cisplatin is used as a radiation sensitizer in cervical cancer
Level 2 <i>Discusses therapeutic options, mechanism of actions, and common toxicities of common systemic therapy based on literature</i>	<ul style="list-style-type: none"> • Understands dose limitations and cardiac toxicity • Understands the effects of cisplatin on renal function, and the specific dosing of carboplatin (Calvert formula)
Level 3 <i>Demonstrates comprehensive knowledge of systemic therapy options based on literature</i>	<ul style="list-style-type: none"> • Discusses third-line treatment options for an ovarian cancer patient • Discusses treatment options for recurrent endometrial cancer, including hormonal options • Discusses the role of bevacizumab therapies in recurrent cervical cancer
Level 4 <i>Applies knowledge of systemic therapeutic agents to individualize management</i>	<ul style="list-style-type: none"> • Understands the replacement of paclitaxel for upfront therapy in a patient with baseline neuropathy • Discusses the risks and benefits of bleomycin treatment in a patient with advanced germ cell tumor • Discusses third-line treatment options in a patient with comorbidities
Level 5 <i>Explores emerging therapies and extrapolates to rare or complex clinical scenarios</i>	<ul style="list-style-type: none"> • Contributes to the design of a trial to use a therapy found to be helpful in testicular cancer for women with germ cell tumor • Extrapolates management of breast cancer to low-grade ovarian cancer such as use of ribociclib
Assessment Models or Tools	<ul style="list-style-type: none"> • Case-based analysis • Chart review • Direct observation • Tumor board assessment
Curriculum Mapping	<ul style="list-style-type: none"> •
Notes or Resources	<ul style="list-style-type: none"> • ASCO. Guidelines, Tools, & Resources. https://www.asco.org/practice-patients/guidelines. 2021. • Gynecologic Oncology Educational Series (GYOEDU). https://www.gyoedu.org/. 2021. • Gynecologic Oncology textbooks • NCCN. NCCN Guidelines. https://www.nccn.org/guidelines/category_1. 2021. • SGO. ConnectED. https://connected.sgo.org/. 2021. • Society of Gynecologic Oncology (SGO), Annunziata CM, Chu CS, Rubin SC (eds). <i>Chemotherapy for Gynecologic Cancers: Society of Gynecologic Oncology Handbook</i>. 3rd ed. Chicago, IL: Society of Gynecologic Oncology; 2017. ISBN:978-0-692-89793-5.

Medical Knowledge 6: Diagnostic Techniques and Treatment Planning	
Overall Intent: To have the knowledge and clinical experience necessary to integrate appropriate diagnostic testing and make comprehensive treatment plans	
Milestones	Examples
<p>Level 1 <i>Demonstrates knowledge of basic diagnostic techniques to evaluate patients with gynecologic neoplasms.</i></p> <p><i>Demonstrates knowledge of histologic characteristics of common gynecologic cancers</i></p>	<ul style="list-style-type: none"> ● Understands the strengths and limitations of ultrasound, computerized tomography (CT) and magnetic resonance imaging (MRI) to image the reproductive organs ● Identifies ultrasound as appropriate initial evaluation of adnexal mass ● Lists examples of epithelial and non-epithelial ovarian cancer
<p>Level 2 <i>Demonstrates knowledge of diagnostic accuracy and cost of advanced imaging modalities used to evaluate patients with gynecologic neoplasms</i></p> <p><i>Demonstrates knowledge of pathologic studies used to identify and subcategorize malignant and premalignant gynecologic pathology</i></p>	<ul style="list-style-type: none"> ● Identifies CT as appropriate initial evaluation for metastatic disease in setting of known endometrial cancer or suspected ovarian cancer ● Identifies classic immunohistochemistry (IHC) markers relevant to gynecologic cancer such as p53, p16, CK7, CK20
<p>Level 3 <i>Discusses diagnostic techniques to comprehensively evaluate patients with gynecologic cancer</i></p> <p><i>Demonstrates knowledge of tailored diagnostic pathologic, genomic, and molecular studies to facilitate comprehensive treatment planning</i></p>	<ul style="list-style-type: none"> ● Effectively uses MRI and positron emission tomography (PET)/CT in the comprehensive evaluation of cervical cancer ● Discusses usefulness of genetic sequencing, molecular testing, and genomic analysis ● Recognizes implications of mismatch repair immunohistochemistry for treatment planning
<p>Level 4 <i>Integrates knowledge of diagnostic techniques to develop comprehensive treatment plans for patients with gynecologic cancer</i></p> <p><i>Synthesizes results of pathologic, genomic, and molecular studies to create effective treatment plans</i></p>	<ul style="list-style-type: none"> ● Uses PET/CT to further evaluate non-specific CT findings in setting of suspected recurrence ● Uses germline and somatic testing in treatment planning for ovarian cancer
<p>Level 5 <i>Applies innovative evidence-based diagnostic techniques to develop treatment plans for patients with gynecologic cancers</i></p>	<ul style="list-style-type: none"> ● Uses somatic testing results to match patient to eligible clinical trials

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<p><i>Designs research projects to further the application or development of innovative tumor testing in gynecologic cancers</i></p>	
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Clinical case review ● Direct observation ● Oral examination ● Tumor board
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● NCCN. NCCN Guidelines. https://www.nccn.org/guidelines/category_1. 2021. ● Salani R, Backes FJ, Fung Kee Fung M, et al. Posttreatment surveillance and diagnosis of recurrence in women with gynecologic malignancies: Society of Gynecologic Oncologists recommendations. <i>Am J Obstet Gynecol</i>. 2011;204(6):466-478. https://www.ajog.org/article/S0002-9378(11)00317-6/fulltext. 2021. ● SGO. ConnectED. https://connected.sgo.org/. 2021. ● Surgical textbooks

Medical Knowledge 7: Clinical Studies	
Overall Intent: To interpret clinical studies and apply study results to clinical practice	
Milestones	Examples
Level 1 <i>Describes the basics of clinical study design and levels of evidence</i>	<ul style="list-style-type: none"> ● Describes Phase 1-3 studies. ● Identifies the level of evidence supporting sentinel lymph node resection in endometrial cancer
Level 2 <i>Demonstrates knowledge of study design, including statistical methods</i>	<ul style="list-style-type: none"> ● Defines non-inferiority study
Level 3 <i>Critically interprets the results of a clinical study, including statistical limitations</i>	<ul style="list-style-type: none"> ● Critiques and interprets a landmark study and discusses the nuanced interpretation based on the statistical design
Level 4 <i>Applies knowledge of clinical study design, research infrastructure, and analytical statistics and integrates into clinical practice</i>	<ul style="list-style-type: none"> ● Integrates sentinel lymph node dissection into clinical practice based on critical review of the evidence
Level 5 <i>Designs and proposes clinical trials</i>	<ul style="list-style-type: none"> ● Submits clinical trial concept to NRG
Assessment Models or Tools	<ul style="list-style-type: none"> ● Clinical case reviews ● Direct observation ● Journal club presentation ● Tumor board
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● Statistics textbooks ● Clinical trial design workshops

Medical Knowledge 8: End-of-Life Care	
Overall Intent: To have the knowledge and clinical experience necessary to provide comprehensive compassionate care to patients and families near the end of life	
Milestones	Examples
Level 1 <i>Identifies general eligibility for hospice care</i>	<ul style="list-style-type: none"> ● Recognizes patient cannot continue disease-directed therapy while enrolled in hospice ● Recognizes that patients can be full code while enrolled in hospice ● Knows the difference between hospice from palliative care, as well as the eligibility for each
Level 2 <i>Addresses basic patient/family questions about hospice and death from cancer</i>	<ul style="list-style-type: none"> ● Sets expectations for home hospice in terms of frequency of presence of hospice staff, i.e., letting patient and family members know 24-hour care is not provided with hospice benefit ● Answers questions about hospice coverage of medications and durable medical equipment
Level 3 <i>Addresses complex patient/family questions about hospice, discontinuation of disease-directed therapy and death from cancer</i>	<ul style="list-style-type: none"> ● Explains role of inpatient hospice and differentiates it from home hospice ● Recognizes and explains to families that patients can un-enroll from hospice at any time to pursue disease-directed therapy or other interventions not covered by hospice benefit ● Addresses questions from family about how to tell if a loved one is uncomfortable in the last hours to days of life
Level 4 <i>Individualizes advice to patient/family about timing of hospice enrollment and appropriately sets patient/family expectations for last days to weeks of life</i>	<ul style="list-style-type: none"> ● Proactively counsels patients/families about expectations for last hours to days of life, including declining consciousness, skin mottling, and agonal breathing ● Addresses questions about inpatient hospice eligibility (highlights that a patient cannot choose inpatient hospice over home hospice by preference, and must qualify medically with untreated symptoms or imminent death) ● Counsels family about the option of continuing disease-modifying treatments for diagnoses other than the primary hospice diagnosis of cancer, such as diabetes treatment, cardiac treatments ● Individualizes counseling about available hospice services based on individual patient/family needs and goals, highlighting 24-hour registered nurse availability, bereavement services, and medication coverage
Level 5 <i>Coordinates multidisciplinary response to complex circumstances such as family conflict and futile care near the end of life</i>	<ul style="list-style-type: none"> ● Arranges for time-limited trial of total parenteral nutrition paid for by hospice agency for patient and family for whom prospect of discontinuation of total parenteral nutrition was the single barrier to hospice enrollment ● Works with palliative care and/or ethics consult service to reach advance care planning consensus in situation where different family members initially pressured patient in different directions regarding preferred intensiveness of care near the end of life
Assessment Models or Tools	<ul style="list-style-type: none"> ● Clinical case reviews ● Direct observation of patient counseling

	<ul style="list-style-type: none"> ● Simulation assessment
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● Duska LR, Lefkowitz C, Blackhall L. Palliative, and supportive care. In: Chi D, Berchuck A, Dizon DS, Yashar CM. <i>Principles and Practice of Gynecologic Oncology</i>. 7th ed. Philadelphia, PA: Wolters Kluwer; 2017. ISBN:978-1496340023. ● Harman SM, Bailey FA, Walling AM. Palliative care: The last hours and days of life. <i>UpToDate</i>. https://www.uptodate.com/contents/palliative-care-the-last-hours-and-days-of-life. 2021. ● Hui D, Dos Santos R, Chisholm G, et al. Bedside clinical signs associated with impending death in patients with advanced cancer: Preliminary findings of a prospective, longitudinal cohort study. <i>Cancer</i>. 2015;121(6):960-967. https://acsjournals.onlinelibrary.wiley.com/doi/10.1002/cncr.29048. 2021. ● Palliative Care Network of Wisconsin (PCNOW). Fast Facts and Concepts. https://www.mypcnw.org/fast-facts/. 2021.

Systems-Based Practice 1: Patient Safety and Quality Improvement (QI)	
Overall Intent: To engage in the analysis and management of patient safety events, including relevant communication with patients, families, and health care professionals; to demonstrate the skills necessary to participate in quality improvement	
Milestones	Examples
<p>Level 1 <i>Demonstrates knowledge of common patient safety events</i></p> <p><i>Demonstrates knowledge of how to report patient safety events</i></p> <p><i>Demonstrates knowledge of basic quality improvement methodologies and metrics</i></p>	<ul style="list-style-type: none"> ● Lists patient misidentification or medication errors as common patient safety events ● Describes how to report errors in your environment ● Describes fishbone tool or PDSA (Plan, Do, Study, Act) cycle
<p>Level 2 <i>Identifies system factors that lead to patient safety events</i></p> <p><i>Reports patient safety events through institutional reporting systems (simulated or actual)</i></p> <p><i>Describes local quality improvement initiatives</i></p>	<ul style="list-style-type: none"> ● Identifies lack of hand sanitizer dispenser at each clinical exam room may lead to increased infection rates ● Reports lack of hand sanitizer dispenser at each clinical exam room to the medical director ● Summarizes protocols to decrease surgical site infections
<p>Level 3 <i>Participates in analysis of patient safety events (simulated or actual)</i></p> <p><i>Participates in disclosure of patient safety events to patients and families (simulated or actual)</i></p> <p><i>Participates in local quality improvement initiatives</i></p>	<ul style="list-style-type: none"> ● Prepares for morbidity and mortality presentations ● Through simulation, communicates with patients/families about a surgical error ● Participates in project identifying better throughput in the operating room
<p>Level 4 <i>Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)</i></p> <p><i>Discloses patient safety events to patients and families (simulated or actual)</i></p>	<ul style="list-style-type: none"> ● Collaborates with a team to conduct the analysis of a surgical error and effectively communicates with patients/families about those events

<p><i>Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project</i></p>	<ul style="list-style-type: none"> ● Participates in the completion of a QI project to improve human papillomavirus (HPV) vaccination rates within the practice, including assessing the problem, articulating a broad goal, developing a SMART (Specific, Measurable, Attainable, Relevant, Time-bound) objective plan and monitoring progress and challenges
<p>Level 5 <i>Actively engages teams and processes to modify systems to prevent patient safety events</i></p> <p><i>Role models or mentors others in the disclosure of patient safety events</i></p> <p><i>Creates, implements, and assesses quality improvement initiatives at the institutional or community level</i></p>	<ul style="list-style-type: none"> ● Assumes a leadership role at the departmental or institutional level for patient safety ● Leads a simulation for disclosing patient safety events ● Initiates and completes a QI project to improve county HPV vaccination rates in collaboration with the county health department and shares results with stakeholders
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Direct observation ● Global evaluation ● Multisource feedback ● Simulation assessment
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● Institute of Healthcare Improvement (IHI). http://www.ihl.org/Pages/default.aspx. 2021. ● IHI. IHI Open School. http://www.ihl.org/education/IHIOpenSchool/Courses/Pages/OpenSchoolCertificates.aspx. 2021. ● Skochelak SE, Hammoud MM, Lomis KD, et al. <i>AMA Education Consortium: Health Systems Science</i>. 2nd ed. Elsevier; 2021. ISBN:9780323694629.

Systems-Based Practice 2: System Navigation for Patient Centered Care	
Overall Intent: To effectively coordinate care through the navigation of the health care system, including the interdisciplinary team and other care providers and to provide safe and efficient transitions of care	
Milestones	Examples
<p>Level 1 <i>Demonstrates knowledge of care coordination</i></p> <p><i>Identifies key elements for safe and effective transitions of care and handoffs</i></p>	<ul style="list-style-type: none"> ● For a patient with cervical cancer, identifies the gynecologic oncologist, the radiation oncologist, home health nurse, and social workers as members of the team ● Lists the essential components of a standardized sign-out checklist and care transition and hand-offs
<p>Level 2 <i>Coordinates care of patients in routine clinical situations effectively utilizing the roles of the interprofessional teams</i></p> <p><i>Performs safe and effective transitions of care/handoffs in routine clinical situations</i></p>	<ul style="list-style-type: none"> ● Coordinates care with the patient’s interdisciplinary team at the time of discharge from the hospital ● Routinely uses a standardized sign-out checklist for a stable patient during sign-outs to call team
<p>Level 3 <i>Coordinates care of patients in complex clinical situations effectively utilizing the roles of their interprofessional teams</i></p> <p><i>Performs safe and effective transitions of care/handoffs in complex clinical situations</i></p>	<ul style="list-style-type: none"> ● Works to coordinate care for a medically complex, post-surgical patient that will ensure follow-up to care after discharge from the hospital ● Routinely uses a standardized sign-out checklist when transferring a patient to the intensive care unit (ICU) or other services
<p>Level 4 <i>Role models effective coordination of patient-centered care among different disciplines and specialties</i></p> <p><i>Role models and advocates for safe and effective transitions of care/handoffs within and across healthcare delivery systems including outpatient settings</i></p>	<ul style="list-style-type: none"> ● During inpatient rotations, leads team members in approaching consultants to review cases/recommendations and arranges multidisciplinary rounds for the team ● Communicates with local oncology providers to effectively transmit important changes in mutual patients care plans and update on new events (e.g., surgical procedures, changes in disease status or goals)
<p>Level 5 <i>Analyses the process of care coordination and leads in the design and implementation of improvements</i></p> <p><i>Improves quality of transitions of care within and across healthcare delivery systems to optimize patient outcomes</i></p>	<ul style="list-style-type: none"> ● Leads a program to arrange for team home visits to patients at high risk of readmission ● Develops a protocol to improve transitions between care facilities
Assessment Models or Tools	<ul style="list-style-type: none"> ● Assessment of quality and safety conference case presentations

	<ul style="list-style-type: none"> ● Direct observation ● Global assessment ● Medical record (chart) audit ● Multisource feedback ● Review of sign-out tools, use and review of checklists
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● Centers for Disease Control (CDC). Population Health Training. https://www.cdc.gov/pophealthtraining/whatis.html. 2021. ● Kaplan KJ. In Pursuit of Patient-Centered Care. Tissue Pathology; 2016. http://tissuepathology.com/2016/03/29/in-pursuit-of-patient-centered-care/#axzz5e7nSsAns. 2021. ● Skochelak SE, Hammoud MM, Lomis KD, et al. <i>AMA Education Consortium: Health Systems Science</i>. 2nd ed. Elsevier; 2021. ISBN:9780323694629.

Systems-Based Practice 3: Community and Population Health	
Overall Intent: To effectively navigate the health care system to adapt care to a specific patient population to ensure high-quality patient outcomes	
Milestones	Examples
Level 1 <i>Demonstrates knowledge of population and community health needs</i>	<ul style="list-style-type: none"> • Describes differences in patient needs based on social setting (e.g., rural versus urban)
Level 2 <i>Identifies specific population and community health needs for their local population</i>	<ul style="list-style-type: none"> • Identifies that transportation may be an obstacle in patients getting to multiple chemotherapy appointments
Level 3 <i>Uses local resources effectively to meet the needs of a patient population and community</i>	<ul style="list-style-type: none"> • Identifies a ride share service for a specific community
Level 4 <i>Participates in changing and adapting practice to provide for the needs of specific populations</i>	<ul style="list-style-type: none"> • Assists to implement protocols for prescribing medications necessary for palliative care needs • Works with other healthcare providers to facilitate the availability of telemedicine options for relevant visit types and consults
Level 5 <i>Leads innovations and advocates for populations and communities with specific health care needs</i>	<ul style="list-style-type: none"> • Leads development of telehealth diagnostic services for a rural clinic
Assessment Models or Tools	<ul style="list-style-type: none"> • Direct observation • Global assessment • Medical record (chart) audit • Multisource feedback • Quality metrics and goals mined from electronic health records (EHRs)
Curriculum Mapping	<ul style="list-style-type: none"> •
Notes or Resources	<ul style="list-style-type: none"> • CDC. Population Health Training. https://www.cdc.gov/pophealthtraining/whatis.html. 2021. • Skochelak SE, Hammoud MM, Lomis KD, et al. <i>AMA Education Consortium: Health Systems Science</i>. 2nd ed. Elsevier; 2021. ISBN:9780323694629.

Systems-Based Practice 4: Physician Role in Health Care Systems	
Overall Intent: To understand the physician role in the complex health care system and how to optimize the system to improve patient care and the health system's performance	
Milestones	Examples
Level 1 <i>Identifies key components of the complex healthcare system</i>	<ul style="list-style-type: none"> • Understands the impact of health plan coverage on prescription drugs for individual patients • Identifies that notes must meet coding requirements
Level 2 <i>Describes how components of a complex healthcare system are inter-related, and how this impacts patient care</i>	<ul style="list-style-type: none"> • Explains that improving patient satisfaction impacts patient adherence and payment to the health system • Recognizes that appropriate documentation can influence the severity of illness determination upon discharge
Level 3 <i>Discusses how individual practice affects the broader system</i>	<ul style="list-style-type: none"> • Discusses risks and benefits of same-day discharge after minimally invasive procedures
Level 4 <i>Manages various components of the complex healthcare system to provide efficient and effective patient care</i>	<ul style="list-style-type: none"> • Works collaboratively to improve patient assistance resources for a patient needing oncofertility options • Integrates social worker in the management of complex patient care with limited support system
Level 5 <i>Advocates for or leads systems change that enhances high value, efficient and effective patient care</i>	<ul style="list-style-type: none"> • Works with community or professional organizations to advocate for awareness of genetic syndromes putting patients at higher risk for gynecologic malignancies
Assessment Models or Tools	<ul style="list-style-type: none"> • Direct observation • Global assessment • Medical record (chart) audit • Multisource feedback • Patient satisfaction data • Portfolio
Curriculum Mapping	<ul style="list-style-type: none"> •
Notes or Resources	<ul style="list-style-type: none"> • American Board of Internal Medicine. QI/PI activities. Practice Assessment: Modules that physicians can use to assess clinical practice. 2019. http://www.abim.org/maintenance-of-certification/earning-points/practice-assessment.aspx • Agency for Healthcare Research and Quality (AHRQ). Major Physician Measurement Sets. https://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/create/physician/measurementsets.html. 2021. • AHRQ. Measuring the Quality of Physician Care. https://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/create/physician/challenges.html. 2021.

- American Board of Internal Medicine (ABIM). QI/PI Activities. <https://www.abim.org/maintenance-of-certification/earning-points/qi-pi-activities/>. 2021.
- Center for Medicare and Medicaid Services (CMS). MACRA <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-MIPS-and-APMs.html>. 2021.
- The Commonwealth Fund. Health System Data Center. http://datacenter.commonwealthfund.org/?_ga=2.110888517.1505146611.1495417431-1811932185.1495417431#ind=1/sc=1. 2021.
- Dzau VJ, McClellan MB, McGinnis JM, et al. Vital directions for health and health care: Priorities from a National Academy of Medicine initiative. *JAMA*. 2017;317(14):1461-1470. <https://nam.edu/vital-directions-for-health-health-care-priorities-from-a-national-academy-of-medicine-initiative/>. 2021.
- The Kaiser Family Foundation. www.kff.org. 2021.
- The Kaiser Family Foundation: Topic: Health Reform. <https://www.kff.org/topic/health-reform/>. 2021.

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice	
Overall Intent: To incorporate evidence and patient values into clinical practice	
Milestones	Examples
Level 1 <i>Demonstrates how to access and use available evidence, and incorporate patient preferences and values to care for a routine patient</i>	<ul style="list-style-type: none"> ● Identifies evidence-based guidelines (e.g., NCCN, ASCO, SGO Clinical Practice guidelines) ● Uses a smart phone app or electronic resource to obtain information and counsel a patient on cancer treatment
Level 2 <i>Articulates clinical questions and elicits patient preferences and values in order to guide evidence based care, with guidance from other health care team members</i>	<ul style="list-style-type: none"> ● Understands and appropriately uses clinical practice guidelines in making patient care decisions while eliciting patient preferences
Level 3 <i>Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients</i>	<ul style="list-style-type: none"> ● Obtains, discusses, and applies evidence for the treatment of a patient with gynecologic cancer and medical comorbidities ● In a patient with complex medical condition, identifies and discusses potential management options and solicits patient perspective ● Searches and incorporates available evidence and patient’s preferences to determine best treatment plan
Level 4 <i>Critically appraises and applies evidence even in the face of uncertainty and conflicting evidence to guide care, tailored to the individual patient</i>	<ul style="list-style-type: none"> ● Accesses the primary literature to identify alternative treatments for endometrial cancer in a patient with desired fertility ● Searches the literature to identify treatment options for management of menopausal symptoms in a woman with estrogen-sensitive cancer
Level 5 <i>Coaches others to critically appraise and apply evidence for complex patients; and/or participates in the development of guidelines</i>	<ul style="list-style-type: none"> ● Leads clinical teaching on application of best practices in critically ill patients with gynecologic cancer ● As part of a team, develops a standard clinical protocol for the management of patients with abnormal placentation limiting obstetric hemorrhage
Assessment Models or Tools	<ul style="list-style-type: none"> ● Clinical case review ● Direct observation/clinical evaluations ● Fresno Test ● Journal club evaluation ● Presentation evaluation (rounds or patient care conferences, tumor board)
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● American College of Obstetricians and Gynecologists (ACOG) Committee on Patient Safety and Quality Improvement. Clinical guidelines and standardization of practice to improve outcomes: ACOG Committee opinion, number 792. <i>Obstet Gynecol.</i> 2019;134(4):e122-e125. https://www.acog.org/clinical/clinical-guidance/committee-

	<p>opinion/articles/2019/10/clinical-guidelines-and-standardization-of-practice-to-improve-outcomes. 2021.</p> <ul style="list-style-type: none">• CREOG. Milestone Tools Task Force: Journal Club Assessment. https://www.acog.org/-/media/project/acog/acogorg/files/creog/milestones-journal-club-assessment.docx?la=en&hash=E2E284E59639C04EF8F526A0CB97A699. 2021.• Ramos KD, Schafer S, Tracz SM. Validation of the Fresno test of competence in evidence based medicine. <i>BMJ</i>. 2003;326(7384):319-321. https://www.bmj.com/content/326/7384/319.long. 2021.
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Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth	
Overall Intent: To seek clinical performance information with the intent to improve care; reflects on all domains of practice, personal interactions, and behaviors, and their impact on colleagues and patients (reflective mindfulness); develop clear objectives and goals for improvement in some form of a learning plan	
Milestones	Examples
<p>Level 1 <i>Identifies gap(s) between expectations and actual performance</i></p> <p><i>Establishes goals for personal and professional development</i></p>	<ul style="list-style-type: none"> ● Uses evaluations from nursing staff members, patients, peers, and faculty members to identify opportunities for improvement ● Sets a personal practice goal of documenting cancer staging ● Identifies a need to incorporate family history for cancer patients ● Establishes a goal to incorporate health maintenance screening for patients with gynecology cancer
<p>Level 2 <i>Analyzes and reflects on the factors which contribute to gap(s) between expectations and actual performance</i></p> <p><i>Identifies opportunities for performance improvement; designs a learning plan</i></p>	<ul style="list-style-type: none"> ● Integrates feedback to adjust the documentation of cancer staging ● Identifies time management skills as a contributing factor to performance, and makes a detailed plan for more timely completion of post-treatment surveillance and completion of clinic notes ● When prompted, develops individual education plan to improve their evaluation of treatment related toxicity ● Identifies specific knowledge base deficits and develops a detailed, structured reading plan over a six-month period
<p>Level 3 <i>Institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance</i></p> <p><i>Integrates practice data and feedback with humility to implement a learning plan</i></p>	<ul style="list-style-type: none"> ● Using contemporary resources, creates a personal curriculum to improve staging documentation ● Completes a literature review prior to patient encounters ● Develops calendar reminder to review patients' pathology results one week following surgical procedures ● Proposes a chart audit to determine the percent of patients receiving a survivorship care plan and uses the results to implement a learning plan
<p>Level 4 <i>Continuously reflects on remaining gap(s) and institutes behavioral adjustments to narrow them</i></p> <p><i>Uses performance data to measure the effectiveness of the learning plan and adapts when necessary</i></p>	<ul style="list-style-type: none"> ● Solicits patient feedback on newly implemented clinical tools ● After patient encounter, debriefs with the attending and other patient care team members to optimize future collaboration in the care of the patient and family members ● Completes a quarterly chart audit to ensure documentation of survivorship care planning in patients with gynecologic cancer ● Assess performance at recent tumor board and prepares an updated reading schedule
<p>Level 5 <i>Coaches others on reflective practice</i></p> <p><i>Coaches others in the design and implementation of learning plans</i></p>	<ul style="list-style-type: none"> ● Models practice improvement and adaptability ● Develops educational module for collaboration with other patient care team members ● Assists more junior residents and medical students in developing their individualized learning plans

<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Chart reviews ● Clinical evaluations ● Direct observation ● Multisource feedback ● Patient care ratings ● Review of learning plan ● Semiannual evaluations
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● Burke AE, Benson B, Englander R, Carraccio C, Hicks PJ. Domain of competence: Practice-based learning and improvement. <i>Acad Pediatr.</i> 2014;14(2 Suppl):S38-S54. https://www.academicpedsjnl.net/article/S1876-2859(13)00333-1/fulltext. 2021. ● Hojat M, Veloski JJ, Gonnella JS. Measurement and correlates of physicians' lifelong learning. <i>Acad Med.</i> 2009;84(8):1066-74. https://insights.ovid.com/crossref?an=00001888-200908000-00021. 2021. ● Lockspeiser TM, Schmitter PA, Lane JL, Hanson JL, Rosenberg AA, Park YS. Assessing residents' written learning goals and goal writing skill: Validity evidence for the learning goal scoring rubric. <i>Acad Med.</i> 2013;88(10):1558-1563. https://insights.ovid.com/article/00001888-201310000-00039. 2021.

Practice-Based Learning and Improvement 3: Scholarly Activity	
Overall Intent: To identify areas worthy of investigation, design and implement a plan for investigation, and disseminate the findings of scholarly work	
Milestones	Examples
Level 1 <i>Identifies areas worthy of scholarly investigation</i>	<ul style="list-style-type: none"> Identifies areas of interest and begins to formulate a research question
Level 2 <i>Designs a hypothesis-driven or hypothesis generating scholarly thesis, under the direction of a research mentor</i>	<ul style="list-style-type: none"> Creates an original research plan with a mentor With assistance of a mentor, outlines a hypothesis and plan to test two methods of teaching for a new procedure
Level 3 <i>Presents products of scholarly activity at local, regional, or national meetings, and/or submits an abstract to regional, state, or national meetings</i>	<ul style="list-style-type: none"> Presents original research at the institutional level or local chapter of the American Cancer Society In collaboration with a statistician or supervisor, reviews the data collected during the study of two teaching methods, writes an abstract, and presents as a poster at a local educational forum
Level 4 <i>Completes and defends a comprehensive written scholarly thesis that demonstrates advanced research methodology, design, and statistical analysis</i>	<ul style="list-style-type: none"> Presents original research at a national meeting After making a significant contribution to an educational research project, submits an abstract to a nationally recognized educational meeting Defends thesis Publishes research in a peer reviewed journal
Level 5 <i>Publication of independent research that has generated new medical knowledge, education programs, or process improvement</i>	<ul style="list-style-type: none"> Mentors another resident/fellow through a research project Designs a novel research project and applies for grant funding
Assessment Models or Tools	<ul style="list-style-type: none"> Assessment of quality of presentations and/or research Assessment of quality of publications, protocols, and/or grants Direct observation Portfolio
Curriculum Mapping	<ul style="list-style-type: none">
Notes or Resources	<ul style="list-style-type: none"> Blome C, Sondermann H, Augustin M. Accepted standards on how to give a medical research presentation: A systematic review of expert opinion papers. <i>GMS Journal for Medical Education</i>. 2017;34(1):Doc11. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5327661/. 2021. National Cancer Institute (NIH). Clinical Trials Information for Patients and Caregivers. https://www.cancer.gov/about-cancer/treatment/clinical-trials. 2021. Schünemann HJ, Wiercioch W, Brozek J, et al. GRADE Evidence to Decision (EtD) frameworks for adoption, adaption, and de novo development of trustworthy recommendations: GRADE-ADOLOPMENT. <i>Journal of Clinical Epidemiology</i>. 2017;81:101-110. https://www.jclinepi.com/article/S0895-4356(16)30482-6/fulltext. 2021.

- ACGME requirement: Fellows must demonstrate the ability to: design and implement a prospective data base; conduct clinical cancer research, especially prospective clinical trials; use statistical methods to properly evaluate results of published research studies; guide other learners or other personnel in laboratory or clinical oncology research; and navigate the interface of basic science with clinical cancer care to facilitate translational research

Professionalism 1: Professional Behavior and Ethical Principles	
Overall Intent: To recognize and address lapses in professional and ethical behaviors, demonstrates professional and ethical behaviors, and use appropriate resources for managing professional and ethical dilemmas	
Milestones	Examples
<p>Level 1 <i>Identifies and describes potential triggers for professionalism lapses and how to appropriately report professionalism lapses</i></p> <p><i>Demonstrates knowledge of ethical principles</i></p>	<ul style="list-style-type: none"> ● Understands that being tired can cause a lapse in professionalism ● Understands being late to sign-out has adverse effect on patient care and on professional relationships ● Articulates how the principle of “do no harm” applies to a patient who may not need an operative procedure even though the training opportunity exists
<p>Level 2 <i>Demonstrates insight into professional behavior in routine situations and takes responsibility for own professionalism lapses</i></p> <p><i>Analyzes straightforward situations using ethical principles</i></p>	<ul style="list-style-type: none"> ● Respectfully approaches a learner who is late to sign-out about the importance of being on time ● Notifies appropriate supervisor when a learner is routinely late to sign-out ● Acknowledge and apologizes for being late to meetings ● Identifies and applies ethical principles involved in informed consent when the patient is unclear of all the risks
<p>Level 3 <i>Demonstrates professional behavior in complex or stressful situations</i></p> <p><i>Recognizes need to seek help in managing and resolving complex ethical situations</i></p>	<ul style="list-style-type: none"> ● Appropriately responds to a distraught family member, following an unsuccessful resuscitation attempt of a relative ● After noticing a colleague’s inappropriate social media post, reviews policies related to posting of content and seeks guidance ● Recognizes that a patient may need an ethics consult for a patient needing surgery and refusing blood transfusions ● Recognizes need to seek help when there are concerns about medical futility and misaligned goals
<p>Level 4 <i>Consistently recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others</i></p> <p><i>Recognizes and utilizes appropriate resources for managing and resolving ethical dilemmas as needed (and identifies system-level issues that induce or exacerbate ethical problems)</i></p>	<ul style="list-style-type: none"> ● Actively considers the perspectives of others in stressful situation ● Models respect for patients and promotes the same from colleagues when a patient has been waiting an excessively long time to be seen ● Uses ethics consults for a patient who lacks capacity and is refusing a recommended procedure
<p>Level 5 <i>Coaches others when their behavior fails to meet professional expectations</i></p>	<ul style="list-style-type: none"> ● Coaches others when their behavior fails to meet professional expectations and creates a performance improvement plan to prevent recurrence

<p><i>Seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution</i></p>	<ul style="list-style-type: none"> ● Engages stakeholders to address system level impediments to fair care for underinsured or uninsured patients
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Direct observation ● Global evaluation ● Multisource feedback ● Oral or written self-reflection ● Simulation
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● ACOG. Code of Professional Ethics. https://www.acog.org/-/media/project/acog/acogorg/files/pdfs/acog-policies/code-of-professional-ethics-of-the-american-college-of-obstetricians-and-gynecologists.pdf. 2021. ● ACOG Committee on Ethics. Ethical decision making in obstetrics and gynecology: ACOG Committee opinion number 390. <i>Obstet Gynecol.</i> 2007;110(6):1479-1487. https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2007/12/ethical-decision-making-in-obstetrics-and-gynecology. 2021. ● ABIM Foundation. American Board of Internal Medicine. Medical professionalism in the new millennium: A physician charter. <i>Annals of Internal Medicine.</i> 2002;136(3):243-246. https://annals.org/aim/fullarticle/474090/medical-professionalism-new-millennium-physician-charter. 2021. ● AMA. Ethics. https://www.ama-assn.org/delivering-care/ethics. 2021. ● Bynny RL, Paauw DS, Papadakis MA, Pfeil S. <i>Medical Professionalism Best Practices: Professionalism in the Modern Era.</i> Aurora, CO: Alpha Omega Alpha Medical Society; 2017. <i>Medical Professionalism Best Practices: Professionalism in the Modern Era.</i> Aurora, CO: Alpha Omega Alpha Medical Society; 2017. http://alphaomegaalpha.org/pdfs/Monograph2018.pdf. 2021. ● Domen RE, Johnson K, Conran RM, et al. Professionalism in pathology: A case-based approach as a potential education tool. <i>Arch Pathol Lab Med.</i> 2017;141:215-219. https://meridian.allenpress.com/aplm/article/141/2/215/132523/Professionalism-in-Pathology-A-Case-Based-Approach. 2021. ● Levinson W, Ginsburg S, Hafferty FW, Lucey CR. <i>Understanding Medical Professionalism.</i> 1st ed. New York, NY: McGraw-Hill Education; 2014. ISBN:978-0071807432.

Professionalism 2: Accountability/Conscientiousness	
Overall Intent: To take responsibility for one’s own actions and the impact on patients and other members of the health care team	
Milestones	Examples
Level 1 <i>Responds promptly to requests to complete tasks and takes ownership for completion of tasks and responsibilities</i>	<ul style="list-style-type: none"> ● Completes end-of-rotation evaluations or acknowledges when they are not completed ● Responds promptly to reminders from program administrator to complete work hour logs ● Completes administrative tasks such as annual HIPAA modules, and licensing requirements by specified due date
Level 2 <i>Takes responsibility to complete tasks with appropriate attention to detail in routine situations and recognizes situations that may impact timely completion</i>	<ul style="list-style-type: none"> ● Before going out of town, completes tasks in anticipation of lack of computer access while traveling ● Appropriate and timely documentation of a debulking surgery ● Acknowledges an emergent case may disrupt plans and adjusts tumor board preparation accordingly
Level 3 <i>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations</i>	<ul style="list-style-type: none"> ● Notifies attending of multiple competing demands for clinical coverage, appropriately triages tasks, and asks for assistance from other fellows or faculty members as needed ● In preparation for being out of the office, arranges coverage for assigned clinical tasks on patients and ensures appropriate continuity of care
Level 4 <i>Recognizes and takes steps to mitigate situations that may impact others’ ability to complete tasks and responsibilities in a timely manner</i>	<ul style="list-style-type: none"> ● Recognizes fatigue in a team member and coordinates coverage to ensure safe performance of patient care ● Recognizes upcoming team absences and ensures streamlined coverage
Level 5 <i>Mentors/coaches other team members to ensure prioritization and completion of tasks</i>	<ul style="list-style-type: none"> ● Sets up a meeting with the nurse manager to streamline patient discharges and leads team to find solutions to the problem ● Supervises and mentors more junior residents, assisting with prioritization of clinical tasks in order to achieve completion in safest, most efficient manner
Assessment Models or Tools	<ul style="list-style-type: none"> ● Compliance with deadlines and timelines ● Direct observation ● Global evaluations ● Multisource feedback ● Self-evaluations and reflective tools ● Simulation
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● Code of conduct from fellow/resident institutional manual ● Expectations of residency program regarding accountability and professionalism

Professionalism 3: Well-Being	
Overall Intent: To manage personal and professional well-being for self and others	
Milestones	Examples
Level 1 <i>Recognizes status of personal and professional well-being, with assistance</i>	<ul style="list-style-type: none"> • Completes regular self-assessment of well-being • With attending assistance, recognizes how a poor patient outcome effects their professional well-being
Level 2 <i>Independently recognizes status of personal and professional well-being</i>	<ul style="list-style-type: none"> • Consistently and independently identifies and communicates impact of a personal life stressor on own well-being • Recognizes signs of burnout or fatigue
Level 3 <i>With assistance, proposes a plan to optimize personal and professional well-being</i>	<ul style="list-style-type: none"> • With a mentor, develops a reflective response to deal with burnout or fatigue
Level 4 <i>Independently develops a plan to optimize personal and professional well being</i>	<ul style="list-style-type: none"> • Consistently and independently identifies ways to manage personal stress • Builds in time for personal activities such as exercise or social outings
Level 5 <i>Coaches others in optimizing personal and professional well-being</i>	<ul style="list-style-type: none"> • Assists in organizational efforts to address clinician well-being
Assessment Models or Tools	<ul style="list-style-type: none"> • Direct observation • Group interview or discussions for team activities • Individual interview • Institutional online training modules • Self-assessment and personal learning plan
Curriculum Mapping	<ul style="list-style-type: none"> •
Notes or Resources	<ul style="list-style-type: none"> • This subcompetency is not intended to evaluate a resident’s well-being. Rather, the intent is to ensure that each resident has the fundamental knowledge of factors that impact well-being, the mechanism by which those factors impact well-being, and available resources and tools to improve well-being. • Local resources, including Employee Assistance • ACGME. “Well-Being Tools and Resources.” https://dl.acgme.org/pages/well-being-tools-resources. 2021. • Hicks PJ, Schumacher D, Guralnick S, Carraccio C, Burke AE. Domain of competence: personal and professional development. <i>Acad Pediatr</i>. 2014 Mar-Apr;14(2 Suppl):S80-97. https://www.academicpedsjnl.net/article/S1876-2859(13)00332-X/fulltext. 2021.

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication and Shared Decision Making Overall Intent: To deliberately use language and behaviors to form constructive relationships with patients, to identify communication barriers including self-reflection on biases, and minimize them in the doctor-patient relationships; organize and lead communication around shared decision making	
Milestones	Examples
Level 1 <i>Demonstrates respect and establishes a basic therapeutic relationship with patient and family and answers basic questions about treatment planning</i>	<ul style="list-style-type: none"> ● Introduces self and faculty member, identifies patient and others in the room, and engages all parties in healthcare discussion; discusses resident role within the health care team ● Identifies need for trained interpreter with non-English-speaking patients ● Identifies the components of the informed consent, including the indication for the procedure, alternatives to management and risks/ benefits of management choices ● Avoids medical jargon and restates patient perspective when discussing chemotherapy
Level 2 <i>Identifies and reflects on biases related to communications with patients and families</i>	<ul style="list-style-type: none"> ● Inquires whether patient needs prescription instructions written in a different language ● Recognizes the differences in how patients absorb knowledge, such as the need for handouts with diagrams and pictures and electronic resources and videos to communicate information ● In a discussion with the faculty member, acknowledges discomfort in caring for a patient with morbid obesity and uterine cancer and does not want to make lifestyle changes
Level 3 <i>Establishes therapeutic relationships in challenging patient and family encounters and counsels patient through shared decision-making</i>	<ul style="list-style-type: none"> ● Acknowledges patient’s request for an ultrasound for low-risk adnexal mass surveillance and arranges timely follow-up visit to align diagnostic plan with goals of care ● Discusses all treatment options for a patient with cervical cancer at 18 weeks gestation and incorporates her preferences in developing a shared decision making care plan ● Provides alternative management methods when providing informed consent to someone with new uterine cancer and a goal to maintain future fertility
Level 4 <i>Facilitates difficult discussions while attempting to proactively minimize communication barriers</i>	<ul style="list-style-type: none"> ● For an obese patient with a new pelvic mass, discusses how her obesity impacts surgical planning ● Counsels patient with a history of uterine cancer and significant vasomotor symptoms regarding risks/benefits of hormone replacement therapy
Level 5 <i>Mentors others to establish therapeutic relationships in challenging encounters</i>	<ul style="list-style-type: none"> ● Leads a discussion group on personal experience of moral distress ● Develops a residency curriculum on social justice which addresses bias
Assessment Models or Tools	<ul style="list-style-type: none"> ● Direct observation ● Kalamazoo Essential Elements Communication Checklist (Adapted) ● Oral examination ● Self-assessment including self-reflection exercises ● Standardized patients
Curriculum Mapping	<ul style="list-style-type: none"> ●

Notes or Resources	<ul style="list-style-type: none">● Laidlaw A, Hart J. Communication skills: An essential component of medical curricula. Part I: Assessment of clinical communication: AMEE Guide No. 51. <i>Med Teach</i>. 2011;33(1):6-8. https://www.tandfonline.com/doi/abs/10.3109/0142159X.2011.531170?journalCode=imte20. 2021.● Makoul G. Essential elements of communication in medical encounters: the Kalamazoo consensus statement. <i>Acad Med</i>. 2001;76(4):390-393. https://journals.lww.com/academicmedicine/Fulltext/2001/04000/Essential_Elements_of_Communication_in_Medical.21.aspx. 2021.● Makoul G. The SEGUE Framework for teaching and assessing communication skills. <i>Patient Educ Couns</i>. 2001;45(1):23-34. https://www.sciencedirect.com/science/article/abs/pii/S0738399101001367?via%3Dihub. 2021.● Symons AB, Swanson A, McGuigan D, Orrange S, Akl EA. A tool for self-assessment of communication skills and professionalism in residents. <i>BMC Med Educ</i>. 2009;9:1. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2631014/. 2021.
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Interpersonal and Communication Skills 2: Critical Cancer Conversations	
Overall Intent: To sensitively and effectively conduct high-stakes conversations with patients with gynecologic cancer and their families/caregivers	
Milestones	Examples
Level 1 <i>Elicits pre-existing preferences related to code status, advance care planning, and medical power of attorney</i>	<ul style="list-style-type: none"> ● Asks about and documents code status on every inpatient admission
Level 2 <i>Assesses patient understanding of illness including prognostic awareness</i>	<ul style="list-style-type: none"> ● Effectively elicits existing understanding of disease status using open-ended, non-threatening questions such as, “Can you tell me what your doctors have told you about why you are in the hospital?” or “What is your understanding of where things are at in the big picture with your cancer?” ● Introduces conversation about prognosis by assessing patient’s prognostic awareness using questions such as, “What have you and your doctors talked about in terms of what we expect from this cancer in the long run?” or “What are you hoping for from your current cancer treatment?”
Level 3 <i>Elicits patient goals & values and delivers basic prognostic information</i>	<ul style="list-style-type: none"> ● Effectively communicates the concept of incurable disease and responds to resultant emotion using Naming, Understanding, Respecting, Supporting, Exploring (NURSE) statements or other structures approaches ● Proactively fosters patient understanding of whether the disease is curable ● Elicits from patients and families what is most important to them given the clinical circumstances, using open-ended questions such as “What do you enjoy when you’re not in the hospital and how can we help you do more of this?” or “When thinking about what we just talked about, what worries and concerns do you have?” or “If time were short, what would you want life to look like?” ● Incorporates Ask-Tell-Ask or other structured approaches to delivering prognostic information
Level 4 <i>Makes goal-concordant treatment and code status recommendations</i>	<ul style="list-style-type: none"> ● When multiple options exist for next steps in treatment, recommends an option to the patient based on that individual patient’s priorities and goals ● Discusses the limited effectiveness of cardiopulmonary resuscitation (CPR) in setting of advanced cancer with limited prognosis
Level 5 <i>Reaches consensus on goal-concordant treatment plan in high complexity circumstances</i>	<ul style="list-style-type: none"> ● Recommends cessation of anti-cancer therapy but continued transfusions for patient with advanced cancer and myelodysplastic syndrome for whom life prolongation is a high priority ● Achieves consensus among family members with initially conflicting opinions, for a time-limited trial of ventilatory support for a patient with progressing platinum resistant ovarian cancer who is admitted with pneumonia and failing non-invasive ventilation
Assessment Models or Tools	<ul style="list-style-type: none"> ● Case review

	<ul style="list-style-type: none"> • Direct observation • Simulation
Curriculum Mapping	•
Notes or Resources	<ul style="list-style-type: none"> • Back A, Arnold R, Baile W, Tulskey J, Fryer-Edwards K. Approaching difficult communication tasks in oncology. <i>CA Cancer J Clin.</i> 2005;55(3):164-77. https://acsjournals.onlinelibrary.wiley.com/doi/full/10.3322/canjclin.55.3.164?sid=nlm%3Apubmed. 2021. • Back A, Arnold R, Tulskey J. <i>Mastering Communication with Seriously Ill Patients: Balancing Honesty with Empathy and Hope.</i> 1st ed. New York: NY: Cambridge University Press; 2009. ISBN:978-0521706186. • Center to Advance Palliative Care (CAPC). Communication Skills. https://www.capc.org/training/communication-skills/. 2021. • Childers J, Back A, Tulskey J, Arnold M. REMAP: A framework for goals of care conversations. <i>J Oncol Pract.</i> 2017;13(10):e844-e850. https://ascopubs.org/doi/10.1200/JOP.2016.018796?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub++0pubmed&. 2021. • Palliative Care Network of Wisconsin (PCNOW). Core Curriculum. https://www.mypcnw.org/fast-facts/core-curriculum/. 2021. • VitalTalk. https://www.vitaltalk.org/. 2021. (Ask-Tell-Ask and NURSE statements)

Interpersonal and Communication Skills 3: Interprofessional and Team Communication Overall Intent: To effectively communicate with the health care team, including consultants, in straightforward and complex situations	
Milestones	Examples
Level 1 <i>Understands and respects the role and function of multidisciplinary team members</i>	<ul style="list-style-type: none"> ● Acknowledges the contribution of each member of the health care team to the patient ● Acknowledges the need for consult of palliative care team to assist with recommendations for pain control for a gynecologic oncology patient with advanced ovarian cancer
Level 2 <i>Solicits and integrates insights from and uses language that values all multidisciplinary team members</i>	<ul style="list-style-type: none"> ● Acknowledges in the medical record the contribution of the palliative care team for pain control in gynecologic oncology patient with advanced ovarian cancer ●
Level 3 <i>Actively manages and coordinates communication between multidisciplinary team members to ensure completion of tasks</i>	<ul style="list-style-type: none"> ● Utilizes recommendations of palliative care team for pain control for discharge planning ● Uses closed-loop communication with team members after interdisciplinary morning rounds to develop and enact a treatment plan
Level 4 <i>Mediates and addresses conflict and distress among the multidisciplinary team members</i>	<ul style="list-style-type: none"> ● Demonstrates active listening by asking team members about their concerns and questions during patient rounds ● Initiates debriefing session amongst team members after a poor surgical outcome
Level 5 <i>Fosters a culture of open communication and effective teamwork among multidisciplinary team members and prevents conflict and distress</i>	<ul style="list-style-type: none"> ● Mediates a conflict resolution between different members of the health care team, solicits other team member's opinions when making clinical decisions
Assessment Models or Tools	<ul style="list-style-type: none"> ● Direct observation ● Global assessment ● Medical record (chart) audit ● Multisource feedback ● Simulation
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● Braddock CH, Edwards KA, Hasenberg NM, Laidley TL, Levinson W. Informed decision making in outpatient practice: Time to get back to basics. <i>JAMA</i>. 1999;282:2313-2320. https://jamanetwork.com/journals/jama/fullarticle/192233. 2021. ● Dehon E, Simpson K, Fowler D, Jones A. Development of the faculty 360. <i>MedEdPORTAL</i>. 2015;11:10174. https://www.mededportal.org/doi/10.15766/mep_2374-8265.10174. 2021. ● Fay D, Mazzone M, Douglas L, Ambuel B. A validated, behavior-based evaluation instrument for family medicine residents. <i>MedEdPORTAL</i>. 2007;3:622. https://www.mededportal.org/doi/10.15766/mep_2374-8265.622. 2021.

- François, J. Tool to assess the quality of consultation and referral request letters in family medicine. *Can Fam Physician*. 2011;57(5):574–575.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3093595/>. 2021.
- Green M, Parrott T, Cook G. Improving your communication skills. *BMJ*. 2012;344:e357
<https://www.bmj.com/content/344/bmj.e357>. 2021.
- Henry SG, Holmboe ES, Frankel RM. Evidence-based competencies for improving communication skills in graduate medical education: A review with suggestions for implementation. *Med Teach*. 2013;35(5):395-403.
<https://www.tandfonline.com/doi/abs/10.3109/0142159X.2013.769677?journalCode=imte20>. 2021.
- Lane JL, Gottlieb RP. Structured clinical observations: A method to teach clinical skills with limited time and financial resources. *Pediatrics*. 2000;105:973-977.
<https://pubmed.ncbi.nlm.nih.gov/10742358/>. 2021.
- Roth CG, Eldin KW, Padmanabhan V, Freidman EM. Twelve tips for the introduction of emotional intelligence in medical education. *Med Teach*. 2018;21:1-4.
<https://www.tandfonline.com/doi/abs/10.1080/0142159X.2018.1481499?journalCode=imte20>. 2021.

Interpersonal and Communication Skills 4: Communication within Health Care Systems Overall Intent: To effectively communicate using a variety of methods	
Milestones	Examples
Level 1 <i>Accurately records and safeguards patient health information in the record</i>	<ul style="list-style-type: none"> ● Fills in all elements of a documentation template with the most up-to-date information available ● Shreds patient list after rounds; avoids talking about patients in the elevator
Level 2 <i>Documents diagnostic information and therapeutic reasoning through notes in the records in an efficient manner</i>	<ul style="list-style-type: none"> ● Organized and accurate documentation outlines clinical reasoning that supports the treatment plan ● Creates accurate, original notes that do not contain extraneous information such as verbatim transcriptions of radiology reports, and concisely summarizes the assessment and plan ● Develops documentation templates for the inpatient rotation ● Utilizes department smart-phrases and clinical smart sets for orders/documentation
Level 3 <i>Appropriately selects direct and indirect forms of communication based on context</i>	<ul style="list-style-type: none"> ● Writes notes documenting concise complex clinical thinking but may not contain anticipatory guidance ● Calls patient or sends electronic request to have nursing staff member contact patient immediately about potentially critical test results
Level 4 <i>Achieves written or verbal communication that is clear, concise, timely, organized, and includes anticipatory guidance</i>	<ul style="list-style-type: none"> ● Creates documentation that is consistently accurate, organized, and concise, and frequently incorporates anticipatory guidance ● Creates exemplary notes that are used as an example when teaching learners
Level 5 <i>Coaches others to improve others' written and verbal communication</i>	<ul style="list-style-type: none"> ● Leads a task force established by the hospital QI committee to develop a plan to improve house staff hand-off checklists ● Mentors/coaches colleagues how to improve clinical notes, including terminology, conciseness, and including all required elements ● Creates a policy around HIPAA compliant electronic communication (e.g., texting)
Assessment Models or Tools	<ul style="list-style-type: none"> ● Direct observation ● Medical record (chart) audit ● Multisource feedback
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● Bierman JA, Hufmeyer KK, Liss DT, Weaver AC, Heiman HL. Promoting responsible electronic documentation: Validity evidence for a checklist to assess progress notes in the electronic health record. <i>Teach Learn Med.</i> 2017;29(4):420-432. https://www.tandfonline.com/doi/full/10.1080/10401334.2017.1303385. 2021. ● Haig KM, Sutton S, Whittington J. SBAR: A shared mental model for improving communication between clinicians. <i>Jt Comm J Qual Patient Saf.</i> 2006;32(3):167-175. https://www.jointcommissionjournal.com/article/S1553-7250(06)32022-3/fulltext. 2021.

- Starmer AJ, Spector ND, Srivastava R, et al. I-pass, a mnemonic to standardize verbal handoffs. *Pediatrics*. 2012;129.2:201-204.
https://pediatrics.aappublications.org/content/129/2/201.long?sso=1&sso_redirect_count=1&nfstatus=401&nftoken=00000000-0000-0000-0000-000000000000&nfstatusdescription=ERROR%3a+No+local+token. 2021.

Gynecologic Oncology Supplemental Guide

To help programs transition to the new version of the Milestones, the ACGME has mapped the original Milestones 1.0 to the new Milestones 2.0. Indicated below are where the subcompetencies are similar between versions. These are not exact matches but are areas that include similar elements. Not all subcompetencies map between versions. Inclusion or exclusion of any subcompetency does not change the educational value or impact on curriculum or assessment.

Milestones 1.0	Milestones 2.0
PC1: Surgical Care of Gynecologic Cancer – Open Techniques	PC1: Surgical Care of Gynecologic Cancer – Open Techniques
PC2: Surgical Care of Gynecologic Cancer – Minimally Invasive Surgical Techniques	PC2: Surgical Care of Gynecologic Cancer – Minimally Invasive Surgical Techniques
PC3: Medical Management of Gynecologic Cancer – Chemotherapy and Targeted Therapeutics	PC3: Management Chemotherapy and Targeted Therapeutics
PC4: Peri-Operative Care	PC4: Peri-Operative Care (Pre-, Intra-, and Post-)
PC5: Hospice and Palliative Care	PC5: Palliative Symptom Management MK8: End-of-Life Care
MK1: Anatomy	MK1: Anatomy
MK2: Pathology	No match
MK3: Management of Medical Diseases in Gynecologic Cancer – Organ System Disorders	MK2: Medical Diseases in Gynecologic Cancer – Organ System Disorders
MK4: Genetics, Cancer Biology, and Immunology	MK3: Genetics, Cancer Biology, and Immunology
MK5: Radiation Therapy – Radiation Biology and Physics	MK4: Radiation Therapy – Radiation Biology and Physics
MK6: Chemotherapy and Targeted Therapeutics	MK5: Chemotherapy and Targeted Therapeutics
MK7: Diagnostic Techniques and Treatment Planning	MK6: Diagnostic Techniques and Treatment Planning
No match	MK7: Clinical Studies
SBP1: Computer Systems	ICS4: Communication within Health Care Systems
SBP2: Value-based Patient Care (Quality/Cost)	SBP4: Physician Role in the Health Care Systems
No match	SBP3: Community and Population Health
PBL11: Scholarly Activity	PBL11: Evidence-Based and Informed Practice PBL13: Scholarly Activity
PBL12: Quality Improvement (QI)	SBP1: Patient Safety and Quality Improvement
No match	PBL12: Reflective Practice and Commitment to Personal Growth
PROF1: Professional Ethics and Accountability	PROF1: Professional Behavior and Ethical Principles PROF2: Accountability/Conscientiousness
PROF2: Compassion, Integrity, and Respect for Others	PROF1: Professional Behavior and Ethical Principles
No match	PROF3: Self-Awareness and Help-Seeking
ICS1: Teamwork and Communication with Physicians and Other Health Professionals	SBP2: System Navigation for Patient-Centered Care ICS3: Interprofessional and Team Communication
ICS2: Communication with Patients and Families	ICS1: Patient- and Family-Centered Communication and Shared Decision-Making ICS2: Critical Cancer Conversations

Available Milestones Resources

Milestones 2.0: Assessment, Implementation, and Clinical Competency Committees Supplement, 2021 - <https://meridian.allenpress.com/jgme/issue/13/2s>

Milestones Guidebooks: <https://www.acgme.org/milestones/resources/>

- *Assessment Guidebook*
- *Clinical Competency Committee Guidebook*
- *Clinical Competency Committee Guidebook Executive Summaries*
- *Implementation Guidebook*
- *Milestones Guidebook*

Milestones Guidebook for Residents and Fellows: <https://www.acgme.org/residents-and-fellows/the-acgme-for-residents-and-fellows/>

- *Milestones Guidebook for Residents and Fellows*
- *Milestones Guidebook for Residents and Fellows Presentation*
- *Milestones 2.0 Guide Sheet for Residents and Fellows*

Milestones Research and Reports: <https://www.acgme.org/milestones/research/>

- *Milestones National Report*, updated each fall
- *Milestones Predictive Probability Report*, updated each fall
- *Milestones Bibliography*, updated twice each year

Developing Faculty Competencies in Assessment courses - <https://www.acgme.org/meetings-and-educational-activities/courses-and-workshops/developing-faculty-competencies-in-assessment/>

Assessment Tool: Direct Observation of Clinical Care (DOCC) - <https://dl.acgme.org/pages/assessment>

Assessment Tool: Teamwork Effectiveness Assessment Module (TEAM) - <https://team.acgme.org/>

Improving Assessment Using Direct Observation Toolkit - <https://dl.acgme.org/pages/acgme-faculty-development-toolkit-improving-assessment-using-direct-observation>

Remediation Toolkit - <https://dl.acgme.org/courses/acgme-remediation-toolkit>

Learn at ACGME has several courses on Assessment and Milestones - <https://dl.acgme.org/>