

Supplemental Guide:

Obstetrics and Gynecology

August 2021

**TABLE OF CONTENTS**

**introduction 4**

**Patient care 5**

Antepartum Care and Complications of Pregnancy 5

First-Trimester Bleeding 7

Care of Patients in the Intrapartum Period 8

Care of Patients in the Postpartum and Interconception Period 10

Obstetrical Technical Skills 11

Critically Ill Obstetric Patients and Obstetric Emergencies 13

Peri-Procedural Care 15

Endoscopic Procedures (Hysteroscopy and Cystoscopy) 17

Laparoscopic Procedures 18

Vulvar-Vaginal Procedures 19

Open Procedures (excludes Cesarean section) 20

Family Planning 21

Ambulatory Gynecology and Office-Based Procedures 23

Consultations 25

**Medical Knowledge 26**

Anatomy and Pathophysiology of Female Reproduction 26

Differential Diagnosis 28

**Systems-based practice 29**

Patient Safety 29

Quality Improvement (QI) 31

System Navigation for Patient-Centered Care - Coordination of Care 32

System Navigation for Patient-Centered Care - Transitions of Care 33

Community and Population Health 34

Physician Role in Health Care Systems 35

**practice-based learning and improvement 37**

Evidence-Based and Informed Practice 37

Reflective Practice and Commitment to Personal Growth 39

**professionalism 41**

Professional Behavior 41

Ethical Principles 43

Accountability/Conscientiousness 45

Well-Being 47

**interpersonal and communication skills 48**

Patient- and Family-Centered Communication 48

Patient Counseling and Shared Decision Making 50

Interprofessional and Team Communication 51

Communication within Health Care Systems 53

**Mapping Milestones 1.0 to 2.0 55**

**resources 57**

**Milestones Supplemental Guide**

This document provides additional guidance and examples for the Obstetrics and Gynecology 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.

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](https://www.acgme.org/What-We-Do/Accreditation/Milestones/Resources/) page of the Milestones section of the ACGME website.

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| **Patient Care 1: Antepartum Care and Complications of Pregnancy****Overall Intent:** To progress from basic knowledge to the recognition and management of the complex obstetrical patient |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates basic knowledge of normal obstetrical care and common medical complications seen in pregnancy* | * Describes low-risk prenatal care, basic antenatal testing, and normal labor
 |
| **Level 2** *Provides complete antepartum care for women with uncomplicated pregnancies**Recognizes basic risk factors, symptoms, and signs of common medical and obstetrical complications* | * Coordinates proper timing of antenatal and prenatal testing
* Identifies pre-term labor, preeclampsia, and gestational diabetes
 |
| **Level 3** *Provides complete antepartum care for women with complicated pregnancies**Manages common medical and obstetrical complications* | * Manages first-line treatment for common pregnancy related comorbidities
* Recognizes risk factors for high-risk pregnancy
* Orders appropriate testing to confirm diagnosis of common pregnancy related comorbidities such as pre-term labor, preeclampsia, gestational, or pregestational diabetes
 |
| **Level 4** *Effectively supervises and educates lower-level residents in antepartum care**Recognizes atypical presentations of medical and obstetrical complications; identifies indications for referral and/or transfer of care for patients with medical and obstetrical complications* | * Provides supervision in obstetrical triage or the ambulatory site or the antenatal testing unit
* Diagnoses gestational diabetes in a patient with gastric bypass
 |
| **Level 5** *Manages patients with complex and atypical medical and obstetrical complications and implements treatment plans based on emerging evidence* | * Coordinated multidisciplinary care plans for complex patients
* Creates treatment plan and manages abnormal placentation
 |
| Assessment Models or Tools | * Chart review
* Clinical evaluations/direct observation
* Mock oral exams
* Multisource feedback
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Cunningham FG, Leveno K, Bloom S, et al. *Williams Obstetrics*. 25th ed. United States: McGraw Hill Education; 2018. ISBN: 978-1259644320.
* Landon MB, Galan HL, Jauniaux ERM, et al. *Gabbes’ Obstetrics: Normal and Problem Pregnancies*. 8th ed. Philadelphia, PA: Elsevier; 2020. ISBN:978-0323608701.
* Resnik R, Lockwood CJ, Moore T, et al. *Creasy and Resnick’s Maternal-Fetal Medicine: Principles and Practice*. 8th ed. Philadelphia, PA: Elsevier; 2018. ISBN: 978-0323479103.
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| **Patient Care 2: First Trimester Bleeding** **Overall Intent:** To provide comprehensive care for women with first trimester bleeding |
| **Milestones** | **Examples** |
| **Level 1** *Formulates a differential diagnosis for patients with first-trimester bleeding* | * Uses knowledge of normal early pregnancy development, including implantation, early embryology, placental development, and non-obstetric etiologies to create a differential diagnosis
 |
| **Level 2** *Counsels patients regarding natural history, and diagnostic and treatment options* | * Distinguishes normal pregnancy, pregnancy of unknown location, ectopic pregnancy, or abnormal intrauterine pregnancy based on criteria
* Counsels patients regarding ultrasound and laboratory findings
* Counsels patients regarding risks and benefits of expectant management, medical management, and surgical options
 |
| **Level 3** *Uses non-surgical and surgical methods to manage patients with first-trimester bleeding* | * Manages ectopic pregnancy with medical or surgical therapy
* Manages failed intrauterine pregnancy with medical or surgical therapy
* Manages ongoing desired and viable pregnancy with first trimester bleeding
 |
| **Level 4** *Manages patients with complications of first-trimester bleeding* | * Manages hemorrhage and infection
* Manages patients with incomplete or no response to first dose of medical therapy
* Manages uterine perforation during surgical evacuation
 |
| **Level 5** *Implements treatment plans for complex or atypical first-trimester bleeding* | * Implements a treatment plan for a patient with a Caesarian section (C-section) scar, ectopic, or heterotopic pregnancy
 |
| Assessment Models or Tools | * Checklists
* Clinical evaluations
* Direct observation
* Multisource feedback
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ACOG. Council of Resident Education in Obstetrics and Gynecology (CREOG) Educational Objectives. <https://www.acog.org/education-and-events/creog/curriculum-resources/creog-educational-objectives>. 2021.
* Doubilet PM, Benson CB, Bourne T, et al. Diagnostic criteria for nonviable pregnancy early in the first trimester. *N Engl J Med*. 2013;369:1443-1451. <https://www.nejm.org/doi/full/10.1056/nejmra1302417>. 2021.
* Practice bulletin
 |

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| **Patient Care 3: Care of Patients in the Intra-partum Period****Overall Intent:** To progress from basic knowledge to the recognition and management of the complex laboring patient |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates basic knowledge of routine/uncomplicated intrapartum obstetrical care, including conduct of normal labor**Performs basic obstetric skills (e.g., identification of fetal lie, interpretation of fetal heart rate monitoring, and tocodynamometry)* | * Performs initial history and physical exam on a low-risk patient in labor
* Performs basic bedside ultrasound for fetal lie and placental position
* Reads the fetal heart rate monitoring strip correctly and reports those results to other medical personnel
 |
| **Level 2** *Manages normal labor**Recognizes common intrapartum complications* | * Updates the attending physician of patient's labor progress and coordinates attending arrival for delivery
* Recognizes labor dystocia and reports to attending physician
* Recognizes the signs of and lists and describes the maneuvers used to relieve a shoulder dystocia
* Recognizes, defines, and lists the signs and symptoms chorioamnionitis
 |
| **Level 3** *Effectively supervises and educates lower-level residents in intrapartum care for women with uncomplicated pregnancies**Manages common labor and intrapartum complications* | * Recognizes the signs and symptoms of placental abruption and facilitates and coordinates patient management
* Recognizes the fetal heart rate monitoring signs of cord prolapse, recognizes cord prolapse on patient's physical exam, and facilitates and coordinates patient management
* Manages chorioamnionitis
* Manages shoulder dystocia
 |
| **Level 4** *Provides care for women with complex intrapartum complications and conditions**Identifies indications for referral and/or transfer of care for patients with intrapartum complications* | * Recognizes, defines, and lists obstetrical reasons for transfer to a tertiary care center
* Coordinates and manages transfer of a patient in preterm labor to a tertiary care center
* Manages and treats laboring patients with chorioamnionitis
 |
| **Level 5** *Applies innovative approaches to complex and atypical intrapartum conditions and implements treatment plans based on emerging evidence* | * Provides consultation recommendations to a generalist obstetrician to care and manage a patient in labor with previable rupture of membranes
* Provides national lectures about cervical incompetence to generalist obstetricians
 |
| Assessment Models or Tools | * Chart review
* Direct observation/clinical evaluation
* Mock oral examination
* Multisource feedback
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Cunningham FG, Leveno K, Bloom S, et al. *Williams Obstetrics*. 25th ed. United States: McGraw Hill Education; 2018. ISBN: 978-1259644320.
* Freeman RK, Garite TJ, Nageotte MP, Miller LA. *Fetal Heart Rate Monitoring*. 4th ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2012. ISBN: ‎978-1451116632.
* Landon MB, Galan HL, Jauniaux ERM, et al. *Gabbes’ Obstetrics: Normal and Problem Pregnancies*. 8th ed. Philadelphia, PA: Elsevier; 2020. ISBN:978-0323608701.
* Resnik R, Lockwood CJ, Moore T, et al. *Creasy and Resnick’s Maternal-Fetal Medicine: Principles and Practice*. 8th ed. Philadelphia, PA: Elsevier; 2018. ISBN: 978-0323479103.
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| **Patient Care 4: Care of Patients in the Postpartum and Interconception Period****Overall Intent:** To empower residents in the spectrum of care from low-risk postpartum patients to the many complications that can arise postpartum and before a subsequent pregnancy |
| **Milestones** | **Examples** |
| **Level 1** Provides postpartum and interconception care for women with uncomplicated pregnancies | * Rounds on patient who is status post uncomplicated vaginal deliveries, and discusses contraception and benefits of breastfeeding
* Sees a patient for a four-week depression screen
 |
| **Level 2** Recognizes basic risk factors, symptoms, and signs of common postpartum and interconception complications | * Lists postpartum hemorrhage, infection, venous thromboembolism, depression, hypertension, and mastitis as risk factors
 |
| **Level 3** Manages common postpartum complications and counsels patients about associated risk in future pregnancies | * Manages preeclampsia and depression and includes discussion of antepartum, intrapartum, and postpartum complications
* Counsels patients who have had pre-term delivery, shoulder dystocia, or classical C-section about risk of recurrence
 |
| **Level 4** Manages patients with complex postpartum complications and identifies indications for referral and/or transfer of care in the postpartum or interconception period | * Manages septic shock resulting from postpartum infection
* Manages postpartum hemorrhage refractory to medical management
* Manages preeclampsia refractory to intravenous (IV) antihypertensives
* Manages postpartum cardiomyopathy, septic pelvic thrombophlebitis, and pulmonary embolism
 |
| **Level 5** Applies innovative approaches to complex and atypical postpartum and interconception conditions and implements treatment plans based on emerging evidence | * Develops care with community health workers to improve care of patient with refractory hypertension
 |
| Assessment Models or Tools | * Community health project
* Direct observation
* Mock oral exam
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Management includes identifying the need for and offering collaboration
* Cunningham FG, Leveno K, Bloom S, et al. The puerperium. In: Cunningham FG, Leveno K, Bloom S, et al. *Williams Obstetrics*. 25th ed. United States: McGraw Hill Education; 2018. ISBN: 978-1259644320.
* Isley MM. Postpartum care and long-term health considerations. In: Landon MB, Galan HL, Jauniaux ERM, et al. *Gabbes’ Obstetrics: Normal and Problem Pregnancies*. 8th ed. Philadelphia, PA: Elsevier; 2020. ISBN:978-0323608701.
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| **Patient Care 5: Obstetric Technical Skills****Overall Intent:** To develop the procedural and surgical skills needed to provide comprehensive antenatal, intrapartum, and postpartum obstetric care to patients |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates basic surgical principles, including use of universal precautions and aseptic technique* | * Appropriately uses and disposes of sharps
* Performs skin or surgical prep
* Positions and drapes patient
* Performs basic suturing and knot tying
 |
| **Level 2** *Demonstrates basic obstetrical skills*  | * Assesses fundal height and fetal heart tones
* Assesses cervical dilation
* Places intrauterine pressure catheter or fetal scalp electrode
* Performs an amniotomy
* Performs ultrasound for fetal number, lie, presentation, viabilty, and placental location
* Performs spontaneous vaginal delivery
* Performs repair of second-degree laceration
* Interprets fetal heart rate and tocometry monitoring
 |
| **Level 3** *Performs advanced obstetrical procedures*  | * Induces labor (including second trimester)
* Manually extracts placenta
* Performs ultrasound to obtain fetal biometry, biophysical profile
* Repair of second degree perineal or vaginal lacerations,
* Performs C- section
* Performs vacuum-assisted vaginal delivery
 |
| **Level 4** *Performs complex obstetrical procedures*  | * Performs external cephalic version
* Performs forceps-assisted vaginal delivery
* Performs complex C-section
* Performs repair of fourth-degree perineal lacerations
* Performs cervical cerclage
* Performs surgical management of intra-partum/postpartum hemorrhage including B-Lynch suture placement, uterine artery ligation, placement of uterine balloon, and peripartum hysterectomy
 |
| **Level 5** *Applies innovative and complex approaches obstetrical care and implements treatment plans based on emerging evidence* | * Manages refractory hemorrhage
* Coordinates/directs care planning for complex obstetric patients such as placenta accreta spectrum, cardiac conditions, or trauma
 |
| Assessment Models or Tools | * Chart review
* Clinical evaluations/direct observation
* Procedure assessment/evaluation
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * The American College of Obstetrics and Gynecology (ACOG). Surgical Curriculum. <https://www.acog.org/education-and-events/creog/curriculum-resources/surgical-curriculum>. 2021.
* Association of Professors of Gynecology and Obstetrics (APGO). Basic Clinical Skills Curriculum. <https://tools.apgo.org/educational-resources/basic-clinical-skills/>. 2021. Includes: (sterile technique, universal precautions, knots and sutures, cervical assessment, vaginal delivery, patient positioning, surgical instruments)
* APGO Basic Clinical Skills Curriculum. Surgical Instruments. <https://tools.apgo.org/wp-content/uploads/2017/06/BCSSurgicalInstruments.pdf>. 2021.
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| **Patient Care 6: Critically Ill Obstetric Patients and Obstetric Emergencies****Overall Intent:** To manage and coordinate care for critically ill obstetric patients and obstetric emergencies |
| **Milestones** | **Examples** |
| **Level 1** *Recognizes risk factors that can lead to a critically ill obstetric patient**Recognizes risk factors for obstetric emergencies* | * Recognizes risk factors for hemorrhage including prior hemorrhage, abruption, and placenta previa
* Recognizes pyelonephritis, intramniotic infection, and prolonged rupture of membranes as potential risk factors for sepsis
* Recognizes preeclampsia and chronic hypertension as risk factors for hypertensive emergency and seizure
* Recognizes malpresentation, preterm gestation, and pre-term premature rupture of membranes as risk factors for umbilical cord prolapse
* Recognizes trauma, abruption, infection, underlying cardiac disease, underlying pulmonary disease, and underlying renal disease put patients at risk for critical illness
* Recognizes gestational diabetes, macrosomia, obesity, and prior dystocia as risk factors for shoulder dystocia
 |
| **Level 2** *Formulates an initial differential diagnosis, recognizes initial signs/symptoms of a critically ill patient (vital signs, lab abnormalities, etc.) and asks for assistance in a timely fashion**Recognizes obstetric emergencies and asks for assistance in a timely fashion* | * Develops differential diagnosis for third-trimester bleeding
* Develops differential diagnosis for peripartum hypotension
* Identifies tachycardia, fever, hypotension, or leukocytosis as possible signs of sepsis
* Notifies senior resident or attending physician of new onset tachycardia
* Recognizes pending shoulder dystocia and alerts team
* Recognizes hemorrhage following vaginal delivery and alerts nursing, anesthesia, and obstetric teams
 |
| **Level 3** *Manages and initiates treatment for critically ill obstetric patient, including recognizing when transfer to the intensive care unit (ICU) or another service is most appropriate**Manages and treats obstetric emergencies* | * Transfers a patient to intensive care unit (ICU) with pulmonary edema, decrease in oxygen saturations, and increased work of breathing
* Activates a massive transfusion protocol for a patient with ongoing intra-operative obstetric hemorrhage requiring Cesarean hysterectomy
* Initiates fluid bolus in patient with sepsis or diabetic ketoacidosis
* Activates a “rapid response” for a patient with hypotension unresponsive to fluid bolus
* Initiates uterotonic medications for uterine atony with hemorrhage
* Performs shoulder dystocia maneuvers
 |
| **Level 4** *Collaborates with other health care teams to facilitate care for critically ill obstetric patients**Leads the multidisciplinary health care team in caring for patients with obstetric emergencies* | * Collaborates with ICU team about post-operative fluid management of a patient with obstetric hemorrhage requiring Cesarean hysterectomy
* Contributes to a multidisciplinary team for best obstetric management of a patient involved in a motor vehicle accident at 28 weeks gestation
* Leads multidisciplinary team in management of an eclamptic seizure
 |
| **Level 5** *Debriefs with the members of the health care team, the patient, and the family members of a critically ill obstetric patients**Debriefs with the members of the health care team, the patient, and the patient’s family members after an obstetric emergency* | * Communicates with patient’s family about progress in critically ill patient
* Organizes team huddle with involved healthcare team following a shoulder dystocia event
* Discusses a hemorrhage event with patient and/or family
 |
| Assessment Models or Tools | * Checklists
* Clinical evaluations
* Direct observation
* Evaluations from consulting services (ICU, trauma service)
* Multisource feedback
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Alliance for Innovation in Maternal Health (AIM). Core AIM Patient Safety Bundles. <https://safehealthcareforeverywoman.org/aim/patient-safety-bundles/#core>. 2021.
* ACOG Committee. Critical care in pregnancy: Practice bulletin, number 211. *Obstet Gynecol*. 2019;133(5):e303-e319. <https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2019/05/critical-care-in-pregnancy>. 2021.
* ACOG Committee. Preparing for clinical emergencies in obstetrics and gynecology: ACOG Committee opinion, number 590. *Obstet Gynecol*. 2014;123(3):722-725. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2014/03/preparing-for-clinical-emergencies-in-obstetrics-and-gynecology>. 2021.
* ACOG. Emergencies in Clinical Obstetrics (ECO). <https://www.acog.org/education-and-events/simulations/eco>. 2021.
* ACOG. Intraoperative Management of Postpartum Hemorrhage. <https://www.acog.org/education-and-events/simulations/scog020>. 2021.
* Society for Maternal Fetal Medicine (SMFM). Online Obstetric Critical Care Course. <https://www.smfm.org/education/criticalcare>. 2021.
 |
| **Patient Care 7: Peri-Procedural Care****Overall Intent:** To develop the skills for pre-operative surgical planning, to identify and manage common and more complex peri-operative/intra-operative complications, and to direct and participate in multidisciplinary surgical planning for complex cases |
| **Milestones** | **Examples** |
| **Level 1** *Identifies alterations in normal physiology and anatomy* | * Identifies patient with post-operative hemorrhage
* Describes location of bladder and ureter during gynecologic surgery
* Identifies location of superficial abdominal wall vasculature in an obese patient during laparoscopy
* Positions obese patient for laparoscopy
 |
| **Level 2** *Accurately and reliably gathers and reports clinical information pertaining to common peri-procedural risks and complications* | * Identifies risk factors for uterine perforation at time of dilation and curettage
* Gathers cardiac risk assessment for a patient with heart disease
* Evaluates post-operative patient with fever, determines likely etiology, and recommends management plan
* Evaluates patient with post-operative bleeding
* Identifies need for deep vein thrombosis (DVT) prophylaxis in patients with progressive risk factors
* Determines accurate antibiotic prophylaxis
 |
| **Level 3** *Independently identifies and manages common peri-procedural risks and complications* | * Identifies cystotomy at time of surgery and performs cystotomy repair
* Reschedules elective surgery due to an elevated A1C levels
* Identifies and manages intraoperative bleeding, bladder injury or uterine perforation
 |
| **Level 4** *Independently identifies and manages complex peri-procedural risks and complications* | * Recognizes uterine perforation at time of hysteroscopy and directs operative team to confirm complication and direct next operative steps
* Recognizes ureteral compromise during prolapse surgery; attempts to determine etiology and recognizes need for intra-operative consult
* Identifies laparoscopic trocar injury of abdominal wall; temporizes bleeding and then ligate vessel to stop bleeding
* Appropriately doses peri-operative anti-coagulation
* Identifies and manages complications such as nerve injuries, bowel injury, or intra-operative hemorrhage
 |
| **Level 5** *Implements measures to prevent or mitigate complications, applying effective interdisciplinary team management skills to manage multiple scenarios simultaneously* | * Coordinates interdisciplinary team for management of placenta percreta including radiology and maternal-fetal medicine for diagnosis, interventional radiology for pre-operative uterine artery balloons, and gynecologic oncology for surgical assistance
* Coordinates with colorectal surgery for a patient with stage four endometriosis
 |
| Assessment Models or Tools | * Chart review
* Direct observation/clinical evaluation
* Mock oral examination
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Handa VL, Van Le L. *Te Linde’s Operative Gynecology*. 12th ed. Philadelphia, PA: Wolters Kluwer; 2020. ISBN:978-1496386441.
* Institute for Clinical Systems Improvement (ICSI). Health Care Guideline: Perioperative. <https://www.icsi.org/wp-content/uploads/2020/01/Periop_6th-Ed_2020_v2.pdf>. 2021.
* Nichols DH, Delancey JOL. *Clinical Problem, Injuries and Complications of Gynecologic and Obstetric Surgery*. Williams & Wilkins; 1995. ISBN:978-0683064971.
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| **Patient Care 8: Endoscopic Procedures (Hysteroscopy and Cystoscopy)****Overall Intent:** To perform endoscopic procedures of the uterus and bladder |
| **Milestones** | **Examples** |
| **Level 1** *Prepares patient and equipment for endoscopic procedures (e.g., lithotomy positioning, assemble endoscope)* | * Positions and drapes the patient prior to surgery start
* Identifies the components of the instrument and properly assemble
* Verbalizes differences between degrees of scope (0, 30, 70, etc.)
 |
| **Level 2** *Performs diagnostic hysteroscopy and cystoscopy*  | * Visualizes anatomic landmarks including tubal ostia, trigone, and ureteral orifices
* Performs survey of visual field
* Troubleshoots blurry camera images
* Obtains appropriate bladder distension
* Maintains awareness of fluid deficit for hysteroscopy (depending on distension media)
 |
| **Level 3** *Independently performs simple operative hysteroscopic procedures* | * Performs hysteroscopic polypectomy
* Performs hysteroscopic removal of small submucosal fibroids
 |
| **Level 4** *Independently performs complex operative hysteroscopic procedures* | * Performs hysteroscopic removal of uterine septum
* Manages Asherman’s syndrome hysteroscopically
* Removes large or multiple fibroids hysteroscopically
 |
| **Level 5** *Independently performs complex hysteroscopic procedures in altered anatomy* | * Performs difficult surgical entry
* Operates if there is difficult visualization due to anatomic distortions or anomalies
 |
| Assessment Models or Tools | * Direct observation during surgery
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ACOG. Surgical Curriculum. <https://www.acog.org/education-and-events/creog/curriculum-resources/surgical-curriculum>. 2021.
* ACOG Committee. The use of hysteroscopy for the diagnosis and treatment of intrauterine pathology. *Obstetrics & Gynecology*. 2018;135(3):754-756. <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2020/03/the-use-of-hysteroscopy-for-the-diagnosis-and-treatment-of-intrauterine-pathology.pdf>. 2021.
 |

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| **Patient Care 9: Laparoscopic Procedures****Overall Intent:** To progress from the fundamental patient safety through complex surgical techniques |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates basic skills (e.g., positioning, draping, docking, undocking)* | * Demonstrates proper surgical preparation and positioning, draping, docking, and undocking robot
 |
| **Level 2** *Assists during* *laparoscopic procedures (e.g., port placement, bedside assistant)* | * Demonstrates knowledge of electrosurgical devices
* Places ports
* Navigates instrument to the surgical field
* Troubleshoots equipment
 |
| **Level 3** *Independently performs simple laparoscopic procedures* | * Performs ovarian cystectomy
* Performs hemodynamically stable ectopic salpingectomy
* Performs simple total laparoscopic hysterectomy
 |
| **Level 4** *Independently performs advanced laparoscopic procedures* | * Performs laparoscopic suturing
* Performs complex total laparoscopic hysterectomy
 |
| **Level 5** *Independently performs uncommon complex laparoscopic procedure*  | * Performs hysterectomy for stage four endometriosis
* Performs ureterolysis
 |
| Assessment Models or Tools | * Direct observation
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ACOG. Surgical Curriculum. <https://www.acog.org/education-and-events/creog/curriculum-resources/surgical-curriculum>. 2021.
* Baggish MS, Karram MM. *Atlas of Pelvic Anatomy and Gynecologic Surgery*. 5th ed. Philadelphia, PA: Elsevier; 2020. ISBN:978-0323654005.
* Handa VL, Van Le L. *Te Linde’s Operative Gynecology*. 12th ed. Philadelphia, PA: Wolters Kluwer; 2020. ISBN:978-1496386441.
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| **Patient Care 10: Vulvar-Vaginal Procedures****Overall Intent:** To progress from fundamental patient safety to complex surgical techniques |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates basic skills (e.g., positioning, knot tying, suturing)* | * Proficiently performs knot tying and suturing in skills lab and models that behavior in the operating room
 |
| **Level 2** *Performs simple vulvar-vaginal procedures* | * Performs marsupialization of a Bartholin’s gland cyst
* Performs bedside incision and drainage of a vulvar abscess
 |
| **Level 3** *Performs pelvic entry for vaginal procedures and simple procedures for incontinence and prolapse* | * Performs incision and dissection necessary to complete anterior or posterior colporrhaphy
* Performs incision and dissection necessary to complete a mid-urethral sling procedure
 |
| **Level 4** *Independently performs vaginal hysterectomy and complex vulvar-vaginal procedures* | * Performs simple partial vulvectomy and repair for vulvar intraepithelial neoplasia
* Performs an anterior or posterior colporrhaphy
* Performs a mid-urethral sling procedure
* Performs a uterosacral ligament suspension for apical prolapse
 |
| **Level 5** *Independently performs uncommon complex vulvar-vaginal procedures* | * Performs sacrocolpopexy or sacrospinous ligament fixation for apical prolapse
* Performs incision and repair of a transverse vaginal septum
* Performs complete vulvectomy with inguinal lymph node dissection for vulvar cancer
 |
| Assessment Models or Tools | * Chart review
* Clinical evaluations
* Direct observation
* Mock oral examination
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ACOG. Surgical Curriculum. <https://www.acog.org/education-and-events/creog/curriculum-resources/surgical-curriculum>. 2021.
* APGO. Basic Clinical Skills Curriculum. <https://tools.apgo.org/educational-resources/basic-clinical-skills/>. 2021. Includes: (sterile technique, universal precautions, knots and sutures, cervical assessment, vaginal delivery, patient positioning, surgical instruments)
* APGO Basic Clinical Skills Curriculum. Surgical Instruments. <https://tools.apgo.org/wp-content/uploads/2017/06/BCSSurgicalInstruments.pdf>. 2021.
* Handa VL, Van Le L. *Te Linde’s Operative Gynecology*. 12th ed. Philadelphia, PA: Wolters Kluwer; 2020. ISBN:978-1496386441.
* Walters MD, Karram MM. *Urogynecology and Reconstructive Pelvic Surgery*. 4th ed. Philadelphia, PA: Elsevier Sanders; 2014. ISBN:978-0323113779.
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| **Patient Care 11: Open Procedures (excludes Cesarean section)****Overall Intent:** To perform open procedures of increasing complexity |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates basic skills (e.g., positioning, knot tying, suturing)* | * Performs knot tying and suturing in skills lab or in operating room
 |
| **Level 2** *Opens and closes abdominal incisions* | * Opens and closes abdomen for laparotomy on patient with relatively normal anatomy
 |
| **Level 3** *Independently performs simple open surgical procedures* | * Performs open ectopic pregnancy, open adnexa removal, or simple abdominal hysterectomy
 |
| **Level 4** *Independently performs complex open surgical procedures* | * Performs laparotomy or abdominal hysterectomy in setting of morbid obesity, significant pelvic adhesions, or aberrant anatomy
 |
| **Level 5** *Independently performs uncommon complex open surgical procedures* | * Performs tumor debulking, open surgery for endometriosis or hysterectomy for tubo-ovarian abscess when anatomic planes are difficult to visualize
 |
| Assessment Models or Tools | * Direct observation in operating room with checklist/objective structured assessment of technical skills (OSATS)
* Simulation with checklist/OSATS
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Baggish MS, Karram MM. *Atlas of Pelvic Anatomy and Gynecologic Surgery*. 5th ed. Philadelphia, PA: Elsevier; 2020. ISBN:978-0323654005.
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| **Patient Care 12: Family Planning****Overall Intent:** To guide patients through increasingly complicated contraception options, while acquiring the knowledge and skills to provide pregnancy termination for patients |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates ability to find reputable, evidence-based information on contraception choices* | * Knows how to access US Preventive Services Task Force contraception guide
* Provides appropriate patient-level information (e.g., information from the Bedsider Birth Control Network)
 |
| **Level 2** *Counsels patients on the effectiveness, risks, benefits, and contraindications of available forms of family planning**Performs medical uterine evacuation* | * Provides risks and benefits of all contraception options including permanent, emergency contraception, and pregnancy termination
* Accurately prescribes medication for early pregnancy loss or management
 |
| **Level 3** *Implements comprehensive contraception management plans for patients and manages common side effects**Performs routine surgical uterine evacuation and manages complications*  | * Prescribes contraception including discussing benefits and possible risks and recognizes what contraception options are available for people with side effects
* Inserts intrauterine devices (IUDs) and Nexplanons®, and performs post-partum and interval tubal ligations
* Performs surgical uterine evacuation for patients with early pregnancy loss
* Manages uterine perforation and retained products
 |
| **Level 4** *Implements comprehensive management plans for patients with medical conditions complicating their use of contraceptive methods**Performs surgical uterine evacuation on patients with complex comorbidities and manages complications* | * Recognizes and mitigates risks of procedures
* Discusses contraception options with patient who has systemic lupus erythematosus
* Performs surgical uterine evacuation in a patient with a distorted uterine cavity
* Performs surgical uterine evacuation in a patient with complex heart disease
* Manages and reduces potential risk of procedural complications
 |
| **Level 5** *Applies innovative and complex approaches to medical contraception and pregnancy termination, and implements treatment plans based on emerging evidence* | * Provides medical care that is based on emerging evidence, such as new treatment guidelines
 |
| Assessment Models or Tools | * Chart review
* Direct observation
* Patient survey
* Procedure evaluation
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Hatcher RA. *Contraceptive Technology*. 21st ed. Managing Contraception LLC; 2018. ISBN:978-1732055605.
* Shoupe D. *The Handbook of Contraception: Evidence Based Practice Recommendations and Rationales.* 3rd ed. Cham, Switzerland; 2020. ISBN:978-3030463908.
* World Health Organization (WHO). *Family Planning – A Global Handbook for Providers*. USAID; 2018. ISBN:978-0999203705.
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| **Patient Care 13: Ambulatory Gynecology and Office-Based Procedures****Overall Intent:** To provide gynecologic care in an office-based setting |
| **Milestones** | **Examples** |
| **Level 1** *Takes a focused patient history for common ambulatory gynecologic problems* | * Takes a focused patient history (menstrual cycle, reproductive history, hormone use) for abnormal uterine bleeding in the outpatient setting
* Takes a focused patient history (sexual partners, past sexually transmitted infection (STI) history, contraceptive use) when a patient presents with vaginal discharge and pelvic pain
 |
| **Level 2** *Performs the initial assessment, formulates a differential diagnosis, and initiates treatment, including performance of basic procedures for common ambulatory gynecologic problems* | * Accurately discusses with a patient having abnormal uterine bleeding the treatment algorithm including exam, biopsy, imaging, and bloodwork
* Accurately discusses with a patient having vaginal discharge and pelvic pain the need for pelvic exam, wet mount, pelvic imaging, possible bloodwork to evaluate for infectious sources
* Performs colposcopy, endometrial biopsy, and basic gynecologic ultrasound
 |
| **Level 3** *Formulates management plans and initiates treatment, including relevant procedures for complex ambulatory gynecologic problems* | * Identifies cervical pathology after colposcopy and successfully obtains informed consent from patient for excisional procedure before conducting office loop electrosurgical excision procedure (LEEP) procedure
* Arranges for a patient diagnosed with pelvic inflammatory disease, but with a history of noncompliance, to be seen in the office and given antibiotics under direct observed therapy
* Performs LEEP, office hysteroscopy, sonohysterogram, and office cystometrics
 |
| **Level 4** *Effectively cares for patients with complex presentations and uses a multidisciplinary approach when caring for patients with complex problems* | * Arranges for emergent transfer to the hospital after a post-operative complication
* Arranges for a multidisciplinary meeting with medical oncology after a patient’s vulvar biopsy demonstrated melanoma
 |
| **Level 5** *Applies innovative approaches to complex and atypical ambulatory gynecology and implements treatment plans based on emerging evidence* | * Assists patients with endometrial cancer and want to retain fertility
* Provides resources for patient refractory to typical therapies for genitourinary syndrome of menopause to enroll in clinical trial enrollment
 |
| Assessment Models or Tools | * Chart review
* Direct observation
* Mock oral/clinical evaluations
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ACOG Committee. Clinical guidelines and standardization of practice to improve outcomes: ACOG Committee opinion, number 792. *Obstet Gynecol*. 2019;134(4):e122-e125. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2019/10/clinical-guidelines-and-standardization-of-practice-to-improve-outcomes>. 2021.
* ACOG Committee. Well-woman visit: ACOG Committee opinion, number 755. *Obstet Gynecol*. 2018;132(4):e181-e186. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/10/well-woman-visit>. 2021.
* Erickson TB, Kirkpatrick DH, DeFrancesco MS, Lawrence HC III. Executive summary of the American College of Obstetricians and Gynecologists Presidential Task Force on Patient Safety in the Office Setting: reinvigorating safety in office-based gynecologic surgery. *Obstet Gynecol*. <https://pubmed.ncbi.nlm.nih.gov/20027047/>. 2021.
* Gershenson DM, Lentz GM, Valea FA, Lobo RA. *Comprehensive Gynecology*. Philadelphia, PA: Elsevier; 2021. ISBN:978-0323653992.
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| **Patient Care 14: Consultations****Overall Intent:** To provide effective and thorough clinical consultations |
| **Milestones** | **Examples** |
| **Level 1** *Performs consultation, with guidance* | * With the attending physician, evaluates and communicates to the emergency department about a patient with vaginal bleeding and elevated beta-human chorionic gonadotropin (bHCG)
 |
| **Level 2** *Triages consult requests* | * Requests emergency department physician order transvaginal ultrasound and bHCG level before patient is seen
* Prioritizes simultaneous consultation requests by order of complexity
 |
| **Level 3** *Manages consultations (including coordination of care) requiring intervention, including procedural options*  | * Discusses therapeutic options for vaginal bleeding in the emergency department and provides informed consent
* Discusses when bedside intervention (aspiration) is appropriate compared to when operative room management (suction dilation and curettage) is needed
* Arranges for the patient to been in the outpatient clinic for follow-up
 |
| **Level 4** *Supervises lower-level residents in managing consultations (including coordination of care) requiring intervention, including procedural options* | * Supervises lower-level resident in discussion regarding need for bedside procedure or operative room procedure
* Steps in when vaginal bleeding is not responsive to traditional interventions and/or when lower-level resident asks for assistance during procedure
 |
| **Level 5** *Oversees the consultation process and manages interdisciplinary systems issues affecting patient care* | * Runs a consultation list of known pregnant patients admitted across multiple institutions before sign-out with lower-level residents
* Calls the interventional radiology attending to arrange for emergent embolization in a post-Cesarean delivery patient who will require cross-county transport
 |
| Assessment Models or Tools | * Chart review
* Direct observation
* Simulation/mock evaluations
* Solicited feedback from consulting services
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ACOG Committee. Seeking and giving consultation: ACOG Committee opinion, number 365. 2007;109(5):1255-1260. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2007/05/seeking-and-giving-consultation>. 2021.
* Cunningham FG, Leveno K, Bloom S, et al. *Williams Obstetrics*. 25th ed. United States: McGraw Hill Education; 2018. ISBN: 978-1259644320.
* Gershenson DM, Lentz GM, Valea FA, Lobo RA. *Comprehensive Gynecology*. Philadelphia, PA: Elsevier; 2021. ISBN:978-0323653992.
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| **Medical Knowledge 1: Anatomy and Pathophysiology of Female Reproduction****Overall Intent:** To demonstrate understanding of the underlying tenets of pathophysiology and anatomy of the female reproductive tract |
| **Milestones** | **Examples** |
| **Level 1** *Identifies normal anatomy relevant to physical examination, imaging, and surgery**Demonstrates knowledge of physiology of reproduction* | * Identifies inferior epigastric artery during laparoscopic trocar placement
* Identifies pelvic structures when reading computerized tomography (CT) scan or ultrasound
* Identifies and names the structures of the vulva and perineum
* Explains the cycle of hormonal signals for ovulation and mechanisms of fertilization
 |
| **Level 2** *Identifies pathologic anatomic variants as applied to physical examination and imaging**Demonstrates basic knowledge of pathophysiology and clinical findings for common diseases of the reproductive system* | * Recognizes the physical exam findings and common radiographic findings seen in patients with uterine fibroids and adnexal masses
* Discusses the causes and findings for patients with ovulatory dysfunction, infertility, and menopause
 |
| **Level 3** *Identifies common pathologic anatomic variants during surgery**Demonstrates advanced knowledge of pathophysiology and clinical findings for common diseases of the reproductive system* | * Distinguishes between functional and neoplastic ovarian cysts
* Discusses molecular causes and progression of gynecologic cancers
 |
| **Level 4** *Identifies complex pathologic anatomic variants during surgery**Demonstrates comprehensive knowledge of the varying patterns of disease presentation, natural history, and patient outcomes* | * Identifies anatomic landmarks in the setting of severe endometriosis, significant adhesions, or advanced ovarian cancer
* Explains clinical findings, pathophysiology, and outcomes of patients with the various causes of primary amenorrhea
 |
| **Level 5** *Contributes to peer-reviewed literature on the varying patterns of disease presentation, and natural history* | * Publishes case studies or case-control studies of gynecologic disease
 |
| Assessment Models or Tools | * Direct observation
* Mock oral examinations
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Gershenson DM, Lentz GM, Valea FA, Lobo RA. *Comprehensive Gynecology*. Philadelphia, PA: Elsevier; 2021. ISBN:978-0323653992.
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| **Medical Knowledge 2: Differential Diagnosis****Overall Intent:** To construct an appropriate differential diagnosis and demonstrate clinical reasoning skills to diagnose obstetric and gynecologic conditions |
| **Milestones** | **Examples** |
| **Level 1***Generates a basic differential diagnosis based on patient symptoms and history* | * Includes bacterial vaginosis, yeast vaginitis, trichomonas, and chlamydia in the differential diagnosis of a patient presenting with vaginal discharge
* Includes ectopic pregnancy, ovarian cyst, and appendicitis in the differential diagnosis of a patient with acute right lower-quadrant pain and missed menses
 |
| **Level 2** *Generates a comprehensive differential diagnosis based on patient symptoms and history and interpretation of results of common diagnostic tests* | * Includes nephrolithiasis and pyelonephritis in the differential diagnosis of a pregnant patient with lower abdominal pain and red blood cells on urinalysis
* Includes chlamydia cervicitis, cervical dysplasia, endometrial polyps, and malignancy in the differential diagnosis of a patient referred for atypical glandular cells on a pap smear
 |
| **Level 3** *Generates a prioritized differential diagnosis and selects additional testing for confirmation* | * Prioritizes anovulatory bleeding in the differential diagnosis of a patient with irregular and heavy uterine bleeding based on “disordered proliferative endometrium” on an endometrial biopsy
* Identifies need for colposcopic evaluation, polymerase chain reaction for gonorrhea/chlamydia, endocervical curettage, and endometrial biopsy in a 45-year-old woman with atypical glandular cells on pap smear
* Identifies need for a pregnancy test and ultrasound imaging to differentiate ectopic pregnancy from ovarian cyst
 |
| **Level 4** *Independently and efficiently synthesizes information to develop prioritized differential diagnoses in complex patient presentations and incorporates subtle, unusual, or conflicting findings* | * Prioritizes placenta accreta spectrum on the differential diagnosis of a patient with a history of four Cesarean deliveries and placenta previa on 20-week ultrasound
* Prioritizes post-partum cardiomyopathy in the differential diagnosis of a post-partum patient reporting worsening lower extremity edema five days after delivery after the patient endorses inability to lie flat without dyspnea on further questioning
 |
| **Level 5** *Coaches peers to develop prioritized differential diagnoses in atypical patient presentations* | * Guides more junior residents in developing a differential diagnosis for a postmenopausal woman presenting with vaginal discharge six weeks after laparoscopic hysterectomy
 |
| Assessment Models or Tools | * Clinical evaluations
* Direct observation
* Review of history and physicals or clinic notes
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Textbooks
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| **Systems-Based Practice 1: Patient Safety****Overall Intent:** To engage in the analysis and management of patient safety events, including relevant communication with patients, families, and health care professionals |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates knowledge of common patient safety events**Demonstrates knowledge of how to report patient safety events* | * Lists patient misidentification or medication errors as common patient safety events
* Describes how to report errors in your environment
 |
| **Level 2** *Identifies system factors that lead to patient safety events**Reports patient safety events through institutional reporting systems (simulated or actual)* | * 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
 |
| **Level 3** *Participates in analysis of patient safety events (simulated or actual)**Participates in disclosure of patient safety events to patients and families (simulated or actual)* | * Preparing for morbidity and mortality presentations
* Through simulation, communicates with patients/families about a surgical error
 |
| **Level 4** *Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)**Discloses patient safety events to patients and families (simulated or actual)* | * Collaborates with a team to conduct the analysis of a surgical error and can effectively communicate with patients/families about those events
 |
| **Level 5** *Actively engages teams and processes to modify systems to prevent patient safety events**Role models or mentors others in the disclosure of patient safety events* | * Assumes a leadership role at the departmental or institutional level for patient safety
* Leads a simulation for disclosing patient safety events
 |
| Assessment Models or Tools | * Assessment of reflection
* Direct observation
* E-module multiple choice tests
* Global evaluation
* Multisource feedback
* Portfolio
* Simulation assessment
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Institute for Healthcare Improvement (IHI). <http://www.ihi.org/Pages/default.aspx>. 2021.
* Skochelak SE, Hammoud MM, Lomis KD, et al. *AMA Education Consortium: Health Systems Science*. 2nd ed. Philadelphia, PA: Elsevier; 2020. ISBN:978-0323694629.
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| **Systems-Based Practice 2: Quality Improvement (QI)****Overall Intent:** To demonstrate the skills necessary to participate in quality improvement |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates knowledge of basic quality improvement methodologies and metrics* | * Describes fishbone tool or Plan, Do, Study, Act (PDSA) cycle
 |
| **Level 2** *Describes local quality improvement initiatives (e.g., cancer screening rate, surgical site infection, smoking cessation)* | * Summarizes protocols to decrease surgical site infections
 |
| **Level 3** *Participates in local quality improvement initiatives* | * Participates in project identifying better throughput in labor and delivery or the office
 |
| **Level 4** *Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project* | * 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
 |
| **Level 5** *Creates, implements, and assesses quality improvement initiatives at the institutional or community level* | * Initiates and completes a QI project to improve county HPV vaccination rates in collaboration with the county health department and shares results with stakeholders
 |
| Assessment Models or Tools | * Assessment of reflection
* Direct observation
* E-module multiple choice tests
* Multisource feedback
* Portfolio
* Simulation assessment
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Institute for Healthcare Improvement (IHI). <http://www.ihi.org/Pages/default.aspx>. 2021.
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| **Systems-Based Practice 3: System Navigation for Patient-Centered Care - Coordination of Care****Overall Intent:** To effectively coordinate care through the navigation of the health care system, including the interdisciplinary team and other care providers |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates knowledge of care coordination* | * For a patient with cervical cancer identifies the gynecologic oncologist, the radiation oncologist, home health nurse and social workers as members of the team
 |
| **Level 2** *Coordinates care of patients in routine clinical situations effectively using the roles of the interprofessional teams* | * Coordinates care with the post-partum patient’s interdisciplinary team at the time of discharge from the hospital
 |
| **Level 3** *Coordinates care of patients in complex clinical situations effectively using the roles of their interprofessional teams* | * Works to coordinate care for a medically complex, post-surgical patient that will ensure follow-up to care after discharge from the hospital
 |
| **Level 4** *Identifies concerns with current systems and identifies opportunities for improvement* | * During inpatient rotations, leads team members in approaching consultants to review cases/recommendations and arranges multidisciplinary rounds for the team
 |
| **Level 5** *Analyzes the process of care coordination and leads in the design and implementation of improvements* | * Leads a program to arrange for team home visits to mothers at high risk for maternal mortality
 |
| Assessment Models or Tools | * Direct observation
* Global assessment
* Medical record (chart) audit
* Multisource feedback
* Objective structured clinical exam (OSCE)
* Portfolio
* Review of sign-out tools, use and review of checklists
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Center for Disease Control and Prevention (CDC). What is Population Health? <https://www.cdc.gov/pophealthtraining/whatis.html>.
* Kaplan KJ. In Pursuit of Patient-Centered Care. <https://tissuepathology.com/2016/03/29/in-pursuit-of-patient-centered-care/#axzz5e7nSsAns>. 2021.
* Skochelak SE, Hammoud MM, Lomis KD, et al. *AMA Education Consortium: Health Systems Science*. 2nd ed. Philadelphia, PA: Elsevier; 2020. ISBN:978-0323694629.
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| **Systems-Based Practice 4: System Navigation for Patient-Centered Care - Transitions of Care****Overall Intent:** To effectively navigate the health care system to provide safe and efficient transitions of care |
| **Milestones** | **Examples** |
| **Level 1** *Identifies key elements for safe and effective transitions of care and hand-offs* | * Lists the essential components of a standardized sign out checklist and care transition and hand-offs
 |
| **Level 2** *Performs safe and effective transitions of care/hand-offs in routine clinical situations* | * Routinely uses a standardized sign-out checklist for a stable patient during night float sign-out
 |
| **Level 3** *Performs safe and effective transitions of care/hand-offs in complex clinical situations* | * Routinely uses a standardized sign-out checklist when transferring a patient to the ICU
 |
| **Level 4** *Role models and advocates for safe and effective transitions of care/hand-offs within and across healthcare delivery systems including outpatient settings* | * Prior to going on vacation, proactively informs the covering resident about a plan of care for a pregnant patient who has elevated blood pressure at 36 weeks and has outpatient labs pending
 |
| **Level 5** *Improves quality of transitions of care within and across health care delivery systems to optimize patient outcomes* | * Develops a protocol to improve transitions to long-term care facilities
 |
| Assessment Models or Tools | * Direct observation
* Medical record (chart) audit
* Multisource feedback
* OSCE
* Quality metrics and goals mined from electronic health records (EHR)
* Review of sign-out tools, use and review of checklists
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Center for Disease Control and Prevention (CDC). What is Population Health? <https://www.cdc.gov/pophealthtraining/whatis.html>.
* Kaplan KJ. In Pursuit of Patient-Centered Care. <https://tissuepathology.com/2016/03/29/in-pursuit-of-patient-centered-care/#axzz5e7nSsAns>. 2021.
* Skochelak SE, Hammoud MM, Lomis KD, et al. *AMA Education Consortium: Health Systems Science*. 2nd ed. Philadelphia, PA: Elsevier; 2020. ISBN:978-0323694629.
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| **Systems-Based Practice 5: 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** *Demonstrates knowledge of population and community health needs and disparities* | * Identifies that patients in rural areas may have different needs than urban patients
* Identifies differences in maternal mortality based on race
 |
| **Level 2** *Identifies specific population and community health needs and inequities for their local population* | * Identifies that limited transportation options may be a factor in patients getting to multiple chemotherapy appointments
 |
| **Level 3** *Uses local resources effectively to meet the needs of a patient population and community* | * Refers patients to a local pharmacy which provides a sliding fee scale option and prints pharmacy coupons for patients in need
 |
| **Level 4** *Participates in changing and adapting practice to provide for the needs of specific populations* | * Assists to implement protocols for prescribing naloxone to patients with opioid use disorders
* Works with other health care providers to develop an evening clinic for working patients
 |
| **Level 5** *Leads innovations and advocates for populations and communities with health care inequities* | * Leads development of telehealth diagnostic services for a rural clinic
 |
| Assessment Models or Tools | * Direct observation
* Medical record (chart) audit
* Multisource feedback
* OSCE
* Quality metrics and goals mined from EHRs
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Center for Disease Control and Prevention (CDC). What is Population Health? <https://www.cdc.gov/pophealthtraining/whatis.html>.
* Kaplan KJ. In Pursuit of Patient-Centered Care. <https://tissuepathology.com/2016/03/29/in-pursuit-of-patient-centered-care/#axzz5e7nSsAns>. 2021.
* Skochelak SE, Hammoud MM, Lomis KD, et al. *AMA Education Consortium: Health Systems Science*. 2nd ed. Philadelphia, PA: Elsevier; 2020. ISBN:978-0323694629.
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| **Systems-Based Practice 6: 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** *Identifies key components of the complex health care system (e.g., hospital, skilled nursing facility, finance, personnel, technology)* | * Understands the impact of health plan coverage on prescription drugs for individual patients
* Understands that notes must meet coding requirements
 |
| **Level 2** *Describes how components of a complex health care system are interrelated and how this impacts patient care* | * Explains that improving patient satisfaction impacts patient adherence and payment to the health system
* Takes into consideration patient’s prescription drug coverage when choosing a contraceptive method
* Recognizes that appropriate documentation can influence the severity of illness determination upon discharge
 |
| **Level 3** *Discusses how individual practice affects the broader system (e.g., length of stay, readmission rates, clinical efficiency)* | * Discusses risks and benefits of same-day discharge after minimally invasive hysterectomy
 |
| **Level 4** *Manages various components of the complex health care system to provide efficient and effective patient care and transition of care* | * Works collaboratively to improve patient assistance resources for a patient with infertility and limited resources
* Works with a patient navigator for a patient with complex gynecologic problems
 |
| **Level 5** *Advocates for or leads systems change that enhances high-value, efficient, and effective patient care and transition of care* | * Works with community or professional organizations to advocate for awareness of postpartum mood disorders
* Participates in local or state health initiatives
 |
| Assessment Models or Tools | * Direct observation
* Medical record (chart) audit
* Patient satisfaction data
* Portfolio
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Agency for Healthcare Research and Quality (AHRQ). Major Physician Measurement Sets. <https://www.ahrq.gov/talkingquality/measures/setting/physician/measurement-sets.html>. 2021.
* AHRQ. Measuring the Quality of Physician Care. <https://www.ahrq.gov/talkingquality/measures/setting/physician/index.html>. 2021.
* American Board of Internal Medicine. 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>. 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 (KFF). [www.kff.org](http://www.kff.org/). 2021.
* KFF. Health Reform: <https://www.kff.org/topic/health-reform/>. 2021.
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| **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** *Demonstrates how to access and use available evidence and incorporate patient preferences and values to take care of a routine patient* | * Identifies evidence-based guidelines for mammogram and osteoporosis screening on US Preventive Services Task Force website
* Understands how to access “Summary Chart of US Medical Eligibility Criteria for Contraceptive Use”
* Uses a smart phone app or electronic resource to obtain information and counsel a patient on health care screening and immunizations
 |
| **Level 2** *Articulates clinical questions and elicits patient preferences and values to guide evidence-based care, with guidance from other health care team members* | * In a patient with a fibroid uterus, inquiries about the impact of fibroids and available treatments on the patient’s future fertility desires
* Understands and appropriately uses clinical practice guidelines in making patient care decisions while eliciting patient preferences
 |
| **Level 3** *Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients, with minimal guidance* | * Obtains, discusses, and applies evidence for the treatment of a patient with abnormal uterine bleeding and co-existing hypertension or obesity
* In a patient with complex medical condition (such as lupus), identifies and discusses potential contraception options, and solicits patient perspective
* Searches and incorporates available evidence and patient’s preferences to determine best treatment plan for an abnormal pap smear
 |
| **Level 4** *Critically appraises and applies evidence even in the face of uncertainty and conflicting evidence to guide care, tailored to the individual patient* | * Accesses the primary literature to identify alternative treatments for endometrial cancer in a patient with desired fertility
* Searches the literature to identify non-hormonal options for management of vasomotor symptoms in a postmenopausal woman with estrogen sensitive breast cancer
 |
| **Level 5** *Coaches others to critically appraise and apply evidence for complex patients; and/or participates in the development of guidelines* | * Leads clinical teaching on application of best practices in critical appraisal of sepsis criteria for pregnant patients
* As part of a team, develops a standard induction protocol for second trimester induction of labor or approach to pregnancy of unknown location in the emergency room
 |
| Assessment Models or Tools | * Direct observation/clinical evaluations
* Fresno Test
* Journal club evaluation
* Oral or written examinations
* OSCE
* Presentation evaluation (rounds or patient care conferences)
* Research portfolio
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ACOG Committee. Clinical guidelines and standardization of practice to improve outcomes: ACOG Committee opinion, number 792. *Obstet Gynecol*. 2019;134(4):e122-e125. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2019/10/clinical-guidelines-and-standardization-of-practice-to-improve-outcomes>. 2021.
* CREOG. Journal Club Assessment. <https://www.acog.org/-/media/project/acog/acogorg/files/creog/milestones-journal-club-assessment.docx?la=en&hash=E2E284E59639C04EF8F526A0CB97A699>. 2021.
* Institutional IRB guidelines
* U.S. National Library of Medicine (NIH). PubMed Online Training. <https://www.nlm.nih.gov/bsd/disted/pubmedtutorial/cover.html>. 2021.
* Various journal submission guidelines
 |

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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** |
| **Level 1** *Identifies gap(s) between expectations and actual performance**Establishes goals for personal and professional development* | * Incorporates evaluations from nurses, patients, peers, and faculty members to identify opportunities for improvement
* Identifies a need to incorporate sexual activity screening for adolescent patients
* Sets a personal practice goal of documenting pelvic organ prolapse quantification (POP-Q) in patient’s presenting with concerns regarding pelvic organ prolapse
* Establishes a goal to incorporate health maintenance screening for patients with gynecology cancer
 |
| **Level 2** *Analyzes and reflects on the factors which contribute to gap(s) between expectations and actual performance**Identifies opportunities for performance improvement; designs a learning plan* | * Integrates feedback to adjust the documentation of POP-Q in the evaluation of patients with pelvic organ prolapse/sexual activity screening for adolescent patients/health maintenance screening in patients with gynecological cancer
* Identifies time management skills as a contributing factor to performance, and makes a detailed plan for more timely completion of indicated screening and completion of clinic notes
* When prompted, develops individual education plan to improve their evaluation of abnormal uterine bleeding
* Identifies specific knowledge base deficits and develops a detailed, structured reading plan over a six-month period
 |
| **Level 3** *Institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance**Integrates practice data and feedback with humility to implement a learning plan* | * Using web-based resources, creates a personal curriculum to improve own evaluation pelvic organ prolapse
* Completes a literature review prior to patient encounters
* Develops calendar reminder to review patients’ pathology results one week following surgical procedures
* Does a chart audit to determine the percent of patients presenting with pelvic organ prolapse and documentation of POP-Q /sexual activity screening for adolescent patients/ health maintenance screening in patients with gynecological cancer and uses results to implement a learning plan
 |
| **Level 4** *Continuously reflects on remaining gaps and institutes behavioral adjustments to narrow them**Uses performance data to measure the effectiveness of the learning plan and adapts when necessary* | * Solicits patient feedback on newly implemented screening 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 POP-Q /sexual activity screening for adolescent patients/ health maintenance screening in patients with gynecological cancer
 |
| **Level 5** *Coaches others on reflective practice**Coaches others in the design and implementation of learning plans* | * 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
 |
| Assessment Models or Tools | * Chart reviews
* Clinical evaluations
* Direct observation
* Patient care ratings
* Review of learning plan
* Semi-annual evaluations
* 360-degree evaluations
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Burke AE, Benson B, Englander R, Carraccio C, Hicks PJ. Domain of competence: Practice-based learning and improvement. *Acad Pediatr.* 2014;14(2 Suppl):S38-S54. [https://www.academicpedsjnl.net/article/S1876-2859(13)00333-1/fulltext](https://www.academicpedsjnl.net/article/S1876-2859%2813%2900333-1/fulltext). 2021.
* [Hojat M](https://www-ncbi-nlm-nih-gov.ezproxy.libraries.wright.edu/pubmed/?term=Hojat%20M%5BAuthor%5D&cauthor=true&cauthor_uid=19638773), [Veloski JJ](https://www-ncbi-nlm-nih-gov.ezproxy.libraries.wright.edu/pubmed/?term=Veloski%20JJ%5BAuthor%5D&cauthor=true&cauthor_uid=19638773), [Gonnella JS](https://www-ncbi-nlm-nih-gov.ezproxy.libraries.wright.edu/pubmed/?term=Gonnella%20JS%5BAuthor%5D&cauthor=true&cauthor_uid=19638773). Measurement and correlates of physicians' lifelong learning. *Acad Med.* 2009;84(8):1066-1074. <https://journals.lww.com/academicmedicine/Fulltext/2009/08000/Measurement_and_Correlates_of_Physicians__Lifelong.21.aspx>. 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. *Acad Med.* 2013;88(10):1558-1563. <https://journals.lww.com/academicmedicine/Fulltext/2013/10000/Assessing_Residents__Written_Learning_Goals_and.39.aspx>. 2021.
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| **Professionalism 1: Professional Behavior****Overall Intent:** To recognize and address lapses in professional behavior, demonstrates professional behaviors, and use appropriate resources for managing professional dilemmas |
| **Milestones** | **Examples** |
| **Level 1** *Identifies and describes potential triggers for professionalism lapses and how to appropriately report professionalism lapses* | * 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
 |
| **Level 2** *Demonstrates insight into professional behavior in routine situations and takes responsibility for one’s own professionalism lapses* | * Respectfully approaches a resident who is late to sign-out about the importance of being on time
* Notifies appropriate supervisor when a resident is routinely late to sign-out
 |
| **Level 3** *Demonstrates professional behavior in complex or stressful situations* | * 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
 |
| **Level 4** *Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others* | * Actively considers the perspectives of others in stressful situations
* Models respect for patients and promotes the same from colleagues, when a patient has been waiting an excessively long time to be seen
 |
| **Level 5** *Coaches others when their behavior fails to meet professional expectations* | * Coaches others when their behavior fails to meet professional expectations and creates a performance improvement plan to prevent recurrence
 |
| Assessment Models or Tools | * Direct observation
* Global evaluation
* Multisource feedback
* Oral or written self-reflection
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABIM Foundation. American Board of Internal Medicine. Medical professionalism in the new millennium: A physician charter. *Annals of Internal Medicine*. 2002;136(3):243-246. <https://annals.org/aim/fullarticle/474090/medical-professionalism-new-millennium-physician-charter>. 2021.
* American Medical Association. Ethics. <https://www.ama-assn.org/delivering-care/ethics>. 2021.
* Bynny RL, Paauw DS, Papadakis MA, Pfeil S. *Medical Professionalism Best Practices: Professionalism in the Modern Era*. Aurora, CO: Alpha Omega Alpha Medical Society; 2017. *Medical Professionalism Best Practices: Professionalism in the Modern Era*. 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. *Arch Pathol Lab Med.* 2017; 141:215-219. <https://pubmed.ncbi.nlm.nih.gov/27763788/>. 2021.
* Levinson W, Ginsburg S, Hafferty FW, Lucey CR. *Understanding Medical Professionalism*. 1st ed. New York, NY: McGraw-Hill Education; 2014. ISBN:978-0071807432.
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| **Professionalism 2: Ethical Principles** **Overall Intent:** To recognize and address lapses in ethical behavior, demonstrates ethical behaviors, and use appropriate resources for managing ethical dilemmas |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates knowledge of the ethical principles* | * Articulates how the principle of “do no harm” applies to a patient who may not need an operative delivery even though the training opportunity exists
 |
| **Level 2** *Analyzes straightforward situations using ethical principles* | * Identifies and applies ethical principles involved in informed consent when the patient is unclear of all the risks
 |
| **Level 3** *Recognizes need to seek help in managing and resolving complex ethical situations* | * Offers treatment options for a terminally ill patient, free of bias, while recognizing personal limitations, and consistently honoring the patient’s choice
 |
| **Level 4** *Recognizes and utilizes appropriate resources for managing and resolving ethical dilemmas as needed and identifies system-level issues that induce or exacerbate ethical problems* | * Recognizes and utilizes ethics consults, literature, risk-management/legal counsel to resolve ethical dilemmas
 |
| **Level 5** *Seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution* | * Engages stakeholders to address excessive wait times in the clinic to decrease patient and provider frustrations that lead to unprofessional behavior
 |
| Assessment Models or Tools | * Direct observation
* Global evaluation
* Multisource feedback
* Oral or written self-reflection
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABIM Foundation. American Board of Internal Medicine. Medical professionalism in the new millennium: A physician charter. *Annals of Internal Medicine*. 2002;136(3):243-246. <https://annals.org/aim/fullarticle/474090/medical-professionalism-new-millennium-physician-charter>. 2021.
* ACOG Committee. Ethical decision making in obstetrics and gynecology: ACOG Committee opinion, number 390. *Obstet Gynecol*. 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.
* ACOG. Code of Professional ethics of the American College of Obstetricians and Gynecologists. <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.
* American Medical Association. Ethics. <https://www.ama-assn.org/delivering-care/ethics>. 2021.
* Bynny RL, Paauw DS, Papadakis MA, Pfeil S. *Medical Professionalism Best Practices: Professionalism in the Modern Era*. Aurora, CO: Alpha Omega Alpha Medical Society; 2017. *Medical Professionalism Best Practices: Professionalism in the Modern Era*. 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. *Arch Pathol Lab Med.* 2017; 141:215-219. <https://pubmed.ncbi.nlm.nih.gov/27763788/>. 2021.
* Levinson W, Ginsburg S, Hafferty FW, Lucey CR. *Understanding Medical Professionalism*. 1st ed. New York, NY: McGraw-Hill Education; 2014. ISBN:978-0071807432.
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| **Professionalism 3: 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** *Takes responsibility for failure to complete tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future**Responds promptly to requests or reminders to complete tasks and responsibilities* | * Acknowledges that end-of-rotation evaluations were not completed
* Responds promptly to reminders from program administrator to complete work hour logs
 |
| **Level 2** *Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations**Recognizes situations that may impact own ability to complete tasks and responsibilities in a timely manner* | * Completes administrative tasks such as annual Health Insurance Portability and Accountability (HIPAA) modules or licensing requirements by specified due date
* Before going out of town, completes tasks in anticipation of lack of computer access while traveling
 |
| **Level 3** *Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations**Proactively implements strategies to ensure that the needs of patients, teams, and systems are met* | * Notifies attending of multiple competing demands on call, appropriately triages tasks, and asks for assistance from other residents 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** *Recognizes situations that may impact others’ ability to complete tasks and responsibilities in a timely manner* | * Takes responsibility for inadvertently omitting key patient requiring follow-up during sign-out and professionally discusses with the patient, family and interprofessional team
 |
| **Level 5** *Recognizes own role in leading the care for all patients on their service, while mentoring/coaching other team members to ensure the best possible care of patients including, prioritizing tasks and mitigating burnout* | * 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 to achieve completion in safest, most efficient manner
* Working with nursing mangers to rectify systems-based issues
 |
| Assessment Models or Tools | * Compliance with deadlines and timelines
* Direct observation
* Global evaluations
* Multisource feedback
* Self-evaluations and reflective tools
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Code of conduct from fellow/resident institutional manual
* Expectations of residency program regarding accountability and professionalism
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| **Professionalism 4: Well-Being****Overall Intent:** To identify, use, manage, improve, and seek help for personal and professional well-being for self and others |
| **Milestones** | **Examples** |
| **Level 1** *Recognizes status of personal and professional well-being, with assistance* | * Acknowledges own response to patient’s fatal genetic diagnosis
* Implements change based on feedback on missed emotional cues after a family meeting
 |
| **Level 2** *Independently recognizes status of personal and professional well-being* | * Independently identifies and communicates impact of a personal family tragedy
* Recognizes a pattern of missing emotional cues during family meetings and asks for feedback
 |
| **Level 3** *With assistance, proposes a plan to optimize personal and professional well-being* | * With a mentor, develops a reflective response to deal with personal impact of difficult patient encounters and disclosures
* Integrates feedback from the multidisciplinary team to develop a plan for identifying and responding to emotional cues during the next family meeting
 |
| **Level 4** *Independently develops a plan to optimize personal and professional well being* | * Independently identifies ways to manage personal stress
* Self-assesses and seeks additional feedback on skills responding to emotional cues during a family meeting
 |
| **Level 5** *Coaches others when emotional responses or limitations in knowledge/skills do not meet professional expectations* | * Assists in organizational efforts to address clinician well-being after patient diagnosis/prognosis/death
* Works with multidisciplinary team to develop a feedback framework for learners around family meetings
 |
| Assessment Models or Tools | * Direct observation
* Group interview or discussions for team activities
* Individual interview
* Institutional online training modules
* Self-assessment and personal learning plan
 |
| Curriculum Mapping  |  |
| Notes or Resources | * 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.
* ACGME. Tools and Resources. <https://www.acgme.org/What-We-Do/Initiatives/Physician-Well-Being/Resources>. 2021.
* Hicks PJ, Schumacher D, Guralnick S, Carraccio C, Burke AE. Domain of competence: Personal and professional development. *Acad Pediatr*. 2014;14(2 Suppl):S80-97. [https://www.academicpedsjnl.net/article/S1876-2859(13)00332-X/fulltext](https://www.academicpedsjnl.net/article/S1876-2859%2813%2900332-X/fulltext). 2021.
* Local resources, including Employee Assistance
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| **Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication****Overall Intent:** To deliberately use language and behaviors to form constructive relationships with patients, to identify communication barriers including self-reflection on personal biases, and minimize them in the doctor-patient relationships; organize and lead communication around shared decision making |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates respect and establishes rapport with patient and family (e.g., situational awareness of language, disability, health literacy level, cultural)**Communicates with patients and their families in an understandable and respectful manner* | * Introduces self and faculty member, identifies patient and others in the room, and engages all parties in health care discussion; discusses resident role within the health care team
* Identifies need for trained interpreter with non-English-speaking patients
* Uses age-appropriate language when discussing gynecology care with adolescent and pediatric patients
 |
| **Level 2** *Establishes a therapeutic relationship in straightforward encounters**Identifies barriers to effective communication (e.g., health literacy, cultural)* | * Avoids medical jargon and restates patient perspective when discussing contraception
* Inquires whether patient needs prescription instructions written in a different language
* Recognizes the differences to how patient absorb knowledge, such as the need for handouts with diagrams and pictures and electronic resources and videos to communicate information
* Prioritizes and sets agenda at the beginning of the appointment for a new patient with chronic pelvic pain
 |
| **Level 3** *Establishes a therapeutic relationship in challenging encounters (e.g., shared decision making)**When prompted, reflects on personal biases while attempting to minimize communication barriers* | * Acknowledges patient’s request for an ultrasound for chronic pelvic pain without physical exam findings and arranges timely follow-up visit to align diagnostic plan with goals of care
* Discusses all treatment options for a patient with ruptured membranes at 18 weeks gestation and incorporates her preferences in developing a shared decision making care plan
* Participates in a family meeting to determine a plan for withdrawal of treatment in a terminally ill patient
* In a discussion with the faculty member, acknowledges discomfort in caring for a patient who is morbidly obese with uterine cancer and does not want to make lifestyle changes
 |
| **Level 4** *Facilitates difficult discussions specific to patient and family conferences, (e.g., end-of-life, explaining complications, therapeutic uncertainty)**Independently recognizes personal biases while attempting to proactively minimize communication barriers* | * Continues to engage representative family members with disparate goals in the care of a patient with dementia
* Leads a family meeting to determine a plan for home hospice in a terminally ill patient, aligned with the patient’s values, using patient and family input
* Reflects on personal bias of a patient’s decision to terminate a pregnancy and solicits input from faculty about overcoming these biases
 |
| **Level 5** *Mentors others in situational awareness and critical self-reflection**Coaches others in the facilitation of crucial conversations* | * Leads a discussion group on personal experience of moral distress
* Develops a residency curriculum on social justice which addresses unconscious bias
* Serves on a hospital bioethics committee
 |
| Assessment Models or Tools | * Direct observation
* Kalamazoo Essential Elements Communication Checklist (Adapted)
* OSCE
* Self-assessment including self-reflection exercises
* Skills needed to Set the state, Elicit information, Give information, Understand the patient, and End the encounter (SEGUE)
* Standardized patients
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Laidlaw A, Hart J. Communication skills: An essential component of medical curricula. Part I: Assessment of clinical communication: AMEE Guide No. 51. *Med Teach*. 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. *Acad Med*. 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. *Patient Educ Couns*. 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. *BMC Med Educ*. 2009; 9:1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2631014/>. 2021.
 |

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| **Interpersonal and Communication Skills 2: Patient Counseling and Shared Decision Making****Overall Intent:** To demonstrate the ability/role to explain treatments and alternatives to patients and help them choose treatment options that best aligns with their preferences as well as their unique cultural and personal beliefs |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates basic understanding of informed consent process* | * Identifies the components of the informed consent, including the indication for the procedure, alternatives to management and risks/ benefits of management choices
* Acknowledges that pre-operative patients need informed consent before undergoing surgical procedures
 |
| **Level 2** *Answers questions about treatment plan and seeks guidance when appropriate* | * Discusses post-operative pain management following bilateral salpingectomy and expected healing process
 |
| **Level 3** *Counsels patient through decision-making process, including questions, for simple clinical problems* | * Provides alternative contraceptive methods when providing informed consent to someone planning bilateral salpingectomy, but unsure about future fertility desires
* Counsels patient regarding risks and benefits of risk reducing salpingectomy
 |
| **Level 4** *Counsels patient through decision-making process, including questions, for complex clinical problems* | * With a patient who is obese with a large fibroid uterus, discusses surgical approaches (laparoscopic, laparotomy), risks and benefits to each, and helps determine the safest surgical approach
* Counsels patient with a history of breast cancer and significant vasomotor symptoms regarding risks/benefits of hormone replacement therapy
* Counsels patient with peri-viable fetus on management options for her severe preeclampsia
 |
| **Level 5** *Counsels patient through decision-making process, including questions, for uncommon clinical problems* | * Appropriately determines that a patient previously consented for a laparoscopic procedure requires psychiatry evaluation for capacity due to worsening dementia
 |
| Assessment Models or Tools | * Chart – stimulated recall
* Direct observation
* Global assessment
* Medical record (chart) audit
* Multisource feedback
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Alston C, Berger Z, Brownlee S, et al. Shared decision-making strategies for best care: Patient decision aids. *NAM Perspectives*. Discussion Paper, National Academy of Medicine, Washington DC; 2014. <https://nam.edu/perspectives-2014-shared-decision-making-strategies-for-best-care-patient-decision-aids/>. 2021.
* Elwyn G, Frosch D, Thomson R, et al. Shared decision making: A model for clinical practice. *J Gen Intern Med*. 2012;27(10):1361-7. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3445676/>. 2021.
 |
| **Interpersonal and Communication Skills 3: Interprofessional and Team Communication****Overall Intent:** To effectively communicate with the health care team, including consultants, in both straightforward and complex situations |
| **Milestones** | **Examples** |
| **Level 1** *Understands and respects the role and function of interprofessional team members**Understands and respects the role and function of other health care team members* | * Receives consult request for a patient with abnormal uterine bleeding, asks clarifying questions politely, and expresses gratitude for the consult
* 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** *Solicits insights from and uses language that values all interprofessional team members**Solicits insights from other health care team members using language that values all members* | * Sends a message in the EHR to the registered dietician to inquire about the appropriateness of increasing the calorie content in a patient with gestational diabetes
* Acknowledges in the medical record the contribution of the palliative care team for pain control in gynecologic oncology patient with advanced ovarian cancer
* Consistently uses inclusive language
 |
| **Level 3** *Integrates contributions from the interprofessional team members into the care plan**Integrates contributions from other health care team members into the care plan* | * Use 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** *Prevents and mediates conflict and distress among the interprofessional team members**Addresses conflict and distress among other health care team members in complex patient situations* | * Asks other members of the health care team to repeat back recommendations to ensure understanding
* Demonstrates active listening by asking team members about their concerns and questions during patient rounds
* Initiates debriefing session amongst labor and delivery team members after an obstetric emergency
 |
| **Level 5** *Fosters a culture of open communication and effective teamwork within the interprofessional team**Attends to individual and team distress and promotes resilience among other health care teams* | * 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 | * Direct observation
* Global assessment
* Medical record (chart) audit
* Multisource feedback
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Braddock CH, Edwards KA, Hasenberg NM, Laidley TL, Levinson W. Informed decision making in outpatient practice: Time to get back to basics. *JAMA*. 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. *MedEdPORTAL*. 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. *MedEdPORTAL*. 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.
* 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.
* 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.
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| **Interpersonal and Communication Skills 4: Communication within Health Care Systems****Overall Intent:** To effectively communicate using a variety of methods |
| **Milestones** | **Examples** |
| **Level 1** *Accurately records information in the patient record**Safeguards patient personal health information* | * 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** *Demonstrates organized diagnostic and therapeutic reasoning through notes in the patient record**Documents required data in formats specified by institutional policy* | * Creates organized and accurate documentation that 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
* Uses department smart-phrases and clinical smart sets for orders/ documentation
 |
| **Level 3** *Concisely reports diagnostic and therapeutic reasoning in the patient record in an efficient manner**Appropriately selects direct (e.g., telephone, in-person) and indirect (e.g., progress notes, text messages) forms of communication based on context* | * Complex clinical thinking is documented concisely but may not contain anticipatory guidance
* Calls patient or sends electronic request to have nursing staff contact patient immediately about potentially critical test results
 |
| **Level 4** *Communicates clearly, concisely, on time, and in an organized written form, including anticipatory guidance**Produces written or verbal communication (e.g., patient notes, email) that serves as an example for others to follow* | * Documentation is consistently accurate, organized, and concise, and frequently incorporates anticipatory guidance
* Notes are exemplary and used as an example when teaching learners
 |
| **Level 5** *Models feedback to improve others’ written communication**Guides departmental or institutional communication around policies and procedures* | * 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, billing compliance, conciseness, and inclusion of all required elements
* Meaningfully participates in a committee to examine community emergency response systems including psychiatric emergencies
* Creates a policy around Health Insurance Portability and Accountability (HIPAA) compliant electronic communication (e.g., texting)
 |
| Assessment Models or Tools | * Direct observation
* Medical record (chart) audit
* Multisource feedback
 |
| Curriculum Mapping  |  |
| Notes or Resources | * 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. *Teach Learn Med.* 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. *Jt Comm J Qual Patient Saf*. 2006;32(3):167-175. [https://www.jointcommissionjournal.com/article/S1553-7250(06)32022-3/fulltext](https://www.jointcommissionjournal.com/article/S1553-7250%2806%2932022-3/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.
 |

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: Antepartum Care and Complications of Pregnancy | PC1: Antepartum Care and Complications of Pregnancy |
| PC2: Care of Patients in the Intrapartum Period | PC3: Care of Patients in the Intrapartum Period |
| PC3: Care of Patients in the Postpartum Period | PC4: Care of Patients in the Postpartum and Interconception Period |
| PC4: Obstetrical Technical Skills | PC5: Obstetrical Technical Skills |
| PC5: Immediate Care of the Newborn | PC5: Theranostics: Parenteral – Patient Evaluation, Procedure Selection, Procedure Performance, and Follow-up |
| PC6: Gynecology Technical Skills: Laparotomy | PC7: Peri-Procedural CarePC11: Open Surgical Skills |
| PC7: Gynecology Technical Skills: Vaginal Surgery  | PC7: Peri-Procedural CarePC10: Vulvar-Vaginal Procedures |
| PC8: Gynecology Technical Skills: Endoscopy | PC7: Peri-Procedural CarePC8: Endoscopic ProceduresPC9: Laparoscopic Procedures |
| PC9: Family Planning | PC12: Family Planning |
| PC10: Ambulatory Gynecology | PC13: Ambulatory Gynecology and Office-Based Procedures |
| PC11: Care of the Patient with Non-Reproductive Medical Disorders | PC13: Ambulatory Gynecology and Office-Based Procedures |
| No match | PC14: Consultations |
| MK1: Peri-operative Care | PC6: Critically Ill Obstetric Patients and Obstetric EmergenciesPC7: Peri-Procedural Care |
| MK2: Abdominal/Pelvic Pain  | MK1: Anatomy and Pathophysiology of Female Reproduction MK2: Differential Diagnosis |
| MK3: Abnormal Uterine Bleeding  | MK1: Anatomy and Pathophysiology of Female Reproduction MK2: Differential Diagnosis |
| MK4: Pelvic Mass | MK1: Anatomy and Pathophysiology of Female Reproduction MK2: Differential Diagnosis |
| MK5: Pelvic Floor Disorders | MK1: Anatomy and Pathophysiology of Female Reproduction MK2: Differential Diagnosis |
| MK6: First Trimester Bleeding | PC2: First Trimester Bleeding |
| MK7: Health Care Maintenance and Disease Prevention | SBP5: Community and Population Health |
| SBP1: Patient Safety and Systems Approach to Medical Errors: | SBP1: Patient Safety SBP2: Quality Improvement |
| SBP2: Cost-effective Care and Patient Advocacy | SBP3: System Navigation for Patient-Centered Care - Coordination of Care SBP6: Physician Role in Health Care Systems |
| PBLI: Self-directed Learning/Critical Appraisal of Medical Literature | PBLI1: Evidence-Based and Informed PracticePBLI2: Reflective Practice and Commitment to Personal Growth |
| PBLI2: Quality Improvement Process | SBP2: Quality Improvement |
| PROF1: Compassion, Integrity, and Respect for Others | PROF1: Professional Behavior PROF2: Ethical Principles |
| PROF2: Accountability and Responsiveness to the Needs of Patients, Society, and the Profession | PROF3: Accountability/Conscientiousness |
| PROF3: Respect for Patient Privacy, Autonomy, Patient-Physician Relationship | PROF2: Ethical PrinciplesICS1: Patient- and Family-Centered Communication |
| No match | PROF4: Well-Being |
| ICS1: Communication with Patients and Families | ICS1: Patient- and Family-Centered CommunicationICS2: Patient Counseling and Shared Decision Making |
| ICS2: Communication with Physicians and Other Health Professionals and Teamwork | SBP4: System Navigation for Patient-Centered Care - Transitions of CareICS3: Interprofessional and Team Communication |
| ICS3: Informed Consent and Shared Decision Making | ICS2: Patient Counseling and Shared Decision Making |
| No match | ICS4: Communication within Health Care Systems |

**Available Milestones Resources**

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

*Clinical Competency Committee Guidebook*, updated 2020 - <https://www.acgme.org/Portals/0/ACGMEClinicalCompetencyCommitteeGuidebook.pdf?ver=2020-04-16-121941-380>

*Clinical Competency Committee Guidebook Executive Summaries*, new 2020 - <https://www.acgme.org/What-We-Do/Accreditation/Milestones/Resources> - Guidebooks - Clinical Competency Committee Guidebook Executive Summaries

*Milestones Guidebook*, updated 2020 - <https://www.acgme.org/Portals/0/MilestonesGuidebook.pdf?ver=2020-06-11-100958-330>

*Milestones Guidebook for Residents and Fellows*, updated 2020 - <https://www.acgme.org/Portals/0/PDFs/Milestones/MilestonesGuidebookforResidentsFellows.pdf?ver=2020-05-08-150234-750>

Milestones for Residents and Fellows PowerPoint, new 2020 -<https://www.acgme.org/Residents-and-Fellows/The-ACGME-for-Residents-and-Fellows>

Milestones for Residents and Fellows Flyer, new 2020 <https://www.acgme.org/Portals/0/PDFs/Milestones/ResidentFlyer.pdf>

*Implementation Guidebook*, new 2020 - <https://www.acgme.org/Portals/0/Milestones%20Implementation%202020.pdf?ver=2020-05-20-152402-013>

*Assessment Guidebook*, new 2020 - <https://www.acgme.org/Portals/0/PDFs/Milestones/Guidebooks/AssessmentGuidebook.pdf?ver=2020-11-18-155141-527>

*Milestones National Report*, updated each Fall - <https://www.acgme.org/Portals/0/PDFs/Milestones/2019MilestonesNationalReportFinal.pdf?ver=2019-09-30-110837-587> (2019)

*Milestones Bibliography*, updated twice each year - <https://www.acgme.org/Portals/0/PDFs/Milestones/MilestonesBibliography.pdf?ver=2020-08-19-153536-447>

*Developing Faculty Competencies in Assessment* courses - <https://www.acgme.org/Meetings-and-Educational-Activities/Other-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](https://team.acgme.org/)**(TEAM) -** <https://dl.acgme.org/pages/assessment>

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