

Supplemental Guide:

Adolescent Medicine

April 2023

**TABLE OF CONTENTS**

**introduction 3**

**Patient care 4**

History 4

Physical Exam 7

Organize and Prioritize Patient Care 9

Differential Diagnosis 11

Patient Management 13

Provides Consultative Care 15

**Medical Knowledge 17**

Clinical Knowledge 17

Diagnostic Evaluation 18

**Systems-based practice 20**

Patient Safety 20

Quality Improvement 22

System Navigation for Patient-Centered Care – Coordination of Care 24

System Navigation for Patient-Centered Care – Transitions in Care 26

Population and Community Health 28

Physician Role in Health Care Systems 30

**practice-based learning and improvement 32**

Evidence-Based and Informed Practice 32

Reflective Practice and Commitment to Personal Growth 34

**professionalism 36**

Professional Behavior 36

Ethical Principles 39

Accountability/Conscientiousness 41

Well-Being 42

**interpersonal and communication skills 44**

Patient- and Family-Centered Communication 44

Interprofessional and Team Communication 46

Communication within Health Care Systems 48

Difficult Conversations 50

Confidentiality and Consent 52

**Mapping of 1.0 to 2.0 54**

**Resources 56**

**Milestones Supplemental Guide**

This document provides additional guidance and examples for the Adolescent Medicine 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 at the end of this document as well as on the [Resources](https://www.acgme.org/milestones/resources/) page of the Milestones section of the ACGME website.

|  |
| --- |
| **Patient Care 1: History****Overall Intent:** To gather medical and psychosocial history with the level of detail and focus required for the individual patient |
| **Milestones** | **Examples** |
| **Level 1** *Gathers information, including confidential psychosocial history, following a template* | * In taking the history of a 16-year-old presenting to the clinic for heavy menstrual bleeding, obtains basic menstrual information; does not pursue further history taking regarding precocious puberty when patient reports menarche at age seven
* Uses HEADSS (“home, education, activities/employment, drugs, suicidality, and sex”) template to carry out a psychosocial assessment and reports back in a checklist fashion to attending
 |
| **Level 2** *Adapts template to filter and prioritize pertinent positives and negatives based on broad diagnostic categories or possible diagnoses**Obtains a basic confidential psychosocial history tailored to the patient’s presentation and developmental stage* | * Takes the history of a 16-year-old presenting to the clinic for heavy menstrual bleeding, obtains basic menstrual information; pursues further history regarding precocious puberty when patient reports menarche at age seven
* Takes a sexual history from a 16-year-old presenting for heavy menstrual bleeding, ensuring that the teen understands the questions being asked, but does not assess for sexually transmitted infection (STI) risk
 |
| **Level 3** *Filters, prioritizes, and synthesizes the history to develop a differential diagnosis in real time for uncomplicated or typical presentations**Obtains a comprehensive, inclusive, confidential psychosocial history, including information from various sources, in a patient with an uncomplicated presentation* | * In a patient presenting with dysmenorrhea, discovers a history of heavy menstrual bleeding and expands template to ask about bleeding from other sites and family history of menorrhagia/bleeding diathesis, etc.
* Takes a history from a 16-year-old presenting with dysmenorrhea, discovers heavy menstrual bleeding, takes a complete medical and psychosocial history, and discovers from the parent that the child misses school due to lack of access to menstrual products (menstrual poverty)
 |
| **Level 4** *Filters, prioritizes, and synthesizes the history to develop a differential diagnosis in real time for complicated or atypical presentations* *Obtains a comprehensive, inclusive, confidential, psychosocial history, including information from various sources, in a patient with a complicated presentation* | * In taking a history from a 16-year-old presenting with dysmenorrhea, elicits history of chronic pelvic pain and sexual trauma; asks patient about prior social services involvement/disclosure, symptoms of depression, and whether the patient has received mental health support
* In the above patient, discovers ongoing symptoms of depression after six months of psychotherapy, asks for permission to contact mental health practitioner to gather more information and assess if a selective serotonin reuptake inhibitor (SSRI) would be appropriate
 |
| **Level 5** *Recognizes and probes subtle clues from patients and families; distinguishes nuances among diagnoses to efficiently drive further information gathering* | * In taking a history from a 16-year-old presenting with dysmenorrhea, discovers tattoos and notices atypical interaction between patient and accompanying adult; suspects human trafficking and safely removes adult from the room to ask more questions
 |
| Assessment Models or Tools | * Direct observation (e.g., mini-CEX, structured clinical observation tool, Minicard, observable structural clinical examination (OCSE))
* Medical record (chart) review
* Multisource feedback
* Verbal presentations on bedside rounds or clinic setting (can use tools like the one-minute preceptor)
 |
| Curriculum Mapping  |  |
| Notes or Resources | * American Academy of Pediatrics (AAP). “The SSHADESS Screening: A Strength-Based Psychosocial Assessment.” <https://www.aap.org/contentassets/0e45de0366d54ec38fbfcb72382a0c6c/rt2e_ch32_sahm.pdf>. Accessed 2022.
* American Board of Internal Medicine. “Mini-CEX: Clinical Evaluation for Trainees.” <https://www.abim.org/~/media/ABIM%20Public/Files/pdf/paper-tools/mini-cex.pdf>. Accessed 2020.
* The American Board of Pediatrics (ABP). “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Bowen, Judith L. 2006. “Educational Strategies to Promote Clinical Diagnostic Reasoning.” *NEJM* 355: 2217-2225. <https://www.nejm.org/doi/full/10.1056/NEJMra054782>.
* Donato, Anthony A., Yoon Soo Park, David L. George, Alan Schwartz, and Rachel Yudkowsky. 2015. “Validity and Feasibility of the Minicard Direct Observation Tool in 1 Training Program.” *Journal of Graduate Medical Education*. 7(2): 225-229. <https://pubmed.ncbi.nlm.nih.gov/26221439/>.
* Journal of General Internal Medicine. “Clinical Reasoning Exercises.” [https://www.sgim.org/web-only/clinical-reasoning-exercises/problem-representation-overview#](https://www.sgim.org/web-only/clinical-reasoning-exercises/problem-representation-overview). Accessed 2020.
* Gordon, Catherine M., Debra K. Katzman, Lawrence S. Neinstein, Todd Callahan, Alain Joffe, and Vaughn Rickert. 2016. *Neinstein’s Adolescent and Young Adult Health Care: A Practical Guide*. Lippincott Williams & Wilkins.
* Peterson, M.C., J.H. Holbrook, D. Von Hales, N.L. Smith, L.V. Staker. 1992. “Contributions of the History, Physical Examination, and Laboratory Investigation in Making Medical Diagnoses.” *Western Journal of Medicine* 156: 163-165. <https://pubmed.ncbi.nlm.nih.gov/1536065/>.
* Schumacher, Daniel J., Robert Englander, Patricia J. Hicks, Carol Carraccio, and Susan Guralnick. 2014. “Domain of Competence: Patient Care.” *Academic Pediatrics* 14(2) Supp: S13-S35. <https://pubmed.ncbi.nlm.nih.gov/24602619/>.
 |

|  |
| --- |
| **Patient Care 2: Physical Exam****Overall Intent:** To gather objective information, recognizing normal and abnormal physical findings while engaging the patient/family using appropriate behavioral and developmental techniques, and considering information gleaned from patient history |
| **Milestones** | **Examples** |
| **Level 1** *Performs a developmentally appropriate physical examination**Performs a complete physical examination and distinguishes between normal and abnormal findings*  | * Asks a 12-year-old female patient if she would prefer for a parent to remain in the room during the physical exam
* While performing a complete physical exam, distinguishes different presentations of tinea versicolor in different skin tones
 |
| **Level 2** *Performs a physical examination using strategies to optimize patient comfort, with guidance**Incorporates additional diagnostic maneuvers as indicated to identify and interpret variants and abnormal findings* | * Recognizes value in keeping a 15-year-old patient with vaginal bleeding fully clothed until necessary to complete genitourinary (GU) exam
* When an adolescent presents with knee pain following a football injury, performs anterior drawer test to assess for ligamentous injury
 |
| **Level 3** *Performs a physical examination that consistently and positively engages the patient**Tailors physical examination in real time based on unique historical and clinical findings* | * When a 12-year-old transgender male presents for well-child check, explains rationale for pubertal (GU) check and incorporates patient preferences for the entirety of the exam
* When a patient presents for well check and has noticeable abrasions on knuckles, adjusts physical exam to evaluate for other stigmata of eating disorders due to concern for purging
 |
| **Level 4** *Performs a physical examination, remaining sensitive to patient history and experience, including trauma-informed practices**Detects, pursues, and integrates key physical examination findings to distinguish nuances among competing, often similarly presenting diagnoses* | * When a patient presents with vaginal discharge and appears anxious during a GU exam, responds to patient cues and learns about history of sexual abuse, leading to performance of a modified exam and offer of self-collected vaginal swab as an alternative option
* Examines an adolescent presenting with a rash and identifies lymphadenopathy; recognizes the need to differentiate between syphilis and pityriasis rosea.
 |
| **Level 5** *Serves as a role model for performing developmentally appropriate, trauma-informed exams sensitive to patient psychosocial context* | * Uses simulation exercises to teach medical students about trauma-informed pelvic exam
* Leads resident or fellow didactics on evaluation of common skin rashes in different skin tones
 |
| Assessment Models or Tools | * Chart/medical record audit
* Course evaluations
* Direct observation (e.g., mini-CEX, structured clinical observation tool, Minicard, OSCE)
* Multisource feedback
* Reflection
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Kliegman, Robert M., and Joseph St. Geme. 2019. *Nelson Textbook of Pediatrics*, *2-Volume Set*, 21st ed. Elsevier Health Sciences. Hardcover ISBN: 9780323568906.
* Schumacher, Daniel J., Robert Englander, Patricia J. Hicks, Carol Carraccio, and Susan Guralnick. 2014. “Domain of Competence: Patient Care.” *Academic Pediatrics* 14(2) Supp: S13-S35. <https://pubmed.ncbi.nlm.nih.gov/24602619/>.
 |

|  |
| --- |
| **Patient Care 3: Organize and Prioritize Patients****Overall Intent:** To organize and appropriately prioritize patient needs to optimize patient outcomes |
| **Milestones** | **Examples** |
| **Level 1** *Takes responsibility for patient care for an individual patient* | * Sees a healthy 16-year-old for a well-adolescent visit and waits until patient is discharged before seeing next patient
* When running behind, completes documentation on current patient before moving to the next one
 |
| **Level 2** *Organizes patient care responsibilities for multiple patients, without prioritization* | * While assessing a new, stable eating disorder patient, completes initial assessment of this patient before addressing a second eating disorder patient who has become aggressive and removed a nasogastric (NG) tube
* Completes a well-adolescent visit for a healthy 13-year-old child prior to enlisting additional support for assessing a 16-year-old who a nurse reports to be exhibiting aggressive behavior towards caregiver
 |
| **Level 3** *Organizes and prioritizes the simultaneous care of patients with efficiency; anticipates and triages urgent and emergent issues* | * When contacted about a second patient while assessing a new, stable eating disorder patient, guides the first-year resident on de-escalation of the second eating disorder patient, who has become aggressive and removed an NG tube, before completing initial assessment for the first patient
* When contacted by the nurse about an aggressive patient while seeing a healthy 13-year-old child for a well-adolescent visit, excuses self from the first visit to get assistance from attending and security, if needed, to help with de-escalation of the 16-year-old patient exhibiting aggressive behavior toward caregiver
 |
| **Level 4** *Organizes, prioritizes, and mobilizes appropriate resources, including when patient volume approaches the capacity of the individual or facility* | * When expecting two patients being admitted from clinic, one with stable vitals and another with vaginal bleeding and a hemoglobin of 6 g/dL, asks a senior resident to see the stable patient, then goes to see the patient with vaginal bleeding, who has the greater potential to decompensate; reviews both patients with the resident after initial evaluation is complete.
* Accommodates a patient from a historically marginalized group with food and housing instability who arrives to clinic beyond the late policy grace period due to limited access to transportation; fits them into the schedule to be seen and coordinates with social work to help address food and housing insecurity needs while seeing other patients who were on time
 |
| **Level 5** *Serves as a role model and coach for triaging patient care responsibilities, and executing and directing care of multiple patients simultaneously*  | * When expecting two patients being admitted (stable eating disorder and unstable vaginal bleeding) asks the resident to see the stable patient with an eating disorder, then goes to see the higher-acuity patient, who has the potential to decompensate; once both patients are assessed and stabilized, meets with the resident for feedback and teaching points, and checks in with the nurse and patient’s family members for further questions
* When two patients arrive at the outpatient clinic simultaneously, asks the resident to see the 13-year-old patient for a well-child visit; sees the suicidal 16-year-old patient, initiating treatment and stabilizing the patient; once both patients are seen, meets with the resident to review the well-child visit for feedback and teaching, teaches resident about how to manage acutely suicidal teens, and checks in with the patient’s family members for further questions
 |
| Assessment Models or Tools | * Audit of diagnoses and numbers of patients seen per clinic session
* Direct observation
* Multisource feedback
* Self-assessment
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Covey, Stephen. 1989. *The Seven Habits of Highly Effective People*. New York: Simon & Schuster.
* Ledrick, David, Susan Fisher, Justin Thompson, and Mark Sniadanko. 2009. “An Assessment of Emergency Medicine Residents’ Ability to Perform in a Multitasking Environment.” *Academic Medicine*. 84(9): 1289-1294. <https://pubmed.ncbi.nlm.nih.gov/19707074/>. doi:10.1097/ACM.0b013e3181b18e1c.
 |

|  |
| --- |
| **Patient Care 4: Differential Diagnosis** **Overall Intent:** To narrow and prioritize the differential diagnoses to determine appropriate management, using all available data  |
| **Milestones** | **Examples** |
| **Level 1** *Constructs a list of potential diagnoses based on the patient’s chief complaint and initial assessment* | * Constructs a list of unprioritized diagnoses for a patient with abnormal uterine bleeding
 |
| **Level 2** *Develops a prioritized differential diagnosis based on chief complaint, likelihood, and severity* | * Develops a differential diagnosis for abnormal uterine bleeding that leads with the conditions that are most common and those that pose the highest risk of morbidity and mortality
 |
| **Level 3** *Integrates history and physical exam into a unifying diagnosis and/or refines differential diagnosis in real time for patients with common conditions* | * After evaluating a patient with abnormal uterine bleeding, learns that the patient is sexually active; notes cervical friability and evidence of inflammation on wet prep; diagnoses an STI and treats appropriately
 |
| **Level 4** *Integrates history and physical exam into a unifying diagnosis and/or refines differential diagnosis in real time for patients with complex conditions* | * Develops weighted differential diagnosis for abnormal uterine bleeding; initial diagnosis is hypothalamic-pituitary-ovarian (HPO) axis immaturity, but when the problem does not improve with time, expands work-up to discover an underlying bleeding disorder
 |
| **Level 5** *Serves as a role model and educator to other learners for how to approach complex conditions to reach diagnosis(es)* | * Educates learners about the subtleties of abnormal uterine bleeding and factors that help narrow the differential diagnosis, and discusses the atypical presentation of bleeding disorders
 |
| Assessment Models or Tools | * Chart-stimulated recall
* Direct observation
* Multisource feedback
* Simulation
* Patient care conferences
* Verbal presentations on bedside rounds or clinic setting (can use tools like the one-minute preceptor)
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Council of Residency Directors in Emergency Medicine (CORD). “CORD Teaching Cases: Oral Board and Simulation Cases.” <https://www.cordem.org/resources/education--curricula/oral-board--sim-cases/>. Accessed 2021.
* Croskerry, Pat. 2020. *The Cognitive Autopsy: A Root Cause Analysis of Medical Decision Making.* 1st ed. New York: Oxford University Press. ISBN: 9780190088743.
* Society to Improve Diagnosis in Medicine. “Practice Improvement Tools.” <https://www.improvediagnosis.org/practice-improvement-tools/>. Accessed 2021.
 |

|  |
| --- |
| **Patient Care 5: Patient Management****Overall Intent:** To lead the health care team in the creation of a comprehensive, patient-centered management plan based on multiple patient factors, including social factors and varied patient backgrounds, regardless of complexity |
| **Milestones** | **Examples** |
| **Level 1** *Participates in the development of management plans* | * Considers antibiotic course for an outpatient with pelvic inflammatory disease according to established treatment guidelines and guidance from supervisor
 |
| **Level 2** *Develops, implements, and follows through on a management plan for common or typical diagnoses* | * Prescribes antibiotics to treat a urinary tract infection in a patient who presents with dysuria and follows up on the results of the urine culture
* For a patient with chlamydia, gives antibiotics and calls to ensure medication adherence and tolerance
 |
| **Level 3** *Develops, implements, and follows through on a management plan for uncommon or atypical diagnoses, incorporating interprofessional care as needed* | * In developing follow up for a patient with anorexia nervosa and inflammatory bowel disease being discharged from a hospital, coordinates follow-up with outpatient therapist, dietician, gastroenterologist, and primary care practitioner
* Evaluates a patient for psychosis and coordinates treatment plan with mental health team; ensures that follow-up appointments are scheduled
 |
| **Level 4** *Works collaboratively with interdisciplinary team to implement a holistic management plan, modifying plan as needed* | * Evaluates a patient with lupus and a history of pulmonary embolism for contraception, discussing management with rheumatology and hematology
* Collaborates with social worker to design treatment plans to help individuals with low incomes or little/no insurance to minimize financial strain
* Helps facilitate a conversation between a patient and the patient’s family regarding an unplanned pregnancy, based on patient's wishes while respecting the young adult’s right to confidentiality; develops a management plan with obstetrics and social work
 |
| **Level 5** *Serves as a role model, leading others in implementing holistic management plans for the most complex diagnoses, modifying plans as needed* | * Leads the inpatient team in discussing a management plan for a patient with chronic abdominal pain and frequent admissions to the hospital, considering the major therapeutic interventions and the evidence for and against each modality
* Guides an incoming fellow in the evaluation and management of a patient disclosing gender dysphoria
 |
| Assessment Models or Tools | * Case-based discussion
* Chart audit
* Direct observation
* Multisource feedback
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Cook, David A., Steven J. Durning, Jonathan Sherbino, and Larry D. Gruppen. 2019. “Management Reasoning: Implications for Health Professions Educators and a Research Agenda.” *Academic Medicine* 94(9):1310–1316. doi: 10.1097/ACM.0000000000002768.
 |

|  |
| --- |
| **Patient Care 6: Provides Consultative Care****Overall Intent:** To provide integrated and comprehensive consultative care for patients in the inpatient and outpatient settings |
| **Milestones** | **Examples** |
| **Level 1** *Receives and discusses consult requests with referring providers collaboratively* | * Asks clarifying questions during a consult request call from an inpatient service and advises the team when the patient will be seen
 |
| **Level 2** *Assesses patient, develops recommendations, and communicates with the referring provider, with guidance*  | * Discusses case with attending prior to seeing patient to be sure of what specific history questions and physical exam findings to elicit; collects appropriate history, completes physical exam, develops recommendations, and communicates them to the primary team after discussing with attending physician
 |
| **Level 3** *Independently assesses patient, develops recommendations, and communicates with referring provider*  | * Provides consult recommendations, discusses the rationale, and answers questions from team members caring for a patient admitted with restrictive eating disorder, with limited input from attending
 |
| **Level 4** *Manages a consultative service and effectively conveys assessment, plan, and rationale to all health care team members*  | * Discusses plans for evaluation and potential therapeutic options with the psychiatrist, therapist, and dietician concurrently consulting on an outpatient with restrictive eating disorder and anxiety; contacts the primary care practitioner to provide integrated recommendations
 |
| **Level 5** *Is identified as a role model for the provision of consultative care across the spectrum of adolescent health*   | * Leads an interdisciplinary committee in creating a protocol to facilitate nutritional rehabilitation for patients with restrictive eating disorders who are admitted to the psychiatry or hospital pediatrics service
 |
| Assessment Models or Tools | * Direct observation
* Faculty member evaluations
* Medical record (chart) audit
* Multisource feedback
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Chen, Debbie C., Eli M. Miloslavsky, Ariel S. Winn, and Jakob I. McSparron. 2018. “Fellow as Clinical Teacher (FACT) Curriculum: Improving Fellows’ Teaching Skills During Inpatient Consultation.” *MedEdPortal* 14:10728. <https://www.mededportal.org/publication/10728/#324747>.
* [François](https://pubmed.ncbi.nlm.nih.gov/?term=Fran%C3%A7ois%20J%5BAuthor%5D), José. 2011. “Tool to Assess the Quality of Consultation and Referral Request Letters in Family Medicine.” *Canadian Family Physician.* 57(5): 574-575. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3093595/>.
* Goldman, L., T. Lee, and P. Rudd. 1983. “Ten Commandments for Effective Consultations.” *Archives of Internal Medicine* 143(9):1753-1755 <https://www.ncbi.nlm.nih.gov/pubmed/6615097>.
* Michael, Sarah H., Steven, Rougas, Xiao C. Zhang, and Brian Clyne. 2019. “A Content Analysis of the ACGME Specialty Milestones to Identify Performance Indicators Pertaining to the Development of Residents as Educators.” *Teaching and Learning in Medicine* 31: 424-433. <https://doi.org/10.1080/10401334.2018.1560298>.
* Podolsky, Anna, David T. Stern, and Lauren Peccoralo. 2015. “The Courteous Consult: A CONSULT Card and Training to Improve Resident Consults.” *Journal of Graduate Medical Education*. 7(1): 113-117. <https://www.ncbi.nlm.nih.gov/pubmed/26217436>.
 |

|  |
| --- |
| **Medical Knowledge 1: Clinical Knowledge****Overall Intent:** To demonstrate medical and scientific knowledge and apply it to the care of pediatric patients |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates knowledge needed to provide primary care* | * Knows recommended vaccines and screening tools for adolescents and young adults
 |
| **Level 2** *Demonstrates knowledge needed to provide subspecialty care to patients with simple or uncomplicated conditions* | * When evaluating a patient with symptoms of an STI, completes laboratory workup and treatment
 |
| **Level 3** *Demonstrates knowledge needed to provide subspecialty care to patients with atypical or complex conditions* | * When evaluating a patient with abnormal uterine bleeding, adapts protocol to account for a history of lupus and thrombocytopenia
 |
| **Level 4** *Integrates a breadth of medical knowledge from various sources to provide care where evidence is ambiguous or limited* | * In a patient with an unclear rheumatologic condition requiring treatment for abnormal uterine bleeding whose family is resistant to long-acting reversible contraception (LARC), effectively compiles patient history, literature review, and discusses with rheumatologist to integrate information to offer safe alternatives that include patient’s and family’s preferences
 |
| **Level 5** *Teaches at multiple levels, drawing from a breadth of medical knowledge that spans the continuum of simple to complex problems* | * Creates workshop presented to other subspecialists on reproductive justice and contraception in adolescents including recommendations for clinical care, health systems, and public policy
 |
| Assessment Models or Tools | * Direct observation (e.g., clinical rounds)
* In-training examination
* Medical record (chart) audit
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Englander, Robert, and Carol Carraccio. 2014. “Domain of Competence: Medical Knowledge.” *Academic Pediatrics* 14(2)Supp: S36-S37. <https://www.sciencedirect.com/science/article/abs/pii/S1876285913003240>.
 |

|  |
| --- |
| **Medical Knowledge 2: Diagnostic Evaluation****Overall Intent:** To order diagnostic tests and subspecialty consultations (if appropriate), tailoring the evaluation to patient complexity, severity of illness, and the most likely diagnosis(es); to interpret results accurately within the context of the clinical picture |
| **Milestones** | **Examples** |
| **Level 1** *Explains the rationale, risks, and benefits for common diagnostic testing**Interprets results of common diagnostic tests* | * When evaluating a 14-year-old patient with heavy menstrual bleeding and fatigue, appropriately orders a complete blood count and explains reasoning for not obtaining a pelvic ultrasound at this time
* Identifies microcytic anemia from results of complete blood count based on hemoglobin and mean corpuscular volume (MCV) value
 |
| **Level 2** *Explains the rationale, risks, and benefits for complex diagnostic testing**Interprets complex diagnostic data* | * When evaluating a 15-year-old with secondary amenorrhea and hirsutism, tailors lab approach to investigate causes of hyperandrogenism
* For 15-year-old patient with secondary amenorrhea, notes elevated follicular stimulating hormone and low estradiol as concerning for premature ovarian insufficiency and need for further evaluation
 |
| **Level 3** *Considers value and test characteristics of various diagnostic strategies**Integrates complex diagnostic data accurately to reach high-probability diagnoses* | * Describes indication for obtaining an antinuclear antibody (ANA) and rheumatoid factor for a patient with joint pain and inflammation

 * Considers region of origin for patient who recently immigrated and adjusts screening tests appropriately
 |
| **Level 4** *Considers biopsychosocial factors when developing diagnostic strategy* *Anticipates and accounts for limitations when interpreting diagnostic data* | * Incorporates history of trauma when performing evaluation of abdominal pain
* Recognizes that pulse oximetry may overestimate oxygen saturation in people of color
* Recognizes that low thyroid studies in patient with severe malnutrition are likely not indicative of thyroid illness and need retesting when nutritionally replete
 |
| **Level 5** *Demonstrates a nuanced understanding of emerging diagnostic tests and procedures* | * Explains to a resident the risks of settling on a diagnosis too early and lists additional evaluations that may be necessary to identify other etiologies of disease
* When a medical student excludes a diagnosis of a specific infection based on a negative serologic antibody test, points out that if the patient is immunodeficient, the test may be negative even if the patient has the disease
 |
| Assessment Models or Tools | * Chart audits
* Clinical evaluations
* Direct observation
* In-training examination
* Multisource feedback
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Cutler, Paul. 1998. *Problem Solving in Clinical Medicine: From Data to Diagnosis*. 3rd ed. Baltimore, MD: Lippincott, Williams & Wilkins.
* Englander, Robert, and Carol Carraccio. 2014. “Domain of Competence: Medical Knowledge.” *Academic Pediatrics* 14(2)Supp: S36-S37. <https://www.sciencedirect.com/science/article/abs/pii/S1876285913003240>.
* Epner, Paul L., Janet E. Gans, and Mark L. Graber. 2013. “When Diagnostic Testing Leads to Harm: A New Outcomes-Based Approach for Laboratory Medicine.” *BMJ Quality & Safety* 22(Supp 2): ii6-ii10. <https://pubmed.ncbi.nlm.nih.gov/23955467/>.
 |

|  |
| --- |
| **Systems-Based Practice 1: Patient Safety****Overall Intent:** To engage in the analysis and management of patient safety events, including relevant communication with patients, their 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 common patient safety events such as vaccination or medication errors
* Lists “patient safety reporting system” or “patient safety hotline” as ways to report safety events
 |
| **Level 2** *Identifies system factors that lead to patient safety events**Reports patient safety events through institutional reporting systems (simulated or actual)* | * Identifies electronic health record (EHR) default setting, such as automatic note-sharing, that may result in disclosure of confidential information to a parent or guardian
* Reports EHR errors leading to confidentiality breaches through appropriate reporting mechanism
 |
| **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)* | * Actively participates in department patient safety presentations
* Engages in root cause analyses (mock or actual)

 * With the support of an attending or risk management team member, participates in the disclosure of a medication or vaccine order error to patient and/or patient’s family
 |
| **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)* | * Leads a simulated or actual root cause analysis related to a note being shared with a patient's guardian containing confidential information
* Following consultation with risk management and other team members, independently discloses a medication or vaccination error to a patient’s family
 |
| **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* | * Leads amultidisciplinary team to work on setting up a patient portal that allows for the protection of confidential information.

 * Conducts a simulation demonstrating techniques and approaches for disclosing patient safety events
* Teaches a session during resident conference about the resident’s role in maintaining patient confidentiality via the patient portal
 |
| Assessment Models or Tools | * Case-based discussion
* Direct observation
* E-module multiple choice tests
* Guided reflection
* Medical record (chart) audit
* Multisource feedback
* Portfolio
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Guralnick, Susan, Stephen Ludwig, and Robert Englander. 2014. “Domain of Competence: Systems-Based Practice.” *Academic Pediatrics*. 14: S70-S79. <https://doi.org/10.1016/j.acap.2013.11.015>.
* Institute for Healthcare Improvement. <http://www.ihi.org/Pages/default.aspx>. Accessed 2020.
* Singh, Ranjit, Bruce Naughton, John S. Taylor, Marlon R. Koenigsberg, Diana R. Anderson, Linda L. McCausland, Robert G. Wahler, Amanda Robinson, and Gurdev Singh. 2005. “A Comprehensive Collaborative Patient Safety Residency Curriculum to Address the ACGME Core Competencies.” *Medical Education*. 39(12): 1195-204. DOI: [10.1111/j.1365-2929.2005.02333.x](https://doi.org/10.1111/j.1365-2929.2005.02333.x).
 |

|  |
| --- |
| **Systems-Based Practice 2: Quality Improvement****Overall Intent:** To understand and implement quality improvement methodologies to improve patient care |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates knowledge of basic quality improvement methodologies and metrics* | * Describes fishbone diagram
* Describes components of a “Plan-Do-Study-Act” cycle
 |
| **Level 2** *Describes local quality improvement initiatives (e.g., long-active reversible contraception (LARC) usage, smoking cessation)* | * Describes an initiative in the continuity clinic to improve human papillomavirus (HPV) vaccination rates
 |
| **Level 3** *Participates in local quality improvement initiatives* | * Participates in an ongoing interdisciplinary project to improve medication reconciliation
* Collaborates on a project to improve discharge efficiency
 |
| **Level 4** *Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project* | * Develops and implements a quality improvement project to improve HPV vaccination rates within a practice site that includes engaging the office team, assessing the problem, articulating a broad goal, developing a SMART (Specific, Measurable, Attainable, Realistic, Time-bound) aim, collecting data, analyzing, and monitoring progress and challenges
* In developing a quality improvement project, considers team bias and social determinants of health in patient population
 |
| **Level 5** *Creates, implements, and assesses quality improvement initiatives at the institutional or community level* | * Initiates and completes a quality improvement project to improve HPV vaccination rates in collaboration with the county health department and shares results through a formal presentation to the community leaders
 |
| Assessment Models or Tools | * Direct observation
* E-module multiple choice test
* Portfolio
* Poster or other presentation
* Team evaluations
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Bright Futures. QI Office System Tools. <https://www.aap.org/en/practice-management/bright-futures/bright-futures-quality-improvement/qi-office-system-tools/>. Accessed 2022.
* Guralnick, Susan, Stephen Ludwig, and Robert Englander. 2014. “Domain of Competence: Systems-Based Practice.” *Academic Pediatrics*. 14: S70-S79. <https://doi.org/10.1016/j.acap.2013.11.015>.
* Institute for Healthcare Improvement. <http://www.ihi.org/Pages/default.aspx>. Accessed 2020.
* Murtagh Kurowski, Eileen, Amanda C. Schondelmeyer, Courtney Brown, Christopher E. Dandoy, Samuel J. Hanke, and Heather L. Tubbs Cooley. 2015. “A Practical Guide to Conducting Quality Improvement in the Health Care Setting.” *Current Treatment Options in Pediatrics*. 1:380-392. <https://doi.org/10.1007/s40746-015-0027-3>.
 |

|  |
| --- |
| **Systems-Based Practice 3: System Navigation for Patient-Centered Care – Coordination of Care****Overall Intent:** To effectively navigate the health care system, including the interdisciplinary team and other care practitioners; to adapt care to a specific patient population to ensure high-quality patient outcomes |
| **Milestones** | **Examples** |
| **Level 1** *Lists the various interprofessional individuals involved in the patient’s care coordination* | * For an adolescent with sickle cell disease and depression admitted to the hospital with pain crisis, identifies the team members, including pediatric hematologist, mental health practitioner, pain management team, and nursing staff members
* Identifies important members of the medical home team for a complex care patient in the adolescent continuity clinic
 |
| **Level 2** *Coordinates care of patients in routine clinical situations, incorporating interprofessional teams with consideration of patient and family needs* | * Coordinates home health care for an adolescent with cerebral palsy and a gastrostomy tube being seen in the adolescent clinic
* Arranges for social work and mental health evaluation for an adolescent with no health insurance and a positive depression screen
 |
| **Level 3** *Coordinates care of patients in complex clinical situations, effectively utilizing the roles of interprofessional teams, and incorporating patient and family needs and goals* | * When evaluating a sexually active adolescent girl with lupus and bipolar disorder who presents for contraception, makes sure to discuss options with patient’s rheumatologist and psychiatrist in order to ensure safety and efficacy of method
* Works with the inpatient social worker and patient’s family to coordinate outpatient care and ensure appropriate eating disorder and nutrition follow up for an adolescent with anorexia nervosa, making sure to update the primary care physician
 |
| **Level 4** *Coordinates interprofessional, patient-centered care among different disciplines and specialties, actively assisting families in navigating the health-care system* | * + Coordinates care for an uninsured adolescent with cystic fibrosis who has recently immigrated to the United States, helping the family make a pulmonology appointment, apply for health insurance, and obtain needed medications
* Arranges high-risk prenatal care for an adolescent with sickle cell disease who is 14 weeks pregnant, reaching out to the obstetrics and gynecology and hematology services for timely appointments
 |
| **Level 5** *Coaches others in interprofessional, patient-centered care coordination* | * Organizes and leads a resident noon conference to discuss the clinical and ethical issues involved when adolescents with cancer refuse treatment, incorporating practitioners from hematology-oncology, social work, and psychiatry
* Coaches a resident through the coordination of a family meeting that includes the inpatient team and subspecialists caring for an adolescent with an eating disorder who is refusing to eat and requires initiation of nasogastric feeding
 |
| Assessment Models or Tools | * Direct observation and entrustable professional activities
* Medical record (chart) audit
* Multisource feedback
* Review of discharge planning documentation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * AAP. <https://www.aap.org/en-us/Pages/Default.aspx>. Accessed 2020.
* AAP. Pediatric Care Coordination Resources. <https://www.aap.org/en/practice-management/care-delivery-approaches/care-coordination-resources/>. Accessed 2022.
* ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Skochelak, Susan E., Maya M. Hammond, Kimberly D. Lomis, Jeffrey M. Borkan, Jed. D. Gonzalo, Luan E. Lawson, and Stephanie R. Starr. 2020. *AMA Education Consortium: Health Systems Science*, 2nd ed. Elsevier.
* Starr, Stephanie R., Neera Agrwal, Michael J. Bryan, Yuna Buhrman, Jack Gilbert, Jill M. Huber, Andrea N. Leep Hunderfund, et al. 2017. “Science of Health Care Delivery: An Innovation in Undergraduate Medical Education to Meet Society’s Needs.” [*Mayo Clinic Proceedings: Innovations, Quality & Outcomes*](https://www.sciencedirect.com/science/journal/25424548). 1(2): 117-129. <https://www.sciencedirect.com/science/article/pii/S2542454817300395>.
 |

|  |
| --- |
| **Systems-Based Practice 4: System Navigation for Patient-Centered Care – Transitions in Care****Overall Intent:** To effectively navigate the health delivery system during transitions of care to ensure high-quality patient outcomes |
| **Milestones** | **Examples** |
| **Level 1** *Uses a standard template for transitions of care/hand-offs* | * When signing out a patient admitted with disordered eating, uses I-PASS template but does not discuss family dynamics or discharge criteria
 |
| **Level 2** *Adapts a standard template, recognizing key elements for safe and effective transitions of care/hand-offs in routine clinical situations* | * Discusses a discharge of a 14-year-old admitted with anorexia nervosa from the ward with the primary care physician and provides a problem list, clinical course, and action items to be followed up as an outpatient
 |
| **Level 3** *Performs safe and effective transitions of care/hand-offs in complex clinical situations, and ensures closed-loop communication* | * Performs the hand-off for a patient with a complex diagnosis who will be seeing a colleague at the next clinic visit with a succinct summary by problem or system, a timeline for follow up and repeat testing, with clearly delineated responsibilities; solicits read-back and confirms understanding of the plan
 |
| **Level 4** *Performs and advocates for safe and effective transitions of care/hand-offs within and across health care delivery systems, including transitions to adult care* | * Seeks out appropriate adult general and subspecialty practitioners to facilitate the transition of a 20-year-old patient with complex health care needs to adult care; ensures a thorough hand-off, including the patient’s social needs, to the identified new adult practitioners
 |
| **Level 5** *Coaches others in improving transitions of care within and across health care delivery systems to optimize patient outcomes* | * Designs and implements standardized hand-off workshop exercises for learners prior to the start of their clinical rotations
* Develops and implements a process within clinic to improve the transition from pediatrics to adult medicine
 |
| Assessment Models or Tools | * Portfolio assessment
* Direct observation
* I-PASS assessment checklist
* Multisource feedback
* Simulation
* Review of sign-out tools, use and review of checklists
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Blazin, Lindsay J., Jitsuda Sitthi-Amorn, James M. Hoffman, and Jonathan D. Burlison. 2020. “Improving Patient Handoffs and Transitions through Adaptation and Implementation of I-PASS Across Multiple Handoff Settings.” *Pediatric Quality and Safety* 23;5(4): e323. <https://doi.org/10.1097/pq9.0000000000000323>.
* Got Transition. “Clinician Education and Resources.” <https://www.gottransition.org/resources-and-research/clinician-education-resources.cfm>. Accessed 2020.
* Matern, Lukas H., Jeanne M. Farnan, Kristen W. Hirsch, Melissa Cappaert, Ellen S. Byrne, and Vineet M. Arora. 2018. “A Standardized Handoff Simulation Promotes Recovery from Auditory Distractions in Resident Physicians.” *Simulation in Healthcare*. 13(4): 233-238. DOI: 10.1097/SIH.0000000000000322.
* Society for Adolescent Health and Medicine. 2020. “Transition to Adulthood for Youth with Chronic Conditions and Special Health Care Needs.” *Journal of Adolescent Health*. 66(5): P631-634. [https://www.jahonline.org/article/S1054-139X(20)30075-6/fulltext](https://www.jahonline.org/article/S1054-139X%2820%2930075-6/fulltext).
* Starmer, Amy J., Nancy D. Spector, Rajendu Srivastava, Daniel C. West, Glenn Rosenbluth, April D. Allen, Elizabeth L. Noble, et al. “Changes in Medical Errors after Implementation of a Handoff Program.” *New England Journal of Medicine*. 371:1803-1812. DOI: 10.1056/NEJMsa1405556.
* Starmer, Amy J., Nancy D. Spector, Rajendu Srivastava, April D. Allen, Christopher P. Landrigan, Theodore C. Sectish, and I-PASS Study Group. 2012. “I-Pass, A Mnemonic to Standardize Verbal Handoffs.” *Pediatrics* 129(2), 201–204. <https://doi.org/10.1542/peds.2011-2966>.
 |

|  |
| --- |
| **Systems-Based Practice 5: Population and Community Health****Overall Intent:** To promote and improve health across communities and populations through patient care and advocacy, including public education and elimination of structural racism |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates awareness of population and community health needs and disparities* | * Identifies social determinants of health, such as poverty and structural racism
* Screens patients for adverse childhood experiences and acknowledges social determinants of health and the impact of structural racism on individual patients
 |
| **Level 2** *Identifies specific population and community health needs and disparities; identifies local resources* | * Identifies food deserts within the area and locates local community gardens and farmers’ markets
* Identifies disproportionate gun violence in patient population and describes local gun safety programs
 |
| **Level 3** *Uses local resources effectively to meet the needs and reduce health disparities of a patient population and community* | * Promotes to patients local resources and programs aimed at eliminating structural racism and improving health disparities, such as accessing legal services to prevent eviction or assistance completing college financial aid forms
* Partners with local organizations to donate products to help people experiencing menstrual poverty to access supplies
 |
| **Level 4** *Adapts practice to provide for the needs of and reduce health disparities of a specific population* | * Includes mental health resources in after-visit summary for patient whose primary language is not English
* Develops a clinical protocol in the delivery of pre-exposure prophylaxis (PrEP) to increase access for patient populations disproportionally burdened by HIV
* Seeks additional training and education for prescribing isotretinoin for patients with acne to reduce barriers to access to care
 |
| **Level 5** *Advocates at the local, regional, or national level for populations and communities with health care disparities* | * Partners with a community organization working to increase COVID-19 vaccination rates in patients with unstable housing
* Participates in longitudinal discussions with local, state, or national government policy makers to eliminate structural racism and reduce health disparities
 |
| Assessment Models or Tools | * Analysis of process and outcomes measures based on social determinants of health and resultant disparities
* Direct observation
* Medical record (chart) audit
* Multisource feedback
* Portfolio assessment
* Reflection
 |
| Curriculum Mapping  |  |
| Notes or Resources | * AAP. Bright Futures. Promoting Lifelong Health for Families and Communities. <https://downloads.aap.org/AAP/PDF/Bright%20Futures/BF4_LifelongHealth.pdf?_ga=2.268230030.1236819861.1654476607-929400881.1619626826&_gac=1.229642574.1651085941.cj0kcqjw06otbhc_arisaau1yovdcxkc8cjmzqntgqmfsj0_flej6v7e95sxi3exmdjyivnt1vv9rxoaamnzealw_wcb>. Accessed 2022.
* AAP. “Advocacy.” <https://services.aap.org/en/advocacy/>. Accessed 2020.
* ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Blankenburg, Rebecca, Patricia Poitevien, Javier Gonzalez del Rey, Megan Aylor, John Frohna, Heather McPhillips, Linda Waggoner-Fountain, and Laura Degnon. 2020. “Dismantling Racism: Association of Pediatric Program Directors’ Commitment to Action.” *Academic Pediatrics.* 20(8): 1051-1053. doi: 10.1016/j.acap.2020.08.017.
* Centers for Disease Control and Prevention. “Fast Facts: Preventing Adverse Childhood Experiences.” <https://www.cdc.gov/violenceprevention/aces/fastfact.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Facestudy%2Ffastfact.html>. Accessed 2020.
* CommonHealth ACTION. 2016. “Leveraging the Social Determinants to Build a Culture of Health.” <https://healthequity.globalpolicysolutions.org/wp-content/uploads/2016/12/RWJF_SDOH_Final_Report-002.pdf>. Accessed 2020.
* DallaPiazza, Michelle, Mercedes Padilla-Register, Megana Dwarakanath, Elyon Obamedo, James Hill, and Maria L. Soto-Greene. 2018. “Exploring Racism and Health: An Intensive Interactive Session for Medical Students.” *MedEdPORTAL*. 14:10783. <https://doi.org/10.15766/mep_2374-8265.10783>.
* Johnson, Tiffani J. 2020. “Intersection of Bias, Structural Racism, and Social Determinants with Health Care Inequities.” *Pediatrics*. 146(2): e2020003657. <https://doi.org/10.1542/peds.2020-003657>.
* MedEdPORTAL. “Anti-Racism in Medicine Collection.” <https://www.mededportal.org/anti-racism>. Accessed 2020.
* Trent, Maria, Danielle G. Dooley, Jacqueline Dougé, Section on Adolescent Health, Council on Community Pediatrics, Committee on Adolescence, Robert M. Cavanaugh, et al. 2019. “The Impact of Racism on Child and Adolescent Health.” *Pediatrics*. 144(2):e20191765. <https://doi.org/10.1542/peds.2019-1765>.
 |

|  |
| --- |
| **Systems-Based Practice 6: Physician Role in Health Care Systems****Overall Intent:** To understand the physician’s role in health systems science to optimize patient care delivery, including cost-conscious care |
| **Milestones** | **Examples** |
| **Level 1** *Engages with patients and other providers in discussions about cost-conscious care and key components of the health care delivery system* | * Articulates the importance of patients coming to the primary care clinic for non-emergent acute visits instead of seeking care in the emergency department
* Discusses the impact of insurance coverage on medication selection in a patient with acne
 |
| **Level 2** *Identifies the relationships between the delivery system and cost-conscious care and the impact on the patient care* | * Considers that insurance coverage, or lack of coverage, can affect the ability for an adolescent to obtain PrEP and increases the risk of HIV for that youth
* Considers insurance coverage and available specialty care practitioners when coordinating discharge planning for an adolescent patient hospitalized with acute asthma exacerbation and comorbid nicotine dependence
* Reviews list of low-cost medications from retail pharmacy prior to discharge and develops a plan for in-hospital vaccination for a recently immigrated adolescent admitted for H. pylori gastritis, and unknown vaccine status
 |
| **Level 3** *Discusses the need for changes in clinical approaches based on evidence, outcomes, and cost-effectiveness to improve care for patients and families* | * Adapts and optimizes clinical plan for an uninsured adolescent to provide appropriate care and minimize costs
* Considers the role of institutionalized racism as a contributor to no-show clinic appointment rates for adolescents from marginalized backgrounds and discusses optimizing the schedule to accommodate their care
 |
| **Level 4** *Advocates for the promotion of safe, quality, and high-value care* | * Works collaboratively to identify additional services and linkage to community workers for an unhoused patient with a recent traumatic brain injury due to gunshot wound
* Identifies the value of an asthma action plan upon discharge to minimize hospital readmissions and implements a quality improvement project to address this issue
* Works in collaboration with local school-based health clinic and community organizations to deliver accessible health education to adolescents and their families about vaccines during the COVID-19 pandemic
 |
| **Level 5** *Coaches others to promote safe, quality, and high-value care across health care systems* | * Educates and coaches outpatient nursing staff on the creation and implementation of protocols to teach patients how to inject masculinizing hormone therapy
* Leads outpatient clinical team members in education and strategies around care gaps for transgender teens by creating and directing initiatives aimed at ensuring that the EHR recognizes patient-identified gender pronouns
 |
| Assessment Models or Tools | * Direct observation
* Medical record (chart) audit
* Multisource feedback
* Patient safety conference
* Portfolio
* Review and guided reflection on costs accrued for individual patients or patient populations with a given diagnosis
 |
| Curriculum Mapping  |  |
| Notes and Resources  | * Agency for Healthcare Research and Quality (AHRQ). **“**Measuring the Quality of Physician Care.” <https://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/create/physician/challenges.html>. Accessed 2020.
* AAP. Practice Management. <https://www.aap.org/en/practice-management/>. Accessed 2022.
* American Board of Internal Medicine. “QI/PI Activities.” <https://www.abim.org/maintenance-of-certification/earning-points/qi-pi-activities.aspx>. Accessed 2020.
* ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* American College of Physicians. “Newly Revised: Curriculum for Educators and Residents (Version 4.0).” <https://www.acponline.org/clinical-information/high-value-care/medical-educators-resources/newly-revised-curriculum-for-educators-and-residents-version-40>. Accessed 2020.
* Choosing Wisely. “American Academy of Pediatrics: Ten Things Physicians and Patients Should Question.” <https://www.choosingwisely.org/societies/american-academy-of-pediatrics/>. Accessed 2020.
* The Commonwealth Fund.“State Health Data Center.”<http://datacenter.commonwealthfund.org/?_ga=2.110888517.1505146611.1495417431-1811932185.1495417431#ind=1/sc=1>. Accessed 2020.
* Crowe, Byron, Sami G. Tahhan, Curtis Lacy, Jule Grzankowski, and Juan N. Lessing. 2020. “Things We Do for No Reason™: Routine Correction of Elevated INR and Thrombocytopenia Prior to Paracentesis in Patients with Cirrhosis.” *Journal of Hospital Medicine*. 16(2): 102-104. <https://doi.org/10.12788/jhm.3458>.
* Dzau, Victor J., Mark McClellan, Sheila Burke, Molly J. Coye, Thomas A. Daschle, Angela Diaz, William H. Frist, et al. 2017. “Vital Directions for Health and Health Care: Priorities from a National Academy of Medicine Initiative.” *NAM Perspectives*. Discussion Paper, National Academy of Medicine, Washington, DC. https://doi.org/10.31478/201703e.
* Solutions for Patient Safety. “Hospital Resources.” <https://www.solutionsforpatientsafety.org/for-hospitals/hospital-resources/>. Accessed 2020.
 |

|  |
| --- |
| **Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice****Overall Intent:** To incorporate evidence and apply it to individual patients and patient populations |
| **Milestones** | **Examples** |
| **Level 1** *Develops an answerable clinical question and demonstrates how to access available evidence, with guidance* | * Identifies a question such as, “What is the appropriate treatment for this patient with abnormal uterine bleeding?” but needs guidance to focus it into a searchable question informed by patient presentation
* Uses general medical resources such as UpToDate or DynaMed to search for answers
 |
| **Level 2** *Independently articulates clinical question and accesses available evidence* | * Identifies the proper question of, “Are non-steroidal anti-inflammatory drugs (NSAIDs) more effective than oral estrogen for treatment of breakthrough bleeding in patients on depot medroxyprogesterone?” and uses PubMed to search for the answer
 |
| **Level 3** *Locates and applies the evidence, integrated with patient preference, to the care of patients* | * To provide the patient with treatment options and engage in shared decision making, obtains, appraises, and applies evidence to identify effective options for the treatment of abnormal uterine bleeding
 |
| **Level 4** *Critically appraises and applies evidence, even in the face of uncertainty and conflicting evidence to guide care tailored to the individual patient* | * Routinely seeks out and applies evidence on impact of implicit bias and inclusivity on the care of individual patients to re-evaluate own clinical practice
* Uses levels of evidence to mitigate uncertainty about the treatment plan for an individual patient
* Seeks out the evidence for supplemental treatment of tranexamic for a patient with persistent heavy menstrual bleeding who is currently taking combined hormonal contraceptives, and counsels patient on what is known about the risks and benefits
 |
| **Level 5** *Coaches others to critically appraise and apply evidence for complex patients* | * Provides feedback to residents and medical students on their ability to formulate questions, search for the best available evidence, appraise evidence, and apply that information to the care of patients
* As part of a team, develops an evidence-based clinical pathway in the EHR for patients with abnormal uterine bleeding
 |
| Assessment Models or Tools | * Direct observation to inform Milestones and entrustable professional activities
* Oral or written examinations
* Presentation evaluation
* Research portfolio
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Duke University. “Evidence-Based Practice.” <https://guides.mclibrary.duke.edu/ebm/home>. Accessed 2020.
* Guyatt, Gordon, Drummond Rennie, Maureen O. Meade, and Deborah Cook. 2015. *Users’ Guides to the Medical Literature: A Manual for Evidence-Based Clinical Practice*, 3rd ed. USA: McGraw-Hill Education. <https://jamaevidence.mhmedical.com/Book.aspx?bookId=847>. Accessed 2020.
* US National Library of Medicine. “PubMed® Online Training.” <https://www.nlm.nih.gov/bsd/disted/pubmedtutorial/cover.html>. Accessed 2020.
 |

|  |
| --- |
| **Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth****Overall Intent:** Tocontinuously improve patient care based on self-evaluation and lifelong learning |
| **Milestones** | **Examples** |
| **Level 1** *Participates in feedback sessions**Develops personal and professional goals, with assistance* | * Attends scheduled feedback sessions after completing online assessment
* Develops a plan with faculty member to incorporate routine screening for mental health and substance use during well-adolescent visits
* Acknowledges faculty member feedback about implicit biases against patients with elevated body mass index
 |
| **Level 2** *Demonstrates openness to feedback and performance data**Designs a learning plan based on established goals, feedback, and performance data, with assistance* | * Acknowledges concerns about timely note completion and works with clinic preceptor to develop goals for improvement
* After receiving feedback on the use of screening tools (e.g., PHQ-A, CRAFFT), develops individualized learning plan with faculty member assistance to increase use of these routine screening tools during annual visits
 |
| **Level 3** *Seeks and incorporates feedback and performance data episodically**Designs and implements a learning plan by analyzing and reflecting on the factors which contribute to gap(s) between performance expectations and actual performance* | * After a lecture, reviews chart of clinic patients to ensure they have been screened for depression or substance use
* Asks for both positive and constructive feedback about taking a sexual history and applies more developmentally appropriate language in the next encounter
* Identifies problems performing an effective pelvic exam and arranges to spend more time with practitioners who regularly perform pelvic exams to improve skills
* Recognizes own implicit biases that affected care for a transgender male seeking contraception and takes steps to mitigate bias
 |
| **Level 4** *Seeks and incorporates feedback and performance data consistently**Adapts a learning plan using long-term professional goals, self-reflection, and performance data to measure its effectiveness* | * Initiates a quarterly chart audit to ensure completion of routine depression and substance use screening for all well-adolescent visits
* Adapts learning plan to improve knowledge of screening, brief intervention, and referral to treatment (SBIRT) based on personal reflection, feedback, and patient data
* After taking an implicit bias test, actively seeks out resources and strategies to reduce the impact of own biases on patient care
 |
| **Level 5** *Role models and coaches others in seeking and incorporating feedback and performance data**Demonstrates continuous self-reflection and coaching of others on reflective practice* | * After assessing own performance data and finding deficits, leads a discussion on opportunities to improve SBIRT implementation for all patients cared for by the clinic
* Meets with learners to review practice habits and develop their learning goals for treating patients with eating disorders
 |
| Assessment Models or Tools | * Direct observation
* Medical record (chart) audit
* Multisource feedback
* Review of learning plan
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Burke, Anne E., Bradley Benson, Robert Englander, Carol Carraccio, and Patricia J. Hicks. 2014. “Domain of Competence: Practice-Based Learning and Improvement.” *Academic Pediatrics.* 14(2): S38-S54. DOI: https://doi.org/10.1016/j.acap.2013.11.018.
* Lockspeiser, Tai M., Su-Ting T. Li, Ann E. Burke, Adam A. Rosenberg, Alston E. Dunbar 3rd, Kimberly A. Gifford, Gregory H. Gorman, et al. 2016. “In Pursuit of Meaningful Use of Learning Goals in Residency: A Qualitative Study of Pediatric Residents.” *Academic Medicine*. 91(6):839-846. DOI: [10.1097/ACM.0000000000001015](https://doi.org/10.1097/acm.0000000000001015).
* Lockspeiser, Tai M., Patricia A. Schmitter, J. Lindsey Lane, Janice L. Hanson, Adam A. Rosenberg, and Yoon Soo Park. 2013. “Assessing Residents’ Written Learning Goals and Goal Writing Skill: Validity Evidence for the Learning Goal Scoring Rubric.” *Academic Medicine*. 88(10):1558-1563. DOI: 10.1097/ACM.0b013e3182a352e6.
 |

|  |
| --- |
| **Professionalism 1: Professional Behavior** **Overall Intent:** To demonstrate ethical and professional behaviors and promote these behaviors in others and to use appropriate resources to manage professional dilemmas |
| **Milestones** | **Examples** |
| **Level 1** *Identifies expected professional behaviors and potential triggers for lapses**Identifies the value and role of physicians as a vocation/career* | * Recognizes own tendency to be more reactive toward others when sleep deprived
* Acknowledges the importance of adolescent medicine specialists in teaching pediatric learners about contraception counseling and other sexual and reproductive health care behaviors of adolescents
* Acknowledges the importance of adolescent medicine physicians in the advocacy for adolescent health rights
 |
| **Level 2** *Demonstrates professional behavior with occasional lapses**Demonstrates accountability for patient care as a physician, with guidance* | * Occasionally does not complete charts on time
* Receives direct request from patient through patient portal when not currently in clinic and communicates patient request to the team covering the clinic that afternoon to ensure patient’s needs are met after being directed by the program director
* Responds to EHR medication refill request after being reminded by the nurse
 |
| **Level 3** *Maintains professional behavior in increasingly complex or stressful situations**Fully engages in patient care and holds oneself accountable* | * During an overbooked clinic afternoon, demonstrates caring and compassionate behaviors with patients, patients’ families, colleagues, and staff members
* Advocates for an individual patient’s needs in a humanistic and professional manner regarding home care, medication approval, and need for care by another subspecialist
* After realizing that the wrong medication was ordered, contacts the patient directly after the correct order is placed
 |
| **Level 4** *Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others**Exhibits a sense of duty to patient care and professional responsibilities* | * Models respect and compassion for patients and promotes the same from colleagues by actively identifying positive professional behavior in tense or stressful patient encounters
* Without prompting, assists colleagues with seeing patients when the clinic is particularly busy
* Speaks up in the moment when observing discriminatory behavior within the health care setting and uses reporting mechanisms to address it
 |
| **Level 5** *Models professional behavior and coaches others when their behavior fails to meet professional expectations**Extends the role of the pediatrician beyond the care of patients by engaging with the community, specialty, and medical profession as a whole* | * Discusses the need to be on time with a resident who continues to be late, works together to address the underlying issues of why the learner is late, and develops a mitigating plan
* Develops education and/or modules on microaggressions and bias for residents and medical students during their adolescent medicine rotation
* Engages with a local school board to discuss the impact of abstinence-only education and offer suggestions for curricular improvement
 |
| Assessment Models or Tools | * Direct observation
* Global evaluation
* Multisource feedback
* Oral or written self-reflection
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Below are resources that define professionalism and seek to focus it on what key knowledge, skills, and attitudes are required to ensure public trust and promote integrity within the profession. It is important to note a historical context in which the informal and formal assessment of “professionalism” has extended beyond these ideals to negatively impact the careers of women, LGBTQIA+ people, and underrepresented minorities in medicine. Explicitly, examples of this have included the way in which women, historically marginalized learners, and LGBTQIA+ learners have been targeted for certain forms of self-expression of racial, ethnic, or gender identity. The assessment of professionalism should seek to be anti-racist and eliminate all forms of bias.
* AbdelHameid, Duaa. 2020. “Professionalism 101 for Black Physicians.” *New England Journal of Medicine.* 383(5): e34. doi:10.1056/NEJMpv2022773.
* AAP. “Residency Curriculum: Mental Health Educational Resources.” <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Mental-Health/Pages/Residency-Curriculum.aspx>. Accessed 2020.
* American Board of Internal Medicine Foundation, ACP-ASIM Foundation, and European Federation of Internal Medicine. 2002. “Medical Professionalism in the New Millennium: A Physician Charter.” *Annals of Internal Medicine* 136: 243-246. <https://doi.org/10.7326/0003-4819-136-3-200202050-00012>.
* ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* ABP. “Medical Professionalism.” <https://www.abp.org/content/medical-professionalism>. Accessed 2020.
* ABP. “Teaching, Promoting, and Assessing Professionalism Across the Continuum: A Medical Educator’s Guide.” <https://www.abp.org/professionalism-guide>. Accessed 2020.
* American Medical Association. “Ethics.” <https://www.ama-assn.org/delivering-care/ama-code-medical-ethics>. Accessed 2020.
* Bynny, Richard L., Douglas S. Paauw, Maxine Papadakis, and Sheryl Pfeil. 2017. *Medical Professionalism Best Practices: Professionalism in the Modern Era*. Aurora, CO: Alpha Omega Alpha Medical Society. <https://www.alphaomegaalpha.org/wp-content/uploads/2022/01/Monograph2018.pdf>. ISBN: 978-1-5323-6516-4.
* Domen, Ronald E., Kristen Johnson, Richard Michael Conran, Robert D. Hoffman, Miriam D. Post, Jacob J. Steinberg, Mark D. Brissette, et al. 2016. “Professionalism in Pathology: A Case-Based Approach as a Potential Educational Tool.” *Archives of Pathology and Laboratory Medicine* 141: 215-219. <https://doi.org/10.5858/arpa.2016-0217-CP>.
* Levinson, Wendy, Shiphra Ginsburg, Frederic W. Hafferty, and Catherine R. Lucey. 2014. *Understanding Medical Professionalism*. New York, NY: McGraw-Hill Education. https://accessmedicine.mhmedical.com/book.aspx?bookID=1058.
* Osseo-Asare, Aba, Lilanthi Balasuriya, Stephen J. Huot, et al. 2018. “Minority Resident Physicians' Views on the Role of Race/Ethnicity in Their Training Experiences in the Workplace.” *JAMA Network Open*. 1(5): e182723. doi:10.1001/jamanetworkopen.2018.2723.
* Paul, Dereck W. Jr., Kelly R. Knight, Andre Campbell, and Louise Aronson. 2020. “Beyond a Moment - Reckoning with Our History and Embracing Antiracism in Medicine.” *New England Journal of Medicine.* 383: 1404-1406. doi:10.1056/NEJMp2021812 <https://www.nejm.org/doi/full/10.1056/NEJMp2021812>.
 |

|  |
| --- |
| **Professionalism 2: Ethical Principles****Overall Intent:** To recognize and address or resolve common and complex ethical dilemmas or situations |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates knowledge of the ethical principles underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics* | * Obtains informed consent before procedures, ensuring patient understanding of risks, benefits, and alternatives
* Explains an adolescent’s right to confidential care to a medical student
 |
| **Level 2** *Applies ethical principles in common situations* | * Articulates how the principle of “do no harm” applies to a patient who may not need a speculum exam even though it could provide a learning opportunity
* Informs a patient that because of own incorrect ordering of a test, for which the lab was not at fault, the patient will have to return to the lab to have blood drawn again
* Refuses to give a contraceptive injection to a patient who does not consent to it, despite parent’s insistence that the shot be given, citing patient autonomy
 |
| **Level 3** *Analyzes complex situations using ethical principles to address conflict/controversy; seeks help when needed to manage and resolve complex ethical situations* | * Provides support to a patient with severe gender dysphoria; explores treatment options to reduce dysphoria with a patient with unsupportive parents
* Provides support to a young mother who has custody of her daughter, although a consultant strongly supported removal from the home
 |
| **Level 4** *Manages and seeks to resolve ethical dilemmas using appropriate resources (e.g., ethics consultations, literature review, risk management/legal consultation)* | * Appropriately uses ethics resources to discuss end-of-life care with an adolescent who has different desires from parents regarding own advance directive
* Uses institutional resources, including social work and risk management, when a patient’s family is considering leaving the hospital against medical advice
* Reviews state laws on statutory rape as it pertains to a 14-year-old having sex with a 16-year-old and discusses case with attending physician
 |
| **Level 5** *Called upon by others to consult in cases of complex ethical dilemmas; identifies and seeks to address system-level factors that induce or exacerbate* | * Participates as part of the ethics consult service, providing guidance for complex cases
 |
| Assessment Models or Tools | * Direct observation
* Global evaluation
* Multisource feedback
* Oral or written self-reflection
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * American Board of Internal Medicine Foundation, ACP-ASIM Foundation, and European Federation of Internal Medicine. 2002. “Medical Professionalism in the New Millennium: A Physician Charter.” *Annals of Internal Medicine* 136: 243-246. <https://doi.org/10.7326/0003-4819-136-3-200202050-00012>.
* ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* American Medical Association. “Ethics.” <https://www.ama-assn.org/delivering-care/ama-code-medical-ethics>. Accessed 2020.
* Bynny, Richard L., Douglas S. Paauw, Maxine Papadakis, and Sheryl Pfeil. 2017. *Medical Professionalism Best Practices: Professionalism in the Modern Era*. Aurora, CO: Alpha Omega Alpha Medical Society. <https://www.alphaomegaalpha.org/wp-content/uploads/2022/01/Monograph2018.pdf>. ISBN: 978-1-5323-6516-4.
* Domen, Ronald E., Kristen Johnson, Richard Michael Conran, Robert D. Hoffman, Miriam D. Post, Jacob J. Steinberg, Mark D. Brissette, et al. 2016. “Professionalism in Pathology: A Case-Based Approach as a Potential Educational Tool.” *Archives of Pathology and Laboratory Medicine* 141: 215-219. <https://doi.org/10.5858/arpa.2016-0217-CP>.
* Levinson, Wendy, Shiphra Ginsburg, Frederic W. Hafferty, and Catherine R. Lucey. 2014. *Understanding Medical Professionalism*. New York, NY: McGraw-Hill Education. <https://accessmedicine.mhmedical.com/book.aspx?bookID=1058>.
 |

|  |
| --- |
| **Professionalism 3: Accountability/Conscientiousness****Overall Intent:** To take responsibility for one’s own actions and their impact on patients and other members of the health care team |
| **Milestones** | **Examples** |
| **Level 1** *Performs tasks and responsibilities, with prompting* | * Responds to reminders from program administrator to complete work hour logs
* After being informed by the program director that too many didactic sessions have been missed, changes habits to meet the minimum attendance requirement
* Completes patient care tasks (callbacks, consultations, orders) after prompting from a supervisor
 |
| **Level 2** *Performs tasks and responsibilities in a timely manner in routine situations* | * Completes administrative tasks, such as licensing requirements, by specified due date
* Answers pages and emails promptly with rare need for reminders
 |
| **Level 3** *Performs tasks and responsibilities in a thorough and timely manner in complex or stressful situations* | * Identifies multiple competing demands when caring for patients, appropriately triages tasks, and appropriately seeks help from other team members
 |
| **Level 4** *Coaches others to ensure tasks and responsibilities are completed in a thorough and timely manner in complex or stressful situations* | * Reminds residents and more junior fellows to log work hours, gives tips on task prioritization
* Supervises medical students, residents, and more junior fellows, delegating tasks appropriately, and ensures that all tasks are completed for safe and thorough patient care
* Teaches junior learners to enable reminders in the EHR to ensure timely follow up
 |
| **Level 5** *Creates strategies to enhance others’ ability to efficiently complete tasks and responsibilities* | * Meets with multidisciplinary team including nurses, social worker, and case manager to provide streamlined, more holistic patient care
* Develops a clinic-wide tracking system to ensure that all patients with positive STI tests are contacted and treated
 |
| 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 | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* American Medical Association. “Ethics.” <https://www.ama-assn.org/delivering-care/ama-code-medical-ethics>. Accessed 2020.
* Code of conduct from fellow/resident institutional manual
* Expectations of residency program regarding accountability and professionalism
 |
| **Professionalism 4: Well-Being****Overall Intent:** To identify resources to manage and improve well-being |
| **Milestones** | **Examples** |
| **Level 1** *Recognizes the importance of addressing personal and professional well-being* | * Discusses the importance of faculty and peer mentors as a resource
* Recognizes that personal stress may require a change in schedule
 |
| **Level 2** *Describes institutional resources that are meant to promote well-being* | * Identifies well-being resources such as mental health resources available through the program and institution
* Meets with program director to discuss Family Medical Leave Act options when expecting a child
* Identifies channels through which to report concerns for mistreatment
 |
| **Level 3** *Recognizes institutional and personal factors that impact well-being* | * Identifies that working with patients with eating disorders may be triggering for someone who has struggled with weight
* Realizes that high work demands are causing personal feelings of inadequacy as a parent/partner
* Acknowledges how individual response to participating in a difficult patient situation impacts well-being and may impact the approach to patients seen later the same day
 |
| **Level 4** *Describes interactions between institutional and personal factors that impact well-being* | * Identifies strategies to help promote institutional changes to accommodate breast-feeding
* Formulates a plan with the program director to achieve better balance between a busy schedule and time with family
* Recognizes how microaggressions from coworkers and/or faculty members are impacting performance or engagement in patient care; reports mistreatment through appropriate channels
 |
| **Level 5** *Coaches and supports colleagues to optimize well-being at the team, program, or institutional level* | * Leads organizational efforts to address clinician well-being
* Develops an affinity group to provide support for self and others to explore impact of microaggressions and biases
* Initiates a debriefing session among clinical staff members after the overdose death of a patient who was being treated for substance use disorder
 |
| 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 fellow’s well-being, but to ensure each fellow has the fundamental knowledge of factors that impact well-being, the mechanisms by which those factors impact well-being, and available resources and tools to improve well-being.
* ACGME. “Well-Being Tools and Resources.” <https://dl.acgme.org/pages/well-being-tools-resources>. Accessed 2022.
* ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Hicks, Patricia J., Daniel Schumacher, Susan Guralnick, Carol Carraccio, and Ann E. Burke. 2014. “Domain of Competence: Personal and Professional Development.” *Academic Pediatrics* 14(2 Suppl): S80-97. <https://www.sciencedirect.com/science/article/abs/pii/S187628591300332X>.
* Local resources, including employee assistance programs
 |

|  |
| --- |
| **Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication** **Overall Intent:** To establish a therapeutic relationship with patients and their families, tailor communication to the needs of patients and their families, and effectively navigate difficult/sensitive conversations |
| **Milestones** | **Examples** |
| **Level 1** *Demonstrates respect and attempts to establish rapport**Attempts to adjust communication strategies based upon patient/family expectations* | * Introduces self and other members of the health care team; identifies patient and others in the room; engages all parties in health care discussion
* Requests in-person interpreter for challenging care conference
 |
| **Level 2** *Establishes a therapeutic relationship in straightforward encounters**Adjusts communication strategies as needed to mitigate barriers and meet patient/family expectations* | * Prioritizes and sets an agenda based on family concerns at the beginning of a health care encounter for a patient who needs a school physical
* Identifies patient and family confusion after interpreter mediated discussion of intrauterine device (IUD) placement, then provides family with access to Spanish language written and video resources to supplement discussion
 |
| **Level 3** *Establishes a culturally competent and therapeutic relationship in most encounters**Communicates with sensitivity and compassion, elicits patient/family values, and acknowledges uncertainty and conflict* | * Asks questions about patient’s personal and family beliefs and prior experiences that could play a role in treating a patient with polycystic ovary syndrome (PCOS) with hormonal medications
* Discusses resources and options with a teenage patient presenting with an unwanted pregnancy in a manner that supports the patient and helps her explore and reconcile her own cultural values and family expectations with her decision, while avoiding bias in options counseling
 |
| **Level 4** *Establishes a therapeutic relationship in straightforward and complex encounters, including those with ambiguity and/or conflict**Uses shared decision making with patient/family to make a personalized care plan* | * During evaluation for depression and anxiety, inquires about sexual orientation and gender identity; patient discloses that he is a gay male who is not out to his parents and is anxious about their reaction to his identify; engages in shared decision making with the patient regarding timing of disclosure to parents and referral and linkage to mental health practitioners to help him manage the anxiety
 |
| **Level 5** *Mentors others to develop positive therapeutic relationships**Models and coaches others in patient- and family-centered communication* | * Mentors a junior resident in how to help a patient to disclose substance use to parents and assists with disclosure
* Coaches others to perform motivational interviews and leads a didactic session for medical students on motivational interviewing
 |
| Assessment Models or Tools | * Direct observation
* Standardized patients
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Laidlaw, Anita, and Jo Hart. 2011. “Communication Skills: An Essential Component of Medical Curricula. Part I: Assessment of Clinical Communication: AMEE Guide No. 51.” *Medical Teacher*. 33(1): 6-8. <https://doi.org/10.3109/0142159X.2011.531170>.
* Makoul, Gregory. 2001. “Essential Elements of Communication in Medical Encounters: the Kalamazoo Consensus Statement.” *Academic Medicine*. 76(4): 390-393. <https://journals.lww.com/academicmedicine/Fulltext/2001/04000/Essential_Elements_of_Communication_in_Medical.21.aspx#pdf-link>.
* Makoul, Gregory. 2001. “The SEGUE Framework for Teaching and Assessing Communication Skills.” *Patient Education and Counseling*. 45(1): 23-34. [https://doi.org/10.1016/S0738-3991(01)00136-7](https://doi.org/10.1016/S0738-3991%2801%2900136-7).
* MedEdPORTAL. “Anti-Racism in Medicine Collection.” <https://www.mededportal.org/anti-racism>. Accessed 2020.
* National LGBTQIA+ Health and Education Center <https://www.lgbtqiahealtheducation.org/>. Accessed 2022.
 |

|  |
| --- |
| **Interpersonal and Communication Skills 2: Interprofessional and Team Communication****Overall Intent:** To communicate effectively with the health care team, including consultants |
| **Milestones** | **Examples** |
| **Level 1** *Respectfully requests a consultation, with guidance**Identifies the members of the interprofessional team* | * Forms a question for the attending regarding a patient with recent unexplained weight loss before consulting with pediatric gastroenterology
* Identifies role of parents, teachers, social workers, and mental health clinicians in treatment of an adolescent with school avoidance
 |
| **Level 2** *Clearly and concisely requests consultation by communicating patient information**Participates within the interprofessional team* | * Requests a consult from pediatric gastroenterology for patient with weight loss and elevated erythrocyte sedimentation rate (ESR) whose history includes poor response to increased nutritional intake
* Responds to messages from nurses with refill requests for antidepressants in a timely and professional manner
 |
| **Level 3** *Formulates a specific question for consultation and tailors communication strategy**Uses bi-directional communication within the interprofessional team* | * Consults pediatrics gastroenterology, provides pertinent positives and negatives, including positive family history of colitis, and asks for an evaluation of a patient for inflammatory bowel disease and treatment recommendations
* Requests consult from dietician on a patient admitted for chronic severe malnutrition; reads consultation, then discusses with dietician the calculation of fluid and weight goals for patient
 |
| **Level 4** *Coordinates consultant recommendations to optimize patient care**Facilitates interprofessional team communication* | * Identifies a history of congenital long QT syndrome in a patient following up after acute psychiatric admission for suicidal ideation; reviews medication recommendations from inpatient child psychiatry and identifies risk of QT prolongation with current medications; contacts pediatric cardiology to discuss treatment options for the patient, adjusts therapy, and provides family and patient education on reminding practitioners to avoid medications that can prolong the QT interval
* Coordinates multi-disciplinary case conference with patient’s parents, consultants, and community mental health practitioners to discuss a discharge plan, including wrap-around services for a patient admitted for malnutrition secondary to poorly controlled schizophrenia and non-adherence to medications
 |
| **Level 5** *Maintains a collaborative relationship with referring providers that maximizes adherence to practice recommendations**Coaches others in effective communication within the interprofessional team* | * After consultation for a 16-year-old transgender male for gender-affirming care, contacts primary care practitioner to relay recommendations and ensure appropriate resources available to enact treatment plan
* Coaches a resident to lead a team/family meeting for a patient with an eating disorder
 |
| Assessment Models or Tools | * Direct observation
* Global assessment
* Medical record (chart) audit
* Multi-source feedback
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ACAPT. “NIPEC Assessment Resources and Tools.” [https://acapt.org/about/consortium/national-interprofessional-education-consortium-(nipec)/nipec-assessment-resources-and-tools](https://acapt.org/about/consortium/national-interprofessional-education-consortium-%28nipec%29/nipec-assessment-resources-and-tools). Accessed 2020.
* ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Dehon, Erin, Kimberly Simpson, David Fowler, and Alan Jones. 2015. “Development of the Faculty 360.” *MedEdPORTAL*. 11:10174. <http://doi.org/10.15766/mep_2374-8265.10174>.
* Fay, David, Michael Mazzone, Linda Douglas, and Bruce Ambuel. 2007. “A Validated, Behavior-Based Evaluation Instrument for Family Medicine Residents. *MedEdPORTAL*. <https://www.mededportal.org/doi/10.15766/mep_2374-8265.622>.
* [François](https://pubmed.ncbi.nlm.nih.gov/?term=Fran%C3%A7ois%20J%5BAuthor%5D), José. 2011. “Tool to Assess the Quality of Consultation and Referral Request Letters in Family Medicine.” *Canadian Family Physician.* 57(5): 574-575. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3093595/>.
* Green, Matt, Teresa Parrott, and Graham Cook. 2012. “Improving Your Communication Skills.” *BMJ*. 344:e357. https://doi.org/10.1136/bmj.e357.
* Henry, Stephen G., Eric S. Holmboe, and Richard M. Frankel. 2013. “Evidence-Based Competencies for Improving Communication Skills in Graduate Medical Education: A Review with Suggestions for Implementation.” *Medical Teacher*. 35(5):395-403. <https://doi.org/10.3109/0142159X.2013.769677>.
* Interprofessional Education Collaborative Expert Panel. 2011. “Core Competencies for Interprofessional Collaborative Practice: Report of an Expert Panel.” Washington, D.C.: Interprofessional Education Collaborative. <https://www.aacom.org/docs/default-source/insideome/ccrpt05-10-11.pdf?sfvrsn=77937f97_2>.
* Roth, Christine G., Karen W. Eldin, Vijayalakshmi Padmanabhan, and Ellen M. Freidman. 2019. “Twelve Tips for the Introduction of Emotional Intelligence in Medical Education.” *Medical Teacher*. 41(7): 1-4. <https://www.tandfonline.com/doi/full/10.1080/0142159X.2018.1481499>.
 |

|  |
| --- |
| **Interpersonal and Communication Skills 3: Communication within Health Care Systems****Overall Intent:** To effectively communicate using a variety of tools and methods |
| **Milestones** | **Examples** |
| **Level 1** *Records accurate information in the patient record**Identifies the importance of and responds to multiple forms of communication (e.g., in-person, electronic health record (EHR), telephone, email)* | * Completes progress notes, but notes are sometimes delayed
* Responds to patient portal messages consistently in a timely fashion
* Monitors email and replies within division standards
 |
| **Level 2** *Records accurate and timely information in the patient record**Selects appropriate method of communication, with prompting* | * In a complex patient admitted for malnutrition, focuses assessment on the active issues of mental health and bradycardia and includes disposition planning as patient approaches medical stability
* After prompting, calls consultant after noting disagreement in treatment plan between adolescent medicine and psychiatry
 |
| **Level 3** *Concisely documents updated, prioritized, diagnostic and therapeutic reasoning in the patient record**Aligns type of communication with message to be delivered (e.g., direct and indirect) based on urgency and complexity* | * For a patient with heavy menstrual bleeding, describes possible causes and treatment plan in the assessment but does not include contingency plan for continued bleeding
* Emails patient's cardiologist with non-urgent question rather than paging cardiologist on call
 |
| **Level 4** *Documents diagnostic and therapeutic reasoning, including anticipatory guidance**Demonstrates exemplary written and verbal communication* | * In the assessment of a patient with heavy menstrual bleeding, describes possible causes, treatment plan, and the recommendation to increase dose of medroxyprogesterone if bleeding recurs
* When coordinating care for a patient with chronic anorexia nervosa with other teams, sends messages via EHR to appropriate team members with concise clinical updates and questions
 |
| **Level 5** *Models and coaches others in documenting diagnostic and therapeutic reasoning**Coaches others in written and verbal communication* | * Develops templates to facilitate documentation of assessments, differential diagnoses, and clinical reasoning for patients with anorexia nervosa, including social factors
* Coaches residents in how to document confidential history and exam in the EHR
 |
| Assessment Models or Tools | * Direct observation
* Medical record (chart) audit
* Multisource feedback
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Bierman, Jennifer A., Kathryn Kinner Hufmeyer, David T. Liss, A. Charlotta Weaver, and Heather L. Heiman. 2017. “Promoting Responsible Electronic Documentation: Validity Evidence for a Checklist to Assess Progress Notes in the Electronic Health Record.” *Teaching and Learning in Medicine.* 29(4): 420-432. <https://doi.org/10.1080/10401334.2017.1303385>.
* Haig, Kathleen M., Staci Sutton, and John Whittington. 2006. “SBAR: A Shared Mental Model for Improving Communications Between Clinicians.” *Joint Commission Journal on Quality and Patient Safety.* 32(3):167-75. [https://doi.org/10.1016/s1553-7250(06)32022-3](https://doi.org/10.1016/s1553-7250%2806%2932022-3).
* Starmer, Amy J., Nancy D. Spector, Rajendu Srivastava, April D. Allen, Christopher P. Landrigan, Theodore Sectish, and I-PASS Study Group. 2012. “I-Pass, a Mnemonic to Standardize Verbal Handoffs.” *Pediatrics* 129.2:201-204. <https://doi.org/10.1542/peds.2011-2966>.
 |

|  |
| --- |
| **Interpersonal and Communication Skills 4: Difficult Conversations** **Overall Intent:** To effectively communicate and promote shared decision making in difficult situations |
| **Milestones** | **Examples** |
| **Level 1** *Identifies communication about challenging topics as a key element for shared decision making* | * Recognizes that discussion of gender dysphoria with a patient’s family may be difficult, but that family acceptance is beneficial for gender-affirming care
 |
| **Level 2** *Assesses the patient’s and patient’s family’s/caregiver’s situational awareness and identifies preferences for receiving challenging information* | * Elicits patient and family’s understanding of the need for gender-affirming care and desire to further explore the process; obtains permission from patient to discuss treatment options with family
 |
| **Level 3** *Delivers challenging information and attends to emotional responses of patients and patients’ families/caregivers* | * Informs minors when parental consent is required for certain aspects of gender-affirming care; validates and manages patients’ distress when learning they cannot consent to their own care
 |
| **Level 4** *Tailors communication according to the situation, patient consent, patient’s family’s needs, emotional response, and medical uncertainty* | * Addresses concerns surrounding gender-affirming care, including legal restrictions, financial limitations, religious objections, medical uncertainty, future fertility, and/or potential mental health implications, focusing on the patient’s family’s greatest concerns
 |
| **Level 5** *Coaches others in the communication of challenging information* | * Leads a resident session on discussions with patients’ families surrounding gender identity and gender-affirming care
 |
| Assessment Models or Tools | * Direct observation
* Guided reflection
* Multi-source feedback
* Simulation
 |
| Curriculum Mapping  |  |
| Notes or Resources | * Back, Anthony, Robert Arnold, and James Tulsky. 2009. *Mastering Communication with Seriously Ill Patients*. Cambridge: Cambridge University Press.
* Back, Anthony L., Robert M. Arnold, Walter F. Baile, James A. Tulskey, and Kelly Fryer-Edwards. 2005. “Approaching Difficult Communication Tasks in Oncology” *CA: A Cancer Journal for Clinicians*. 55(3): 164-77. <https://doi.org/10.3322/canjclin.55.3.164>.
* Childers, Julie W., Anthony L. Back, James A. Tulsky, and Robert M. Arnold. 2017. “REMAP: A Framework for Goals of Care Conversations.” *Journal of Oncology Practice*. 13(10): e844-e850. doi:10.1200/JOP.2016.018796.
* Ciarkowski, Claire. “SPIKES: A Strategy for Delivering Bad News.”<https://accelerate.uofuhealth.utah.edu/improvement/spikes-a-strategy-for-delivering-bad-new>. *University of Utah*, May 1, 2020.
* Levetown, Marcia, and the Committee on Bioethics. 2008. “Communicating with Children and Families: From Everyday Interactions to Skill in Conveying Distressing Information.” *Pediatrics*. 121(5): e1441-60. <https://doi.org/10.1542/peds.2008-0565>.
* VitalTalk: [www.vitaltalk.org](http://www.vitaltalk.org). Accessed 2018.
 |

|  |
| --- |
| **Interpersonal and Communication Skills 5: Confidentiality and Consent****Overall Intent:** To promote and support adolescent autonomy and the importance of consent |
| **Milestones** | **Examples** |
| **Level 1** *Communicates to patients and families the general rights and limitations to adolescent confidentiality and services for which minors can legally consent* | * Prefaces a psychosocial history with a conversation with both the patient and the patient’s family regarding an adolescent's right to confidentiality and when confidentiality must be broken, using standard verbiage
 |
| **Level 2** *Uses developmentally appropriate language to discuss consent and confidentiality based on institutional policies and local statutes* | * Explains to adolescents that they have the right to confidential STI screening but based on local statutes, the department of health will need to be notified of a positive test for certain infections
 |
| **Level 3** *Negotiates boundaries of consent and confidentiality in common situations, including need for disclosure, legal implications, and concern for patient safety* | * Discusses with actively suicidal patient the need to break confidentiality to maintain patient safety and facilitates conversation with patient's caregiver
 |
| **Level 4** *Negotiates boundaries of consent and confidentiality in complex situations, including conflict resulting from disclosure* | * Navigates a hospital admission for a 15-year-old patient with an ectopic pregnancy, whose parents are involved but are unaware of the patient’s sexual activity
 |
| **Level 5** *Role models consent confidentiality, disclosure, and conflict resolution*  | * Gives grand rounds to the department of pediatrics regarding confidentiality and consent in adolescent health, using specific examples
 |
| Assessment Models or Tools | * Direct observation
* Medical record (chart) review
* Multidisciplinary group supervision
* Multisource feedback
* Semi-annual meetings with the program director
 |
| Curriculum Mapping  |  |
| Notes or Resources | * The words “family” and “families” should be interpreted to mean legal guardians for consent purposes
* American Academy of Child and Adolescent Psychiatry (AACAP). “Child Psychodynamic Psychotherapy Toolkit.” <https://www.aacap.org/AACAP/Member_Resources/How-to-use-the-Psychodynamic-Play-Psychotherapy-Train-the-Trainer-Tool.aspx>.Note: Requires login and password.
* American Association of Directors of Psychiatric Residency Training (AADPRT). “Psychotherapy Benchmarks.” <https://portal.aadprt.org/public/vto/categories/Psychotherapy%20Committee%20Tips%20of%20the%20Month/2012/57c7898088044_psychotherapy_benchmarks.pdf>.
* AADPRT. “AADPRT Virtual Training: Psychotherapy Competency Tools.” [https://portal.aadprt.org/user/vto/category/483](https://urldefense.proofpoint.com/v2/url?u=https-3A__portal.aadprt.org_user_vto_category_483&d=DwMFaQ&c=aRRFLO2qYoBIsVMVe7O14w&r=SeZr8Qxh5d5Me-3qrO3aCw&m=Lxvl1cWfnFOATNlK5RrMf5MVcbkf78-gzaGt7kN7lC4&s=YVRjaXzCjloat4m_1l9dNjDFnDl9BTyonLoVBm5Dmko&e=).Note: Requires login and password.
* AADPRT. “Psychiatric Interview.” [https://portal.aadprt.org/user/vto/category/593](https://urldefense.proofpoint.com/v2/url?u=https-3A__portal.aadprt.org_user_vto_category_593&d=DwMFaQ&c=aRRFLO2qYoBIsVMVe7O14w&r=SeZr8Qxh5d5Me-3qrO3aCw&m=WCexjUHr-TFn2dhMHGhobuqGwq8VBsISOI8VKsK56_4&s=Gc3gNeXO6FeGa8C9G1snjb5MRBxw-_Jl3MzjRjWPmcI&e=).Note: Requires login and password.
* ABP. “Entrustable Professional Activities for Subspecialties: Adolescent Medicine.” [https://www.abp.org/content/entrustable-professional-activities-subspecialties](https://www.abp.org/content/entrustable-professional-activities-subspecialties.%20Accessed%202022). Accessed 2022.
* Back, Anthony, Robert Arnold, and James Tulsky. 2009. *Mastering Communication with Seriously Ill Patients*. Cambridge: Cambridge University Press.
* Breuner, Cora Collette, and Megan A. Moreno. 2011. “Approaches to the Difficult Patient/Parent Encounter.” *Pediatrics* 127 (1): 163–169. https://doi.org/10.1542/peds.2010-0072.
* Carlson, Jennifer, Rachel Goldstein, Kim Hoover, and Nichole Tyson. 2021. “NASPAG/SAHM Statement: The 21st Century Cures Act and Adolescent Confidentiality.” *Journal of Adolescent Health*. 68(2):426-428. doi: 10.1016/j.jadohealth.2020.10.020. PMID: 33541602.
* Childers, Julie W., Anthony L. Back, James A. Tulsky, and Robert M. Arnold. 2017. “REMAP: A Framework for Goals of Care Conversations.” *Journal of Oncology Practice*. 13(10): e844-e850. doi:10.1200/JOP.2016.018796.
* Gabbard, Glen O., Laura Weiss Roberts, Holly Crisp-Han, Valdesha Ball, Gabrielle Hobday, and Funmilayo Rachal. 2012. “Professionalism, and the Clinical Relationship: Boundaries and Beyond.” In: *Professionalism in Psychiatry* by Glen O. Gabbard, et al., 35-59. Arlington, VA: American Psychiatric Publishing.
* Levetown, Marcia, and the Committee on Bioethics. 2008. “Communicating with Children and Families: From Everyday Interactions to Skill in Conveying Distressing Information.” *Pediatrics*. 121(5): e1441-60. <https://doi.org/10.1542/peds.2008-0565>.
* Maslyanskaya, Sofya, and Elizabeth M. Alderman. 2019. “Confidentiality and Consent in the Care of the Adolescent Patient.” *Pediatrics in Review* 40(10): 508-516. doi: 10.1542/pir.2018-0040. PMID: 31575802.
* VitalTalk: [www.vitaltalk.org.](http://www.vitaltalk.org/) Accessed 2018.
 |

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 the subcompetencies that 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: Provide transfer of care that ensures seamless transitions  | SBP4: System Navigation for Patient-Centered Care – Transitions in Care   |
| PC2: Make informed diagnostic and therapeutic decisions that result in optimal clinical judgement   | PC1: HistoryPC2: Physical Exam PC4: Differential Diagnosis MK2: Diagnostic Evaluation  |
| PC3: Develop and carry out management plans  | PC5: Patient Management PC6: Provides Consultative CareICS1: Patient- and Family-Centered Communication  |
| PC4: Provide appropriate role modeling   | PBLI2: Reflective Practice and Commitment to Personal Growth |
|  | PC3: Organize and Prioritize Patient Care |
| MK1: Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems   | MK1: Clinical Knowledge PBLI1: Evidence Based and Informed Practice  |
| SBP1: Work effectively in various health care delivery settings and systems relevant to their clinical specialty   | SBP3: System Navigation for Patient Cantered Care – Coordination of Cre SBP6: Physician Role in Health Care Systems  |
| SBP2: Coordinate patient care within the health care system relevant to their clinical specialty   | SBP3: System Navigation for Patient Centered Care – Coordination of Care  SBP4: System Navigation for Patient-Centered Care – Transitions in Care  SBP5: Population and Community Health  ICS1: Patient- and Family-Centered Communications ICS2: Interprofessional and Team Communication  |
| SBP3: Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate   | SBP5: Population and Community Health  SBP6: Physician Role in Health Care Systems    |
| SBP4: Work in inter-professional teams to enhance patient safety and improve patient care quality   | SBP1: Patient Safety  ICS2: Interprofessional and Team Communication  |
| SBP5: Participate in identifying system errors and implementing potential systems solutions  | SBP1: Patient Safety  SBP2: Quality Improvement  |
| PBLI1: Identifying strengths, deficiencies, and limits to one’s knowledge and expertise   | PBLI1: Evidence Based and Informed Practice  PBLI2: Reflective Practice and Commitment to Personal Growth  |
| PBLI2: Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement   | SBP2: Quality Improvement PBLI2: Reflective Practice and Commitment to Personal Growth   |
| PBLI3: Use information technology to optimize learning and care delivery   | PBLI1: Evidence Based and Informed Practice  PBLI2: Reflective Practice and Commitment to Personal Growth ICS3: Communication within Health Care Systems   |
| PBLI4: Participate in the education of patients, families, students, residents, fellows, and other health professionals   | SBP5: Population and Community Health PBLI1: Evidence Based and Informed Practice ICS1: Patient- and Family-Centered Communications  |
| PROF1: Professional Conduct: High standards of ethical behavior which includes maintaining appropriate professional boundaries   | PROF1: Professional Behavior PROF2: Ethical Principles   |
| PROF2: Trustworthiness that makes colleagues feel secure when one is responsible for the care of patients   | PBLI1: Evidence Based and Informed Practice  PROF1: Professional Behavior  PROF3: Accountability/Conscientiousness  ICS1: Patient- and Family-Centered Communications  |
| PROF3: Provide leadership skills that enhance team functioning, the learning environment, and/or the health care delivery system/environment with the ultimate intent of improving care of patients   | ICS2: Interprofessional and Team Communication ICS3: Communication within Health Care Systems PROF2: Ethical Principles  PROF3: Accountability/Conscientiousness  |
| PROF4: The capacity to accept that ambiguity is part of clinical medicine and to recognize the need for and to utilize appropriate resources in dealing with uncertainty   | PROF2: Ethical Principles ICS1: Patient- and Family-Centered Communication PBLI1: Evidence Based and Informed Practice  |
|   | PROF4: Well-Being   |
| ICS1: Communicate effectively with physicians, other health professionals, and health-related agencies   | ICS2: Interprofessional and Team Communication ICS3: Communication within Health Care Systems    |
| ICS2: Work effectively as a member or leader of a health care team or other professional group   | ICS2: Interprofessional and Team Communication  PBLI2: Reflective Practice and Commitment to Personal Growth PROF3: Accountability/Conscientiousness  |
| ICS3: Act in a consultative role to other physicians and health professionals   | PC6: Provides Consultative CareICS2: Interprofessional and Team Communication ICS3: Communication within Health Care Systems    |
|  | ICS4: Difficult Conversations  |
|  | ICS5: Confidentiality and Consent |

**Available Milestones Resources**

*Milestones 2.0: Assessment, Implementation, and Clinical Competency Committees Supplement,* 2021 - [*https://meridian.allenpress.com/jgme/issue/13/2s*](https://meridian.allenpress.com/jgme/issue/13/2s)

*Milestones Guidebooks:* [*https://www.acgme.org/milestones/resources/*](https://www.acgme.org/milestones/resources/)

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

*Milestones Guidebook for Residents and Fellows:* [*https://www.acgme.org/residents-and-fellows/the-acgme-for-residents-and-fellows/*](https://www.acgme.org/residents-and-fellows/the-acgme-for-residents-and-fellows/)

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

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

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

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

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

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

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

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