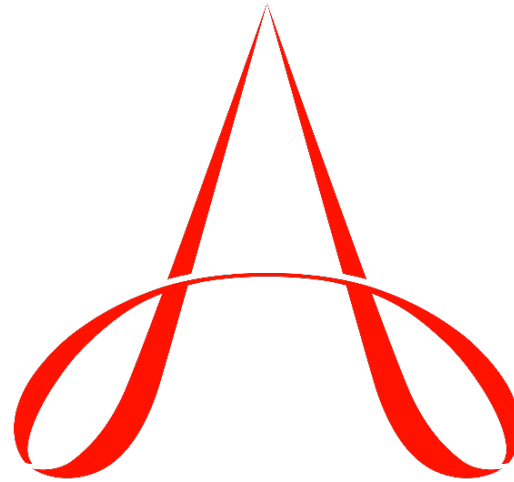




Supplemental Guide: Addiction Medicine



A C G M E

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Milestones Supplemental Guide

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

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

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

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

Patient Care 1: Screening, Evaluation, Differential Diagnosis, and Case Formulation of the Patient with or at Risk for Substance Use, Addictive Disorders, and Comorbidities	
Overall Intent: To correctly identify patient on continuum from low risk to substance use disorder (meeting DSM-5 criteria) while recognizing other medical and psychiatric conditions and contributing social factors	
Milestones	Examples
<p>Level 1 <i>Uses validated screening and assessment tools</i></p> <p><i>Performs biopsychosocial history and targeted physical examination</i></p> <p><i>Organizes, summarizes, and presents information and develops an initial differential diagnosis</i></p>	<ul style="list-style-type: none"> ● Correctly administers a National Institute on Alcohol Abuse and Alcoholism (NIAAA) single question alcohol screen, followed by Alcohol Use Disorders Identification Test (AUDIT) when positive ● Takes a history and physical to correctly identify a person at risk
<p>Level 2 <i>Actively engages patients in discussions of screening and assessment results</i></p> <p><i>Incorporates biopsychosocial history, examination, lab, and collateral data into patient evaluation</i></p> <p><i>Uses diagnostic criteria to define differential diagnosis while avoiding premature closure</i></p>	<ul style="list-style-type: none"> ● Reviews results of AUDIT with patient and discusses alcohol use ● Orders and interprets urine toxicology screen ● Lists multiple potential diagnoses
<p>Level 3 <i>Addresses inconsistencies in collected information from screening and assessment</i></p> <p><i>Performs comprehensive patient evaluation, including patients with complex presentations, with indirect supervision</i></p> <p><i>Develops a case formulation, including diagnosis, readiness to change, risk of withdrawal and relapse, psychiatric and medical comorbidities, and recovery/living environment</i></p>	<ul style="list-style-type: none"> ● Creates a case formulation (integrated summary) for a patient with alcohol and tobacco use disorder, chronic liver disease, post-traumatic stress disorder (PTSD), and experiencing homelessness

<p>Level 4 <i>Teaches validated screening and assessment tools to other health care professionals</i></p> <p><i>Independently performs comprehensive patient evaluation, including for patients with complex presentations</i></p> <p><i>Continuously reassesses the patient, adjusting the formulation as new data becomes available</i></p>	<ul style="list-style-type: none"> ● Teaches residents how to use the Clinical Opiate Withdrawal Scale (COWS)/Clinical Institute Withdrawal Assessment (CIWA) ● Recognizes hazardous benzodiazepine use in a patient after hospital discharge for alcohol withdrawal ● Independently recognizes that patient has mental status change from previous assessment
<p>Level 5 <i>Facilitates or leads screening and patient evaluation activities within an organization</i></p> <p><i>Participates in the ongoing development or evaluation of disease identification and diagnostic criteria</i></p>	<ul style="list-style-type: none"> ● Incorporates a new alcohol screening tool in the Emergency Department ● Participates in a work group at a national conference to develop a new screening tool
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Direct observation ● Standardized patient; Observed Structured Clinical Exam (OSCE) ● Patient feedback ● Chart audit ● Simulation
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● Case formulation is a theoretically-based explanation or conceptualization of the information obtained from a clinical assessment. It offers a hypothesis about the cause and nature of the presenting problems and is considered an adjunct or alternative approach to the more categorical approach of psychiatric diagnosis. (Wikipedia definition) ● National Institute on Drug Abuse Medical & Health Professionals (NIDAMED) resources www.drugabuse.gov/nidamed ● National Institute on Alcohol Abuse and Alcoholism (NIAAA) resources www.NIAAA.nih.gov/guide ● Agency for Healthcare Research and Quality (AHRQ). Fagerstrom: treating tobacco use and dependence – 2008 update. https://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/tobacco/clinicians/update/correctadd.html ● American Society of Addiction Medicine (ASAM). The performance measures for the addiction specialist physician. https://www.asam.org/docs/default-

[source/advocacy/performance-measures-for-the-addiction-specialist-physician.pdf?sfvrsn=5f986dc2_0](#)

- Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Improvement Protocol 24. A guide to substance abuse services for primary care clinicians <https://www.ncbi.nlm.nih.gov/books/NBK64827/> 1997.
 - SAMHSA Treatment Improvement Protocol 31. Screening and assessing adolescents for substance use disorders. <https://www.ncbi.nlm.nih.gov/books/NBK64364/> 1999.

Patient Care 2: Pharmacologic and Non-Pharmacologic Treatment for Substance Use and Addictive Disorders Overall Intent: To manage patients with substance use disorders incorporating evidence-based pharmacologic treatments and non-pharmacologic interventions in patient-centered treatment plans	
Milestones	Examples
<p>Level 1 <i>Prescribes commonly used evidence-informed pharmacologic agents, with direct supervision, including management of intoxication and withdrawal states</i></p> <p><i>Informs patients about non-pharmacologic interventions, including evidence-informed behavioral and psychosocial treatment, with supervision</i></p>	<ul style="list-style-type: none"> ● Orders, prescribes, or dispenses naloxone for a person with or at risk for opioid overdose ● Informs patient about the health effects of syringe service programs
<p>Level 2 <i>Prescribes a broad range of pharmacologic agents, with indirect supervision, paying attention to dosing parameters and side effects including ongoing medical treatment</i></p> <p><i>Facilitates appropriate non-pharmacologic treatment, tailoring recommendations to patient goals, under direct supervision</i></p> <p><i>Employs basic counseling strategies in treatment</i></p>	<ul style="list-style-type: none"> ● Counsels patient about dosing and side effects of the approved pharmacotherapies for opioid use disorder and prescribes appropriate treatment ● Uses open-ended questions, affirmations, reflections, and summaries in supervised patient interactions ● Refers patient to syringe service program and provides local schedule and locations
<p>Level 3 <i>Manages pharmacokinetic and pharmacodynamic drug interactions for patients using multiple medications or other substances</i></p> <p><i>Participates in the delivery of evidence based non-pharmacologic interventions</i></p> <p><i>Integrates the principles of motivational interviewing, with indirect supervision</i></p>	<ul style="list-style-type: none"> ● Times induction appropriately after the last dose of methadone in a patient transitioning to office-based buprenorphine treatment for opioid use disorder ● Trains patients in sterile injecting techniques, site rotation, and intranasal naloxone administration ● Expresses empathy through reflective listening while developing discrepancy between a patient’s goal to avoid hospital readmissions for heart failure and current daily methamphetamine use

<p>Level 4 <i>Independently manages patients with complex disease states and complex medication regimens</i></p> <p><i>Develops a patient centered treatment plan with continuous reassessment, integrating pharmacologic and nonpharmacologic interventions</i></p> <p><i>Independently integrates the principles of motivational interviewing</i></p>	<ul style="list-style-type: none"> ● Appropriately manages a pregnant patient with HIV, active tuberculosis, chronic pain, and heroin use disorder who is initiating methadone treatment ● Incorporates patient’s values and preferences into opioid agonist treatment plan using motivational interviewing techniques and engages the patient in periodic monitoring ● Independently demonstrates partnership, acceptance, compassion, and evocation in patient encounters
<p>Level 5 <i>Designs an educational curriculum for fellows or providers in practice</i></p> <p><i>Presents research or scholarship at a regional or national meeting</i></p> <p><i>Engages with health system or community organizations to improve patient care</i></p>	<ul style="list-style-type: none"> ● Designs a harm reduction curriculum for medical students ● Presents results at a national or regional meeting of a quality improvement project to initiate low-threshold buprenorphine with patients experiencing homelessness ● Engages with health system to develop and implement protocols for initiating evidence-based addiction pharmacotherapies in hospitalized patients
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Direct observation ● Chart audit and pharmacy prescription records ● Prescription Drug Monitoring Program reports ● Patient feedback ● Quality improvement metrics (e.g., receipt of X license)
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● American Society of Addiction Medicine. The ASAM national practice guideline for the use of medications in the treatment of addiction involving opioid use. https://www.asam.org/resources/guidelines-and-consensus-documents/npg ● SAMHSA Treatment Improvement Protocols (TIPS) https://store.samsha.gov ● SAMHSA. Buprenorphine waiver management: https://www.samhsa.gov/programs-campaigns/medication-assisted-treatment/training-materials-resources/buprenorphine-waiver. 2018. ● National Alliance of Advocates for Buprenorphine Treatment. https://www.naabt.org/ ● Harm Reduction Coalition. http://harmreduction.org/ ● Aspinall EJ, Nambiar D, Goldberg DJ, et al. Are needle and syringe programmes associated with a reduction in HIV transmission among people who inject drugs: a

systematic review and meta-analysis. *Int J Epidemiol.* 2014 Feb;34(1):235-48.

<https://www.ncbi.nlm.nih.gov/pubmed/24374889>

- Motivational Interviewing Network of Trainers.

<http://www.motivationalinterviewing.org/>

Medical Knowledge 1: Neuroscience of Substance Use and Addictive Disorders Overall Intent: To apply the neuroscientific basis of addiction to explain genetic vulnerability, acute effects, chronic disease development, and treatment targets	
Milestones	Examples
<p>Level 1 <i>Describes the basic neuroanatomy and neurophysiology</i></p> <p><i>Demonstrates basic knowledge of pharmacology of different classes of substances</i></p> <p><i>Describes the mechanism of action for commonly prescribed pharmacologic agents</i></p>	<ul style="list-style-type: none"> ● Maps the neuroanatomy of the limbic system with attention to reward system of nucleus accumbens and ventral tegmental area ● Describes the role of dopamine and other neurotransmitters ● Explains how exogenous opioids mimic or modify the endogenous endorphin pathway
<p>Level 2 <i>Describes basic pathophysiology and genetic vulnerability</i></p> <p><i>Describes the neuropharmacologic differences between commonly used substances</i></p> <p><i>Describes the neuropharmacology and mechanisms of action of evidence-informed pharmacologic agents</i></p>	<ul style="list-style-type: none"> ● Recognizes that roughly half of the risk of the development of substance use disorder is attributable to genetic vulnerability ● Contrasts the mechanisms of action of methadone, buprenorphine, and naltrexone/naloxone at the mu opioid receptor ● Compares and contrasts how the five main classes of substances modulate the reward system through various receptor targets
<p>Level 3 <i>Demonstrates knowledge of the developmental trajectory and neuroanatomical changes with prolonged substance use</i></p> <p><i>Demonstrates knowledge of complex pharmacologic and neuropharmacologic interactions of commonly used substances</i></p> <p><i>Demonstrates knowledge of mechanisms of action, metabolism, adverse effects, and interactions of prescribed pharmacologic agents</i></p>	<ul style="list-style-type: none"> ● Describes how the use of opioids results in persistent dysregulation of receptor density ● Describes the effects of the complex interaction between simultaneous use of cocaine and alcohol ● Explains how the complex interaction between opioid agonist treatment and sedative/hypnotics increases overdose risk
<p>Level 4 <i>Applies knowledge of the latest research findings into discussions of</i></p>	<ul style="list-style-type: none"> ● Describes how single nucleotide polymorphisms modulate clinical expression of withdrawal

<p><i>neuroscience of substance use and addictive disorders</i></p> <p><i>Demonstrates a detailed knowledge of known pharmacology and neuropharmacology of all classes of substances</i></p> <p><i>Demonstrates detailed actions of neuropharmacology and mechanisms of action of known and emerging pharmacologic agents</i></p>	<ul style="list-style-type: none"> • Differentiates the synaptic location of action of methamphetamine vs. cocaine • Explains how different sedative/hypnotics act on the GABA/glutamate system
<p>Level 5 <i>Designs and teaches a neuroscience teaching module focusing on substance use or addictive disorders</i></p> <p><i>Participates in research on the neuroscience of substance use or addictive disorders</i></p>	<ul style="list-style-type: none"> • Creates a teaching module for pediatrics residents on how the developing brain is more vulnerable to addiction • Participates in and presents research on fMRI data on cocaine-induced brain changes at a local or national meeting
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> • In-training multiple choice examination question (e.g., Addiction Practice e-Test [ADePT]) • Direct observation of fellow explaining neurobiologic basis of addiction to patients and families • Direct observation of a fellow choosing medications taking into account neuropharmacologic interactions • Mock oral examination • Case-based discussion
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> •
<p>Notes or Resources</p>	<ul style="list-style-type: none"> • National Institute on Drug Abuse. The neurobiology of addiction five part series. https://www.drugabuse.gov/neurobiology-drug-addiction-2007. • Ries RK, Fiellin DA, Miller SC, Saitz R. Section 1: Basic science and core concepts. In: <i>The ASAM Principles of Addiction Medicine</i>. 5th ed. Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2014. • Neurocircuitry of Addiction: An Alcohol Perspective, Dr. George Koob: https://www.youtube.com/watch?v=JkEy0sovpqI • Volkow ND, Koob GF, McLellan AT. Neurobiologic advances from the brain disease model of addiction. <i>N Engl J Med</i>. 2016 Jan 28;374(4):363-71. https://www.ncbi.nlm.nih.gov/pubmed/?term=koob+volkow+NEJM

- Wachman EM, Hayes MJ, Brown MS, Paul J, Harvey-Wilkes K, Terrin N, Huggins GS, Aranda JV, Davis JM. Association of OPRM1 and COMT single-nucleotide polymorphisms with hospital length of stay and treatment of neonatal abstinence syndrome. *JAMA*. 2013 May;309(17):1821-7.
 - Koob GF, Le Moal M. *Neurobiology of Addiction*. Cambridge, MA: Academic Press; 2006.
<https://www.sciencedirect.com/science/book/9780124192393>

Medical Knowledge 2: Epidemiology and Clinical Presentation of Substance Use and Addictive Disorders Overall Intent: To engage in the analysis and management of patient safety events, including relevant communication with patients, families, and health care professionals; to conduct a QI project	
Milestones	Examples
<p>Level 1 <i>Demonstrates basic knowledge of epidemiology</i></p> <p><i>Demonstrates basic knowledge of biopsychosocial factors</i></p> <p><i>Demonstrates knowledge of common clinical presentations</i></p>	<ul style="list-style-type: none"> ● Describes incidence and prevalence of opioid use disorders in the population ● Describes social determinants of health ● Recognizes a patient in opioid withdrawal
<p>Level 2 <i>Demonstrates knowledge of epidemiology in heterogenous populations</i></p> <p><i>Describes the contributing and protective biopsychosocial factors</i></p> <p><i>Demonstrates knowledge of common clinical complications</i></p>	<ul style="list-style-type: none"> ● Recognizes increased incidence of opioid use disorders in women of child-bearing age ● Describes how adverse childhood events (ACES) contribute to the development of substance use disorders ● Describes the prevalence of HIV and viral hepatitis in people who inject drugs
<p>Level 3 <i>Demonstrates knowledge of the limits and strengths of epidemiologic test</i></p> <p><i>Applies knowledge of the contributing and protective biopsychosocial factors</i></p> <p><i>Integrates knowledge to formulate a prevention plan</i></p>	<ul style="list-style-type: none"> ● Demonstrates ability to interpret the number needed to treat in published clinical trials of opioid pharmacotherapy ● Incorporates knowledge of patient’s history of childhood abuse into patient formulation ● Recognizes that patient is at risk for HIV given high-risk behavior and recommends pre-exposure prophylaxis (PrEP)
<p>Level 4 <i>Applies knowledge of epidemiology to patient care</i></p> <p><i>Teaches others about the contributing and protective biopsychosocial factors</i></p>	<ul style="list-style-type: none"> ● Demonstrates knowledge of high prevalence of PTSD in women with opioid use disorder, leading to specific screening methods ● Teaches residents about ACES

<p><i>Applies detailed knowledge of comorbidities, their presentations, and their complications</i></p>	<ul style="list-style-type: none"> ● Recognizes that untreated PTSD will increase relapse rates for opioid use disorder and refers to evidence-informed therapy
<p>Level 5 <i>Applies knowledge of epidemiology and clinical presentation to inform policy</i></p> <p><i>Engages in research on substance use and addictive disorders or their interactions and common complications</i></p> <p><i>Develops a teaching module to address complex clinical complications</i></p>	<ul style="list-style-type: none"> ● Testifies at legislative sessions about high prevalence of history of childhood sexual assault in women who use drugs in pregnancy ● Conducts research on decreasing HIV transmission with syringe service programs in their community ● Develops a simulation model for residents on HIV-positive patient in opioid withdrawal while pregnant
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Observation of presentation at journal club ● Direct observation ● Role playing/standardized patient ● In-training examination
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● Association of American Medical Colleges. Morton-Eggleston EB, DiCarlo R, Jarris YS. Teaching population health: innovative medical school curricula for biostatistics and epidemiology. https://www.aamc.org/initiatives/diversity/portfolios/cdc/416338/epibiostatswebinar.html 2015. ● Substance Abuse and Mental Health Services Administration. Population Data and National Survey on Drug Use and Health. https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health <ul style="list-style-type: none"> ○ Ries RK, Fiellin DA, Miller SC, Saitz R. <i>The ASAM Principles of Addiction Medicine</i>. 5th ed. Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2014.

Medical Knowledge 3: Treatment Modalities and Interventions in Heterogenous Patient Populations Overall Intent: To formulate a safe and evidence-informed treatment plan that includes pharmacologic and non-pharmacologic interventions	
Milestones	Examples
<p>Level 1 <i>Lists the commonly available pharmacologic treatment modalities for management of intoxication and withdrawal</i></p> <p><i>Lists non-pharmacologic treatments and interventions</i></p>	<ul style="list-style-type: none"> ● Orders a safe detoxification protocol for opioid withdrawal using buprenorphine and adjunctive medications for a patient with opioid use disorder and PTSD ● Refers a patient with opioid use disorder to group therapy focused on harm reduction and cognitive behavioral therapy (CBT) for their PTSD ● Refers a patient with opioid use disorder to Narcotics Anonymous (NA)
<p>Level 2 <i>Describes the basic theoretical principles underlying the use of evidence-informed pharmacologic treatments</i></p> <p><i>Describes the basic theoretical principles underlying the use of evidence-informed nonpharmacologic treatments and interventions</i></p>	<ul style="list-style-type: none"> ● Discusses the mechanism of action and unique pharmacodynamic properties of buprenorphine ● Reviews the main tenets of CBT and NA
<p>Level 3 <i>Describes the evidence base for the use of specific pharmacologic agents</i></p> <p><i>Describes the evidence base for the use of specific non-pharmacologic treatments and interventions</i></p>	<ul style="list-style-type: none"> ● Reviews the evidence base for medication-assisted treatment in the treatment of opioid use disorder ● References specific review articles describing the success of CBT for PTSD ● References specific review articles describing the success of 12-step meetings for opioid use disorder
<p>Level 4 <i>Applies the risks, benefits, and limitations of available pharmacotherapies</i></p> <p><i>Applies the current evidence for use of behavioral, psychotherapeutic, and psychosocial treatments and interventions</i></p>	<ul style="list-style-type: none"> ● Describes in detail the risk, benefits, and limitations of naltrexone versus buprenorphine ● Refers a patient with PTSD to a Seeking Safety group ● Refers a patient with opioid use disorder to a needle exchange program and a medication-assisted treatment program

<p>Level 5 <i>Develops a curriculum and teaches others about the pharmacologic and psychosocial treatments</i></p> <p><i>Participates in research on pharmacologic and psychosocial treatments and interventions</i></p>	<ul style="list-style-type: none"> ● Provides a grand rounds lecture regarding medication-assisted treatment options for opioid use disorder ● Engages in ongoing study regarding patient outcomes when buprenorphine is initiated in the Emergency Department
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● In-service training examination ● Direct observation ● Participation on in-program learning activities (e.g., journal club, Morbidity and Mortality)
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● SAMHSA-HRSA Center for Integrated Health Solutions. Motivational interviewing. https://www.integration.samhsa.gov/clinical-practice/motivational-interviewing ● ASAM. The ASAM national practice guidelines for the use of medications in the treatment of addiction involving opioid use. https://www.asam.org/resources/guidelines-and-consensus-documents/npg ● World Health Organization. <i>Clinical guidelines for withdrawal management and treatment of drug dependence in closed settings</i>. World Health Organization: Geneva; 2009. https://www.ncbi.nlm.nih.gov/books/NBK310654/ <ul style="list-style-type: none"> ○ Monico LB, et al. Buprenorphine treatment and 12-step meeting attendance: conflicts, compatibilities, and patient outcomes. <i>J Subst Abuse Treat</i>. 2015 Oct;57:89-95. https://www.ncbi.nlm.nih.gov/pubmed/25986647

Systems-based Practice 1: Patient Safety and Quality Improvement	
Overall Intent: To engage in the analysis and management of patient safety events, including relevant communication with patients, families, and health care professionals; to conduct a QI project	
Milestones	Examples
<p>Level 1 <i>Demonstrates knowledge of common patient safety events</i></p> <p><i>Demonstrates knowledge of how to report patient safety events</i></p> <p><i>Demonstrates knowledge of basic quality improvement methodologies and metrics</i></p>	<ul style="list-style-type: none"> ● Washes hands prior to examining a patient ● Lists types of healthcare-associated infections and common causes ● Describes how to report errors in at local institution ● Describes quality improvement tools such as the Fishbone Diagram, 5 Whys and Plan-Do-Study-Act (PDSA) Cycles
<p>Level 2 <i>Identifies system factors that lead to patient safety events</i></p> <p><i>Reports patient safety events through institutional reporting systems (actual or simulated)</i></p> <p><i>Describes local quality improvement initiatives (e.g., community vaccination rate, infection rate, smoking cessation)</i></p>	<ul style="list-style-type: none"> ● Identifies lack of hand sanitizer dispenser at each clinical exam room may lead to increased infection rates ● Applies Swiss Cheese Model of Accident Causation to patient safety events ● Reports lack of hand sanitizer dispenser at each clinical exam room to the medical director ● Reports near miss of wrong medication administration due to similar looking container/labeling through institutional reporting system ● Summarizes protocols and initiatives aimed at reducing surgical site infections
<p>Level 3 <i>Participates in analysis of patient safety events (actual or simulated)</i></p> <p><i>Participates in disclosure of patient safety events to patients and families (actual or simulated)</i></p> <p><i>Participates in local quality improvement initiatives</i></p>	<ul style="list-style-type: none"> ● Evaluates and presents patient case at patient safety/quality improvement conference (i.e. M&M conference) ● Through simulation, communicates with patients/families about an insulin administration error ● Follows pre-op and post-op protocols designed to prevent surgical site infections

<p>Level 4 <i>Conducts analysis of patient safety events and offers error prevention strategies (actual or simulated)</i></p> <p><i>Discloses patient safety events to patients and families (actual or simulated)</i></p> <p><i>Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project</i></p>	<ul style="list-style-type: none"> ● Categorizes the frequency of surgical site infections by hospital unit using a Pareto chart to focus on the most significant problems or causes, followed by one or more PDSA cycles and tracks progress using a run chart to document success and maintenance of success ● Collaborates with a multidisciplinary and interprofessional team to conduct the analysis of insulin administration errors ● In collaboration with team, discusses how a missed antibiotic dose contributed to development of a surgical site infection ● Develops and tracks quality improvement project progress using the IHI Model for Improvement
<p>Level 5 <i>Actively engages teams and processes to modify systems to prevent patient safety events</i></p> <p><i>Role models or mentors others in the disclosure of patient safety events</i></p> <p><i>Creates, implements, and assesses quality improvement initiatives at the institutional or community level</i></p>	<ul style="list-style-type: none"> ● Collaborates with IT department to build peri-op order set to reduce surgical site infections ● Designs and conducts a simulation for disclosing patient safety events ● Initiates and completes a QI project to reduce insulin administration errors in collaboration with the Nursing and Pharmacy leadership
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Simulation ● Reflection ● Direct observation ● E-module multiple choice tests ● Medical record (chart) audit ● Multisource feedback ● Portfolio ● Dashboards on quality and safety metrics
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● Institute of Healthcare Improvement website (http://www.ihl.org/Pages/default.aspx) which includes multiple choice tests, reflective writing samples, and more) <ul style="list-style-type: none"> ○ IHI Open School online modules: Improvement Capability & Patient Safety

- Quorum Quality Improvement Guide (<http://www.hqontario.ca/portals/0/Documents/qi/qi-quality-improve-guide-2012-en.pdf>) and Quorum QI Tools & Resources website (<https://quorum.hqontario.ca/en/Home/QI-Tools-Resources/QI-Essentials>)
- AMA STEPS*forward* PDSA website (https://edhub.ama-assn.org/steps-forward/module/2702507?resultClick=1&bypassSolrId=J_2702507)
- CMS's PDSA Cycle Template (<https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/downloads/PDSACycledebedits.pdf>)
- Washington Manual of Patient Safety and Quality Improvement
- CLER: Health Care Quality
 - Wagner, R, Koh, N, Bagian, JP, Weiss, KB, for the CLER Program. CLER 2016 National Report of Findings. Issue Brief #3: Health Care Quality. Accreditation Council for Graduate Medical Education, Chicago, Illinois USA
- CLER: Patient Safety
 - Wagner, R, Koh, N, Bagian, JP, Weiss, KB, for the CLER Program. CLER 2016 National Report of Findings. Issue Brief #2: Patient Safety. Accreditation Council for Graduate Medical Education, Chicago, Illinois USA

Systems-Based Practice 2: System Navigation for Patient-Centered Care	
Overall Intent: To effectively navigate the health care system, including the interdisciplinary team and other care providers, to adapt care to a specific patient population to ensure high-quality patient outcomes.	
Milestones	Examples
<p>Level 1 <i>Demonstrates knowledge of care coordination</i></p> <p><i>Identifies key elements for safe and effective transitions of care and handoffs</i></p> <p><i>Demonstrates knowledge of population and community health needs</i></p>	<ul style="list-style-type: none"> ● Identifies the members of the interprofessional team, as well as community team members, such as recovery coaches, sponsors, or others, and describes their roles; not yet routinely using team members or accessing resources ● Lists the essential components of an effective sign-out ● Identifies components of social determinants of health and how they impact the delivery of patient care
<p>Level 2 <i>Coordinates care of patients in routine clinical situations effectively utilizing the roles of the interprofessional teams</i></p> <p><i>Performs safe and effective transitions of care/handoffs in routine clinical situations</i></p> <p><i>Identifies specific population and community health needs for their local population</i></p>	<ul style="list-style-type: none"> ● Contacts interprofessional and community team members, such as social workers and consultants, but requires supervision to ensure all necessary referrals are made and resource needs are arranged ● Provides a basic sign-out but still needs direct supervision to ensure diagnoses, comorbidities, medications, psychosocial treatments, and other elements informing care are appropriately detailed ● Identifies health system and community resources available to address socioeconomic and patient-specific factors that impact substance use
<p>Level 3 <i>Coordinates care of patients in complex clinical situations effectively utilizing the roles of their interprofessional teams</i></p> <p><i>Performs safe and effective transitions of care/handoffs in complex clinical situations</i></p> <p><i>Uses local resources effectively to meet the needs of a patient population and community</i></p>	<ul style="list-style-type: none"> ● For a patient with opioid use disorder, arranges for continuing medication-assisted treatment, psychosocial treatments, recovery coaching, psychiatry consult (for major occurring mental health disorders), and other services as indicated; links the patient to appropriate community support resources, such as self-help groups, recovery centers ● Engages the patient’s family in the ongoing recovery process and links them with needed family support services ● Provides effective anticipatory guidance for unstable patients including medication reconciliation; and provides safe and effective written and oral communication when patient is transitioning settings (i.e., outpatient to emergency room, inpatient to outpatient)

<p>Level 4 <i>Role models effective coordination of patient-centered care among different disciplines and specialties</i></p> <p><i>Role models and advocates for safe and effective transitions of care/handoffs within and across healthcare delivery systems including outpatient settings</i></p> <p><i>Advocates for quality patient care and resources for populations and communities with specific health care needs</i></p>	<ul style="list-style-type: none"> • Models for and educates students and junior team members regarding the engagement of appropriate interprofessional team members and community support services as needed for each patient, and ensures the necessary resources have been arranged • Proactively calls the outpatient doctor to ensure a discharged patient can get medication-assisted treatment • Performs panel reviews to identify patients who are not receiving smoking cessation advice; identifies patient populations at high risk for poor outcomes due to health barriers and implements strategies to improve care
<p>Level 5 <i>Analyses the process of care coordination and leads in the design and implementation of improvements</i></p> <p><i>Improves quality of transitions of care within and across healthcare delivery systems to optimize patient outcomes</i></p> <p><i>Modifies systems to improve access to care for populations and communities</i></p>	<ul style="list-style-type: none"> • Works with hospital or ambulatory site team members or leadership to analyze care coordination in that setting, and takes a leadership role in designing and implementing changes to improve the care coordination process • Works with a QI mentor to identify better hand-off tools or to improve teaching sessions • Designs a social determinants of health curriculum to help others learn to identify local resources and barriers to care; effectively uses resources, such as telehealth, for proactive outreach to prevent Emergency Department visits or readmission for high-risk populations
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> • Direct observation (including discussion during rounds and case presentations), OSCE, chart review • 360-degree feedback from the interprofessional team • Panel management quality metrics and goals mined from the electronic health record • Lectures/workshops on social determinants of health or population health with identification of local resources
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> •
<p>Notes or Resources</p>	<ul style="list-style-type: none"> • Medicaid Innovation Accelerator Program. Reducing substance use disorders. https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/program-areas/reducing-substance-use-disorders/index.html

- Network for the Improvement of Addiction Treatment (NIATx). Simple process improvement for behavioral health.
<https://niatx.net/Home/Home.aspx?CategorySelected=HOME>
- Phillips KA, Friedmann PD, Saitz R, Samet JH. Chapter 28: Linking addiction treatment with other medical and psychiatric treatment systems. In: *The ASAM principles of addiction medicine*. 5th ed. Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2014.
 - The Washington Circle (A Policy Group on Performance Measurement for Care of Substance Use Disorders).
<http://www.washingtoncircle.org/index.html>

Systems-Based Practice 3: The Addiction Medicine Physician Role in Health Care Systems

Overall Intent: To understand his/her role in the complex health care system and how to optimize the system to improve patient care and the health system's performance

Milestones	Examples
<p>Level 1 <i>Identifies components of the complex health care system</i></p> <p><i>Describes cost of care and basic health payment systems, including government, private, public, and uninsured care and different practice models</i></p>	<ul style="list-style-type: none"> ● Names all the providers and systems involved in providing care to and prescribing medication for the patient ● Understands the impact of health plan features, including formularies and network requirements ● Completes a note template following a routine patient encounter and applies diagnostic and encounter coding in compliance with regulations with direct supervision ● Provides a medical perspective on the care team and interacts respectfully with other team members ● Recognizes the important role of addiction specialists in teaching and modeling care of persons with substance use disorders across the health care system
<p>Level 2 <i>Describes how the components of the complex health care system impact prevention and treatment</i></p> <p><i>Delivers cost-effective care while understanding patient specific payment model</i></p> <p><i>Compares the specific transition issues relevant to various practice pathways</i></p>	<ul style="list-style-type: none"> ● Understands how improving patient satisfaction improves patient adherence and remuneration to the health system; is not yet able to consistently think through clinical redesign to improve patient satisfaction ● Applies knowledge of health plan features, including formularies and network requirements in patient care situations ● Completes a note template following a more complex patient encounter and applies appropriate coding in compliance with regulations, with oversight ● Engages with non-addiction specialists and models care for patients with substance use disorders
<p>Level 3 <i>Analyzes how personal practice affects the system</i></p> <p><i>Uses shared decision making in patient care, taking into consideration payment models</i></p> <p><i>Identifies resources and effectively plans for transition to practice</i></p>	<ul style="list-style-type: none"> ● Understands, accesses, and analyzes own performance data (e.g., readmission rates, screening for smoking and safety) and begins work to improve performance based on available data or other feedback ● Consistently applies knowledge of health plan features, including formularies and network requirements in patient care ● Uses shared decision making in clinical planning ● Understands process of contract negotiations, choosing malpractice insurance carriers and features, and reporting requirements relevant to practice ● Appropriately and independently codes both routine and complex encounters in compliance with regulations

	<ul style="list-style-type: none"> • Teaches and models addiction medicine principles and care to non-specialists in the health care system in the course of clinical consultations and interactions
<p>Level 4 <i>Manages the components of the complex health care systems for efficient and effective prevention and treatment</i></p> <p><i>Advocates for patient care understanding the limitations of each patient's payment model</i></p> <p><i>Begins transition to practice</i></p>	<ul style="list-style-type: none"> • Works collaboratively with pertinent stakeholders to prevent and address harmful substance use at the community level • Works collaboratively with the institution to improve patient assistance resources or design the institution's community health needs assessment, or develop/implement/assess the resulting action plans • Applies knowledge of contract negotiations, choosing malpractice insurance carriers and features, and reporting requirements relevant to practice • Serves as a physician leader on the on the care team, providing medical input and leading integration of input from other professionals in development of the treatment plan • Prepare educational sessions on relevant addiction topics to advance knowledge and patient care by non-addiction specialists
<p>Level 5 <i>Advocates for or leads change to enhance systems for high-value, efficient, and effective prevention and treatment</i></p> <p><i>Participates in advocacy activities for health policy to better align payment systems with high-value care</i></p> <p><i>Leads efforts to expand the addiction medicine workforce or practice environments</i></p>	<ul style="list-style-type: none"> • Improves opioid prescribing practices on one or more clinical services, incorporates prescribing protocols into electronic records (e.g., buprenorphine prescribing, naran prescribing) publishes original research in a peer-reviewed journal • Works with community or professional organizations to advocate for no smoking ordinances • Works for systems changes that improve integration of substance use disorders care into the broader health care system
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> • Direct observation • Chart review/audit of patient care • OSCE • QI project (perhaps as part of a portfolio)
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> •
<p>Notes or Resources</p>	<ul style="list-style-type: none"> • Center for Medicare and Medicaid Services. The merit-based incentive payment system: advancing care information and improvement activities performance categories. https://www.cms.gov/Medicare/Quality-Payment-Program/Resource-Library/2018-Advancing-Care-information-Fact-Sheet.pdf 2018.

- Center for Medicare and Medicaid Services: MIPS and MACRA <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-MIPS-and-APMs.html> 2018.
- Agency for Healthcare Research and Quality (AHRQ): The Challenges of Measuring Physician Quality <https://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/create/physician/challenges.html> 2016.
- AHRQ. Major physician performance sets: <https://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/create/physician/measurementsets.html> 2018.
- The Kaiser Family Foundation: www.kff.org, 2019.
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- The National Academy for Medicine, Dzau VJ, McClellan M, Burke S, et al. Vital directions for health and health care: priorities from a National Academy of Medicine Initiative. March 2016. <https://nam.edu/vital-directions-for-health-health-care-priorities-from-a-national-academy-of-medicine-initiative/>
- The Commonwealth Fund. Health system data center. 2017. http://datacenter.commonwealthfund.org/?_ga=2.110888517.1505146611.1495417431-1811932185.1495417431#ind=1/sc=1
- The Commonwealth Fund. Health reform resource center: [http://www.commonwealthfund.org/interactives-and-data/health-reform-resource-center#/f:@facasubcategoriesfacet63677=\[Individual%20and%20Employer%20Responsibility](http://www.commonwealthfund.org/interactives-and-data/health-reform-resource-center#/f:@facasubcategoriesfacet63677=[Individual%20and%20Employer%20Responsibility)
- American Board of Internal Medicine. QI/PI activities. Practice Assessment: Modules that physicians can use to assess clinical practice. <http://www.abim.org/maintenance-of-certification/earning-points/practice-assessment.aspx>
- ASAM. Public policy statement on addiction medicine physician participation in and leadership of multidisciplinary care teams. https://www.asam.org/docs/default-source/public-policy-statements/multidisciplinary-care-teams-final-jan-2016.pdf?sfvrsn=14d670c2_0 2016.

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice Overall Intent: To incorporate evidence and patient values into clinical practice	
Milestones	Examples
Level 1 <i>Demonstrates how to access and use the available evidence, and incorporate patient preferences and values in order to take care of a routine patient</i>	<ul style="list-style-type: none"> • Searches online for guidelines related to medication-assisted treatment for pregnant women with opioid use disorder
Level 2 <i>Articulates clinical questions and elicits patient preferences and values in order to guide evidence based care</i>	<ul style="list-style-type: none"> • Identifies evidence for medication-assisted treatment for pregnant women with opioid use disorder and comorbid HIV
Level 3 <i>Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients</i>	<ul style="list-style-type: none"> • Applies available evidence for medication-assisted treatment for pregnant women with opioid use disorder and comorbid HIV, and can decide between various medication options with attention to drug-drug interactions
Level 4 <i>Critically appraises and applies evidence even in the face of uncertainty and conflicting evidence to guide care, tailored to the individual patient</i>	<ul style="list-style-type: none"> • Critically appraises inconsistencies in the medical literature regarding optimal pharmacotherapy and best outcomes for pregnant women with opioid use disorder
Level 5 <i>Coaches others to critically appraise and apply evidence for complex patients; and/or participates in the development of guidelines</i>	<ul style="list-style-type: none"> • Develops a protocol based on available evidence to inform best practices within the hospital for treatment of pregnant women with opioid use disorder
Assessment Models or Tools	<ul style="list-style-type: none"> • Direct observation • Written examination
Curriculum Mapping	<ul style="list-style-type: none"> •
Notes or Resources	<ul style="list-style-type: none"> • Jones HE, et al. Neonatal abstinence syndrome after methadone or buprenorphine exposure. <i>N Engl J Med.</i> 2010 Dec 9; 363(24):2320-31 • The ASAM nation practice guideline: for the use of meidcations in the treatment of addiction involving opioid use. https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-supplement.pdf

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth in Addiction Medicine Overall Intent: To seek clinical performance information with the intent to improve care; reflects on all domains of practice, personal interactions, and behaviors, and their impact on colleagues and patients (reflective mindfulness); develop clear objectives and goals for improvement in some form of a learning plan	
Milestones	Examples
<p>Level 1 <i>Accepts responsibility for personal and professional development by establishing goals</i></p> <p><i>Identifies the factors which contribute to gap(s) between expectations and actual performance</i></p> <p><i>Recognizes opportunities to improve</i></p>	<ul style="list-style-type: none"> ● Is aware of need to improve ● Is beginning to seek ways to figure out what to work on to improve and make some non-specific goals that may be difficult to execute and achieve
<p>Level 2 <i>Demonstrates openness to performance data (feedback and other input) in order to inform goals</i></p> <p><i>Analyzes and reflects on the factors which contribute to gap(s) between expectations and actual performance</i></p> <p><i>Designs and implements a learning plan, with prompting</i></p>	<ul style="list-style-type: none"> ● Is increasingly able to identify what to work on in terms of patient care; uses feedback from others ● After working together on wards for a week, asks attending about ways to talk with patients that is easier to understand ● Uses feedback and sets a goal to improve communication skills with patients the following week
<p>Level 3 <i>Seeks performance data episodically</i></p> <p><i>Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance</i></p> <p><i>Independently creates and implements a learning plan</i></p>	<ul style="list-style-type: none"> ● Takes input from nursing staff members, peers, and supervisors to gain complex insights into personal strengths and areas to improve ● Humbly acts on input and is appreciative and not defensive ● Begins to document goals in a more specific and achievable manner, such that attaining them is measurable
<p>Level 4 <i>Seeks performance data consistently</i></p> <p><i>Challenges assumptions and considers alternatives in narrowing the gap(s) between expectations and actual performance</i></p>	<ul style="list-style-type: none"> ● Is clearly in the habit of making a learning plan for each rotation

<p><i>Uses performance data to evaluate effectiveness of the learning plan, and when necessary, improves it</i></p>	<ul style="list-style-type: none"> ● Consistently identifies ongoing gaps and chooses areas to work on
<p>Level 5 <i>Role models consistently seeking performance data</i></p> <p><i>Mentors others on reflective practice</i></p> <p><i>Facilitates the design and implementation of learning plans for others</i></p>	<ul style="list-style-type: none"> ● Actively discusses learning goals with supervisors and colleagues; may encourage other learners on the team to consider how their behavior affects the rest of the team
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Direct observation ● Review of learning plan
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●
<p>Notes or Resources</p>	<ul style="list-style-type: none"> ● Hojat M, Veloski JJ, Gonnella JS. Measurement and correlates of physicians' lifelong learning. <i>Acad Med</i> 2009. Aug;84(8):1066-74. <i>Contains a validated questionnaire about physician lifelong learning.</i> ● Lockspeiser TM, Schmitter PA, Lane JL et al. Assessing fellows' written learning goals and goal writing skill: validity evidence for the learning goal scoring rubric. <i>Acad Med</i>. 2013. 88(10) ● Burke AE, Benson B, Englander R, Carraccio C, Hicks PJ. Domain of competence: practice-based learning and improvement. <i>Acad Pediatr</i>. 2014. 14: S38-S54.

Professionalism 1: Professional Behavior and Ethical Principles Overall Intent: To recognize and address lapses in ethical and professional behavior, demonstrates ethical and professional behaviors, and use appropriate resources for managing ethical and professional dilemmas	
Milestones	Examples
<p>Level 1 <i>Identifies and describes potential triggers for professionalism lapses</i></p> <p><i>Describes when and how to appropriately report professionalism lapses, including strategies for addressing common barriers</i></p> <p><i>Demonstrates knowledge of the ethical principles underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics</i></p>	<ul style="list-style-type: none"> ● Identifies and describes inappropriate behavior by pharmaceutical and equipment manufacturers at clinical sites and academic or professional meetings ● Recognizes when anyone, including oneself, makes an inappropriate or stigmatizing comment about a patient ● Recognizes that a patient has the autonomy to decide whether or not to receive pharmacotherapy for a substance use disorder
<p>Level 2 <i>Demonstrates insight into professional behavior in routine situations</i></p> <p><i>Takes responsibility for own professionalism lapses</i></p> <p><i>Analyzes straightforward situations using ethical principles</i></p>	<ul style="list-style-type: none"> ● Courteously declines invitations and gifts from patients and commercial industry representatives ● Takes responsibility for making an erroneous assumption and a pejorative statement about a patient’s sexual orientation and promptly apologizes to patient ● Applies the ethical principles of beneficence, justice, and autonomy to the analysis of resource allocation in the care of a pregnant patient who injects drugs and declines pharmacotherapy
<p>Level 3 <i>Demonstrates professional behavior in complex or stressful situations</i></p> <p><i>Analyzes complex situations using ethical principles</i></p> <p><i>Recognizes need to seek help in managing and resolving complex ethical situations</i></p>	<ul style="list-style-type: none"> ● After prompting, recognizes that an article discussed in journal club may have been biased by pharmaceutical sponsorship and is able to discuss how that may influence the findings and implications for patient care ● Applies ethical principles in analyzing the allocation of resources to the care of a patient with postpartum depression who has returned to injection drug use and requires a heart valve replacement for endocarditis ● Recognizes biases and need to seek help in caring for a religious leader with an alcohol use disorder who is accused of sexual molestation of a minor

<p>Level 4 <i>Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others</i></p> <p><i>Recognizes and utilizes appropriate resources for managing and resolving ethical dilemmas as needed. (e.g., ethics consultations, literature review, risk management/legal consultation)</i></p>	<ul style="list-style-type: none"> • Recognizes and intervenes when a colleague has been offered an honorarium to present an industry-authored study at a lavish dinner sponsored by a pharmaceutical company • Seeks help to prevent a lapse in professional behavior when finding it difficult to provide care to a religious leader who is accused of sexual molestation of a minor • Reviews the literature and requests ethics consultation for managing and resolving an ethical dilemma arising from the denial of surgical treatment for a patient who injects drugs and requires a second cardiac valve replacement for recurrent or incompletely treated endocarditis
<p>Level 5 <i>Coaches others when their behavior fails to meet professional expectations</i></p> <p><i>Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution</i></p>	<ul style="list-style-type: none"> • Develops and teaches a facility-wide policy about gifts and invitations from pharmaceutical companies and other commercial interests • Identifies and seeks to address, through a grand rounds presentation, the hidden curriculum underlying the system-wide use of pejorative language by attendings and house staff to describe persons who use drugs
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> • Direct observation • Global evaluation • Multisource feedback • OSCE • Mentor and program director observations • Oral or written self-reflection (e.g., of a personal or observed lapse, ethical dilemma, or systems-level factors)
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> •
<p>Notes or Resources</p>	<ul style="list-style-type: none"> • American Medical Association Code of Ethics: https://www.ama-assn.org/delivering-care/ama-code-medical-ethics-2019. • American Board of Internal Medicine; American College of Physicians-American Society of Internal Medicine; European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter. <i>Ann Intern Med</i>. 2002;136:243-246. http://abimfoundation.org/wp-content/uploads/2015/12/Medical-Professionalism-in-the-New-Millennium-A-Physician-Charter.pdf • Byyny RL, Papadakis MA, Paauw DS. Medical Professionalism Best Practices. Alpha Omega Alpha Medical Society, Menlo Park, CA. 2015. https://alphaomegaalpha.org/pdfs/2015MedicalProfessionalism.pdf

- Levinson W, Ginsburg S, Hafferty FW, Lucey CR. [*Understanding Medical Professionalism*](#). 1st ed. McGraw-Hill Education; 2014.
- AMA Journal of Ethics. Kirkpatrick J. Ineffective endocarditis in the intravenous drug user. <http://journalofethics.ama-assn.org/2010/10/ccas1-1010.html> 2010.

Professionalism 2: Accountability/Conscientiousness in Addiction Medicine Overall Intent: To take responsibility for one’s own actions and the impact on patients and other members of the health care team	
Milestones	Examples
<p>Level 1 <i>Takes responsibility for failure to complete tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future</i></p> <p><i>Responds promptly to requests or reminders to complete tasks and responsibilities</i></p>	<ul style="list-style-type: none"> • Takes responsibility for inability to administer a dose of extended-release naltrexone for the treatment of alcohol use disorder in a timely fashion because the medication was not stored properly at the correct temperature; describes strategy for preparing medication in advance • Takes responsibility for not contacting a patient’s opioid treatment program with a 42 confidentiality regulations (CFR) Part 2-compliant release of information before the clinic closed for the day; describes strategy for ensuring timely task completion in the future • Completes all patient records and charting before leaving and ensures that no protected health information leaves the treatment area
<p>Level 2 <i>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</i></p> <p><i>Recognizes situations that may impact own ability to complete tasks and responsibilities in a timely manner</i></p>	<ul style="list-style-type: none"> • Updates or confirms there is a 42 CFR Part 2-compliant release of information for a patient being seen as a follow up from a residential treatment center to confirm when the last dose of extended-release naltrexone was given • Promptly renews a patient’s buprenorphine when it is appropriate and due • Prioritizes communicating with an opioid treatment program about a patient’s methadone dose and attendance before the opioid treatment program clinic closes for the day
<p>Level 3 <i>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations</i></p> <p><i>Proactively implements strategies to ensure that the needs of patients, teams, and systems are met</i></p>	<ul style="list-style-type: none"> • Submits a prior authorization in a timely manner to the insurance plan for the prescription of extended-release naltrexone for the treatment of alcohol use disorder • Determines next best course of action to treat an agitated patient in severe opioid withdrawal when a 42 CFR Part 2-compliant release of information to communicate with the patient’s opioid treatment program was not obtained • Proactively implements appropriate strategy to ensure that a patient receives usual methadone dose after discharge from the hospital on the weekend when methadone clinic is closed
<p>Level 4 <i>Recognizes situations that may impact others’ ability to complete tasks and responsibilities in a timely manner</i></p>	<ul style="list-style-type: none"> • Recognizes what information team members need to complete all necessary releases of information and prior authorizations from multiple third parties • Identifies workflow issues that could impede others from completing tasks and provides leadership to address those issues (e.g., fellows advise interns how to manage their time in completing substance abuse disorder assessments)

	<ul style="list-style-type: none"> • Works with hospital pharmacy to administer observed methadone doses over the weekend, when a patient that has been initiated on methadone in the hospital is ready for discharge on Saturday
Level 5 <i>Takes ownership of system outcomes</i>	<ul style="list-style-type: none"> • Delivers health system-wide training on the implementation of federal Substance Use Confidentiality Regulations • Assumes accountability and leadership for developing and implementing health system policies and procedures for ensuring the appropriate transition of care and continuation of evidence-based addiction pharmacotherapies and behavioral treatment for patients between treatment settings
Assessment Models or Tools	<ul style="list-style-type: none"> • Direct observation • Multisource global evaluations • Self-evaluations • Compliance with deadlines and timelines • OSCE • Mentor and program director observations
Curriculum Mapping	<ul style="list-style-type: none"> •
Notes or Resources	<ul style="list-style-type: none"> • SAMHSA. Substance abuse confidentiality regulations: frequent asked questions and fact sheets regarding the substance abuse confidentiality regulations. https://www.samhsa.gov/about-us/who-we-are/laws-regulations/confidentiality-regulations-faqs 2018. • SAMHSA. Laws, regulations, and guidelines. https://www.samhsa.gov/health-information-technology/laws-regulations-guidelines 2018. • Legal Action Center. SAMHSA further revises 42 CFR Part 2 with new final rule on confidentiality of SUD treatment information. https://lac.org/samhsa-revises-42-cfr-part-2-new-final-rule-confidentiality-substance-use-disorder-treatment-information/ 2018. • SAMHSA. Federal guidelines for opioid treatment programs. https://store.samhsa.gov/product/Federal-Guidelines-for-Opioid-Treatment-Programs/PEP15-FEDGUIDEOTP 2015. <ul style="list-style-type: none"> • Guideline for Physicians Working in California Opioid Treatment Programs (CSAM, 2008; a revision is in press): https://www.csam-asam.org/sites/default/files/csam_otpguideline_oct08.pdf

Professionalism 3: Self-Awareness and Help-Seeking Overall Intent: To identify, use, manage, improve, and seek help for personal and professional well-being for self and others	
Milestones	Examples
Level 1 <i>Recognizes status of personal and professional well-being, with assistance</i> <i>Recognizes limits in the knowledge/skills of self or team, with assistance</i>	<ul style="list-style-type: none"> ● Accepts feedback about how a medication error could have resulted from fatigue and mood changes ● Is aware of the institution’s confidential employee assistance services for personal or work-related problems ● Recognizes limits in team’s ability to communicate compassionately with a patient in a stressful interaction during debriefing
Level 2 <i>Independently recognizes status of personal and professional well-being</i> <i>Independently recognizes limits in the knowledge/skills of self or team</i> <i>Demonstrates appropriate help-seeking behaviors</i>	<ul style="list-style-type: none"> ● Independently recognizes the importance of getting adequate sleep to ensure patient safety ● Independently discerns when the team’s behavior is impacted by bias and/or a lack of sensitivity to the individual needs and sociocultural backgrounds of others ● Seeks guidance from mentor or Employee Assistance Program about a difficult patient interaction
Level 3 <i>With assistance, proposes a plan to optimize personal and professional well-being</i> <i>With assistance, proposes a plan to remediate or improve limits in the knowledge/ skills of self or team</i>	<ul style="list-style-type: none"> ● With assistance, proposes an action plan to optimize personal wellness that may reduce medication errors ● With assistance, proposes a personal learning plan to improve patient-centered communication ● With assistance, proposes a plan for team to participate in a bias workshop
Level 4 <i>Independently develops a plan to optimize personal and professional well being</i> <i>Independently develops a plan to remediate or improve limits in the knowledge/skills of self or team</i>	<ul style="list-style-type: none"> ● Independently develops an action plan to reduce fatigue and prevent physician burnout that translates to improved patient safety ● Independently develops a personal learning plan to improve patient relationships by focusing on self-care and counseling through the employee assistance service ● Independently, proposes a practical plan for team participation in bias training and establishes regular debriefing sessions after difficult patient encounters
Level 5 <i>Coaches others when emotional responses or limitations in knowledge/skills do not meet professional expectations</i>	<ul style="list-style-type: none"> ● Delivers a conference plenary or skills-based workshop on preventing burnout for addiction practitioners ● Establishes a proactive wellness program sponsored by the institutional health professional committee to advise others on optimizing their personal and professional well-being
Assessment Models or Tools	<ul style="list-style-type: none"> ● Direct observation

	<ul style="list-style-type: none"> ● Multi-source feedback ● Self-assessment and personal learning plan ● Individual interview ● Group interview or discussions for team activities ● Participation in institutional well-being programs ● Mentor and program director observations ● Institutional online training modules
Curriculum Mapping	<ul style="list-style-type: none"> ●
Notes or Resources	<ul style="list-style-type: none"> ● This subcompetency is not intended to evaluate a 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. ● Local resources, including Employee Assistance Programs ● American Academy of Family Physicians. Focus on Physician Well-Being https://www.aafp.org/news/focus-on-physician-well-being.html ● Bohman B, Dyrbye L, Sinsky CA, et al. Physician well-being: the reciprocity of practice efficiency, culture of wellness, and personal resilience. <i>N Engl J Med: Catalyst</i>. 2017 Aug. https://catalyst.nejm.org/physician-well-being-efficiency-wellness-resilience/ ● American Medical Association Ed Hub. Physician Wellness: Preventing Resident and Fellow Burnout. STEPS Forward Practice Improvement Strategies, online module. 2015. https://www.stepsforward.org/modules/physician-wellness ● American Medical Association. Practice management: physician health. https://wire.ama-assn.org/life-career/physician-wellness ● Ludwig S. Domain of competence: professionalism. <i>Acad Pediatr</i>. 2014;14:S66–S69

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication	
Overall Intent: To deliberately use language and behaviors to form constructive relationships with patients, to identify communication barriers including self-reflection on biases, and minimize them in the doctor-patient relationships; organize and lead communication around shared decision-making.	
Milestones	Examples
<p>Level 1 <i>Uses patient-centered language, appropriate terminology, and nonverbal behavior to demonstrate respect, establish rapport, and reduce stigma</i></p> <p><i>Identifies common barriers to effective communication while accurately communicating one’s own role within the health care system</i></p> <p><i>Identifies the need to adjust communication strategies based on assessment of patient/family expectations while understanding their health status and treatment options</i></p>	<ul style="list-style-type: none"> ● Uses the words “positive” and “negative” to describe the results of a toxicology test, instead of words that contain judgement, such as “clean” and “dirty” ● Identifies low health literacy as a potential barrier to effective communication ● Effectively explains the potential role of an addiction medicine specialist in the management of complex chronic pain
<p>Level 2 <i>Establishes a therapeutic relationship in straightforward encounters using active listening and patient-centered language</i></p> <p><i>Identifies complex barriers to effective communication</i></p> <p><i>Organizes conversations with patients/families by introducing stakeholders; setting the agenda; eliciting values, goals, and preferences; clarifying expectations; and verifying an understanding of the clinical situation</i></p>	<ul style="list-style-type: none"> ● Actively restates features of a patient’s own narrative in order to create a therapeutic alliance ● Uses diagrams to explain pathology and treatment options of opioid use disorder ● Leads a family meeting to discuss consideration of buprenorphine in a patient with moderate opioid use disorder and chronic pain, and elicits concerns and barriers to care

<p>Level 3 <i>Establishes a therapeutic relationship in challenging patient encounters using active listening and patient-centered language</i></p> <p><i>When prompted, reflects on consciousness and biases while attempting to minimize communication barriers</i></p> <p><i>With guidance, appropriately delivers medical information and acknowledges uncertainty and conflict</i></p>	<ul style="list-style-type: none"> ● Uses patient-centered interviewing to explore reasons for medication non-adherence and lack of consistency with follow up ● With guidance, reflects on experiences of working with patients who were unsuccessful in prior treatment episodes ● Effectively discusses the risks and benefits of all treatment options for opioid use disorder, including side effects and potential relapse
<p>Level 4 <i>Models the use of patient centered language and terminology with patient and family</i></p> <p><i>Independently recognizes biases while attempting to proactively minimize communication barriers</i></p> <p><i>Independently uses shared decision making to align patient/family values, goals, and preferences with treatment options to make a personalized care plan</i></p>	<ul style="list-style-type: none"> ● Consistently models appropriate terminology in discussions with patients, family members, clinicians, and staff members, such as “patient with alcohol use disorder” instead of “alcoholic” ● Through advanced motivational interviewing skills, works with a patient with cirrhosis to develop a plan to decrease at-risk alcohol use even when abstinence is the recommended goal ● Consults with peers and/or supervisors to identify and mitigate bias introduced by personal experiences with substance use disorder
<p>Level 5 <i>Role models self awareness practice and educates others to use a contextual approach to minimize communication barriers</i></p> <p><i>Completes scholarly activity related to shared decision making in patient/family communication</i></p>	<ul style="list-style-type: none"> ● Coaches residents to respond to patient body language within the context of the clinical encounter ● Leads a workshop at a regional or national meeting on patient-centered treatment planning and shared decision making
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> ● Direct attending assessment of patient/family encounters ● Standardized patient interviews or structured case discussions ● Self-assessment including opportunities for self-reflection ● Videotaped patient interviews ● OSCE
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> ●

Notes or Resources	<ul style="list-style-type: none">• Botticelli MP, Koh HK. Changing the language of addiction. <i>JAMA</i>. 2016 Oct4;316(13):1361-1362 https://www.ncbi.nlm.nih.gov/pubmed/27701667• Kelly JF, Wakeman SE, Saitz R. Stop talking 'dirty': clinicians, language, and quality of care for the leading cause of preventable death in the United States. <i>Am J Med</i>. 2015 Jan;128(1):8-9 https://www.ncbi.nlm.nih.gov/pubmed/25193273
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Interpersonal and Communication Skills 2: Interprofessional and Team Communication Overall Intent: To effectively communicate with the health care team, including consultants, in both straightforward and complex situations	
Milestones	Examples
<p>Level 1 <i>Respectfully requests a consultation</i></p> <p><i>Respectfully receives a consultation request</i></p> <p><i>Uses language that values all members of the healthcare team</i></p>	<ul style="list-style-type: none"> ● Requests a consultation from infectious disease for management of a new diagnosis of HIV with plan to collaborate on the patient’s care ● Receives and acknowledges a request for medication management for a patient with substance use admitted to a specialty service ● Listens to and considers others’ points of view, is non-judgmental and actively engaged, and demonstrates respect for different clinical disciplines
<p>Level 2 <i>Clearly and concisely requests a consultation</i></p> <p><i>Clearly and concisely responds to a consultation request</i></p> <p><i>Communicates information effectively with all healthcare team members</i></p> <p><i>Solicits feedback on performance as a member of the healthcare team</i></p>	<ul style="list-style-type: none"> ● Efficiently communicates key details and specific clinical questions while requesting psychiatric consultation for a patient with co-occurring psychiatric condition ● Provides clear and detailed initial recommendations for withdrawal management to the requesting physician by phone and within the electronic health record ● Communicates clearly and concisely in a timely manner during encounters with consultants and primary team members ● Requests 1:1 feedback session with consultation team after a challenging case
<p>Level 3 <i>Checks own understanding of consultant recommendations</i></p> <p><i>Checks understanding of recommendations when providing consultation</i></p> <p><i>Uses active listening to adapt communication style to fit team needs</i></p> <p><i>Communicates concerns and provides feedback to peers and learners</i></p>	<ul style="list-style-type: none"> ● Summarizes plan of care provided by a consultant to complete closed-loop communications ● Discusses gaps in withdrawal management provided by primary team and reviews opportunities to improve care in clear and constructive manner ● Uses teach-back and other strategies to assess receiver understanding during consultations ● Inconsistently provides feedback or constructive criticism to superiors, including to addiction medicine faculty members; is unable to consistently manage conflict between team members

<p>Level 4 <i>Coordinates recommendations from different members of the healthcare team to optimize patient care</i></p> <p><i>Communicates feedback and constructive criticism to superiors</i></p>	<ul style="list-style-type: none"> • Balances recommendations from social work and infectious disease in determining care plan for patient with IV substance use and need for long-term antibiotics • Provides constructive feedback on streamlining clinic intake workflow to the attending physician on the consult service • Offers suggestions to negotiate or resolve conflicts related to patient care among health care team members; raises concerns or provides opinions and feedback, when needed, to superiors on the team
<p>Level 5 <i>Role models flexible communication strategies that value input from all healthcare team members, resolving conflict when needed</i></p> <p><i>Facilitates regular healthcare team-based feedback in complex situations</i></p>	<ul style="list-style-type: none"> • Regularly provides opportunity for clinic team to provide 360-degree feedback on clinic operations and care planning, and negotiates differences of opinion respectfully • Presents quality improvement project at a national meeting describing the new approach to interprofessional team building to improve patient care
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> • Direct observation • Global assessment • Multi-source assessment • Simulation encounters • Standardized patient encounters or OSCE • Checklists • Record or chart review • 360-degree evaluation from multidisciplinary team
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> •
<p>Notes or Resources</p>	<ul style="list-style-type: none"> • François, J. Tool to assess the quality of consultation and referral request letters in family medicine. <i>Can Fam Physician</i>. 2011 May;57(5), 574–575. • Dehon E, Simpson K, Fowler D, Jones A. Development of the faculty 360. <i>MedEdPORTAL</i>. 2015;11:10174. https://doi.org/10.15766/mep_2374-8265.10174 • American College of Obstetrics and Gynecology. Seeking and giving consultation. https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Ethics/Seeking-and-Giving-Consultation-2007. • Arizona State University. Core interprofessional eLearning modules: https://ipe.asu.edu/core-interprofessional-elearning-modules

Interpersonal and Communication Skills 3: Communication within Health Care Systems Overall Intent: To effectively communicate using a variety of methods	
Milestones	Examples
<p>Level 1 <i>Records information in the patient record with accuracy and timeliness</i></p> <p><i>Safeguards patient personal health information, including confidentiality laws surrounding certain diagnoses and substance use disorders</i></p>	<ul style="list-style-type: none"> ● Notes are accurate but include extraneous information not pertinent to patients' substance use disorder history and presentation ● Appropriately uses release of information documentation from the institution in an effort to maintain consistency with applicable confidentiality rules and regulations
<p>Level 2 <i>Demonstrates organized diagnostic and therapeutic reasoning through one's notes in the patient record</i></p> <p><i>Demonstrates accurate, timely, and appropriate use of documentation shortcuts</i></p>	<ul style="list-style-type: none"> ● Notes are organized and accurate but carry forward outdated laboratory or imaging results ● Appropriately uses documentation templates or forms to communicate efficiently between team members and with other disciplines
<p>Level 3 <i>Concisely reports diagnostic and therapeutic reasoning in the patient record</i></p> <p><i>Appropriately selects direct (e.g., telephone, inperson) and indirect (e.g., progress notes, text messages) forms of communication based on context</i></p>	<ul style="list-style-type: none"> ● Effectively describes use of history, physical examination, and laboratory results to support diagnosis and treatment plan ● Documents change in plan of care taking into account unexpected urine toxicology results ● Opts to discuss new HIV diagnosis obtained via screening labs in person rather than by telephone
<p>Level 4 <i>Teaches others how to provide accurate, concise, and timely communication in the patient record</i></p> <p><i>Teaches appropriate communication techniques regarding patients with substance use disorders</i></p>	<ul style="list-style-type: none"> ● Reviews medical student documentation in the record and provides helpful feedback on organization and communication ● Notes are exemplary, but is not yet able to provide feedback to trainees and colleagues who are insufficiently documenting substance use history ● Leads didactic session on non-judgmental communication

<p>Level 5 <i>Participates in the development or evaluation of policies and procedures for departmental or institutional communication</i></p>	<ul style="list-style-type: none"> • Teaches colleagues how to improve clinical notes, including use of appropriate, non-stigmatizing terminology, billing compliance, conciseness, and including all required elements • Leads a task force established by the health system QI committee to develop a plan to improve hand-offs between providers
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> • Chart (history of present illness, progress notes, procedure notes, discharge summary) audit • Observation of sign-outs, observation of requests for consultations • 360-degree evaluation of chart documentation • Chart stimulated recall exercise addressing systems based practice
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> •
<p>Notes or Resources</p>	<ul style="list-style-type: none"> • Bierman JA, Hufmeyer KK, Liss DT, Weaver AC, Heiman HL. Promoting responsible electronic documentation: validity evidence for a checklist to assess progress notes in the electronic health record. <i>Teach Learn Med.</i> 2017 Oct-Dec;29(4):420-432. • ASAM. Awad A. Confused by confidentiality? A primer on 42 CFR Part 2. 2013. https://www.asam.org/resources/publications/magazine/read/article/2013/08/15/confused-by-confidentiality-a-primer-on-42-cfr-part-2

Available Milestones Resources

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

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

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

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

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

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

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

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

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

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

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

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

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

