Supplemental Guide:

Public Health and

General Preventive Medicine
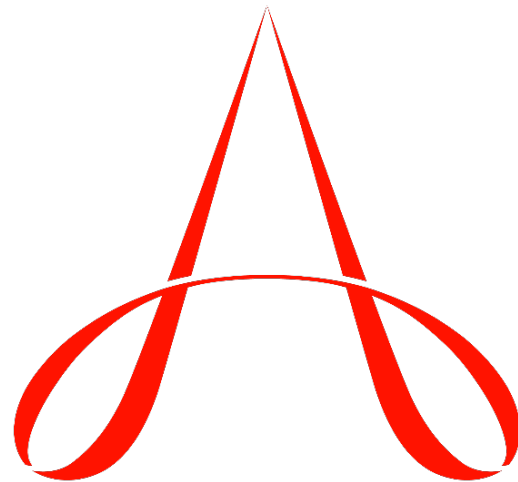
ACGME

April 2022

TABLE OF CONTENTS

Milestones Supplemental Guide

This document provides additional guidance and examples for the Public Health and General Preventive 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 on the Resources page of the Milestones section of the ACGME website.

Patient Care 1: Emergency Preparedness and Response – Apply Skills in Emergency Preparedness and Response
Overall Intent: To gain the knowledge and skills necessary to lead the preparation and response in emergency situations

Milestones	Examples
Level 1 *Identifies examples of public health threats that might warrant an emergency response*	● Describes examples of current public health threats ● Discusses what emergency response may be important at a local, national, or global level
Level 2 *Describes how a response to a public health emergency is organized*	● Completes relevant assigned online and in-person Federal Emergency Management Agency (FEMA) courses ● Completes first responder course online or in person through the Environmental Protection Agency (EPA) or local programs ● Explains the organization of an emergency response at the local medical center or public health department
Level 3 *Plans and/or participates in an emergency preparedness event (actual or simulated)*	● Develops a residency-designated simulation, such as tabletop drill or other simulation of real events such as a pandemic, weather-related event, or terrorism ● Participates in an exercise that occurs at a public health entity ● Modifies existing emergency preparedness plans to fit a new exercise or actual event
Level 4 *Evaluates an emergency preparedness event (actual or simulated)*	● Evaluates a medical center or public health agency emergency preparedness activity ● Designs a plan to evaluate an emergency preparedness exercise or actual event
Level 5 *Provides leadership during an emergency preparedness event (actual or simulated)*	● Leads the response to a natural or man-made catastrophic event ● Develops the protocols for use during an emergency preparedness exercise of actual event ● Serves as an emergency preparedness subject matter expert
Assessment Models or Tools	● Direct observation ● Post-course examinations ● Simulation
Curriculum Mapping	●
Notes or Resources	● FEMA website. https://www.fema.gov/.

Patient Care 2: Policies and Plans – Develop Policies and Plans to Support Individual and Community Health Efforts Overall Intent: To develop and implement policies for individual and community health efforts	
Milestones	**Examples**
Level 1 *Identifies pertinent policies and interventions for individual patient care*	● Identifies clinic policy of screening patients for tobacco and alcohol use during each visit ● Identifies evidence-based individual intervention plans to address obesity and physical inactivity
Level 2 *Describes how policies and plans are developed and implemented to support the health of individuals and communities*	● Gives an advocacy presentation describing the process necessary to pass and implement a city ordinance related to drowning prevention or e-cigarette policies ● Describe how a health system has developed policies and implemented programs to address obesity and physical inactivity
Level 3 *Applies policies and plans for disease prevention and health promotion to individuals and/or communities*	● Rotates in a childhood obesity clinic as a medical provider and participates in the community-based childhood obesity prevention program ● Participate in the planning and implementation of screening for physical inactivity and exercise prescriptions in a primary care clinic
Level 4 *Evaluates policies and plans for disease prevention and health promotion that have been applied to individuals and/or communities*	● Evaluates a local YMCA diabetes prevention program and makes recommendations for modifications for the next launch of the program to increase recruitment and retention of the target population ● Evaluate a clinic weight reduction program and make recommendations for modifications of the program to increase recruitment and retention of the target population
Level 5 *Develops and/or implements policies or plans to improve community health*	● Develops a policy that is implemented within a non-government organization serving a population ● Plays an integral role in the implementation of an approved policy by the community outreach division within a health system ● Develops a health program that is used by a local health department for the community
Assessment Models or Tools	● Direct observation ● Presentation given ● Rotation evaluation ● Evaluation of written policy
Curriculum Mapping	●
Notes or Resources	● Centers for Disease Control (CDC) website. www.cdc.gov ● Local and state community health improvement plans (CHIPs) ● Local and state community health assessments

Patient Care 3: Clinical and Community Preventive Services	
Overall Intent: To identify, evaluate, and apply appropriate clinical preventive services for individuals and populations	

Milestones	Examples
Level 1 *Locates and appraises evidence about a clinical preventive service for an individual patient* *Recognizes distinctions between population and individual health services*	● Looks up a clinical question using the Patient/Population, Intervention, Control/Comparison and Outcomes (PICO) format and applies a relevant article to patient care ● Considers US Preventive Services Task Force (USPSTF) individual recommendations for an individual patient, distinguishing patient variability ● Reviews Community Guide recommendations for a population health service
Level 2 *Discusses the strengths and weaknesses of an individual study relevant to a clinical preventive service* *Describes the usefulness and value of population-based health services in meeting the needs of target populations*	● Lists strengths and weaknesses of an article using evidence-based medicine criteria to discuss a clinical preventive service ● Describes usefulness and value in screening for burnout in residents ● Describes usefulness and value in screening for hearing loss in certain worker populations ● Identifies Community Guide interventions one can implement for their community or population
Level 3 *Examines the quality and strength of evidence of a clinical preventive service* *Assesses evidence for population-based health services*	● Describes the strength of evidence for a current or proposed clinical preventive service under public comment and coordinates a response to the USPSTF ● Examines a journal article on the benefits of a specific screening ● Assesses the strength of evidence for water fluoridation, lead screening in children, or genetic testing for newborns
Level 4 *Participates in the analysis of a guideline to address a clinical preventive service* *Uses established performance criteria to evaluate a population-based health service, to include identifying barriers to services and strategies for improvement*	● Participates in the development of a USPSTF guideline while at Agency for Healthcare Research and Quality (AHRQ) rotation ● Reviews childhood prevention program data to identify gaps or inequities in screening and identify strategies to improve screening rates
Level 5 *Evaluates the implementation of an evidence-based guideline to address a clinical preventive service and identifies barriers and proposes solutions to improving system-level adherence*	● Observes a USPSTF committee ● Reviews draft USPSTF draft recommendations and prepares comments

Develops program goals and/or performance criteria to evaluate a population-based health service for strategic or operational improvements	● Develops program goals for a lead screening program in children and evaluates the performance of the program ● Evaluates a lead screening program
Assessment Models or Tools	● Direct observation ● Rotation evaluation ● Guideline or program or evaluation ● Authorship on a USPSTF on a guideline/published paper
Curriculum Mapping	●
Notes or Resources	● USPSTF app. https://www.uspreventiveservicestaskforce.org/apps/ ● USPSTF website. https://uspreventiveservicestaskforce.org/uspstf/home ● Community Guide website: https://www.thecommunityguide.org/

Patient Care 4: Lifestyle Medicine
Overall Intent: To develop, implement, and evaluate evidence-based, lifestyle management plans for individuals and populations

Milestones	Examples
Level 1 *Lists modifiable and non-modifiable risk factors associated with the development of prevalent chronic conditions*	● Reviews an oral or written presentation of the modifiable and non-modifiable risk factors associated with the development of type II diabetes
Level 2 *Identifies evidence of utilizing lifestyle interventions that reduce the risk of developing, or to mitigate the effects of, prevalent chronic conditions*	● Reviews in an oral or written presentation of the evidence for individual clinical or community-based preventive services for the development or mitigation of diabetes
Level 3 *Recommends lifestyle interventions to mitigate and treat prevalent chronic conditions in individuals*	● Develops an individual, evidence-based, lifestyle management plan for patients with pre-diabetes or diabetes
Level 4 *Evaluates or develops a plan for management of lifestyle factors associated with prevalent chronic conditions at the population or community level*	● Develops a population/community, evidence-based, lifestyle management plan for people at high risk or diagnosed diabetes
Level 5 *Implements and evaluates a population-based strategy for an evidence-based lifestyle program or policy that mitigates prevalent chronic conditions at the population or community level*	● Participates in the implementation and evaluation of the diabetes prevention program for a primary care clinic, health system, or county
Assessment Models or Tools	● Direct observation ● E-module multiple choice tests ● Medical record (chart) audit ● Multisource feedback ● Presentation evaluation ● Reflection ● Simulation
Curriculum Mapping	●
Notes or Resources	● Although these examples are diabetes-related, all chronic disease could be considered ● USPSTF. https://www.uspreventiveservicestaskforce.org ● "The Guide to Community Preventive Services." Community Preventive Services Task Force (CPSTF). https://www.thecommunityguide.org/

Medical Knowledge 1: Environmental Health	
Overall Intent: To apply prevention principles to potential environmental hazards	

Milestones	Examples
Level 1 *Identifies common illnesses that may be caused or influenced by exposure to environmental hazards* *Identifies major classes of environmental hazards and their routes of human exposure*	● Defines what hazards may impact food, air, or water quality ● Describes the routes of exposures that may occur and how this may differ in vulnerable populations ● Recognizes common illnesses that may be caused by exposures to radiation, noise, or other physical hazards
Level 2 *Identifies the components of an environmental exposure history* *Describes situations that warrant an environmental risk assessment*	● Selects the important elements of an exposure history for populations exposed to environmental hazards ● Describes the importance of dose/response in an environmental exposure ● Describes the implications of poor air or water quality to populations
Level 3 *Takes a complete environmental exposure history, including individual factors that impact susceptibility to environmental hazards* *Identifies the steps in an environmental risk assessment and describes how the results are used to manage and communicate risk*	● Participates in taking environmental exposure histories at an occupational health clinic, taking into account variations for specific agents and individual patients ● Uses the results of an environmental risk assessment to communicate to patients about risk and management
Level 4 *Recommends methods for reducing or eliminating exposure to environmental hazards and methods for addressing the health effects resulting from these exposures* *Conducts a population-level environmental risk assessment (actual or simulated)*	● Works with an environmental health group and the public health department to plan treatment protocols for populations or patients who are impacted by exposures to an environmental hazard, such as noise, air pollution, or water contamination ● Completes an environmental risk assessment that may involve food, air, water, or other hazard exposures for a population specific community ● Designs a community-level risk management plan for an environmental hazard such as in sanitation, wastewater management, vector control, climate change, or food safety
Level 5 *Evaluates and interprets the results of individual and/or population-level environmental monitoring* *Makes policy recommendations based on the results of an environmental risk assessment*	● Leads the design of a complex environmental risk assessment ● Recommends policy changes to local or national regulatory agencies, serving as a subject matter expert ● Presents research or scholarship in environmental health at a regional or national meeting
Assessment Models or Tools	● Direct observation ● Medical record (chart) audit

	● Multisource feedback ● Presentation evaluation ● Reflection ● Simulation
Curriculum Mapping	●
Notes or Resources	● EPA. https://www.epa.gov/. Accessed 2021. ● CDC. https://www.cdc.gov. Accessed 2021. ● Occupational Safety and Health Administration (OSHA). https://www.osha.gov. Accessed 2021.

Medical Knowledge 2: Biostatistics	
Overall Intent: To gain and apply knowledge of biostatics	

Milestones	Examples
Level 1 *Recognizes common statistical concepts and tests*	● Describes qualitative and quantitative data, defines types of variables, and describes frequency distributions ● Describes methods to determine sample size, power, and randomization by data type
Level 2 *Identifies statistical test(s) for a given research question and data set*	● Differentiates the different types of data (e.g., continuous, ordinal, dichotomous and nominal) ● Understands statistical inference, testing hypothesis, and test of statistical significance ● Analyzes a journal article and presents at journal club using evidence-based literature strategies
Level 3 *Performs data analyses using various statistical methods*	● Selects appropriate methods for analyzing data ● Analyze the relationship between two variables using appropriate test for continuous ordinal, dichotomous, and nominal data sets
Level 4 *Interprets the statistical and clinical significance of a data set and evaluates the generalizability of the results to a population*	● Analyzes qualitative and/or quantitative data to address clinical and/or population issues ● Interprets scientific literature using biostatistical and epidemiological principles (e.g., statistical significance, confidence intervals, bias, confounding, and causal inference) in the context of the development of a poster presentation or publication
Level 5 *Analyzes and interprets large data sets using complex statistical methods and submits the results for publication or presentation*	● Independently develops a study design, data collection, and appropriate statistical methods and executes study and post-study analysis to address clinical or public health scenarios ● Uses complex statistical methods such as multiple linear regression or logistic regression
Assessment Models or Tools	● Evidence-based literature review training ● Journal club ● Research project
Curriculum Mapping	●
Notes or Resources	● Some programs may choose to use specific grades in master's degrees in public health (MPH) courses, such as Introductory and Advanced Biostatistics ● Elmore JG, Wild D, Nelson HD, Katz DL. *Jekel's Epidemiology, biostatistics, preventive medicine and public health*. 5th ed. Amsterdam, Netherlands: Elsevier; 2020. ● Daniel W.W. & Cross C.L. (2018). *Biostatistics: A Foundation for Analysis in the Health Sciences*, 11th ed., Wiley. ISBN: 978-1119496700.

Medical Knowledge 3: Epidemiology	
Overall Intent: To gain knowledge and skills of epidemiologic principles to data analysis	
Milestones	**Examples**
Level 1 *Identifies sources of data and common measures for descriptive epidemiology* *Describes the basic types of research studies* *Describes the natural history of disease and relevance to primary, secondary, and tertiary prevention*	• Identifies different sources of data to describe the distribution of a disease in a given population • Reads a published research study and identifies whether the study was observational or experimental as well as the specific type of design • Analyzes patient cases to determine stage in the natural history of disease, and based upon this assessment recommend primary, secondary, or tertiary prevention strategies
Level 2 *Defines basic measures of disease frequency and excess risk* *Compares and contrasts commonly used study designs* *Identifies criteria for effective screening tests*	• Identifies the type of data needed to calculate incidence rates, prevalence rates, mortality rates, relative risk, and attributable risk, number needed to treat, confidence intervals, sensitivity, specificity, positive predictive value, and negative predictive value • Compares and contrasts the strengths and weaknesses of study designs used in different publications • Understands the basic parameters for assessing the need for and feasibility of a screening program (e.g., morbidity of a disease, characteristics of screening tests, accuracy and cost of effective treatments, program cost, population served, and community resources available)
Level 3 *Calculates measures of disease frequency and excess risk for a specified disease or condition* *Critiques epidemiologic studies, including assessing external and internal validity and distinguishing between association and causation* *Assesses the validity and reliability of individual screening tests*	• When provided with the appropriate data, can calculate incidence rates, prevalence rates, mortality rates, relative risk, and attributable risk • Interprets findings from published studies including assumptions made, generalizability, potential biases, and implications for prevention • When provided with the appropriate data, can calculate the sensitivity and specificity of a specific screening test
Level 4 *Uses data to characterize the health of a local population and compares it with that of other populations*	• Creates heat maps illustrating the geographic distribution of a particular disease, including variations by age, gender and race and socioeconomic status

Participates in epidemiological research, including evaluating and interpreting results	● Conducts a secondary analysis of an association between diet and health outcomes
Uses evidence about individual screening tests, interventions, and harms to weigh the potential benefits and harms of screening programs	● Writes an advocacy letter to the state legislature summarizing evidence for or against a proposed screening program ● Provides detailed feedback on a proposed USPSTF screening guideline in the public comment stage
Level 5 *Teaches use of data to characterize the health of a population and compare it with that of other populations*	● Teaches a course on epidemiology ● Teaches the fundamentals of population-based health
Independently designs and conducts epidemiologic research	● Obtains research funding to conduct a study that analyzes the impact of a preventive intervention
Provides expert opinion on the benefits and harms of screening programs	● Shares expertise at a meeting of the USPSTF ● Provides expert opinion at a county meeting for implementing new syphilis screenings the county proposes to implement
Assessment Models or Tools	● Evidence-based literature review training ● Journal club presentation ● Research projects
Curriculum Mapping	●
Notes or Resources	● Some programs may choose to use specific grades in MPH courses, such as Introduction and Advanced Epidemiology ● Strauss, SE, Glasziou, P, Richardson, WS, Haynes, RB. *Evidence-based medicine: how to practice and teach EBM*. 5th edition. Amsterdam, Netherlands: Elsevier, 2018. ● Rothman, K. *Modern Epidemiology*, 4th edition. Wolters Kluwer, 2021.

Medical Knowledge 4: Public Health Regulations	
Overall Intent: To develop and interpret public health regulations	

Milestones	Examples

Level 1 *Identifies examples of public health regulatory agencies*	● Identifies food safety regulatory agencies at different levels of government:
	  ○ Federal: Food and Drug Administration (FDA), US Department of Agriculture (USDA), Environmental Protection Agency (EPA)
	  ○ State: state public health department, state department of agriculture
	  ○ Local: local health department
	● Identifies drinking water quality regulatory agencies at the federal level and their roles (e.g., EPA regulates public drinking water; FDA regulates bottled drinking water)
	● Identifies air quality regulatory agencies at various levels at different levels of government (e.g., Federal level is the EPA; state and local have their own air pollution control agencies

Level 2 *Describes the regulatory requirements for a specific public health topic*	● Describes food safety regulatory requirements at a restaurant, including temperature and storage, personal hygiene, use of licensed sources, and maintenance of pest control
Level 3 *Interprets regulatory requirements as applied to individuals and/or populations*	● During a restaurant inspection with a local health inspector, determines whether the restaurant is in compliance with relevant food safety regulatory standards around temperature, storage, personal hygiene, use of licensed source, and pest control
Level 4 *Develops or modifies a public health policy based upon regulatory requirements or public health laws (actual or simulated)*	● Assists in writing a policy on food trucks ● Completes a simulation exercise in writing a food policy for food trucks ● Assists in developing a local or state regulation on vaccine mandates
Level 5 *Contributes to the development or modification of a proposed regulatory requirement or public health law*	● Working with external and internal partners, develops the rules and regulations for the licensure and operation of a food truck
Assessment Models or Tools	● Direct observation ● Feedback or evaluation from a health inspector ● Policies implemented ● Written policy or regulation
Curriculum Mapping	●
Notes or Resources	● FDA. https://www.fda.gov/. Accessed 2021. ● USDA. https://www.usda.gov/. Accessed 2021.

Medical Knowledge 5: Infectious Diseases of Public Health Significance	
Overall Intent: To participate in the development and implementation of prevention and treatment strategies for infectious diseases of public health significance	
Milestones	**Examples**
Level 1 *Describes common methods for preventing the transmission of infectious diseases*	● Discusses the common methods for preventing spread of influenza in individuals and populations
Level 2 *Discusses aspects of disease and common environmental, health, and behavioral risk factors associated with infectious diseases of public health significance*	● Discusses the common environmental, health, and behavioral risk factors associated with influenza epidemics and pandemics
Level 3 *Describes the epidemiology, risk factors, prevention strategies, diagnosis, and treatment for infectious diseases of public health significance*	● Reviews the epidemiology, risk factors, prevention strategies, diagnosis, and treatment of an influenza epidemic
Level 4 *Applies knowledge of the epidemiology, risk factors, prevention strategies, diagnosis, and treatment for infectious diseases of public health significance to the individual or population- level*	● Participates in the implementation of prevention strategies and treatment efforts for seasonal influenza at the level of a local health system or county ● Participates in a vaccine clinic to vaccinate individuals against communicable diseases, including discussing the individual's risks and benefits of vaccination
Level 5 *Designs a plan for the prevention, diagnosis, and treatment of an infectious disease of public health significance at the population level*	● Plays an integral role in the development of a plan to prevent, diagnose, and treat a seasonal influenza epidemic or pandemic for a health system or county
Assessment Models or Tools	● Direct observation ● E-module multiple choice tests ● Multisource feedback ● Presentation evaluation (oral or written) ● Reflection ● Simulation
Curriculum Mapping	●
Notes or Resources	● Although these examples refer to influenza, other infectious disease could be considered ● CDC. Pandemic influenza. https://www.cdc.gov/flu/pandemic-resources/index.htm. Reviewed May 12, 2020.

Systems-Based Practice 1: Patient Safety and Quality Improvement (QI)	
Overall Intent: To engage in the analysis and management of patient safety events, including relevant communication with patients, families, and health care professionals; to conduct a QI project	
Milestones	**Examples**
Level 1 *Lists common patient safety events and describes how to report patient safety events*	● Lists patient misidentification or medication errors as common patient safety events
Discusses basic quality improvement methodologies and metrics	● Identifies quality improvement tools such as fishbone diagram, histograms, Pareto charts, control charts, and checklists
Level 2 *Identifies system factors that lead to patient safety events*	● Identifies that a lack of hand sanitizer dispenser at each clinical exam room may lead to increased infection rates
Describes quality improvement initiatives	● Summarizes protocols resulting in decreased spread of hospital acquired *C. diff* or decreased needlestick injuries in the public health clinic
Level 3 *Participates in a root cause analysis (actual or simulated)*	● Preparing for morbidity and mortality presentations ● Participates in a root cause analysis using the Five Whys method or fishbone diagram method of finding the root cause of an event ● Performs a patient safety report
Participates in local quality improvement initiatives	● Participates in projects identifying root cause of rooming inefficiency in the outpatient setting ● Participates in community organization-based quality projects focused on areas such as improved needle exchange
Level 4 *Conducts analysis of patient safety events and offers error prevention strategies (actual or simulated)*	● Collaborates with a team to conduct the analysis of a vaccine administration errors and can effectively communicate with patients/families about those events
Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	● Participates in the completion of a QI project to improve human papilloma virus (HPV) vaccination rates within the practice, including assessing the problem, articulating a broad goal, developing a SMART (Specific, Measurable, Attainable, Relevant, Time-bound) objective plan, and monitoring progress and challenges
Level 5 *Actively modifies systems to prevent patient safety events*	● Assumes a leadership role at the departmental or institutional level for patient safety
Leads the conduct and implementation of a quality improvement project	● Initiates and completes a QI project to improve county HPV vaccination rates in collaboration with the county health department and shares results with stakeholders
Assessment Models or Tools	● Direct observation

	● E-module multiple choice tests ● Medical record (chart) audit ● Multisource feedback ● Portfolio ● Reflection ● Simulation
Curriculum Mapping	●
Notes or Resources	● Institute of Healthcare Improvement (IHI). http://www.ihi.org/Pages/default.aspx ○ This site includes multiple choice tests, reflective writing samples, and more

Systems-Based Practice 2: System Navigation for Patient- and Population-Centered Care	
Overall Intent: To effectively navigate the public health or 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**
Level 1 *Lists examples of care coordination in a health care system* *Recognizes population and community health needs and inequities*	● For an inpatient discharge, coordinates with primary care physician, home health nurse, and social workers as members of the team ● Identifies patients in rural areas may have different needs than urban patients
Level 2 *Demonstrates coordination of care of patients in routine clinical situations, effectively using the roles of interprofessional team members and care settings* *Identifies specific population and community health needs and inequities for the local population*	● Coordinates with the clinic interprofessional team to refer patients to prevention screening such as mammograms ● Identifies that limited transportation options may be a factor in patients getting to multiple chemotherapy, physical therapy, or counseling appointments ● Works with a community organization to initiate or improve tobacco cessation or vaccination programs
Level 3 *Demonstrates coordination of care of patients in complex clinical situations, effectively using the roles of interprofessional team members* *Uses local resources effectively address the health needs and inequities of a patient population and community*	● Works with the social worker to coordinate care for a homeless patient that will ensure follow-up to a substance use disorder clinic after discharge from the hospital ● Refers patients to a local pharmacy which provides a sliding fee scale option ● Prints pharmacy coupons for patients in need ● Connects patients to a community garden and/or food pantry ● Helps a senior enroll in Silver Sneakers program
Level 4 *Models effective coordination of patient- and population-centered care among different disciplines and specialties/settings* *Participates in changing and adapting practice to provide for the health needs and inequities experienced by specific populations*	● Leads team members in approaching consultants to review cases/recommendations. ● Leads public health team members in setting up vaccination clinics in underserved communities ● Assists to design community screening program for diabetes prevention ● Assists in designing protocols for prescribing naloxone to patients at risk of opioid use disorders
Level 5 *Analyzes the process of care coordination and leads in the design and implementation of improvements*	● Leads a program to arrange for team home visits to newborns at high risk for infant mortality

Leads innovations and advocates for populations and communities with health needs and inequities	● Leads development of telehealth behavioral health services for a rural site
Assessment Models or Tools	● Direct observation ● Medical record (chart) audit ● OSCE ● Multisource feedback ● Quality metrics and goals mined from electronic health records (EHRs) ● Review of sign-out tools, use and review of checklists
Curriculum Mapping	●
Notes or Resources	● Population health training in place program. CDC. https://www.cdc.gov/pophealthtraining/whatis.html. ● Kaplan KJ. In pursuit of patient-centered care. TissuePathology.com. March 29, 2016. http://tissuepathology.com/2016/03/29/in-pursuit-of-patient-centered-care/#axzz5e7nSsAns. ● Skochelak SE, Hawkins RE, Lawson LE, et al. *AMA education consortium: health systems science*. Amsterdam, Netherlands: Elsevier; 2016.

Systems-Based Practice 3: Physician Leadership in Health Care and Community Health Systems	
Overall Intent: To understand the physician's role in the health care or public health system and how to optimize the system to improve individual and community health outcomes	
Milestones	**Examples**
Level 1 *Identifies key components of the health care system* *Identifies key agencies involved in community health efforts*	● Articulates differences between public health and clinical care system ● Lists a variety of agencies in the local community that address childhood obesity ● Creates a community resource guide of agencies to help patients with obesity
Level 2 *Describes how components of a health care system are inter-related, and how they impact patient and/or population/stakeholder care* *Describes the interactions between agencies and how these impact the overall health of the community*	● Explains the interrelationship of the components of the IHI Triple Aim ● Explains the logistics of collaboration between two agencies for an obesity prevention initiative ● Reporting infectious diseases to the county health department
Level 3 *Discusses how individual practice affects the broader system* *Discusses how each agency impacts the broader goal of a healthy community*	● Participates in a QI project that ensures that patients with chronic obstructive pulmonary disease (COPD) have a scheduled follow-up appointment at discharge within seven days to reduce risk of readmission ● Discusses how, during a syphilis outbreak, the county health department collaborates with the local health care centers and hospitals in educating providers, reporting, and screening
Level 4 *Navigates components of the complex health care system to promote efficient and effective patient and/or population/stakeholder care* *Participates in a community needs assessment to identify and improve the overall health of a community (actual or simulated)*	● For positive lung cancer screening, ensures appropriate referrals for medical care and social needs ● Completes a windshield or walking survey for a community needs assessment to address childhood obesity ● Completes the qualitative data analysis for stakeholder interviews conducted for a community needs assessment ● Conducts interviews with stakeholders for a community needs assessment
Level 5 *Leads health care systems change that enhances high-value, efficient, and effective patient care*	● Leads community or professional organizations efforts to advocate for a no-smoking ordinances

Leads a community needs assessment to identify and improve the overall health of a community	● Leads an advocacy campaign for healthier food options in a food desert to address childhood obesity
Assessment Models or Tools	● Direct observation ● Medical record (chart) audit ● Patient satisfaction data ● Portfolio
Curriculum Mapping	●
Notes or Resources	● AHRQ. The challenges of measuring physician quality. https://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/create/physician/challenges.html . Created February 2015; Reviewed September 2019. ● AHRQ. Major physician performance sets. https://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/create/physician/measurementsets.html.Updated 2018. ● 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. Accessed 2019. ● http://datacenter.commonwealthfund.org/?_ga=2.110888517.1505146611.1495417431-1811932185.1495417431#ind=1/sc=1. Copyright 2019. Updated 2021. ● Dzau VJ, McClellan M, Burke S, et al. Vital directions for health and health care: priorities from a National Academy of Medicine Initiative. The National Academy for Medicine. March 2016. https://nam.edu/vital-directions-for-health-health-care-priorities-from-a-national-academy-of-medicine-initiative/ ● IHI. The triple aim. http://www.ihi.org/Engage/Initiatives/TripleAim/Pages/default.aspx ● The Kaiser Family Foundation. www.kff.org, Accessed 2019. ● The Kaiser Family Foundation. Topic: health reform. https://www.kff.org/topic/health-reform/. Updated 2019.

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice	
Overall Intent: To incorporate evidence and population values into clinical practice	

Milestones	Examples
Level 1 *Recognizes the need for evidence in decision-making to care for a routine patient, situation, or public health problem*	● Communicate evidence-based guidelines for osteoporosis screening and treatment to patients and incorporates patient's preferences and values into the decision-making process
Level 2 *Identifies evidence and elicits patient or population preferences and values to guide a patient or population intervention*	● In a population with hyperlipidemia, identifies and discusses potential evidence-based treatment options, and solicits perspective from the community ● Identifies USPSTF guidelines
Level 3 *Applies the best available evidence, integrated with patient or population preferences and values*	● Shares knowledge and obtains patient feedback about treatment of metabolic syndrome ● Modifies treatment based on patient feedback ● Interprets evidence-based guidelines for osteoporosis screening at USPSTF website for a specific patient or population
Level 4 *Critically appraises and applies evidence, even in the face of uncertainty and conflicting evidence, to guide care tailored to an individual or population*	● Makes a recommendation regarding whether to adopt a new screening tool based on current evidence for and against ● Accesses the primary literature to identify alternative treatments to statins for hyperlipidemia ● Works with a team to develop criteria for population-based policies to prevent hypertension
Level 5 *Trains others to critically appraise and apply evidence to complex situations*	● Leads clinical teaching on understanding and applying USPSTF guidelines
Assessment Models or Tools	● Direct observation ● Presentation evaluation ● Oral or written examinations ● Research portfolio
Curriculum Mapping	●
Notes or Resources	● Strauss, SE, Glasziou, P, Richardson, WS, Haynes, RB. *Evidence-based medicine: How to Practice and Teach EBM*. 5th edition. Amsterdam, Netherlands: Elsevier; 2019. ● USPSTF. www.USpreventiveservicestaskforce.org/uspstf/ ● US National Library of Medicine. PubMed tutorial. https://www.nlm.nih.gov/bsd/disted/pubmedtutorial/cover.html. Accessed 2018.

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth	
Overall Intent: To seek clinical performance information with the intent to improve care; reflect 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 via a learning plan	
Milestones	**Examples**
Level 1 *Establishes goals for personal and professional development*	● Sets a personal practice goal of documenting use of the USPSTF recommendations for clinical preventive services and clinical shared decision making with patients
Actively seeks opportunities to improve	● Asks for feedback from patients, families, and patient care team members
Level 2 *Demonstrates openness to feedback and other input to inform goals*	● Integrates feedback to adjust the documentation of the USPSTF recommendations for clinical preventive services and clinical shared decision making with patients
Designs and implements a learning plan, with prompting	● When prompted, develops an individual education plan to improve their evaluation of clinical preventive services
Level 3 *Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance*	● Completes a chart audit to determine the percentage of patients appropriately referred for evidence-based clinical preventive services ● Independently develops a strategy to address knowledge gaps identified in the in-service exam
Independently creates and implements a learning plan	● Using web-based resources, creates a personal curriculum to improve motivational interviewing skills in shared decision making for clinical preventive services
Level 4 *Intentionally seeks feedback consistently, with adaptability and humility*	● Completes a quarterly chart audit to ensure documentation of patients appropriately referred for evidence-based clinical preventive services ● Considers evaluation results from rotation evaluators and regularly seeks more specific feedback to improve practice behaviors
Uses feedback to measure the effectiveness of the learning plan and, when necessary, improves it	● Uses feedback from chart audits of one's own documentation to improve the quality of evidence-based clinical preventive services provided
Level 5 *Role models consistently seeking feedback with adaptability and humility*	● Models practice improvement and adaptability to more junior residents ● Completes and implements practice improvement initiatives based upon feedback
Facilitates the design and implementation of learning plans for others	● Helps first-year residents develop their individualized learning plans
Assessment Models or Tools	● Direct observation ● Review of learning plan
Curriculum Mapping	●

Notes or Resources	● Burke AE, Benson B, Englander R, Carraccio C, Hicks PJ. Domain of competence: practice-based learning and improvement. *Acad Pediatr.* 2014;14: S38-S54. ● Hojat M, Veloski JJ, Gonnella JS. Measurement and correlates of physicians' lifelong learning. *Acad Med.* 2009 Aug;84(8):1066-74. **Note: Contains a validated questionnaire about physician lifelong learning.** ● Lockspeiser TM, Schmitter PA, Lane JL et al. Assessing residents' written learning goals and goal writing skill: validity evidence for the learning goal scoring rubric. *Acad Med.* 2013 Oct;88(10)1558-63.

Practice-Based Learning and Improvement 3: Disease Outbreak and Surveillance Systems **Overall Intent:** To participate and lead in the planning and implementation of a cluster/outbreak investigation or exercise	
Milestones	**Examples**
Level 1 *Discusses common causes of disease clusters and outbreaks*	● Identifies examples of respiratory pathogens that contribute to disease clusters and outbreaks ● Describes modes of transmission of communicable diseases and countermeasures to transmission ● Describes various population countermeasures to transmission of communicable diseases such as quarantine and isolation
Recognizes the need to report selected diseases to public health authorities and describes the need for surveillance systems in a variety of settings	● Discusses the needs and roles of various entities (public health agencies, hospitals, clinics, nursing homes) in the identification, reporting, and control of communicable diseases ● Discusses the list of reportable conditions, how they vary by state, the reporting process, the role of the state epidemiologists and the CDC's National Notifiable Diseases Surveillance System
Level 2 *Describes the steps of a cluster or outbreak investigation*	● Presents a detailed approach to investigating a foodborne illness in a college dormitory, including case definition, personal and clinical data collection, laboratory testing, hypothesis testing, countermeasures, and risk communication ● Identifies how to approach an assessment when presented with a concern about the presence of a cancer cluster
Identifies and summarizes commonly used surveillance systems	● Describes the features of common surveillance systems such as the National Notifiable Diseases Surveillance System, Behavioral Risk Factor Surveillance System, and/or the National Syndromic Surveillance Program
Level 3 *Analyzes an outbreak, assessing for steps taken, mitigation strategies, results, and areas for improvement in the approach*	● Analyzes and critiques a recent, publicly reported outbreak investigation, (e.g., using a Morbidity and Mortality Weekly Report article), and assesses if the appropriate steps were taken
Lists the challenges in designing and maintaining a surveillance system	● Describes how to develop a syndromic surveillance program, including its purposes, components, data sources, maintenance, dissemination, strengths, and weaknesses
Level 4 *Participates in the planning and implementation of a cluster/outbreak investigation (actual or simulated)*	● Participates in a team-based exercise on how to plan and implement an influenza outbreak investigation in a nursing home ● Creates an outbreak response plan that may be used for an organization's exercise

Analyzes surveillance data to identify appropriate targets for individual, community, and/or systems interventions and to evaluate the quality of the system	● Analyzes respiratory pathogen surveillance data for a school and evaluates the effectiveness of interventions to minimize transmission (e.g., clinical testing, vaccination, isolation, quarantines, use of personal protective equipment) ● Participates in a QI project evaluating surveillance data and implemented interventions
Level 5 *Leads a team to investigate and manage an outbreak, including supervision of staff members, assignment of roles, program design, monitoring of effectiveness, etc.* *Independently designs and implements a new surveillance system*	● Leads a team-based exercise on how to plan and implement an influenza outbreak investigation in a college dormitory ● Designs and implements a respiratory pathogen surveillance system for a prison
Assessment Models or Tools	● Direct observation ● Presentation evaluation ● Oral or written examinations
Curriculum Mapping	●
Notes or Resources	● CDC. What CDC does about novel flu: outbreak investigations. https://www.cdc.gov/flu/outbreak-investigations.html. Accessed 2021. ● CDC. Investigating an outbreak. https://www.cdc.gov/csels/dsepd/ss1978/lesson6/section2.html. Accessed 2021. ● *Salmonella* in the Caribbean outbreak simulation: https://www.cdc.gov/training/SIC_CaseStudy/page2.html. Accessed 2021. ● Case studies from the CDC: https://www.cdc.gov/training/epicasestudies/classroom.html. Accessed 2021. ● CDC. National Notifiable Diseases Surveillance System website. https://www.cdc.gov/nndss/index.html. Accessed 2021.

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
Level 1 *Identifies potential triggers for and reporting of professionalism lapses* *Defines the ethical principles underlying informed consent, surrogate decision-making, advance directives, privacy and confidentiality, error disclosure, stewardship of limited resources, and related topics*	● Identifies that being tired can cause a lapse in professionalism ● Articulates how the principle of "do no harm" applies to a patient who may not need a procedure even though the training opportunity exists
Level 2 *Demonstrates insight into professional behavior in routine situations* *Analyzes straightforward situations using ethical principles*	● Respectfully approaches a co-resident who is late to clinic about the importance of being on time ● Identifies and applies ethical principles involved in informed consent when the resident is unclear of all the risks
Level 3 *Demonstrates professional behavior in complex or stressful situations* *Uses appropriate resources for managing ethical dilemmas*	● Maintains a professional approach when responding to patients who refuse vaccinations for vaccine-preventable diseases ● When offered authorship of a poster or paper that they did not contribute significantly to, declines the offer. ● Offers treatment options for multiple comorbidities, free of bias, while recognizing own limitations, and consistently honoring the patient's choice ● Demonstrates an ethical approach to research and other scholarly activity
Level 4 *Intervenes to prevent or mitigate lapses in professional behavior of oneself and others* *Develops an approach to manage and resolve complex ethical situations*	● Identifies burnout or substance misuse in self and/or colleague and discusses with appropriate faculty member(s) ● Models respect for patients and promotes the same from colleagues ● Uses ethics consults, literature, risk-management/legal counsel to resolve ethical dilemmas
Level 5 *Coaches others when their behavior fails to meet professional expectations* *Implements system-level factors to improve ethical behavior in health care professionals*	● Creates a performance improvement plan to prevent recurrence when behavior fails to meet professional expectations ● Serves an integral role on an ethics taskforce for decision making related to rollout of a limited resource
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; American College of Physicians-American Society of Internal Medicine; European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter. *Ann Intern Med*. 2002;136:243-246. http://abimfoundation.org/wp-content/uploads/2015/12/Medical-Professionalism-in-the-New-Millenium-A-Physician-Charter.pdf ● American Medical Association Code of Ethics. https://www.ama-assn.org/delivering-care/ama-code-medical-ethics 2019. Accessed 2021. ● Bynny RL, Paauw DS, Papadakis MA, Pfeil DS. *Medical professionalism: Best practices: professionalism in the modern era.* Menlo Park, California: Alpha Omega Alpha Honor Medical Society; 2017. ISBN: 978-1-5323-6516-4 ● Domen RE, Johnson K, Conran RM, et al. Professionalism in pathology: a case-based approach as a potential education tool. *Arch Pathol Lab Med*. 2017; 141:215-219. doi: 10.5858/arpa.2016-2017-CP ● Levinson W, Ginsburg S, Hafferty FW, Lucey CR. *Understanding Medical Professionalism*. McGraw-Hill Education; 2014.

Professionalism 2: Accountability/Conscientiousness
Overall Intent: To take responsibility for one's own actions and the impact on patients and other members of the health care team

Milestones	Examples
Level 1 *Recognizes situations that may impact one's own ability to complete tasks and takes responsibility*	● Before going out of town, completes tasks in anticipation of lack of computer access while traveling
Level 2 *Responds promptly to requests to complete tasks and responsibilities*	● Answers electronic communications (e.g., emails, texts) in a timely manner ● Completes evaluations as requested
Level 3 *Proactively implements strategies to ensure responsibilities are met*	● In preparation for being out of the office, works with teams to assure that relevant clinic care or projects are not disrupted
Level 4 *Recognizes situations that may impact others' ability to complete tasks and responsibilities in an accurate and timely manner*	● Takes responsibility for inadvertently omitting key information in clinical or public health settings
Level 5 *Modifies/develops a system of accountability to ensure completeness of tasks and responsibilities in an accurate and timely manner*	● Serves on an institutional taskforce reviewing reported errors
Assessment Models or Tools	● Direct observation ● Multisource feedback ● Global evaluations ● Self-evaluations and reflective tools ● Compliance with deadlines and timelines ● Simulation
Curriculum Mapping	●
Notes or Resources	● Code of conduct from fellow/resident institutional manual ● Expectations of residency program regarding accountability and professionalism

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 *Recognizes status of personal and professional well-being, with assistance*	● During a debrief, acknowledges own response to patient's vaccine refusal ● Recognizes when necessary personal coping skills are lacking
Level 2 *Independently recognizes status of personal and professional well-being*	● Independently identifies and communicates impact of a personal family tragedy ● Identifies institutional resources available for resident well-being
Level 3 *With assistance, proposes a plan to optimize personal and professional well-being*	● Develops a reflective response to deal with the personal impact of difficult patient encounters and disclosures ● Integrates feedback to develop a plan for identifying and responding to high-stress environment
Level 4 *Independently develops a plan to optimize personal and professional well-being*	● Independently identifies ways to manage personal stress ● Self-assesses and seeks additional feedback in the event of burnout, inappropriate substance use, or fatigue
Level 5 *Coaches others when emotional responses or limitations in knowledge/skills do not meet professional expectations*	● Leads an organizational initiative to address clinician well-being ● Works with multidisciplinary team to develop a feedback framework for learners around responding to a high-stress environment
Assessment Models or Tools	● Direct observation ● Group interview or discussions for team activities ● Individual interview ● Institutional online training modules ● Self-assessment and personal learning plan
Curriculum Mapping	●
Notes or Resources	● This subcompetency is not intended to evaluate a resident's well-being. Rather, the intent is to ensure that each resident has the fundamental knowledge of factors that affect well-being, the mechanisms by which those factors affect well-being, and available resources and tools to improve well-being ● ACGME Physician Well-Being Tools and Resources. https://dl.acgme.org/pages/well-being-tools-resources. Accessed 2022. ● Local resources, including Employee Assistance Programs

Interpersonal and Communication Skills 1: Community- and Population-Centered Communication and Shared Decision Making	
Overall Intent: To appropriately use language to overcome communication barriers; and to lead communication around community- and population-centered shared decision making	

Milestones	Examples
Level 1 *Identifies common barriers to effective communication while accurately communicating one's own role and responsibilities within the health system*	● Identifies need for trained interpreter with non-English-speaking patients ● Uses age-appropriate language when discussing vaccinations with pediatric patients
Level 2 *Identifies complex barriers to effective communication*	● Identifies the need for nontraditional ways to communicate information to a patient/population to assure understanding
Level 3 *Recognizes personal biases while attempting to minimize communication barriers*	● Develops communication strategies to inform patients on treatment decisions for treatment options for a patient with COPD who continues to smoke ● Takes and reflects on the results of an Implicit Bias Test
Level 4 *Independently uses shared decision-making to align community/population values, goals, and preferences with preventive services*	● Uses community input to determine approaches to diabetes treatment ● Discusses the harms and benefits of prostate screening with a health system
Level 5 *Practices shared decision-making in community/population communication, including in situations with a high degree of uncertainty/conflict*	● Serves on a hospital bioethics committee ● Communicates community health assessment to relevant community leaders/population
Assessment Models or Tools	● Direct observation ● Multisource feedback ● Self-assessment including self-reflection exercises
Curriculum Mapping	●
Notes or Resources	● Laidlaw A, Hart J. Communication skills: an essential component of medical curricula. Part I: Assessment of clinical communication: AMEE Guide No. 51. *Med Teach*. 2011;33(1):6-8. ● Makoul G. Essential elements of communication in medical encounters: The Kalamazoo consensus statement. *Acad Med*. 2001;76:390-393. ● Project Implicit. Implicit bias. https://implicit.harvard.edu/implicit/takeatest.html. Accessed 2021. ● Public Health Communication Collaborative (PHCC). https://publichealthcollaborative.org/. Accessed 2021. ● Symons AB, Swanson A, McGuigan D, Orrange S, Akl EA. A tool for self-assessment of communication skills and professionalism in fellows. *BMC Med Educ*. 2009; 9:1.

Interpersonal and Communication Skills 2: Interprofessional and Team Communication	
Overall Intent: To effectively communicate with the interprofessional team and community groups, in both straightforward and complex situations	
Milestones	**Examples**
Level 1 *Uses language that values all members of an interprofessional team*	● Politely listens with the intent to understand all team members
Recognizes the importance of the role of feedback within an interprofessional team	● Acknowledges the contribution of each member of the team to the patient ● Consistently uses inclusive language
Level 2 *Communicates information effectively, including the use of active listening and feedback, with all members of an interprofessional team and/or with community stakeholders*	● Communicates diagnostic evaluation recommendations clearly and concisely and in an organized and timely manner ● Participates in a town hall meeting to discuss vaccines
Solicits feedback on performance as a member of an interprofessional team or community group	● Asks an attending physician or community group leader about presentation to a community group
Level 3 *Adapts communication style to fit the needs of health care team members or community stakeholders*	● Demonstrates active listening by asking team members about their concerns and questions
Communicates concerns and provides feedback to peers and learners	● Respectfully provides feedback to medical students and more junior residents about their presentations
Level 4 *Facilitates interprofessional team and community group communication using multiple communication strategies*	● Leads a campaign that uses presentations, written reports, and online methods to share the goals and outcomes of the project ● Determines the appropriate communication method to be used for an interprofessional team or community group
Uses constructive criticism skills in communicating with interprofessional team members, community stakeholders, and leaders	● Provides feedback to faculty members or team leaders when expectations are not clear (e.g., during rotations or projects)
Level 5 *Serves as a role model for effective interprofessional team communication*	● Mediates a conflict resolution between different members of the team
Assessment Models or Tools	● Direct observation ● Global assessment ● Medical record (chart) audit ● Multisource feedback

	● Simulation
Curriculum Mapping	●
Notes or Resources	● Braddock CH, Edwards KA, Hasenberg NM, Laidley TL, Levinson W. *JAMA* 1999; 282:2313-2320Roth CG, Eldin KW, Padmanabhan V, Freidman EM. Twelve tips for the introduction of emotional intelligence in medical education. *Med Teach.* 2018 Jul 21:1-4. doi: 10.1080/0142159X.2018.1481499. [Epub ahead of print] ● Dehon E, Simpson K, Fowler D, Jones A. Development of the faculty 360. *MedEdPORTAL.* 2015;11:10174 http://doi.org/10.15766/mep_2374-8265.10174Fay D, Mazzone M, Douglas L, Ambuel B. A validated, behavior-based evaluation instrument for family medicine residents. *MedEdPORTAL Publications*. 2007 May; 10.15766/mep_2374-8265.622 ● François, J. Tool to assess the quality of consultation and referral request letters in family medicine. *Can Fam Physician*. 2011 May; 57(5), 574–575. ● Green M, Parrott T, Cook G., Improving your communication skills. *BMJ* 2012;344:e357 doi: https://doi.org/10.1136/bmj.e357 ● Henry SG, Holmboe ES, Frankel RM. Evidence-based competencies for improving communication skills in graduate medical education: a review with suggestions for implementation. *Med Teach*. 2013 May; 35(5):395-403. doi: 10.3109/0142159X.2013.769677. ● Lane JL, Gottlieb RP. Pediatrics.2000;105:973-7. Makoul GT. SEGUE. ©1993/1999

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

Milestones 1.0	Milestones 2.0
PC1: Emergency Preparedness and Response: Apply Skills in Emergency Preparedness and Response	PC1: Emergency Preparedness and Response: Apply Skills in Emergency Preparedness and Response
PC2: Community Health: Monitor, diagnose, and investigate community health problems	
PC3: Inform and Educate: Inform and educate populations about health threats and risks	
PC4: Policies and Plans: Develop policies and plans to support individual and community health efforts	PC2: Policies and Plans: Develop Policies and Plans to Support Individual and Community Health Efforts
PC5: Evaluating Health Services: Evaluate Population-based health services	PC3: Clinical Preventive Services
PC6: Descriptive Epidemiology: Able to characterize the health of a community	MK3: Epidemiology
PC7: Analytic Epidemiology: Able to design and conduct an epidemiologic study	MK3: Epidemiology
PC8: Disease Outbreak: Investigate and respond to a cluster or outbreak	PBLI3: Disease Outbreak and Surveillance Systems
PC9: Surveillance Systems: Design and operate a surveillance system	MK4: Public Health Regulations
PC10: Clinical Preventive Services (CPS): Analyze evidence regarding the performance of proposed clinical preventive services for individuals and populations	PC3: Clinical Preventive Services
PC11: Conditions of Public Health Significance: Implement appropriate clinical care for individuals with conditions of public health significance	MK5: Infectious Diseases of Public Health Significance
PC12: Preventive Services: Select and provide appropriate evidence-based clinical preventive services	PC3: Clinical Preventive Services
MK1: Behavioral Health	PC4: Lifestyle Medicine
MK2: Environmental Health	MK1: Environmental Health
MK3: Biostatistics	MK2: Biostatistics

SBP1: Work and coordinate patient care effectively in various health care delivery settings and systems	SBP1: Patient Safety and Quality Improvement
SBP2: Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care, as appropriate	SBP3: Physician Leadership in Health and Community Health Systems
SBP3: Work in inter-professional teams to enhance patient safety and improve patient care quality; advocate for quality patient care and optimal patient care systems; participate in identifying system errors and implementing potential systems solutions	SBP1: Patient Safety and Quality Improvement SBP2: System Navigation for Patient- and Population-Centered Care
PBLI1: Identify strengths, deficiencies, and limits in one's knowledge and expertise; set learning and improvement goals and identify and perform appropriate learning activities utilizing information technology, evidence from scientific studies, and evaluation feedback; systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement	PBLI1: Evidence-Based and Informed Practice PBLI2: Reflective Practice and Commitment to Personal Growth
PROF1: Compassion, integrity, and respect for others, as well as sensitivity and responsiveness to diverse patient populations, including diversity in gender, age, culture, race, religion, disabilities, and sexual orientation; knowledge about, respect for, and adherence to the ethical principles relevant to the practice of medicine, remembering in particular that responsiveness to patients that supersedes self-interest is an essential aspect of medical practice	PROF1: Professional Behavior and Ethical Principles
PROF2: Accountability to patients, society and the profession	PROF2: Accountability/Conscientiousness PROF3: Self-Awareness and Help-Seeking Behaviors
ICS1: Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds; communicate effectively with physicians, other health care professionals and health related agencies; work effectively as a member or leader of a health care team or other professional group; act in a consultative role to other physicians and health professionals	ICS1: Community- and Population-Centered Communication and Shared Decision Making ICS2: Interprofessional and Team Communication

ICS2: Maintain comprehensive, timely and legible medical records, including electronic health records (EHR)	

Available Milestones Resources

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

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

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

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

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

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

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

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

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

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

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

Developing Faculty Competencies in Assessment courses - https://www.acgme.org/Meetings-and-Educational-Activities/Other-Educational-Activities/Courses-and-Workshops/Developing-Faculty-Competencies-in-Assessment

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

Assessment Tool: Teamwork Effectiveness Assessment Module (TEAM) - https://dl.acgme.org/pages/assessment

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