

Preventive Medicine Milestones for Singapore



May 2017

The Preventive Medicine Milestones for Singapore

The Milestones are designed only for use in evaluation of residents in the context of their participation in ACGME-I-accredited residency programs. The Milestones provide a framework for the assessment of the development of the resident in key dimensions of the elements of physician competency in a specialty. They neither represent the entirety of the dimensions of the six domains of physician competency, nor are they designed to be relevant in any other context.

Milestones Reporting

This document presents milestones designed for programs to use in semi-annual review of resident performance and reporting to the ACGME-I. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME-I competencies organized in a developmental framework from less to more advanced. They are descriptors and targets for resident performance as a learner moves from entry into their program through graduation.

For each period, review and reporting will involve selecting milestone levels that best describe each resident's current performance and attributes. Milestones are arranged in numbered levels. Tracking from "Level 1" to "Level 5" is synonymous with moving from novice to expert in the specialty. These levels do not correspond with time in the educational program. Dependent upon previous education and experience, residents may enter a program at varying points in the Milestones.

Selection of a level implies that the resident substantially demonstrates the milestones in that level, as well as those in lower levels (see the diagram on page v).

Level 1: The resident demonstrates milestones expected of an incoming resident.

Level 2: The resident is advancing and demonstrates additional milestones, but is not yet performing at a mid-residency level.

Level 3: The resident continues to advance and demonstrate additional milestones, consistently including the majority of milestones targeted for residency.

Level 4: The resident has advanced so that he or she now substantially demonstrates the milestones targeted for residency. This level is designed as the graduation target.

Level 5: The resident has advanced beyond performance targets set for residency and is demonstrating "aspirational" goals, which might describe the performance of someone who has been in practice for several years. It is expected that only a few exceptional residents will reach this level.

Additional Notes

The “Level 4” Milestones are designed as the graduation *target* and *do not* represent a graduation *requirement*. Making decisions about readiness for graduation is the purview of the program director. Study of Milestones performance data will be required before the ACGME-I and its partners will be able to determine whether milestones in the first four levels appropriately represent the developmental framework, and whether Milestone data overall are of sufficient quality to be used for high-stakes decisions.

Answers to Frequently Asked Questions about Milestones are posted on the ACGME-I website.

The diagram below presents an example set of milestones for one sub-competency in the same format as the ACGME-I Report Worksheet. For each reporting period, a learner’s performance on the milestones for each sub-competency will be indicated by selecting the level of milestones that best describes that learner’s performance in relation to those milestones.

Systems-Based Practice 1: Patient Safety and Quality Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of common patient safety events	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events (simulated or actual)	Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)	Actively engages teams and processes to modify systems to prevent patient safety events
Demonstrates knowledge of how to report patient safety events	Reports patient safety events through institutional reporting systems (actual or simulated)	Participates in disclosure of patient safety events to patients and families (simulated or actual)	Discloses patient safety events to patients and families (simulated or actual)	Role models or mentors others in the disclosure of patient safety events
Demonstrates knowledge of basic quality improvement methodologies and metrics	Describes local quality improvement initiatives (e.g., community vaccination rate, infection rate, smoking cessation)	Participates in local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses quality improvement initiatives at the institutional or community level
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not yet achieved Level 1 <input type="checkbox"/>

Selecting a response box in the middle of a level implies that milestones in that level and in lower levels have been substantially demonstrated.

Selecting a response box on the line in between levels indicates that milestones in lower levels have been substantially demonstrated as well as **some** milestones in the higher level(s).

Patient Care 1: Emergency Preparedness and Response – Apply skills in emergency preparedness and response				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic skills in emergency medical care	Demonstrates knowledge of triage concepts. Demonstrates basic knowledge of emergency preparedness programs (e.g. pandemics, multiple casualty accidents at institutional and national level).	Demonstrates and applies understanding of emergency preparedness programs.	Demonstrates ability to develop and evaluate the medical portion of an emergency plan.	Provides leadership in developing, implementing, and evaluating emergency preparedness programs.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 2: Policies and Plans – Develop policies and plans to support individual and community health efforts				
Level 1	Level 2	Level 3	Level 4	Level 5
Diagnoses disease and develops an individualized treatment plan.	Links individuals to needed personal health services including appropriate referrals and follow-ups.	Applies primary, secondary, and tertiary preventive approaches to disease prevention and health promotion for individuals or communities, with minimal supervision.	Applies primary, secondary, and tertiary preventive approaches to disease prevention and health promotion for the individuals and community.	Contributes to the development and/or implementation of a policy to improve community health efforts.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 3: Health in the Community – Monitor, diagnose, and investigate community health problems				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies common health issues in a community.	Identifies basic health status measures to assess/investigate a community's health.	Selects and describes appropriate health status measures to assess a community's health.	Monitors and interprets single health status indicator of the community, and identifies groups with poorer health.	Monitors and interprets multiple and/or complex health status indicators of the community, and develops and implements appropriate measures to address health improvement needs.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved <input type="checkbox"/>

Patient Care 4: Evaluating Health Services – Evaluate population-based health services				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes distinctions between population and individual health services.	<p>Describes basic measures of effect (e.g. risk ratio).</p> <p>Describes basic measures of quality (e.g. benchmarking).</p> <p>Lists populations known to be underserved (e.g. low income).</p>	<p>Assesses evidence for effectiveness of a population-based health service.</p> <p>Uses scientific literature to identify a target population for a given population-based health service.</p> <p>Uses scientific literature to identify barriers to delivery of population-based health service.</p>	<p>Uses program goals and/or established performance criteria to evaluate a population-based health service.</p> <p>Uses evaluation findings to recommend strategic or operational improvements.</p> <p>Uses data to identify barriers to population-based health services.</p>	Develops program goals and/or performance criteria to evaluate a population-based health service.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 5: Disease Outbreak Management				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands that clusters or outbreaks occur.</p> <p>Identifies most common methods for preventing individual disease spread (e.g. hand hygiene).</p>	<p>Understands common environmental, health, and behavioral risk factors associated with clusters or outbreaks occurring (e.g. congregate settings, immuno-compromised populations, and drug abuse).</p> <p>Understands aspects of disease that predispose to outbreak development (e.g. high infectivity, subclinical phase).</p> <p>Identifies most common methods for preventing disease spread in populations (e.g. quarantine, isolation).</p>	<p>Recognizes sentinel event; uses surveillance, hospital, vital statistics, or other data to establish the existence of a cluster or outbreak.</p> <p>Establishes a case definition, including clinical and laboratory findings; participates in collection of demographic, clinical, and/or risk factor information from cases.</p> <p>Understands approaches for mitigating and responding to a cluster or outbreak.</p>	<p>Implements a plan to investigate and collects data to describe a cluster or outbreak.</p> <p>Characterizes and interprets data collected from a cluster or outbreak investigation.</p> <p>Applies a strategy or plan for management of an outbreak (e.g. limiting spread, mitigating effects).</p>	<p>Designs a strategy to investigate a cluster or outbreak of a novel disease or atypical disease presentation.</p> <p>Leads a team to investigate and manages an outbreak, including supervision of staff, assignment of roles, program design, monitoring of effectiveness, etc.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 6: Public Health Communications – Inform and educate populations about health threats and risks				
Level 1	Level 2	Level 3	Level 4	Level 5
Conveys basic health information to individuals or small groups.	Identifies proper communication techniques related to health threats and risks.	Prepares and delivers a basic health hazard/risk presentation.	Conveys complex health information to educate a community or group and responds to queries about risk.	Conveys sensitive/high-stakes health information to educate a community or group through a variety of media platforms.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 7: Public Health, Surveillance, and Disease Prevention				
Level 1	Level 2	Level 3	Level 4	Level 5
Aware of the need to report selected diseases to public health authorities.	Identifies commonly used surveillance data sources (e.g. vital statistics, hospital discharge data) and the conditions typically monitored using such systems.	Thoroughly describes the components of an existing surveillance system (e.g. aims, stakeholders, data sources, quality, uses, etc).	Analyzes surveillance data to identify appropriate targets for individual, community, and/or systems interventions.	Independently designs and operates a new surveillance system.
Aware of the need for surveillance systems in a variety of settings (e.g. public health agencies, hospitals, clinics, nursing homes).	Recognizes difference between active and passive surveillance.	Develops a list of challenges in designing and maintaining a surveillance system.	Evaluates one or more aspects of the quality and effectiveness of a surveillance system (e.g. data completeness, ease of use, compliance).	Develops a comprehensive program plan for an actual workplace, including test selections, follow-up plans, marketing, and comparison of cost effectiveness of alternative strategies.
Demonstrates working knowledge of basic principles underlying screening (e.g. sensitivity, specificity, predictive value, positive/negative, etc).	Performs a medical surveillance examination following prescribed guidelines; communicates results in writing to patient (and employer, if relevant).	Independently determines which tests are appropriate, cost-effective, and/or mandatory for a specific worker-patient.	Prepares a valid aggregate analysis and summary of actual medical surveillance examinations for a specific focus.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 8: Preventive Medicine Related Ethics				
Level 1	Level 2	Level 3	Level 4	Level 5
Describes the ethical and legal rights of patients to privacy and confidentiality of personal health information.	<p>Informs individuals of sensitive or confidential information in an ethical manner consistent with legal requirements.</p> <p>Describes the legal and ethical uses of various types of medical information held in healthcare facilities.</p> <p>Describes the physician's role and responsibilities with respect to identification and reporting of relevant notifiable infections, illness and injuries.</p>	Distinguishes between personal health information protections and laws governing release of clinical information related to work-related injury/illness and medical surveillance programs.	<p>Demonstrates the ability to protect the privacy and confidentiality rights of the individual patient.</p> <p>Communicates summary results and trends in disability, disease, or risks of public health significance without jeopardizing individual employee privacy rights.</p> <p>Understands and applies appropriate sharing and restriction of information for various aspects of public health and occupational medicine.</p>	<p>Advocates for health, safety and social issues arising in the workplace and the community.</p> <p>Develops ethically sound policies and procedures for programs including those related to substance abuse testing, fertility protection, fitness for duty evaluations, and safety sensitive positions.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 9: Clinical Occupational and Environmental Medicine				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands basic epidemiologic concepts and recognizes that diseases and injuries occur in a social and environmental context.</p> <p>Acquires a history and performs a basic physical exam that may be related to workplace or environmental exposures.</p>	<p>Understands controls that can be used to reduce exposures in the workplace.</p> <p>Acquires an accurate and relevant history, including occupational history, and performs intermediate-level physical examination that may be related to workplace or environmental exposures under direct supervision; begins formulation of the differential diagnosis, assessment, and plan.</p>	<p>Works with a team to evaluate and identify workplace or environmental causes of injury or illness and recommends controls or programmes to reduce exposure, and to enhance the health and productivity of workers under substantial supervision.</p> <p>Acquires an accurate, organized, and relevant history, including occupational history, and performs advanced-level physical examination that may be related to workplace or environmental exposures under minimal direct supervision.</p>	<p>Works with a team to evaluate and identify workplace or environmental causes of injury or illness and recommends controls or programmes to reduce exposure, and to enhance the health and productivity of workers under minimal supervision.</p> <p>Acquires an accurate, organized, and relevant history, including occupational history, and performs advanced-level physical examination that may be related to workplace or environmental exposures.</p>	<p>Leads a team to evaluate and identify a previously unrecognized workplace or environmental cause of injury or illness.</p> <p>Participates in cases of complex occupational injury and illness that require tertiary prevention measures such as multidisciplinary case management, specialty referral, and advanced accommodation systems, provides supervision of other independently licensed health care professionals, receives minimal oversight by attending physician.</p>

	<p>Begins to assess work-relatedness (e.g. repair of simple laceration, initial management of non-displaced distal extremity fracture, interpretation of surveillance pure-tone audiometry).</p>	<p>Formulates an appropriate differential diagnosis and assessment; provides appropriate treatment and plan, including fitness for duty and accommodations, for simple cases.</p> <p>Applies evidence-based clinical practice guidelines in treatment and management (e.g. management of work-related asthma and interpretation of spirometry).</p>	<p>Formulates an appropriate differential diagnosis and assessment; provides appropriate treatment and plan, including fitness for duty and accommodations, for complex cases under indirect supervision.</p> <p>Applies evidence-based clinical practice guidelines in treatment and management. Provides care efficiently (e.g. implementing an evidence-based treatment approach for a patient with work-related low back pain unresponsive to evidence-based treatments).</p>								
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Comments: Not Yet Achieved Level 1 <input type="checkbox"/></p>											

Patient Care 10: Industrial Hygiene, Safety and Ergonomics and Risk/Hazard Control, and Communication - Assess if there is risk of an adverse event from exposure to physical, chemical, or biological hazards in the workplace or environment, and characterize, make recommendations for control of, and communicate the risk.				
Level 1	Level 2	Level 3	Level 4	Level 5
Acquires accurate and complete history and performs appropriate physical examination of patients with injuries and illnesses that may be related to workplace hazard exposures.	Demonstrates understanding of core principles of industrial hygiene, ergonomics, occupational safety, and risk/hazard control and communication (e.g. recognition of regulatory standards and guidelines).	Participates in activities or consultations that include application of the principles of industrial hygiene, ergonomics, occupational safety, and risk/hazard control to patients, populations, and employer organizations under supervision.	<p>Applies the principles of the hierarchy of controls to reduce risks from industrial hygiene, ergonomic, and safety hazards to patients, populations, and employer organizations under minimal supervision.</p> <p>Communicates risk from hazards to patients in a clear and effective manner both orally and in writing; communicates same to labour and employer organizations (these latter two communications to groups/organizations may be achieved through simulation).</p>	<p>Interprets, analyses, and applies principles of industrial hygiene, ergonomics, occupational safety, and risk/hazard control in complex occupational or community environments.</p> <p>Communicates risk from hazards to groups (e.g. health professionals, the public, public agencies, and the media) in a clear and effective manner both orally and in writing.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 11: Work Fitness and Disability Integration				
Level 1	Level 2	Level 3	Level 4	Level 5
Acquires an accurate and relevant history with pertinent physical examination findings of injuries and diseases, which may result in an impairment, disability, or limitation to perform required job tasks.	Opens, manages, and directs straightforward workers' compensation treatment plans, and close workers' compensation injury/illness cases following the relevant workers' compensation insurance rules.	Opens, manages, and directs complicated workers' compensation treatment plans, and close workers' compensation injury/illness cases following the relevant workers' compensation insurance rules.	Provides advice and remediation strategies concerning summary results or trends in disability, disease, or risk that may have public health significance to maximize worker productivity—this may be achieved through simulation.	Performs an independent medical evaluation, including an impairment formulation following the relevant workers' compensation insurance rules.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 12: Occupational and Environmental Medicine (OEM) Related Management and Administration				
Level 1	Level 2	Level 3	Level 4	Level 5
Understands the basic use of information technology to prepare simple reports, present data, and communicate with colleagues and patients	Adopts protocols to manage patient records and protect confidentiality. Demonstrates an understanding of the roles of various professionals in an occupational health service, including other independent licensed health care professionals.	Identifies and implements, under supervision, process and outcome measures for work populations and benchmarks with other organizations. Applies techniques of process improvement in uncomplicated circumstances.	Designs, with supervision, cost containment strategies for workers' compensation, health benefits, and disability management programs. Communicates technical and clinical information to professionals and lay audiences, including labour and management with supervision.	Plans, designs, implements, manages, and evaluates comprehensive occupational/environmental health programs, projects, and protocols that enhance the health, safety, and productivity of workers, their families, and members of the community.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 13: Toxicology - Recognize, evaluate, and treat exposures to toxins at work or in the general environment				
Level 1	Level 2	Level 3	Level 4	Level 5
Provide care for patients in outpatient and inpatient settings and demonstrates knowledge of anatomy, physiology, pathophysiology, and pharmacological principles, including metabolism of drugs and other hazardous agents under supervision.	Demonstrates core foundation knowledge of toxicological principles, including toxicokinetics, routes of exposure and absorption, preclinical and clinical effects of toxins, evaluation and treatment of acute or chronic exposure to occupational or environmental chemical agents, screening and surveillance for exposed populations, and use and interpretation of relevant scientific literature and data bases.	Recognizes, evaluates, and treats (or refers) patients whose health may be affected by acute or chronic exposure to occupational or environmental chemical agents, including interpretation of laboratory and/or environmental monitoring test results under supervision. Assesses clinical, worksite, and environmental data, and performs appropriate scientific literature reviews in performance of patient evaluations under supervision.	Recognizes, evaluates, and treats (or refers) exposures to toxicants at work or in the general environment, including interpretation of laboratory or environmental monitoring test results and applying toxicokinetic data under minimal supervision.	Performs complex causation analysis (e.g. Independent Medical Evaluations (IME), toxicology consultations, etc) of patients with symptoms or conditions that may be related to toxic exposures from work or the general environment. Communicates risk from real or potential hazards to groups, including health professionals, the public, and the media, in a clear and effective manner both orally and in writing.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 14: OEM Related Law and Regulations				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies relevant regulatory agencies with jurisdiction for regulating exposure in the geographic area and industry/agent.	Lists the criteria/regulatory levels for exposures to the specific substance or hazard.	Reviews actual exposure monitoring data and prepares written reports about compliance for managers, workers, or government.	Able to apply the relevant laws and regulations to prepare a written exposure monitoring and reporting system plan for a specific workplace or other defined entity.	Based on personal research (empirical data or systematic literature review), prepares a proposal for modifying an existing regulatory standard.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 15: Conditions of Public Health Significance				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains history and basic physical.	Generates a differential diagnosis for a disease or condition of public health significance and proposes a treatment plan.	Accurately diagnoses and effectively treats common presentations of diseases/conditions of public health significance with direct supervision.	Accurately diagnoses and effectively treats common presentations of diseases/conditions of public health significance.	Accurately diagnoses and effectively treats complex conditions and unusual presentations of diseases/conditions of public health significance
Prescribes indicated medications.	Identifies diseases and conditions that require a public health response	Participates in an appropriate public health intervention for a disease or condition that requires a public health response	Initiates an appropriate public health intervention for a disease or condition that requires a public health response.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 16: Preventive Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Prescribes immunizations and chemoprophylaxis	Identifies major risk factors of individual patients that would benefit from preventive services. Identify and provide such suitable preventive services.	Assesses relevant risks for disease and injury in individual patients and uses patient information, scientific evidence, and clinical judgment to select appropriate preventive services for individual patients	Comprehensively assesses risks for diseases and injuries, and appropriately evidence-based guidelines regarding screening, counselling, preventive medications, and immunization to individual patients	Comprehensively assesses risks for diseases and injuries, and appropriately applies evidence-based guidelines regarding clinical preventive services in individual patients with complex health or social conditions (e.g., hospitalized, homeless, or nursing home patients).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 17: Clinical Preventive Services				
Level 1	Level 2	Level 3	Level 4	Level 5
Locates and appraises evidence from a scientific study related to a patient's health problem	Leads a discussion with peers of the strengths and weaknesses of an individual study relevant to CPS	Participates in the examination of evidence to address a proposed clinical preventive service	Participates in the development or analysis of a guideline to address a proposed clinical preventive service	Systematically examines scientific evidence and develops an evidence-based guideline to address a proposed clinical preventive service.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 18: Health in the Community - Monitor, diagnose, and investigate community health problems.				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies common health issues in a community.	Identifies basic health status measures to assess/investigate a community's health.	Selects and describes appropriate health status measures to assess a community's health.	Monitors and interprets single health status indicator of the community, and identifies groups with poorer health.	Monitors and interprets multiple and/or complex health status indicators of the community, and develops and implements appropriate measures to address health improvement needs.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 1: Behavioral Health				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Lists major effects of individual behavior on health.</p> <p>Recognizes that social and behavioral factors influence population health.</p>	<p>Identifies social and behavioral factors that affect health of individuals.</p> <p>Identifies social and behavioral factors that affect health of populations</p>	<p>Identifies best practice and tools to assess risk behaviors.</p> <p>Describes effective approaches to modify individual health behaviors.</p> <p>Describes effective approaches to modify population health behaviors.</p> <p>Identifies the causes of social and behavioral factors that affect health of populations</p>	<p>Integrates best practices and tools to assess risk behaviors.</p> <p>Implements effective approaches to modify individual health behaviors.</p> <p>Integrates best practices and tools to assess population risk behaviors.</p> <p>Implements effective approaches to modify population health behaviors.</p> <p>Develops, implements and evaluates programs to promote health and modify individual and population risk behaviors.</p>	<p>Develops and evaluates programs to change health behaviors of individuals.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 2: Environmental Health				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies major routes of human exposure to environmental toxicants	Identifies common illnesses that may be caused or influenced by environmental exposures. Identifies broad environmental factors that may impact the health of a community	Describes individual factors that impact susceptibility to adverse health effects from environmental exposures. Identifies potential population health effects from exposure to chemical, physical, and biological hazards	Recommends methods of reducing adverse environmental health effects for individuals. Identifies sources and routes of environmental exposures to chemical, physical, and biological hazards for defined populations	Recommends, interprets, and explains the results of individual environmental monitoring. Interprets and explains population level environmental monitoring results
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			Not Yet Achieved Level 1 <input type="checkbox"/>	

Medical Knowledge 3: Biostatistics				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes common statistical concepts (e.g. measures of central tendency, p-values, and confidence intervals).	<p>Defines common statistical concepts (e.g. p-values and confidence intervals).</p> <p>Describes frequently used statistical tests (e.g. paired and unpaired t-tests, chi-square tests, and others). [from PH, added to OM]</p>	<p>Independently utilizes simple statistical methods (e.g. paired and unpaired t-tests, chi-square tests, and appropriate non-parametric tests) to describe small data sets.</p> <p>Participates in the use of statistical software to perform statistical tests.</p> <p>Understands more advanced statistical methods (e.g. linear and logistic regression)</p>	<p>Selects appropriate methods for analysing data; performs data analyses using more advanced statistical methods (e.g. linear and logistic regression)</p> <p>Utilizes appropriate software for data management and statistical analyses</p> <p>Recognizes the need to use complex statistical analyses (e.g. survival analysis, repeated measures).</p>	Independently analyses large data sets using complex statistical methods.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			Not Yet Achieved Level 1 <input type="checkbox"/>	

Medical Knowledge 4: Descriptive Epidemiology				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies and recognizes basic measures of disease frequency (incidence, prevalence, mortality) and risk (risk ratios, odds ratios).	Knows methods for calculating basic measures of disease frequency and risk.	For a defined population, uses data to calculate measures of disease frequency and one or more risk factors for a specified disease or condition	Uses data to characterize the health of a local population, compares it with that of other populations, identifies localities or groups with poorer health, and identifies and assesses the importance of different risk factors, for at least one disease or condition.	Uses data to fully characterize the health of a population, compares it with that of other populations, identifies localities or groups with poorer health, and identifies and assesses the importance of different risk factors, for a range of diseases and conditions.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 5: Analytic Epidemiology				
Level 1	Level 2	Level 3	Level 4	Level 5
Distinguishes between experimental and observational studies.	<p>Explains what is meant by validity, bias, confounding, and effect modification.</p> <p>Describes commonly used study designs (e.g., randomized controlled trial, cohort, case-control, cross-sectional).</p> <p>Distinguishes between association and causation; lists criteria for causal inference.</p>	Critically reviews and interprets epidemiologic literature for commonly used study designs, identifying purpose, population, design, and biases.	Able to design and conduct a basic epidemiological study (defines aims; selects appropriate study designs; collects, analyses, and interprets data; identifies limitations; summarizes and discusses findings).	Independently designs and conducts a complex epidemiological study that addresses confounding and effect modification analytically, suitable for peer-reviewed publication.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			Not Yet Achieved Level 1 <input type="checkbox"/>	

Systems-Based Practice 1: Patient Safety and Quality Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of common patient safety events	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events (simulated or actual)	Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)	Actively engages teams and processes to modify systems to prevent patient safety events
Demonstrates knowledge of how to report patient safety events	Reports patient safety events through institutional reporting systems (actual or simulated)	Participates in disclosure of patient safety events to patients and families (simulated or actual)	Discloses patient safety events to patients and families (simulated or actual)	Role models or mentors others in the disclosure of patient safety events
Demonstrates knowledge of basic quality improvement methodologies and metrics	Describes local quality improvement initiatives (e.g., community vaccination rate, infection rate, smoking cessation)	Participates in local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses quality improvement initiatives at the institutional or community level
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Systems-Based Practice 2: System Navigation for Patient-Centered Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of care coordination	Coordinates care of patients in routine clinical situations effectively utilizing the roles of the interprofessional teams	Coordinates care of patients in complex clinical situations effectively utilizing the roles of their interprofessional teams	Role models effective coordination of patient-centered care among different disciplines and specialties	Analyses the process of care coordination and leads in the design and implementation of improvements
Identifies key elements for safe and effective transitions of care and hand-offs	Performs safe and effective transitions of care/hand-offs in routine clinical situations	Performs safe and effective transitions of care/hand-offs in complex clinical situations	Role models and advocates for safe and effective transitions of care/hand-offs within and across health care delivery systems, including in outpatient settings	Improves quality of transitions of care within and across health care delivery systems to optimize patient outcomes
Demonstrates knowledge of population and community health needs and disparities	Identifies specific population and community health needs and inequities for their local population	Uses local resources effectively to meet the needs of a patient population and community	Participates in changing and adapting practice to provide for the needs of specific populations	Leads innovations and advocates for populations and communities with health care inequities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Systems-Based Practice 3: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies components of the complex health care system	Describes the physician's role and how the interrelated components of complex health care system impact patient care	Analyzes how personal practice affects the system (e.g., length of stay, readmission rates, clinical efficiency)	Manages the interrelated components of the complex health care systems for efficient and effective patient care	Advocates for or leads change to enhance systems for high value, efficient, and effective patient care
Describes basic health payment systems, including government, private, public, and uninsured care and different practice models	Delivers care informed by patient specific payment model	Utilizes shared decision making in patient care, taking into consideration payment models	Advocates for patient care understanding the limitations of each patient's payment model (e.g., community resources, patient assistance resources)	Participates in advocacy activities for health policy to better align payment systems with high value care
		Identifies resources and effectively plans for transition to practice (e.g., information technology, legal, billing and coding, financial, personnel)	Describes basic elements needed to transition to practice (e.g., contract negotiations, malpractice insurance, government regulation, compliance)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates how to access and use available evidence, and to incorporate patient preferences and values in order to take care of a routine patient	Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based care	Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients	Critically appraises and applies evidence, even in the face of uncertainty and conflicting evidence, to guide care tailored to the individual patient	Coaches others to critically appraise and apply evidence for complex patients, and/or participates in the development of guidelines
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth				
Level 1	Level 2	Level 3	Level 4	Level 5
Accepts responsibility for personal and professional development by establishing goals	Demonstrates openness to performance data (feedback and other input) in order to inform goals	Seeks performance data episodically, with adaptability and humility	Intentionally seeks performance data consistently, with adaptability and humility	Role models consistently seeking performance data, with adaptability and humility
Identifies the factors that contribute to gap(s) between expectations and actual performance	Analyzes and reflects on the factors that contribute to gap(s) between expectations and actual performance	Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance	Challenges assumptions and considers alternatives in narrowing the gap(s) between expectations and actual performance	Coaches others on reflective practice
Actively seeks opportunities to improve	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Uses performance data to measure the effectiveness of the learning plan and, when necessary, improves it	Facilitates the design and implementation of learning plans for others
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Professionalism 1: Professional Behavior and Ethical Principles				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Identifies and describes potential triggers for professionalism lapses</p> <p>Describes when and how to appropriately report professionalism lapses, including strategies for addressing common barriers</p> <p>Demonstrates knowledge of the ethical principles underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics</p>	<p>Demonstrates insight into professional behavior in routine situations</p> <p>Takes responsibility for own professionalism lapses</p> <p>Analyzes straightforward situations using ethical principles</p>	<p>Demonstrates professional behavior in complex or stressful situations</p> <p>Analyzes complex situations using ethical principles</p> <p>Recognizes need to seek help in managing and resolving complex ethical situations</p>	<p>Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others</p> <p>Recognizes and utilizes appropriate resources for managing and resolving ethical dilemmas as needed (e.g., ethics consultations, literature review, risk management/legal consultation)</p>	<p>Coaches others when their behavior fails to meet professional expectations</p> <p>Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Professionalism 2: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Takes responsibility for failure to complete tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future</p> <p>Responds promptly to requests or reminders to complete tasks and responsibilities</p>	<p>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p> <p>Recognizes situations that may impact own ability to complete tasks and responsibilities in a timely manner</p>	<p>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations</p> <p>Proactively implements strategies to ensure that the needs of patients, teams, and systems are met</p>	<p>Recognizes situations that may impact others' ability to complete tasks and responsibilities in a timely manner</p>	<p>Takes ownership of system outcomes</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Professionalism 3: Self-Awareness and Help-Seeking				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Recognizes status of personal and professional well-being, with assistance</p> <p>Recognizes limits in the knowledge/skills of self or team, with assistance</p>	<p>Independently recognizes status of personal and professional well-being</p> <p>Independently recognizes limits in the knowledge/skills of self or team</p> <p>Demonstrates appropriate help-seeking behaviors</p>	<p>With assistance, proposes a plan to optimize personal and professional well-being</p> <p>With assistance, proposes a plan to remediate or improve limits in the knowledge/skills of self or team</p>	<p>Independently develops a plan to optimize personal and professional well-being</p> <p>Independently develops a plan to remediate or improve limits in the knowledge/skills of self or team</p>	<p>Coaches others when emotional responses or limitations in knowledge/skills do not meet professional expectations</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Uses language and non-verbal behavior to demonstrate respect and establish rapport</p> <p>Identifies common barriers to effective communication (e.g., language, disability) while accurately communicating own role within the health care system</p> <p>Identifies the need to adjust communication strategies based on assessment of patient/family expectations and understanding of their health status and treatment options</p>	<p>Establishes a therapeutic relationship in straightforward encounters using active listening and clear language</p> <p>Identifies complex barriers to effective communication (e.g. health literacy, cultural)</p> <p>Organizes and initiates communication with patient/family by introducing stakeholders, setting the agenda, clarifying expectations, and verifying an understanding of the clinical situation</p>	<p>Establishes a therapeutic relationship in challenging patient encounters</p> <p>When prompted, reflects on personal biases while attempting to minimize communication barriers</p> <p>With guidance, sensitively and compassionately delivers medical information; elicits patient/family values, goals, and preferences; and acknowledges uncertainty and conflict</p>	<p>Easily establishes therapeutic relationships, with attention to patient/family concerns and context, regardless of complexity</p> <p>Independently recognizes personal biases while attempting to proactively minimize communication barriers</p> <p>Independently uses shared decision making to align patient/family values, goals, and preferences with treatment options to make a personalized care plan</p>	<p>Mentors others in situational awareness and critical self-reflection to consistently develop positive therapeutic relationships</p> <p>Role models self-awareness practice while identifying teaching a contextual approach to minimize communication barriers</p> <p>Role models shared decision making in patient/family communication in situations with a high degree of uncertainty/conflict</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Interpersonal and Communication Skills 2: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully requests a consultation	Clearly and concisely requests a consultation	Checks own understanding of consultant recommendations	Coordinates recommendations from different members of the health care team to optimize patient care	Role models flexible communication strategies that value input from all health care team members, resolving conflict when needed
Respectfully receives a consultation request	Clearly and concisely responds to a consultation request	Checks understanding of recommendations when providing consultation	Communicates feedback and constructive criticism to superiors	Facilitates regular health care team-based feedback in complex situations
Uses language that values all members of the health care team	Communicates information effectively with all health care team members Solicits feedback on performance as a member of the health care team	Uses active listening to adapt communication style to fit team needs Communicates concerns and provides feedback to peers and learners		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Interpersonal and Communication Skills 3: Communication within Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Accurately records information in the patient record	Demonstrates organized diagnostic and therapeutic reasoning through notes in the patient record	Concisely reports diagnostic and therapeutic reasoning in the patient record	Communicates clearly, concisely, in a timely manner, and in an organized written form, including anticipatory guidance	Models feedback to improve others' written communication
Safeguards patient personal health information	Demonstrates accurate, timely, and appropriate use of documentation shortcuts	Appropriately selects direct (e.g., telephone, in-person) and indirect (e.g., progress notes, text messages) forms of communication based on context	Produces written or verbal communication (e.g., patient notes, e-mail, etc.) that serves as an example for others to follow	Guides departmental or institutional communication around policies and procedures
Communicates through appropriate channels as required by institutional policy (e.g. patient safety reports, cell phone/pager usage)	Documents required data in formats specified by institutional policy Respectfully communicates concerns about the system	Uses appropriate channels to offer clear and constructive suggestions to improve the system	Initiates difficult conversations with appropriate stakeholders to improve the system	Facilitates dialogue regarding systems issues among larger community stakeholders (e.g., institution, health care system, field)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>