The Pediatric Emergency Medicine Milestone Project

A Joint Initiative of

The Accreditation Council for Graduate Medical Education,
The American Board of Pediatrics,
and,
The American Board of Emergency Medicine

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The Milestones are designed only for use in evaluation of fellows in the context of their participation in ACGME-accredited residency or fellowship programs. The Milestones provide a framework for the assessment of the development of the fellow in key dimensions of the elements of physician competency in a specialty or subspecialty. 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.

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Milestone Reporting

This document presents milestones designed for programs to use in semi-annual review of fellow performance and reporting to the ACGME. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME competencies organized in a developmental framework from less to more advanced. The Pediatrics Emergency Medicine Milestones are designed to describe changes in observable attributes of the learner across the continuum of medical education from residency through fellowship into practice. In the initial years of implementation, the Review Committee will examine Milestone performance data for each program's fellows as one element in the Next Accreditation System (NAS) to determine whether fellows overall are progressing.

For each reporting period, review and reporting will involve selecting the level of milestones that best describes each fellow's current performance level in relation to those milestones. Milestones are arranged into levels (see the figure on page iv). Progressing from Level 1 to Level 5 is synonymous with moving from novice to expert in the subspecialty. Selection of a level implies that the fellow substantially demonstrates the milestones in that level, as well as those in lower levels.

Additional Notes

Level 4 is designed as the graduation *target* but does *not* represent a graduation *requirement*. Making decisions about readiness for graduation is the purview of the residency program director (See the Milestones FAQ for further discussion of this issue: "Can a resident/fellow graduate if he or she does not reach every milestone?"). Study of Milestone performance data will be required before the ACGME and its partners will be able to determine whether Level 4 milestones and milestones in lower levels are in the appropriate level within the developmental framework, and whether Milestone data are of sufficient quality to be used for high stakes decisions.

Answers to Frequently Asked Questions about Milestones are available on the Milestones web page: http://www.acgme.org/acgmeweb/Portals/0/MilestonesFAQ.pdf.

The figure below presents an example set of milestones for one sub-competency in the same format as the milestone report worksheet. For each reporting period, a fellow's performance on the milestones for each sub-competency will be indicated by:

- selecting the level of milestones that best describes that fellow's performance in relation to the milestones
  or
- selecting the "Not yet Assessable" response option. This option should be used only when a fellow has not yet had a learning experience in the sub-competency.

PBLI3. Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement

Not yet Assessable	Level 1	Level 2	Level 3	Level 4	Level 5
	Unable to gain insight from encounters due to a lack of reflection on practice; does not understand the principles of quality improvement methodology or change management; is defensive when faced with data on performance improvement opportunities within one's practice	Able to gain insight from reflection on individual patient encounters, but potential improvements are limited by a lack of systematic improvement strategies and team approach; is dependent upon external prompts to define improvement opportunities at the population level	Able to gain insight for improvement opportunities from reflection on both individual patients and populations; grasps improvement methodologies enough to apply to populations; is still reliant on external prompts to inform and prioritize improvement opportunities at the population level	Able to use both individual encounters and population data to drive improvement using improvement methodology; analyzes one's own data on a continuous basis, without reliance on external forces, to prioritize improvement efforts, and uses that analysis in an iterative process for improvement; is able to lead a team in improvement	In addition to demonstrating continuous improvement activities and appropriately utilizing quality improvement methodologies, thinks and acts systemically to try to use one's own successes to benefit other practices, systems, or populations; is open to analysis that at times requires course correction to optimize improvement
☐	☐	☐	☐	☐	☐
Comments:					

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).

Gather essential and accurate information about the patient: Abstracts current findings in a patient with multiple chronic medical problems and, when appropriate, compares with a prior medical record and identifies significant differences between the current presentation and past presentations — PC1					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Either gathers too little information or exhaustively gathers information following a template regardless of the patient's chief complaint, with each piece of information gathered seeming as important as the next; recalls clinical information in the order elicited, with the ability to gather, filter, prioritize, and connect pieces of information being limited by and dependent upon analytic reasoning through basic pathophysiology alone Performs and communicates a reliable, comprehensive history and physical exam	Clinical experience allows linkage of signs and symptoms of a current patient to those encountered in previous patients; still relies primarily on analytic reasoning through basic pathophysiology to gather information, but has the ability to link current findings to prior clinical encounters allows information to be filtered, prioritized, and synthesized into pertinent positives and negatives, as well as broad diagnostic categories Performs and communicates a focused history and physical exam which effectively address the chief complaint and urgent patient issues	Demonstrates an advanced development of pattern recognition that leads to the creation of illness scripts, which allow information to be gathered while simultaneously filtered, prioritized, and synthesized into specific diagnostic considerations; data gathering is driven by real-time development of a differential diagnosis early in the information-gathering process Prioritizes essential components of a history given a limited or dynamic circumstance Prioritizes essential components of a physical examination given a limited or dynamic circumstance	Creates well-developed illness scripts that allow essential and accurate information to be gathered and precise diagnoses to be reached with ease and efficiency when presented with most pediatric problems, but still relies on analytic reasoning through basic pathophysiology to gather information when presented with complex or uncommon problems Synthesizes essential data necessary for the correct management of patients using all potential sources of data	Creates robust illness scripts and instance scripts (where the specific features of individual patients are remembered and used in future clinical reasoning) that lead to unconscious gathering of essential and accurate information in a targeted and efficient manner when presented with all but the most complex or rare clinical problems; these illness and instance scripts are robust enough to enable discrimination among diagnoses with subtle distinguishing features Identifies obscure, occult, or rare patient conditions based solely on historical and physical exam findings
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Comments:					

Organize and prioritize responsibilities to provide patient care that is safe, effective, and efficient — PC2					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Struggles to organize patient care responsibilities, leading to focusing care on individual patients rather than multiple patients; responsibilities are prioritized as a reaction to unanticipated needs that arise (those responsibilities presenting the most significant crisis at the time are given the highest priority); even small interruptions in task often lead to a prolonged or permanent break in that task to attend to the interruption, making return to initial task difficult or unlikely	Organizes the simultaneous care of a few patients with efficiency; occasionally prioritizes patient care responsibilities to anticipate future needs; each additional patient or interruption in work leads to notable decreases in efficiency and ability to effectively prioritize; permanent breaks in task with interruptions are less common, but prolonged breaks in task are still common	Organizes the simultaneous care of many patients with efficiency; routinely prioritizes patient care responsibilities to proactively anticipate future needs; additional care responsibilities lead to decreases in efficiency and ability to effectively prioritize only when patient volume is quite large or there is a perception of competing priorities; interruptions in task are prioritized and only lead to prolonged breaks in task when workload or cognitive load is high	Organizes patient care responsibilities to optimize efficiency; provides care to a large volume of patients with marked efficiency; patient care responsibilities are prioritized to proactively prevent those urgent and emergent issues in patient care that can be anticipated; interruptions in task lead to only brief breaks in task in most situations	Serves as a role model of efficiency; patient care responsibilities are prioritized to proactively prevent interruption by routine aspects of patient care that can be anticipated; unavoidable interruptions are prioritized to maximize safe and effective multitasking of responsibilities in essentially all situations
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Comments:					

Provide transfer of care that ensures seamless transitions — PC3					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Demonstrates variability in transfer of information (content, accuracy, efficiency, and synthesis) from one patient to the next; makes frequent errors of both omission and commission in the hand-off	Uses a standard template for the information provided during the hand-off; is unable to deviate from that template to adapt to more complex situations; may have errors of omission or commission, particularly when clinical information is not synthesized; neither anticipates nor attends to the needs of the receiver of information	Adapts and applies a standardized template, relevant to individual contexts, reliably and reproducibly, with minimal errors of omission or commission; allows ample opportunity for clarification and questions; is beginning to anticipate potential issues for the transferee	Adapts and applies a standard template to increasingly complex situations in a broad variety of settings and disciplines; ensures open communication, whether in the receiver- or the provider-of-information role, through deliberative inquiry, including read-backs, repeat-backs (provider), and clarifying questions (receivers)	Adapts and applies the template without error and regardless of setting or complexity; internalizes the professional responsibility aspect of hand-off communication, as evidenced by formal and explicit sharing of the conditions of transfer (e.g., time and place) and communication of those conditions to patients, families, and other members of the health care team
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Comments:					

Make informed diagnostic and therapeutic decisions that result in optimal clinical judgment — PC4					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Recalls and presents clinical facts in the history and physical in the order they were elicited without filtering, reorganization, or synthesis; demonstrates analytic reasoning through basic pathophysiology results in a list of all diagnoses considered rather than the development of working diagnostic considerations, making it difficult to develop a therapeutic plan	Focuses on features of the clinical presentation, making a unifying diagnosis elusive and leading to a continual search for new diagnostic possibilities; largely uses analytic reasoning through basic pathophysiology in diagnostic and therapeutic reasoning; often reorganizes clinical facts in the history and physical examination to help decide on clarifying tests to order rather than to develop and prioritize a differential diagnosis, often resulting in a myriad of tests and therapies and unclear management plans, since there is no unifying diagnosis	Abstracts and reorganizes elicited clinical findings in memory, using semantic qualifiers (such as paired opposites that are used to describe clinical information [e.g., acute and chronic]) to compare and contrast the diagnoses being considered when presenting or discussing a case; shows the emergence of pattern recognition in diagnostic and therapeutic reasoning that often results in a well-synthesized and organized assessment of the focused differential diagnosis and management plan	Reorganizes and stores clinical information (illness and instance scripts) that lead to early directed diagnostic hypothesis testing with subsequent history, physical examination, and tests used to confirm this initial schema; demonstrates well-established pattern recognition that leads to the ability to identify discriminating features between similar patients and to avoid premature closure; selects therapies that are focused and based on a unifying diagnosis, resulting in an effective and efficient diagnostic work-up and management plan tailored to address the individual patient	Current literature does not distinguish between behaviors of proficient and expert practitioners; expertise is not an expectation of GME, as it requires deliberate practice over time
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Comments:					

Emergency Stabilization: Prioritizes critical initial stabilization action and mobilizes hospital support services in the resuscitation of a critically-ill or injured patient and reassesses after stabilizing intervention — PC5					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Recognizes abnormal vital signs	Recognizes when a patient is unstable requiring immediate intervention; performs a primary assessment on a critically-ill or injured patient; discerns relevant data to formulate a diagnostic impression and plan	Manages and prioritizes critically-ill or injured patients; prioritizes critical initial stabilization actions in the resuscitation of a critically-ill or injured patient; reassesses after implementing a stabilizing intervention; evaluates the validity of a DNR order	Recognizes in a timely fashion when further clinical intervention is futile; integrates hospital support services into a management strategy for a problematic stabilization situation	Develops policies and protocols for the management and/or transfer of critically-ill or injured patients
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Comments:					

Diagnostic Studies: Applies the results of diagnostic testing based on the probability of disease and the likelihood of test results altering management — PC6					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Determines the necessity of diagnostic studies	Orders appropriate diagnostic studies; performs appropriate bedside diagnostic studies and procedures	Prioritizes essential testing; interprets results of a diagnostic study, recognizing limitations and risks, seeking interpretive assistance when appropriate; reviews risks, benefits, contraindications, and alternatives to a diagnostic study or procedure	Uses diagnostic testing based on the pre-test probability of disease and the likelihood of test results altering management; practices cost effective ordering of diagnostic studies; understands the implications of false positives and negatives for post-test probability	Discriminates between subtle and/or conflicting diagnostic results in the context of the patient presentation
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Comments:					

Observation and Reassessment: Re-evaluates patients undergoing emergency department (ED) observation (and monitoring) and, using appropriate data and resources, determines the differential diagnosis and, treatment plan, and disposition — PC7					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Recognizes the need for patient re-evaluation	Monitors that necessary therapeutic interventions are performed during a patient's ED stay	Identifies which patients will require observation in the ED; evaluates effectiveness of therapies and treatments provided during observation; monitors a patient's clinical status at timely intervals during their stay in the ED	Considers additional diagnoses and therapies for a patient who is under observation and changes treatment plan accordingly; identifies and complies with federal and other regulatory requirements, including billing, which must be met for a patient who is under observation	Develops protocols to avoid potential complications of interventions and therapies
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Comments:					

Disposition: Establishes and implements a comprehensive disposition plan that uses appropriate consultation resources; provides patient education regarding diagnosis; treatment plan; medications; and time- and location-specific disposition instructions — PC8					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Describes basic resources available for care of the ED patient	Formulates a specific follow-up plan for common ED complaints with appropriate resource utilization	Formulates and provides patient education regarding diagnosis, treatment plan, medication review and primary care physician (PCP)/consultant appointments for complicated patients; involves appropriate resources (e.g., PCP, consultants, social work, PT/OT, financial aid, care coordinators) in a timely manner; makes correct decision regarding admission or discharge of patients; correctly assigns admitted patients to an appropriate level of care (ICU/Telemetry/Floor/ Observation Unit)	Formulates sufficient admission plans or discharge instructions, including future diagnostic/therapeutic interventions for ED patients; engages patient or surrogate to effectively implement a discharge plan	Works within the institution to develop hospital systems that enhance safe patient disposition and maximizes resource utilization
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Comments:					

General Approach to Procedures: Performs the indicated procedure on all appropriate patients (including those who are uncooperative, at the extremes of age, or hemodynamically unstable, and those who have multiple co-morbidities, poorly defined anatomy, high risk for pain or procedural complications, or sedation requirements), takes steps to avoid potential complications, and recognizes the outcome and/or complications resulting from the procedure — PC9					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Identifies pertinent anatomy and physiology for a specific procedure; uses appropriate Universal Precautions	Performs patient assessment, obtains informed consent, and ensures monitoring equipment is in place in accordance with patient safety standards; knows indications, contraindications, anatomic landmarks, equipment, anesthetic and procedural techniques, and potential complications for common ED procedures; performs the indicated common procedure on a patient with moderate urgency who has identifiable landmarks and a low-to-moderate risk for complications; performs post-procedural assessment and identifies any potential complications	Determines a back-up strategy if initial attempts to perform a procedure are unsuccessful; correctly interprets the results of a diagnostic procedure	Performs indicated procedures on any patients with challenging features (e.g., poorly identifiable landmarks, at extremes of age or with co-morbid conditions; performs the indicated procedure, takes steps to avoid potential complications, and recognizes the outcome and/or complications resulting from the procedure	Teaches procedural competency and corrects mistakes
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Comments:					

Anesthesia and Acute Pain Management: Provides safe acute pain management, anesthesia, and procedural sedation to patients of all ages regardless of the clinical situation — PC10					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Discusses indications, contraindications, and possible complications of local anesthesia with the patient; performs local anesthesia using appropriate doses of local anesthetic and appropriate technique to provide skin to sub-dermal anesthesia for procedures	Knows the indications, contraindications, potential complications, and appropriate doses of analgesic/sedative medications; knows the anatomic landmarks, indications, contraindications, potential complications, and appropriate doses of local anesthetics used for regional anesthesia	Knows the indications, contraindications, potential complications, and appropriate doses of medications used for procedural sedation; performs patient assessment and discusses with the patient the most appropriate analgesic/sedative medication and administers in the most appropriate dose and route; performs pre-sedation assessment, obtains informed consent, and orders appropriate choice and dose of medications for procedural sedation; obtains informed consent and correctly performs regional anesthesia; ensures appropriate monitoring of patients during procedural sedation	Performs procedural sedation providing effective sedation with the least risk of complications and minimal recovery time through selective dosing, route and choice of medications	Develops pain management protocols/care plans
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Comments:					

Provide appropriate supervision (milestones for the supervisor) — PC11					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
	Limited experience as a supervisor makes it difficult to step back from direct care	Recognizes the need to entrust care to the trainee, but is not able to accurately assess the current level of competence of the trainee, resulting in a mismatch between the level of competence of the trainee and the type of supervision provided, particularly for trainees who are not at either end of the performance spectrum	Accurately assesses the competence of the trainee and is able to align type of supervision provided to demonstrated level of trainee competence; however, a personal need for greater involvement in care often results in an inability to empower the trainee to reach beyond his or her current level of comfort and competence to become capable of dealing with less familiar types of patients and clinical circumstances	Accurately assesses both the competence and the capability of the trainee and provides a level of supervision that balances patient safety with the trainee's professional development; is dependent on a self-directed trainee to provide the needed resources to support his or her own learning in managing less familiar types of patients and clinical circumstances	Accurately assesses the competence and capability of the trainee, aligning the type of supervision provided to maximize and balance patient safety and the trainee's professional growth. Continuously evaluates the potential for the trainee to develop new capabilities and adjusts the type of supervision necessary to optimize trainee**'s** professional development
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Comments:					

Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatric emergency medicine — MK1					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**

	Understands the basic content knowledge of pediatrics, but is still learning to apply it to clinical situations	Understands the basic content knowledge of pediatric practice, and is able to synthesize and apply it in a clinical situation	Able to analyze and categorize knowledge in a way that allows the generation of a meaningful differential diagnosis	Able to evaluate knowledge and use it appropriately in a given clinical encounter to develop meaningful clinical management plans	Learns from experience; analyzes a situation, evaluates what worked well and what did not work well in the past, and creates, adapts, or extrapolates information appropriately to new clinical situations and encounters
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Comments:					

Advocate for quality patient care and optimal patient care systems — SBP1					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**

	Attends to medical needs of individual patient(s); wants to take good care of patients and takes action for individual patients' health care needs *Example:* *The physician sees a child with a firearm injury and provides good care.*	Demonstrates recognition that an individual patient's issues are shared by other patients, that there are systems at play, and that there is a need for quality improvement of those systems; acts on the observed need to assess and improve quality of care *Example:* *The physician notes on rounds, "We have sent home four-to-five firearm-injury patients and one has come back with repeated injury. We need to do something about that."*	Acts within the defined medical role to address an issue or problem that is confronting a cohort of patients; may enlist colleagues to help with this problem *Example:* *The physician works with colleagues to develop an approach, protocol, or procedure for improving care for penetrating trauma injury in children and measures the outcomes of system changes.*	Actively participates in hospital-initiated quality improvement and safety actions; demonstrates a desire to have an impact beyond the hospital walls *Example:* *The physician attends a hospital symposium on gun-related trauma and what can be done about it and then arranges to speak on gun safety at the local meeting of the parent-teachers association.*	Identifies and acts to begin the process of improvement projects both inside the hospital and within one's practice community *Example:* *Upon completion of quality improvement project, the physician works on new proposed legislation and testifies in City Council.*
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Comments:					

Participate in identifying system errors and implementing potential systems solutions — SBP2					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**

	Is defensive or blaming when encountering medical error; has no perception of personal responsibility for individual or systems error correction; is not open to discussion of error or identification of the type of error; approaches error prevention from an individual case perspective only	Is occasionally open to discussion of error without a defensive or blaming approach; has some awareness of personal responsibility for individual or systems error correction; identifies medical error events, but cannot identify the type (active versus latent) of error; begins to perceive that error may be more than the mistake of an individual	Is usually open to a discussion of error; actively identifies medical error events and seeks to determine the type of error; occasionally identifies the element of personal responsibility for individual or systems error correction; sees examination and analysis of error as an important part of the preventive process	Usually encourages open and safe discussion of error; actively identifies medical error events; accepts personal responsibility for individual or systems error correction, regularly determining the type of error and beginning to seek system causes of error	Consistently encourages open and safe discussion of error; characteristically identifies and analyzes error events, habitually approaching medical error with a system solution methodology; actively and routinely engaged with teams and processes through which systems are modified to prevent medical error
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Comments:					

Use information technology to optimize learning and care delivery — PBLI1					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**

	Reluctant to utilize information technology; generally does not initiate attempts to use information technology without mandatory assignments and direct help; unable to choose between multiple available databases for clinical query and unable to filter or prioritize the information retrieved, resulting in too much information, much of which is not useful; failure to achieve success may worsen perception of information technology ease of use, leading to resistance to adopting new technologies Uses the Electronic Health Record (EHR) to order tests and medications, and to document notes and respond to alerts Reviews medications for patients	Demonstrates a willingness to try new technology for patient care assignments or learning; is able to identify and use several available databases, search engines, or other appropriate tools, resulting in a manageable volume of information, most of which is relevant to the clinical question; is improving in basic use of an EHR, as evidenced by greater efficacy and efficiency in performing needed tasks; is beginning to identify shortcuts to getting to the right information quickly, such as use of filters; is also beginning to avoid shortcuts that lead one astray of the correct information or perpetuate incorrect information in the EHR Ensures that medical records are complete, with attention to preventing confusion and error Effectively and ethically uses technology for patient care, medical communication, and learning	Efficiently retrieves (from EHR, databases, and other resources), manages, and utilizes biomedical information for solving problems and making decisions that are relevant to the care of patients and for ongoing learning Recognizes the risk of computer shortcuts and reliance upon computer information on accurate patient care and documentation	In addition to the above, demonstrates an emotional investment in the outcome (improved patient care, deeper understanding, or successful resolution of a query) leading to the habit of utilizing familiar information technology resources and seeking new ones to answer clinical questions and remedy knowledge gaps identified in the course of patient care; utilizes the EHR platform to improve the care, not only for individual patients, but populations of patients; utilizes evidence-based (actuarial) decision support tools to continually supplement clinical experience Uses decision support systems in EHR (as applicable in institution)	Along with the above capabilities and behaviors, demonstrates comfort level and experience with information technology that frees up mental energy that is reinvested to contribute to the continuous improvement of current systems and to the development and implementation of new information technology innovations for patient care and professional learning Recommends systems redesign for improved computerized processes
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Comments:					

Self-awareness of one's own knowledge, skill, and emotional limitations that leads to appropriate help-seeking behaviors — PROF1

Not yet Assessable	Level 1	Level 2	Level 3	Level 4	Level 5

	Has a lack of insight into limitations that results in the need for help going unrecognized, sometimes resulting in unintended consequences	Shows concern that limitations may be seen as weaknesses that will negatively impact evaluations results in help-seeking behaviors, typically only in response to external prompts rather than internal drive	Recognizes limitations, but has the perception that autonomy is a key element of one's identity as a physician, and the need to emulate this behavior to belong to the profession may interfere with internal drive to engage in appropriate help-seeking behavior	Recognizes limitations and has matured to the stage where a personal value system of help-seeking for the sake of the patient supersedes any perceived value of physician autonomy, resulting in appropriate requests for help when needed	Beyond recognizing limitations, has the personal drive to learn and improve results in the habit of engaging in help-seeking behaviors and explicitly role modeling and encouraging these behaviors in fellows
☐	☐	☐	☐	☐	☐
Comments:					

The capacity to accept that ambiguity is part of clinical medicine and to recognize the need for and to utilize appropriate resources in dealing with uncertainty — PROF2					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**

	Feels overwhelmed and inadequate when faced with uncertainty or ambiguity; communications with patients/families and development of therapeutic plan are rigid and authoritarian, with assumption that the patient can manage information and participate in decision-making; patient/family numeracy presumed; seeks only self or self-available resources to manage response to this uncertainty, resulting in a response characterized by their (individual) preexisting state of risk aversion or risk taking; does not regard patient need for hope; feels compelled to make sure that patients understand full potential for negative outcome (defensive/protective of physician)	Recognizes uncertainty and feels tension/pressure from not knowing or knowing with limited control of outcomes; explains situation to the patient in framework most familiar to the physician, rather than framing it with terms, graphics, or analogies familiar to the patient; seeks rules and statistics and feels compelled to transfer all information to the patient immediately, regardless of patient readiness, patient goals, and patient ability to manage information	Anticipates and focuses on uncertainty, looking for resolution by seeking additional information; aims to inform the patient of the more optimal outcome(s), framed by physician goals; does not manage overall balance of patient/family uncertainty with quality of life, need for hope, and ability to adhere to therapeutic plan; focuses on own risk management position for a given problem and does not suggest that more or less risk taking (different from physician's position) could be chosen; still seeks patient/parent recitation of uncertainty/morbidity as proof that patient/family understands the uncertainty; has an unresolved balance of expectations with physician expectations taking precedence	Anticipates that uncertainty at the time of diagnostic deliberation will be likely; uses such uncertainty or larger ambiguity as a prompt/motivation to seek information or understanding of unknown (to self or world); balances delivery of diagnosis with hope, information, and exploration of individual patient goals; works through concepts of risk versus hope using conceptual framework that includes cost (e.g., suffering, lifestyle changes, financial) versus benefit, framed by patient health care goals; expresses openness to patient position and patient uncertainty about his or her position and response	Is aware of and keeps own risk aversion or risk-taking position in check; seeks to understand patient/family goals for health and their capacity to achieve those goals, given the uncertain treatment options; engages in discussion with high sensitivity towards numeracy, emphasizing patient/family control of choices with initial plan development and ongoing information sharing through changes as knowledge and patient health status evolve; remains flexible and committed to engagement with the patient/family throughout the patient's illness, serving as a resource to gather information so that degree of uncertainty is minimized; openly and comfortably discusses strategies and outcomes anticipated with the patient/family, emphasizing that all plans are subject to the imperfect knowledge and state of uncertainty; balances constant revisiting of knowledge,

					uncertainty, and developed plans acceptance of what is unknown; transparent communication of limits of treatment plan outcomes
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Comments:					

Practice flexibility and maturity in adjusting to change with the capacity to alter behavior — PROF3					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**

	Rigid behavior is most comfortable; has a difficult time making decisions when faced with challenging situations; fears loss of control when moving outside of the usual realm of cognitive concepts/thinking; emotionally reactive and vulnerable to stress; uses immature coping mechanisms; does not modify behavior, seeing no reason to do so; low level of emotional intelligence (EI) with inability to be self-aware or effectively self-regulate, poor commitment and little optimism; poor social skills	Is less rigid, possessing some flexible behaviors; may realize that there is more than one solution to some problems; is uncomfortable with loss of control, but able to recognize that feeling and start to adjust and modify; when not stressed, can demonstrate self-awareness with reflection; tough situations may cause reversion to immature or primitive (e.g., fight or flight, blaming, fussy) behaviors and unhealthy coping mechanisms; intermediate level of EI, with some ability to self-regulate; has some self-awareness and insight, some optimism, and aware of need for social skills	Consciously chooses and practices flexibility; easily shifts mindsets and behaviors when emotional and social functioning is compromised; utilizes mature and healthy mechanisms to cope; seems to carry self-resilience and confidence through both daily behaviors and stressful times; tends to have a positive attitude; demonstrates upper-middle to high EI, with a high level of self-awareness, self-regulation, motivation, empathy, and social skills	Appears to be and is flexible, resilient, confident; has high EI by habit; demonstrates that these capabilities have progressed and are now innate behaviors; demonstrates maturity and self-awareness that lead to anticipation of stressors and that invoke coping mechanisms that work well, so that he or she is always in control; adapts easily to almost any situation and embraces change as a positive experience; his or her high level of EI allows the fellow to "read" others and anticipate their needs, proactively helping them to cope with stress and change	*Current literature does not distinguish between behaviors of proficient and expert practitioners; expertise is not an expectation of GME, as it requires deliberate practice over time*
	Example: *A physician becomes irritated with a nurse who pages her that the new admission—a patient with a fever and rash—is on the floor. She complains to her medical student that she should not even have to be on call today*	*Example:* *Life has been running smoothly for one of the fellows in the PICU, who had some minor difficulty in the past. To his colleagues, he seems to have "figured it out." He seems to care more*	*Example:* *A seemingly happy fellow who is well liked by students and peers has just had premature twins (25 weeks) who are in the NICU. He does not complain about it at work and actually has*	*Example:* *The senior fellow on your team is doing an amazing job on the ward. It is time for midrotation feedback and you try to tease out what makes her performance so outstanding. You have*	

	because she has one more call this month than the other fellow. Later she feels badly that she complained, but just feels so out of control sometimes. The nurse calls again to let her know that the family is Spanish speaking, so she will need to arrange an interpreter. This sends the fellow into a "tailspin" of moodiness, frustration, worry, and inability to gather herself to take care of the patient. She again feels disturbed by her inability to cope. The idea of apologizing to the student and nurse does not even cross her "radar."	*about them, is more self-confident, and some interns have actually requested to be on call with him because he is good at solving problems. His wife pages him during rounds one day to tell him that she had a car accident. She has a shoulder injury and her car is totaled, but she is otherwise OK. He takes off a few days to make arrangements for the car and to take her to the doctor. He feels out of control internally due to worry and is moody to others. He does not feel "back to normal" for two months. He recognizes and apologizes to his colleagues for his moodiness.*	*the outlook (coping mechanism) that he is so glad they are both alive and his wife is fine. He continues to take call, despite offers of help from colleagues. He seems to take care of his wife, patients, and peers with his usual enthusiasm, friendliness, and openness to life experience.*	*worked with other knowledgeable and skilled fellows, but as you think about this you realize that it is not the knowledge and skill that sets her apart but her attitude. She is perceptive and anticipates the needs of everyone on the team, carefully monitoring workloads and providing the right amount of help. In the middle of what can be total chaos she is in control and is able to easily adapt to the ever-changing status of patients and care priorities and helps others to embrace constant flux as a learning opportunity. Her spirit and motivation are infectious.*	
☐	☐	☐	☐	☐	☐

Comments:

Provide leadership skills that enhance team functioning, the learning environment, and/or the health care delivery system/environment with the ultimate intent of improving care of patients — PROF4					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**

	Does not define/clarify roles and expectations for team members, and his or her team management is disorganized and inefficient; interacts with supervisor(s) in an unfocused and indecisive manner; does not encourage open communication within the team; does not give ownership of or engage team members in decision-making; manages by mandate; is unable to advocate effectively for the team with faculty and staff members, families, patients, and others	Demonstrates through interactions that there are roles and expectations for team members, but does not explicitly defined these; manages the team in a somewhat organized manner; interacts with supervisor(s) in a somewhat focused but poorly decisive manner; begins to encourage open communication within the team; sometimes engages team members in decision-making processes; manages most often through direction, with some effort towards consensus building; attempts to advocate for the team with faculty and staff members, families, patients, and others	Provides some explicit definition to roles and expectations for team members; manages the team in an organized manner; interactions with supervisor(s) are focused and decisive in most cases; routinely encourages open communication within the team; routinely engages team members in decision-making and gives team members some ownership in care; usually manages through consensus-building and empowerment of others, but sometimes reverts to being directive; advocates somewhat effectively for the team with faculty and staff members, families, patients, and others	Routinely clarifies roles and expectations for team members; manages the team in an organized and fairly efficient manner; interactions with supervisor(s) are focused and decisive; creates a foundation of open communication within the team; expects team members engage in decision-making and encourages them to take ownership in care; utilizes a consensus-building process and empowerment of others, only in rare instances becoming directive; advocates effectively for the team with faculty and staff members, families, patients, and others	Routinely clarifies roles and expectations for team members; team management is organized and efficient; interacts with supervisor(s) in a focused and decisive manner; creates a strong sense of open communication within the team; team members routinely engage in decision-making and are expected to take ownership in care; consensus-building and empowerment are the norm; proactively and effectively advocates for the team with faculty and staff members, families, patients, and others; inspires others to perform
☐	☐	☐	☐	☐	☐
Comments:					

Demonstrate self-confidence that puts patients, families, and members of the health care team at ease — PROF5					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**

	Is unaware of how to solve a problem/question; is expected to have little self-confidence given limited experience, and appropriately identifies the need to ask for help	Speaks in a confident manner, but still unsure of when and how to clearly articulate his or her limitations to the family; exhibits behaviors that reflect some comfort and confidence with his role as a physician, but families would not necessarily feel at ease without reassurance from a more senior colleague or supervisor	Starts to self-reflect and navigate the interplay of the complexity of explaining uncertainty to patients/families, while remaining confident with information he knows and understands clinically; has some insight into when to be confident and when to express uncertainty with situations and diagnoses; demonstrates an emerging alignment between knowledge/skill and degree of certainty that allows families to assess the fellow as effective in placing them at ease in many situations	Is gaining experience and comfort with uncertainty; is appropriately self-confident and considered to be trustworthy (skilled, truthful, discerning, and conscientious); demonstrates a balance between confidence and uncertainty that allows patients/families to assess the fellow as quite effective in placing them at ease	Is a master of explaining uncertainty and what is known; does so with a mature/comforting self-confidence that is easily identified by all, modified to the emotional needs of the patient/family; patients/families identify the fellow as excellent at placing them at ease, even in the face of difficult situations
☐	☐	☐	☐	☐	☐
Comments:					

Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds — ICS1					
Not yet Assessable	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**

	Uses standard medical interview template to prompt all questions; does not vary the approach based on a patient's unique physical, cultural, socioeconomic, or situational needs; may feel intimidated or uncomfortable asking personal questions of patients	Uses the medical interview to establish rapport and focus on information exchange relevant to a patient's or family's primary concerns; identifies physical, cultural, psychological, and social barriers to communication, but often has difficulty managing them; begins to use non-judgmental questioning scripts in response to sensitive situations	Uses the interview to effectively establish rapport; is able to mitigate physical, cultural, psychological, and social barriers in most situations; verbal and non-verbal communication skills promote trust, respect, and understanding; develops scripts to approach most difficult communication scenarios	Uses communication to establish and maintain a therapeutic alliance; sees beyond stereotypes and works to tailor communication to the individual; a wealth of experience has led to development of scripts for the gamut of difficult communication scenarios; is able to adjust scripts ad hoc for specific encounters	Connects with patients and families in an authentic manner that fosters a trusting and loyal relationship; effectively educates patients, families, and the public as part of all communication; intuitively handles the gamut of difficult communication scenarios with grace and humility
☐	☐	☐	☐	☐	☐
Comments:					

Demonstrate the insight and understanding into emotion and human response to emotion that allows one to appropriately develop and manage human interactions — ICS2

Not yet Assessable	Level 1	Level 2	Level 3	Level 4	Level 5
	Does not accurately anticipate or read others' emotions in verbal and non-verbal communication; is unaware of one's own emotional and behavioral cues and may transmit emotions in communication (e.g., anxiety, exuberance, anger) that can precipitate unintended emotional responses in others; does not effectively manage strong emotions in oneself or others	Begins to use past experiences to anticipate and read (in real time) the emotional responses in himself and others across a limited range of medical communication scenarios, but does not yet have the ability or insight to moderate behavior to effectively manage the emotions; strong emotions in oneself and others may still become overwhelming	Anticipates, reads, and reacts to emotions in real time with appropriate and professional behavior in nearly all typical medical communication scenarios, including those evoking very strong emotions; uses these abilities to gain and maintain therapeutic alliances with others	Perceives, understands, uses, and manages emotions in a broad range of medical communication scenarios and learns from new or unexpected emotional experiences; effectively manages own emotions appropriately in all situations; effectively and consistently uses emotions to gain and maintain therapeutic alliances with others; is perceived as a humanistic provider	Intuitively perceives, understands, uses, and manages emotions to improve the health and well-being of others and to foster therapeutic relationships in any and all situations; is seen as an authentic role model of humanism in medicine
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Comments:										

Act in a consultative role to other physicians and health professionals — ICS3					
Not yet					

Assessable	Level 1	Level 2	Level 3	Level 4	Level 5
	Actively participates as a member of the consultation team and can accurately gather and present the patients' history and physical findings, scribe recommendations, and document them in the medical record; lack of discipline-specific knowledge limits ability to focus the data gathering and presentation to those details relevant to the question asked	Identifies self as a member of the consultation team; can accurately gather and present the patient's history and physical findings with a focus on those details pertinent to the question asked; increased discipline-specific knowledge and ability to filter and prioritize information lead to a more focused (although not comprehensive), differential, realistic working diagnosis; more specific recommendations; and more succinct documentation; takes more "ownership" of the patients' outcomes during follow-up of initial recommendations	Identifies self as an integral member of the consultation team based on advanced knowledge and skills in specific areas tempered by recognition of limitations in others, leading to pursuit of new knowledge; independently assesses and confirms data; combination of past experience and ability to use information technology to seek new knowledge allows for recommendations that are consistent with best practice; develops good relationships with referring providers, but may not encourage the bidirectional feedback that makes the relationship truly collaborative	Identifies self as an expert in her discipline based on advanced knowledge and vast experience that manifest as intuitive clinical reasoning that is succinctly communicated to answer the specific questions asked; this drives life-long learning behavior and clear communication of the strength of the evidence on which recommendations are based; develops and maintains a collaborative relationship with the referring providers that maximizes adherence to recommendations and supports continuous bidirectional feedback	Identified by self and others as a master clinician who effectively and efficiently lends a practical wisdom to consultation; answers to all but the most difficult diagnostic dilemmas are intuitive, leaving most mental energy available for reinvestment in ongoing clinical, educational, and/or research contributions to the field
☐	☐	☐	☐	☐	☐
Comments:					