

38TH ANNUAL MEETING

Today and Tomorrow in Pain
Medicine: Innovations and
Practical Applications



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Scottsdale, AZ



Accreditation Council for
Graduate Medical Education

Pain Medicine Milestones 2.0

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Objectives

- Describe the basic process of milestones 2.0 development and their purpose
- Identify changes in Milestones 2.0
- Discuss how to educate colleagues and trainees on the use of Milestones 2.0

- Disclosures
 - Funded research from Avanos, NIH, FUS Foundation, FUS Mobile
 - Steering committee/honoraria from Avanos
- The presentation does not include off label use of drugs.

Working Group Members

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- Diane Braza, MD
- Laura Edgar, EdD, CAE
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- Lynn Kohan, MD, MS
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- Anne Marie McKenzie-Brown, MD
- Kiran V. Patel, MD
- Rene Przkora, MD
- Alexandra Szabova, MD

Multiple Specialties Represented

- American Board of Anesthesiology
- American Board of Physical Medicine and Rehabilitation American
- Board of Psychiatry and Neurology Review Committee for Anesthesiology
- Review Committee for Neurology
- Review Committee for Physical Medicine and Rehabilitation
- Patient representative

History

Table 1: Key Dates in Educational Milestones History

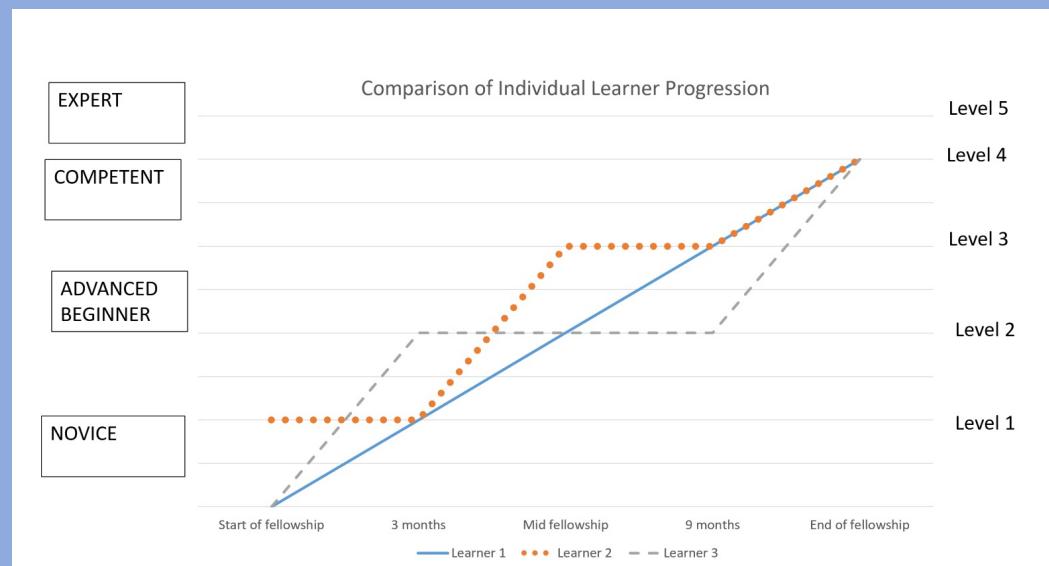
Dates	Structure
1999	The six Core Competencies endorsed by ACGME and American Board of Medical Specialties (ABMS)
2001	The Outcome Project formally launched
2009	ACGME approves structure of NAS, including inclusion of the Milestones
2013	First seven specialties implement NAS, including Milestones reporting
2014	Remaining accredited specialties and subspecialties implement NAS, including Milestones reporting
2015	All specialties and subspecialties begin to report Milestones data
2018	Work begins on Milestones revisions, called Milestones 2.0

What are the Milestones?

- 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 competence 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.**

What are the Milestones?

Milestones are simply a significant point in development. They can enable the learner and the program to determine individual trajectories of professional development in narrative terms.



Milestone Basics

Figure 1a: General Description of Milestone Levels Related to Stage of Education

Competency: Subcompetency					
Level 1	Level 2	Level 3	Level 4	Level 5	
Novice Resident/Fellow	Advanced Beginner Resident/Fellow	Competent Resident/Fellow	Proficient Resident/Fellow	Resident/Fellow Expert	
Brand new to the specialty	Performs some tasks with limited autonomy	Performs common tasks with autonomy	Target for graduation (not a requirement)	Exceeds their peers	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Edgar L, et al. The Milestones Guidebook 2020

Dreyfus Stage	Description (Clinical reasoning example)
Novice	Rule driven; analytic thinking; little ability to prioritize information
Advanced beginner	Able to sort through rules based on experience; analytic and non-analytic for some common problems
Competent	Embraces appropriate level of responsibility; dual processing of reasoning for most common problems; can see big picture; complex problems default to analytic reasoning; performance can be exhausting
Proficient	More fully developed non-analytic and dual process thinking; comfortable with evolving situations; able to extrapolate; situational discrimination; can live with ambiguity
Expert	Experience in subtle variations; distinguishes situations

Table 5: The Purpose and Function of Milestones

Constituency or Stakeholder	Purpose/Function
Residents and Fellows	<ul style="list-style-type: none">• Provide a descriptive roadmap for education and training• Increase transparency of performance requirements• Encourage informed self-assessment and self-directed learning• Facilitate better feedback to learner• Encourage self-directed feedback-seeking behaviors
Residency and Fellowship Programs	<ul style="list-style-type: none">• Guide curriculum and assessment tool development• Provide meaningful framework for CCC (e.g., help create shared mental model)• Provide more explicit expectations of residents and fellows• Support better systems of assessment• Enhance opportunity for early identification of under-performers• Enhance opportunity to identify advanced learners to offer them innovative educational opportunities
ACGME	<ul style="list-style-type: none">• Accreditation – enable continuous improvement of programs and lengthening of site visit cycles• Public Accountability – report at an aggregated national level on Competency outcomes• Community of practice for evaluation and research, with focus on continuous improvement
Certification Boards	<ul style="list-style-type: none">• Enable research to improve certification processes

6 core competencies

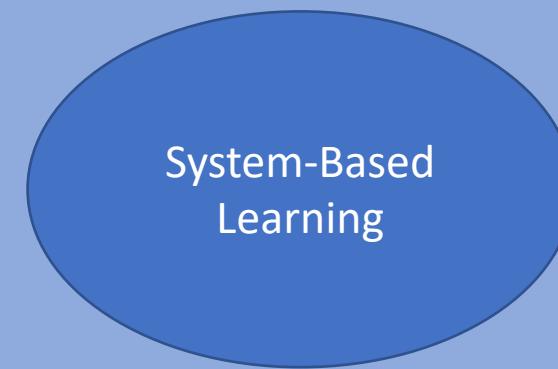
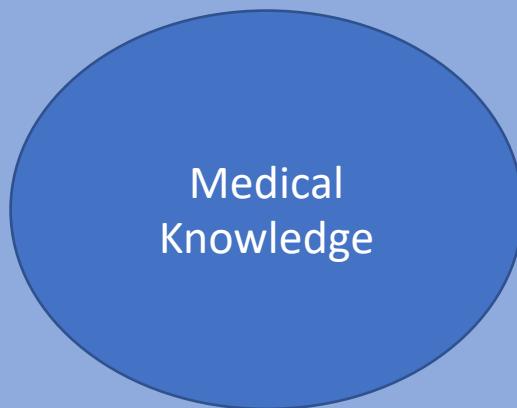
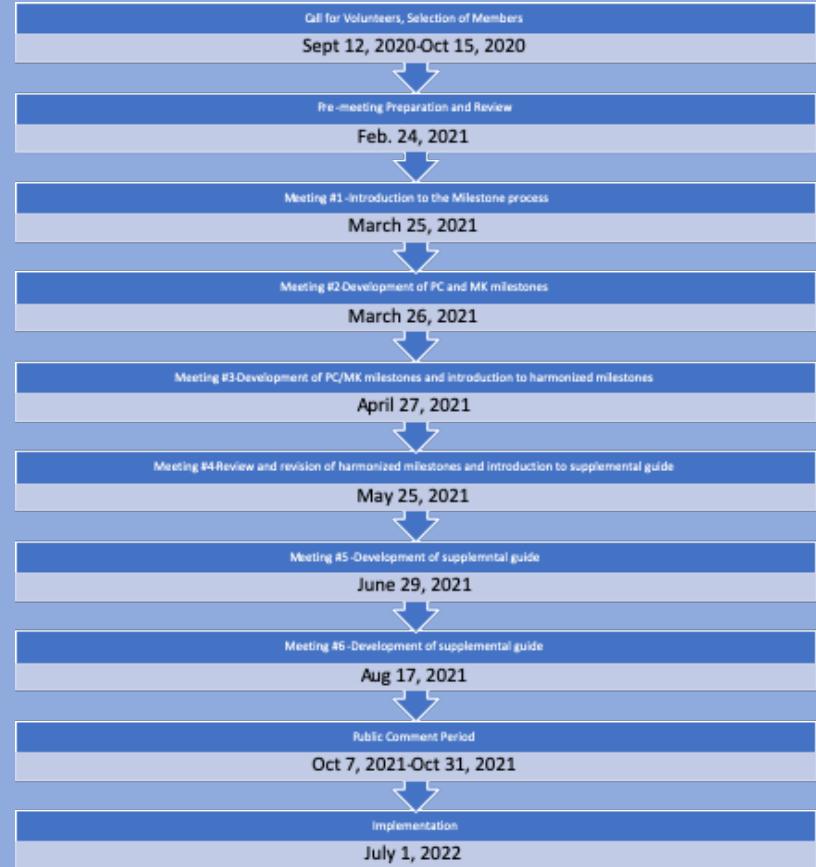
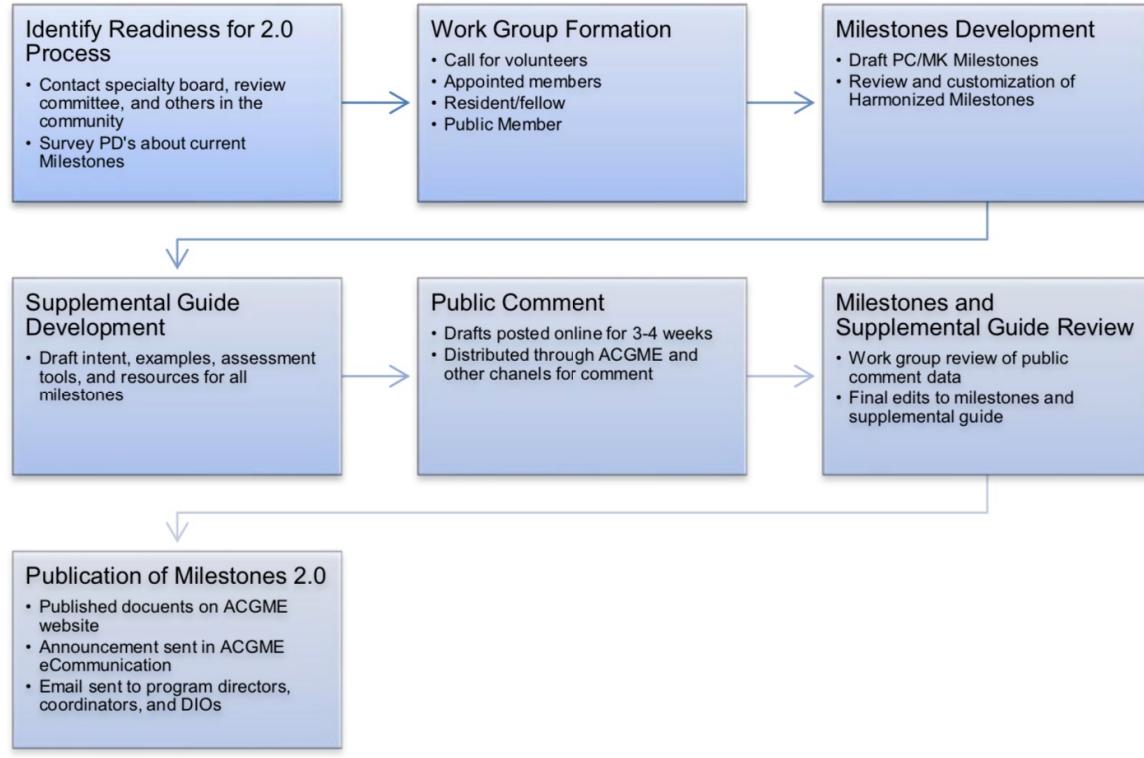


Table 6: Common Assessment Methods for the Six Core Competencies

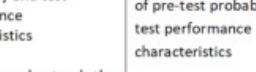
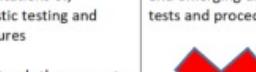
Core Competency	Common Assessment Methods
Patient Care	<ul style="list-style-type: none">• Direct observation (live or video)• Rating scales/evaluation forms• Audit of clinical practice (e.g., quality performance measures)• Simulation (including standardized patients)• Case logs/registries
Medical Knowledge	<ul style="list-style-type: none">• In-training examinations• Oral questioning methods (e.g., SNAPPS)• Direct observation (live or video)• Assessment of Reasoning Tool
Professionalism	<ul style="list-style-type: none">• Multi-source feedback• Patient surveys (can be part of multi-source feedback)• Direct observation
Interpersonal and Communication Skills	<ul style="list-style-type: none">• Multi-source feedback• Patient surveys (can be part of multi-source feedback)• Direct observation (live or video)• Simulation (including standardized patients)
Practice-based Learning and Improvement	<ul style="list-style-type: none">• Audit of clinical practice (e.g., quality performance measures)• Evidence-based medicine logs• Case logs• Rating scales/evaluation forms• Reflective practice rubrics
Systems-based practice	<ul style="list-style-type: none">• Quality improvement knowledge assessment test• Audit of clinical practice (e.g., quality performance measures)• Multi-source feedback• Rating scales/evaluation forms

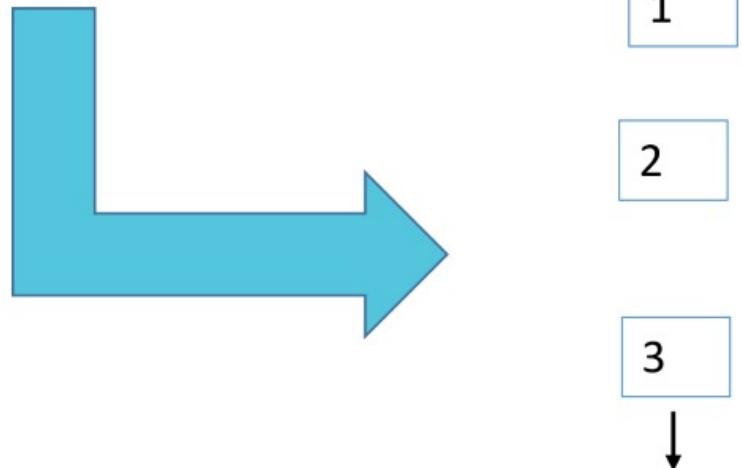
Basic process of milestone development

Figure 2. Milestones 2.0 Development Process



OLD

Medical Knowledge – Demonstrates Knowledge of Diagnostic Laboratory, Diagnostic Imaging and Neuro-diagnostic Testing and Procedures				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates a limited foundational knowledge to apply diagnostic testing and procedures to patient care for common pain conditions	Inconsistently interprets basic diagnostic tests accurately	Consistently interprets basic diagnostic tests accurately	Interprets complex diagnostic tests accurately while accounting for limitations and biases	Anticipates and accounts for subtle nuances of interpreting diagnostic tests and procedures
				
				
Comments:	Not yet achieved Level 1 <input type="checkbox"/>			



Maximum 3 lines per subcompetency; each line represents relevant skill, knowledge or behavior

NEW



Medical Knowledge 2: Diagnostic Testing and Imaging (e.g., electrodiagnostics, radiology, laboratory)				
Level 1	Level 2	Level 3	Level 4	Level 5
Knows the indications for and limitations of basic diagnostic testing	Lists indications, contraindications, risks, and benefits of diagnostic testing and imaging	Discusses the rationale and risks of invasive diagnostic testing and imaging studies	Demonstrates comprehensive knowledge of diagnostic testing and controversies	Acts as a role-model and teaches the effective use of multimodal diagnostic studies efficiently to identify and treat multiple complex pain conditions
Discusses a general diagnostic approach appropriate to clinical presentation	Considers diagnostic testing based on cost effectiveness and likelihood that results will	Prioritizes the sequence and urgency of diagnostic studies	Correlates diagnostic testing with clinical presentation	
PROGRESSION IN SUBCOMPETENCY				
Interprets common diagnostic tests, with supervision	Consistently interprets common diagnostic tests	Consistently interprets results of complex diagnostic tests accurately while accounting for sensitivity and specificity	Anticipates and accounts for subtle nuances of interpreting diagnostic tests	Pursues knowledge of new and emerging diagnostic tests
				
Comments:	Not Yet Completed Level 1 <input type="checkbox"/>			
	Not Yet Assessable <input type="checkbox"/>			

Milestone/level achieved (4 is a graduation target)

Example

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 and institutional reporting system Demonstrates knowledge of basic quality improvement methodologies and metrics	Identifies and reports patient safety events Describes local quality improvement initiatives	Participates in analysis of patient safety events (simulated or actual) Participates in local quality improvement initiatives	Offers strategies (simulated or actual) to prevent patient safety events Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Actively engages and leads teams and processes to prevent patient safety events 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 Completed 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).**

What changed?

- Less milestones
 - Convergence of milestones
 - Ex. Neuro and MSK combined
- More specific and practical (less wordy)
 - Ex. PC Demonstrates skills in performing and interpreting diagnostic and therapeutic interventions → Demonstrates skills in performing interventions
 - Ex. SBP –Identified forces that impact the cost of health care, and advocates for and practices cost effective care → Physician role in health care systems
- Supplemental guide with resources (provides examples that help guide)

Transition

Milestones 1.0	Milestones 2.0
PC1: Gathers and Synthesizes Essential and Accurate Information to Define Each Patient's Clinical Problem(s) (Neurological)	PC1: Gathers and Synthesizes Essential and Accurate Information
PC2: – Gathers and Synthesizes Essential and Accurate Information to Define Each Patient's Clinical Problem(s) (Musculoskeletal)	PC1: Gathers and Synthesizes Essential and Accurate Information
PC3: Gathers and Synthesizes Essential and Accurate Information to Define Each Patient's Clinical Problem(s) (Psychiatric)	PC2: Gathers and Synthesizes Essential and Accurate Information - Psychiatric History
PC4: In Collaboration with the Patient, Develops and Achieves a Comprehensive Pain Treatment Plan for Each Patient	PC3: Develops and Achieves a Comprehensive Pain Treatment Plan for Each Patient
PC5: Demonstrates Skill in Performing and Interpreting Diagnostic and Therapeutic Interventions	PC4: Demonstrates Skill in Performing Interventions
PC6: Requests and Provides Consultative Care	PC5: Provides Consultative Care
MK1: Possesses Clinical Knowledge	MK1: Possesses Clinical Knowledge
MK2: Demonstrates Knowledge of Diagnostic Laboratory, Diagnostic Imaging and Neuro-diagnostic Testing and Procedures	MK2: Diagnostic Testing and Imaging
MK3: Participates in Scholarship (Foundation, Investigation, Analysis, and Dissemination	PBLI3: Participates in Scholarship
SBP1: Works Effectively Within an Interprofessional Team	ICS2: Interprofessional and Team Communication
SBP2: Recognizes System-based Error and Advocates for System Improvement	SBP1: Patient Safety and Quality Improvement
SBP3: – Identifies Forces that Impact the Cost of Health Care, and Advocates for and Practices Cost-effective Care	SBP3: Physician Role in Health Care Systems
SBP4: Transitions Patients Effectively Within and Across Health Delivery System	SBP2: System Navigation for Patient-Centered Care

PBLI1: Monitors Practice with a Goal for Improvement	PBLI2: Reflective Practice and Commitment to Personal Growth
PBLI2: Learns and Improves via Performance Audit	PBLI2: Reflective Practice and Commitment to Personal Growth
PBLI3: Learns and Improves via Feedback	PBLI2: Reflective Practice and Commitment to Personal Growth
PBLI4: Learns and Improves at the Point of Care	PBLI1: Evidence-Based and Informed Practice
PROF1: Has Professional and Respectful Interactions with Patients, Caregivers, and Members of the Interprofessional Team	PROF1: Professional Behavior and Ethical Principles
PROF2: Accepts Responsibility and Follows through on Tasks	PROF2: Accountability/Conscientiousness
PROF3: Responds to each Patient's Unique Characteristics and Needs	PROF4: Patient-Centered Care/Cultural Competency
PROF4: Exhibits Integrity and Ethical Behavior in Professional Conduct	PROF1: Professional Behavior and Ethical Principles
	PROF3: Well-Being
ICS1: Communicates Effectively with Patients and Caregivers	ICS1: Patient- and Family-Centered Communication
ICS2: Communicates Effectively in Interprofessional Teams	ICS2: Interprofessional and Team Communication
ICS3: Appropriately Utilizes and Completion of Health Records	ICS3: Communication within Health Care Systems

Supplemental guide

Provides examples to better assist the PD and CCC



Supplemental guide examples

Patient Care 1: Gathers and Synthesizes Essential and Accurate Information to Define Each Patient's Clinical Problem(s) (Neurology and Musculoskeletal) Overall Intent: To demonstrate progression in the areas of history taking, physical examination, and formulation of the correct diagnosis, with emphasis placed on inclusion of broad and complete sources of information including the patient, patient-reported outcomes, biopsychosocial data, and secondary sources of data (e.g., medical record)	
Milestones	Examples
Level 1 Acquires accurate medical histories	<ul style="list-style-type: none"> Adheres to note template when acquiring medical histories
Performs accurate physical exams	<ul style="list-style-type: none"> Asks about headache healthy habits
Develops limited differential diagnoses	<ul style="list-style-type: none"> Performs respiratory, cardiovascular and abdominal exam; needs guidance to organize neurological and musculoskeletal exams
Level 2 Acquires accurate and relevant pain history	<ul style="list-style-type: none"> When patients state they stay well hydrated, asks follow-up questions to determine exact daily fluid intake, types of liquids, daily caffeine, and sugary drink intake
Performs relevant pain-based physical exam	<ul style="list-style-type: none"> Examines a patient for Beighton criteria for joint hypermobility In a patient with widespread pain, examines and looks for tender points in all four quadrants Talks patient through the exam, explaining each step
Uses and synthesizes collected data, including patient-reported outcomes, to define a patient's central clinical problem(s) and generate a prioritized differential diagnosis and problem list	<ul style="list-style-type: none"> Provides differential diagnosis for an L5 radiculopathy Uses the Functional Disability Inventory trends over time to assess efficacy of treatment plan
Level 3 Acquires accurate and relevant pain history in the context of a patient with complex medical conditions	<ul style="list-style-type: none"> Obtains an accurate medical history of acute pain symptoms superimposed on chronic pain Adjusts hip examination technique in a patient with previous total hip arthroplasty
Performs accurate and relevant physical exams that are targeted to the patient's problems	<ul style="list-style-type: none"> During abdominal exam, looks for signs consistent with visceral hyperalgesia versus neuralgia versus myofascial pain Demonstrates on self potentially painful elements of exam (e.g., pinprick for sensory testing for patients with neuropathic pain)
Efficiently uses the biopsychosocial data to inform the differential diagnosis	<ul style="list-style-type: none"> Obtains history of substance misuse in a patient with chronic pain to inform treatment options Interprets discrepancies between functional outcomes and pain scale responses Modifies treatment plan based on Functional Disability Inventory trends
Level 4 Efficiently acquires accurate and relevant pain history in the context of a patient with complex medical conditions	
<i>Performs a hypothesis-driven physical exam that identifies subtle or unusual physical exam findings in patients with uncommon conditions</i>	
<i>Efficiently uses all sources of secondary data to inform differential diagnosis</i>	
Level 5 Acts as a role model and teaches the effective use of history taking, biopsychosocial, and physical examination skills to efficiently identify and treat multiple complex pain conditions	
Assessment Models or Tools	
Curriculum Mapping	
Notes or Resources	
<ul style="list-style-type: none"> Malanga GA, Mautner K. <i>Musculoskeletal Physical Examination: An Evidence-Based Approach</i>. 2nd ed. Philadelphia, PA: Elsevier; 2016. ISBN:978-0323396233. O'Brien M. <i>Aids to the Examination of the Peripheral Nervous System</i>. 5th ed. Elsevier; 2010. ISBN:978-0702034473. Scholten P, Chekka K, Benzon HT. Physical examination of the patient with pain. In: Benzon HT, Raja SN, Fishman SM, et al. <i>Essentials of Pain Medicine</i>. 4th ed. Philadelphia, PA: Elsevier; 2017. ISBN:978-0323401968. Stanford Medicine. Stanford Medicine 25: Promoting the Culture of Bedside Medicine. https://stanfordmedicine25.stanford.edu/. 2021. Wahedi SE, Duarte RA, Yerra S, et al. Telemedicine during COVID-19 and beyond: A practical guide and best practices multidisciplinary approach for the orthopedic and neurologic pain physical examination. <i>Pain Physician</i>. 2020;23(4S):S205-S238. https://www.painphysicianjournal.com/linkout?issn=&vol=23&page=S205. 2021. 	

Residents and Fellows

Summary – Practical Tips

1. *Share and discuss the pertinent Milestones Set with residents/fellows at the beginning of the program. This helps them to gain a shared understanding of the goals of the program and the Milestones.*
2. *Share the Milestones Guidebook for Residents and Fellows at the beginning of the program.*
3. *Have residents/fellows complete individualized learning plans, using the Milestones as an important guide (ACGME 2020).*
4. *Consider having residents/fellows complete a self-assessment of the Milestones that they can compare and contrast, with a trusted advisor, to the Milestone judgments of the CCC every six months.*
5. *Enable residents/fellows to seek out assessment (i.e., self-directed assessment seeking), especially direct observation, from faculty members.*

Faculty

Summary – Practical Tips

1. *Share and discuss the pertinent Milestones Set with faculty members as a group at the beginning of the academic year (at a minimum). This helps faculty members develop and use a shared understanding of the goals of the Milestones.*
2. *Observe, observe, observe! Faculty members' observation of key competencies is essential to effective feedback, coaching, and professional development of residents/fellows.*
3. *Embed observation in "what faculty members do" – clinic precepting, procedures, bedside rounds, discharge planning, joining part of an admission, and so on.*
4. *Participate in faculty development around the Milestones, assessment and observation, and feedback as core educator skills.*
5. *Help faculty members understand where their assessments map onto the pertinent Milestones related to their role in the program.*

Program Leadership

Summary – Practical Tips

1. *Create a shared mental model of the Milestones using the Supplemental Guide and other resources.*
2. *Share and discuss the pertinent Milestone set with faculty members as a group at the beginning of the academic year (at a minimum). This helps faculty members develop and use a shared understanding of the goals of the Milestones.*
3. *Empower and facilitate direct observation of residents/fellows by faculty members. Faculty observation of key competencies is essential to effective feedback, coaching, and professional development.*
4. *Provide longitudinal faculty development around the Milestones, assessment, observation, and feedback. These are difficult skills, and single, one-time workshops are helpful, but insufficient. Assessment instruments are only as effective as the person using them.*
5. *Build “small aliquots” (e.g., 15-30 minutes) of faculty development into existing structures, such as section and department meetings, grand rounds, morning reports, noon conferences, and CCC meetings. Use the “practice makes perfect” principle through continued dialogue around the Milestones. This helps to deepen shared understanding.*
6. *Map the curriculum and assessment program against the pertinent milestones. This will help to identify curricular gaps and areas for opportunity, and ensure the most effective combination of assessments.*

Lessons Learned

Table 7: Perceived Benefits and Challenges of Milestones Implementation

Benefits	Challenges
<ul style="list-style-type: none">• Milestones and CCC process can provide better feedback for residents and fellows• Milestones system can catalyze feedback for residents and fellows (e.g., for many, this can be first time formal feedback given)• Milestones provide useful language for assessment and feedback• Milestones help faculty members develop shared mental model of competence• Milestones have helped to identify curricular gaps• Milestone mapping onto curricular activities has facilitated better assessment• Milestones are facilitating earlier identification of residents and fellows in difficulty• CCCs are a useful mechanism to facilitate working with residents and fellows in difficulty• Milestones facilitate faculty development• Milestones provide a continuous quality improvement philosophy of system• The common framework of Milestones allows for more generalizability of medical education research on assessment in GME	<ul style="list-style-type: none">• Time and resources ("relative value units [RVUs] always win")<ul style="list-style-type: none">◦ Data entry burden• Synthesizing multiple assessments into a CCC developmental judgment• Misalignment of assessment forms and scales and Milestones judgments• Lack of assessment methods and tools• Use of Milestones as rotation evaluation form (problem of "cognitive load")• Need for faculty development• Assessment burden on faculty members• Increasingly short faculty attending periods (e.g., one to two weeks) in a number of specialties<ul style="list-style-type: none">◦ Insufficient faculty member exposure to properly perform assessment• Challenging to use a five-level Milestone rubric for one-year fellowships• Educational jargon and framing of language (select Milestones Sets)

Summary

- Milestones 2.0 are designed to be more clear and useable
- More simplistic
- Provides concrete examples

Reference slides of Milestones 2.0

Milestones 2.0

Patient Care

Patient Care 1: Gathers and Synthesizes Essential and Accurate Information to Define Each Patient's Clinical Problem(s) (Neurology and Musculoskeletal)				
Level 1	Level 2	Level 3	Level 4	Level 5
Acquires accurate medical histories	Acquires accurate and relevant pain history	Acquires accurate and relevant pain history in the context of a patient with complex medical conditions	Efficiently acquires accurate and relevant pain history in the context of a patient with complex medical conditions	Acts as a role model and teaches the effective use of history taking, biopsychosocial, and physical examination skills to efficiently identify and treat multiple complex pain conditions
Performs accurate physical exams	Performs relevant pain-based physical exam	Performs accurate and relevant physical exams that are targeted to the patient's problems	Performs a hypothesis-driven physical exam that identifies subtle or unusual physical exam findings in patients with uncommon conditions	Efficiently uses all sources of secondary data to inform differential diagnosis
Develops limited differential diagnoses	Uses and synthesizes collected data, including patient-reported outcomes, to define a patient's central clinical problem(s) and generate a prioritized differential diagnosis and problem list	Efficiently uses the biopsychosocial data to inform the differential diagnosis		
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Comments:			Not Yet Completed Level 1 <input type="checkbox"/> Not Yet Assessable <input type="checkbox"/>	

Patient Care 2: Gathers and Synthesizes Essential and Accurate Information to Define Each Patient's Clinical Problem(s) (Psychiatric and Pain Comorbidities)				
Level 1	Level 2	Level 3	Level 4	Level 5
Acquires accurate psychiatric histories and conducts a mental status examination when relevant	Consistently acquires accurate psychiatric histories and conducts mental status examinations when relevant	Consistently and efficiently acquires accurate psychiatric histories and conducts mental status examinations when relevant; screens for common psychiatric comorbidities	Consistently uses screening to narrow the differential diagnosis for a patient with psychiatric comorbidities	Acts as a role model and teaches the effective use of history taking and conduct of mental status examination when relevant
Identifies common psychiatric diagnoses	Screens patients for common psychiatric comorbidities	Consistently screens for adverse childhood events, trauma, substance use disorders (SUDs), and safety	Consistently follows trends in functional assessment of a patient with common psychiatric comorbidities	Acts as a role model and teaches how to screen for adverse childhood events, trauma, SUDs, and safety
<input type="checkbox"/>				
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Patient Care

Patient Care 3: In Collaboration with the Patient, Develops and Achieves a Comprehensive Pain Treatment Plan for Each Patient; Includes Consideration of Available Pharmacologic, Behavioral, Rehabilitative, Interventional, Complementary/Alternative Approaches								
Level 1	Level 2	Level 3	Level 4	Level 5				
Develops a plan for straightforward cases, with assistance	Independently develops a plan for a straightforward case and implements it, with assistance	Develops a plan for a complex case and implements it, with minimal assistance	Independently develops, implements, and monitors a comprehensive treatment plan	Effectively manages unusual, rare, or complex disorders in all appropriate clinical settings				
Consistently recognizes situations that require consultations or help from an attending physician	Obtains appropriate consultations with specific questions for the consultant	Incorporates consultation results into a treatment plan	Applies learning from consultants to similar patient care scenarios	Acts as role model and teaches complex patient-centered care				
Manages straightforward cases, with direct supervision	Manages complex cases, with direct supervision	Manages cases with indirect supervision	Independently manages patients across applicable inpatient, outpatient, and ambulatory clinical settings	Actively advances novel pain therapies				
<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"/>				
Comments:								
Not Yet Completed Level 1 <input type="checkbox"/>								
Not Yet Assessable <input type="checkbox"/>								

Patient Care 4: Demonstrates Skill in Performing Interventions								
Level 1	Level 2	Level 3	Level 4	Level 5				
Discusses the indications, contraindications, and potential risks of a straightforward procedure and obtains and documents informed consent	Discusses the indications, contraindications, and potential risks of a complex procedure	Discusses the indications, contraindications, and potential risks of procedures for patients with common comorbidities	Discusses the indications, contraindications, and potential risks of procedures for patients with complex comorbidities	Quantifies evidence for risk-benefit analysis while obtaining informed consent for complex procedures or therapies				
Performs straightforward interventions, ensuring patient safety and comfort, with supervision	Independently performs straightforward interventions, ensuring patient safety and comfort	Performs complex interventions, ensuring patient safety and comfort, with supervision	Independently performs complex interventions, ensuring patient safety and comfort	Independently performs complex interventions for a patient with complex comorbidities, ensuring patient safety and comfort				
Recognizes and manages complications in patients with common comorbidities, with supervision	Independently recognizes and manages complications in patients with common comorbidities	Recognizes and manages complications in patients with complex comorbidities, with supervision	Independently recognizes and manages complications in patients with complex comorbidities	Independently recognizes and manages complications in patients with complex comorbidities				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
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Comments:								
Not Yet Completed Level 1 <input type="checkbox"/>								
Not Yet Assessable <input type="checkbox"/>								

Patient Care 5: Provides Consultative Care								
Level 1	Level 2	Level 3	Level 4	Level 5				
Respectfully receives and provides a timely response to consultation request	Clarifies the consultative question after gathering data about a patient with a basic pain condition, with supervision	With supervision, communicates the redefined problem with referring team when a recommendation differs from the original consultation question	Independently communicates the redefined problem with the referring team when a recommendation differs from the original consultation question	Is identified as a role model for consultative care across the spectrum of disease complexity and social determinants of health				
Recognizes the need for timely consultation based on disease acuity with supervision	Independently recognizes the need for timely consultation based on disease acuity	Prioritizes management steps	Recognizes the economic impact and role of medical team dynamics when making recommendations to the referring team	Leads the multidisciplinary team to evaluate and integrate divergent recommendations to formulate a unified plan				
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Comments:								
Not Yet Completed Level 1 <input type="checkbox"/>								
Not Yet Assessable <input type="checkbox"/>								

Medical Knowledge

Medical Knowledge 1: Possesses Clinical Knowledge								
Level 1	Level 2	Level 3	Level 4	Level 5				
Possesses basic knowledge of the anatomy, physiology, and pharmacology of pain for common pain conditions	Possesses knowledge of the anatomy, physiology, and pharmacology of pain for common pain conditions	Possesses knowledge of the anatomy, physiology, biopsychosocial factors, and pharmacology of pain for comprehensive pain care	Possesses knowledge of the anatomy, physiology, biopsychosocial factors, and pharmacology of pain for comprehensive pain care of complex cases	Possesses knowledge of the anatomy, physiology, biopsychosocial factors, and pharmacology of pain for comprehensive pain care of rare or diagnostically ambiguous pain cases				
Possesses basic knowledge of pain assessment and treatment modalities for common pain conditions	Possesses knowledge of pain assessment and treatment modalities for common pain conditions	Possesses knowledge of pain assessment and treatment modalities for comprehensive pain care	Possesses knowledge of pain assessment and treatment modalities for comprehensive pain care of complex cases	Possesses knowledge of pain assessment and treatment modalities for comprehensive pain care of rare or diagnostically ambiguous pain cases				
Possesses basic knowledge of common interventional strategies to treat pain	Possesses knowledge of common interventional strategies to treat pain	Possesses knowledge of interventional strategies to treat pain, including knowledge of non-standard cases	Possesses knowledge of less commonly used interventional strategies to treat pain	Possesses knowledge to develop and postulate new interventional targets and methods to treat pain				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Comments:								
Not Yet Completed Level 1 <input type="checkbox"/>								
Not Yet Assessable <input type="checkbox"/>								

Medical Knowledge 2: Diagnostic Testing and Imaging (e.g., electrodiagnostics, radiology, laboratory)								
Level 1	Level 2	Level 3	Level 4	Level 5				
Knows the indications for and limitations of basic diagnostic testing	Lists indications, contraindications, risks, and benefits of diagnostic testing and imaging	Discusses the rationale and risks of invasive diagnostic testing and imaging studies	Demonstrates comprehensive knowledge of diagnostic testing and controversies	Acts as a role model and teaches the effective use of multimodal diagnostic studies efficiently to identify and treat multiple complex pain conditions				
Discusses a general diagnostic approach appropriate to clinical presentation	Considers diagnostic testing based on cost effectiveness and likelihood that results will influence clinical management	Prioritizes the sequence and urgency of diagnostic studies	Correlates diagnostic testing with clinical presentation					
Interprets common diagnostic tests, with supervision	Consistently interprets common diagnostic tests	Consistently interprets results of complex diagnostic tests accurately while accounting for sensitivity and specificity	Anticipates and accounts for subtle nuances of interpreting diagnostic tests	Pursues knowledge of new and emerging diagnostic tests				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Comments:								
Not Yet Completed Level 1 <input type="checkbox"/>								
Not Yet Assessable <input type="checkbox"/>								

Systems-Based Practice: Patient Safety and Quality Improvement

Systems-Based Practice 1: Patient Safety and Quality Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of common events that impact patient safety	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 (simulated or actual)	Participates in disclosure of patient safety events to patients and their families (simulated or actual)	Discloses patient safety events to patients and their 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 departmental quality improvement initiatives	Participates in department 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 level or above
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				
Not Yet Completed 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 using the roles of the interprofessional team members	Coordinates care of patients in complex clinical situations effectively collaborating with members of the interprofessional team members	Role models effective coordination of patient-centered care among different professions and specialties	Analyzes 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 and 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 the local population	Uses local resources effectively to meet the needs of a patient population and community while minimizing health care inequities	Participates in changing and adapting practice to provide for the needs of specific populations	Leads innovations and advocacy in partnership with populations and communities experiencing health care inequities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				
Not Yet Completed Level 1				<input type="checkbox"/>

Systems-Based Practice: Patient Safety and Quality Improvement

Systems-Based Practice 3: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Describes basic health payment systems (e.g., government, private, public, uninsured care) and practice models	Describes how components of a complex health care system are interrelated, and how this impacts delivery of pain management	Practices pain management in the context of a complex health care system to deliver effective care	Navigates the various components of the complex health care system to provide efficient and effective patient care and transition of care	Advocates for or leads systems change that enhances high-value, efficient, and effective patient care
Identifies basic knowledge domains for effective transition to practice (e.g., information technology, legal, billing and coding, financial, personnel)	Delivers care with consideration of each patient's payment model (e.g., insurance type)	Engages with patients in shared decision making, informed by each patient's payment model	Advocates for patient care needs (e.g., community resources, patient assistance resources) with consideration of the limitations of each patient's payment model	Participates in health policy advocacy activities
	Demonstrates use of information technology required for medical practice (e.g., electronic health record, documentation required for billing and coding)	Describes core administrative knowledge needed for transition to practice (e.g., contract negotiations, malpractice insurance, government regulation, compliance)	Analyzes individual practice patterns and professional requirements in preparation for independent practice	Edulates others to prepare them for transition to practice
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				
Not Yet Completed Level 1 <input type="checkbox"/>				

Practice-Based Learning and Improvement: Evidence-Based and Informed Practice

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	Locates and applies the best available evidence, integrated with patients' preferences, to the care of straightforward patients	Locates and applies the best available evidence, integrated with patients' preferences, 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"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:	Not Yet Completed 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) to form 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 performance gaps	Analyzes and acknowledges the factors that contribute to performance gaps	Institutes behavioral change(s) to improve performance	Considers alternatives to improve performance	Models reflective practice
Actively seeks opportunities to improve knowledge and skills	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Integrates performance data to adapt the learning plan	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"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:	Not Yet Completed Level 1 <input type="checkbox"/>			

Practice-Based Learning and Improvement: Evidence-Based and Informed Practice

Practice-Based Learning and Improvement 3: Participates in Scholarship (foundation, investigation, analysis, and dissemination)				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies a topic for a scholarly project and a mentor Communicates and/or disseminates knowledge in the field of pain medicine during straightforward clinical care	Develops a research question for the scholarly project Communicates scientific literature as applied to more complex clinical situations	Develops a research plan and timeline for completion of the scholarly project with one's mentor Presents at journal club, quality improvement meetings, or clinical conferences, and/or effectively describes and discusses one's own scholarly work or research	Completes a scholarly project Presents scholarly project at local or regional meetings, and/or submits an abstract summarizing scholarly work to regional/state/ national meetings, and/or publishes non-peer-reviewed manuscript(s) (reviews, book chapters)	Leads or provides mentorship for a scholarly project Presents scholarly work at national and international meetings or publishes peer-reviewed manuscript(s) containing scholarly work (clinical practice, quality improvement, patient safety, education, or research) or obtains research funding
<input type="checkbox"/>				
Comments:				
Not Yet Completed Level 1 <input type="checkbox"/>				

Professionalism: Professional Behavior and Ethical Principles

Professionalism 1: Professional Behavior and Ethical Principles				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies potential triggers for professionalism lapses	Demonstrates insight into professional behavior in routine situations	Demonstrates professional behavior in complex or stressful situations	Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in oneself	Coaches others when their behavior fails to meet professional expectations
Describes when and how to report lapses in professionalism	Takes responsibility for one's own professionalism lapses	Recognizes need to seek help in managing and resolving complex interpersonal situations	Implements recommendations to resolve complex interpersonal situations	Participates in committees that works to promote ethical behavior
Demonstrates knowledge of the ethical principles underlying patient care	Analyzes straightforward situations using ethical principles	Analyzes complex situations using ethical principles	Recognizes and utilizes resources for managing and resolving ethical dilemmas	Participates in committees that works to promote ethical behavior
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <input type="checkbox"/> Not Yet Completed Level 1 <input type="checkbox"/>				

Professionalism 2: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
Responds promptly to requests or reminders to complete tasks	Performs tasks and responsibilities in a timely manner	Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations	Prioritizes tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations	
Takes responsibility for failure to complete tasks	Recognizes situations that may impact one's own ability to complete tasks and responsibilities in a timely manner	Takes responsibility for tasks not completed in a timely manner and identifies strategies to prevent recurrence	Proactively implements strategies to ensure that the needs of patients, teams, and systems are met	Designs and implements an institutional systems approach to ensure timely task completion and shared responsibility
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <input type="checkbox"/> Not Yet Completed Level 1 <input type="checkbox"/>				

Professionalism: Professional Behavior and Ethical Principles

Professionalism 3: Well-Being				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the importance of addressing personal and professional well-being	Lists available resources for addressing personal and professional well-being	With assistance, proposes a plan to promote personal and professional well-being	Independently develops a plan to promote personal and professional well-being	Serves as a well-being coach and leads a well-being initiative
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				
Not Yet Completed Level 1 <input type="checkbox"/>				

This subcompetency is not intended to evaluate a fellow's well-being. Rather, the intent is to ensure that each fellow has the fundamental knowledge of factors that affect well-being, the mechanisms by which those factors affect well-being, and available resources and tools to improve well-being.

Professionalism 4: Patient-Centered Care/Cultural Competence				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the need to respect the dignity of all patients of all backgrounds	Demonstrates specific elements of verbal and physical communication that reflect respect for patients	Recognizes the impact of a patient's background on delivery of care	Integrates a patient's background into the care one provides	Serves as a role model and as a resource for others by coaching them in behaviors and actions that optimize the comfort, dignity, and respect of patients of all backgrounds
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				
Not Yet Completed Level 1 <input type="checkbox"/>				

Interpersonal and Communication Skills

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Uses language and non-verbal behavior to demonstrate respect and establish rapport	Establishes a therapeutic relationship in straightforward encounters using active listening and clear language	Establishes a therapeutic relationship in challenging patient encounters	Easily establishes therapeutic relationships, with attention to a patient/s/patient's family's concerns and context, regardless of complexity	Mentors others in developing positive therapeutic relationships
Identifies common barriers to effective communication (e.g., language, disability)	Identifies complex barriers to effective communication (e.g., health literacy, cultural differences)	When prompted, reflects on personal biases while attempting to minimize communication barriers	Independently recognizes personal biases while proactively minimizing communication barriers	Role models self-awareness practice while teaching a contextual approach to minimize communication barriers
Accurately communicates one's own role within the health care system	Organizes and initiates communication with a patient/patient's family by clarifying expectations and verifying understanding of the clinical situation	With guidance, uses shared decision making to align a patient/s/patient's family's values, goals, and preferences with treatment options to make a personalized care plan	Independently uses shared decision making to align a patient/s/patient's family's values, goals, and preferences with treatment options to make a personalized care plan	Role models shared decision making in patient/family communication, including in situations with a high degree of uncertainty/conflict
<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"/>
Comments:				
Not Yet Completed 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 or receives consultations	Clearly, concisely, and promptly requests or responds to a consultation	Uses closed-loop communication to verify understanding	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
Uses language that values all members of the health care team	Communicates information effectively with all health care team members	Adapts communication style to fit team needs	Manages communication among team members in complex patient situations	Coaches others in managing communication among team members in complex patient situations
Respectfully receives feedback from health care team members	Solicits feedback on performance as a member of the health care team	Communicates concerns and provides feedback to peers and learners	Communicates constructive feedback to faculty members and supervisors	Facilitates regular health care team-based feedback in complex situations
<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"/>
Comments:				
Not Yet Completed Level 1 <input type="checkbox"/>				

Interpersonal and Communication Skills

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 while safeguarding patients' personal health information	Demonstrates organized and complete diagnostic and therapeutic reasoning through notes in the patient record, including appropriate modifications when using copy-and-paste function	Communicates clearly, concisely, timely, and in an organized written form, including anticipatory recommendations	Provides feedback to improve others' written communication	Models feedback to improve others' written communication
Demonstrates basic knowledge of appropriate channels of communication within the institution (e.g., pager callback, timely response to emails)	Communicates through appropriate channels as required by institutional policy (e.g., patient safety reports)	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 that serves as an example for others to follow	Guides departmental or institutional communication around policies and procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:	Not Yet Completed Level 1 <input type="checkbox"/>			