



Headache Medicine Milestones

Common milestones for Interpersonal and Communication Skills, Practice-Based Learning and Improvement, Professionalism, and Systems-Based Practice

1. Systems thinking, including cost- and risk-effective practice – Systems-based Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> Identifies and describes the roles of other team members. Identifies obvious or critical causes of error. 	<ul style="list-style-type: none"> Minimizes unnecessary diagnostic and therapeutic tests. Advocates for cost-conscious utilization of resources. Reports system errors that contribute to patient safety. 	<ul style="list-style-type: none"> Practices cost-effective patient care. Advocates for safe patient care and optimal patient care systems. Participates in quality assurance or improvement activities to improve patient safety. 	<ul style="list-style-type: none"> Leads quality assurance or improvement activities. Initiates care delivery models to mitigate barriers to cost-effective and high-quality care. 	<ul style="list-style-type: none"> Mentors others in quality improvement activities. Mentors others in developing care delivery models.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <div align="right">Not Applicable <input type="checkbox"/></div>				

2. Self-directed learning – Practice-based Learning and Improvement				
<ul style="list-style-type: none"> Identify strengths, deficiencies, and limits in one's knowledge and expertise Set learning and improvement goals Identify and perform appropriate learning activities 				
Level 1	Level 2	Level 3	Level 4	Level 5

<ul style="list-style-type: none"> Engages in self-reflection when asked to do so. Open to feedback when offered. 	<ul style="list-style-type: none"> Welcomes unsolicited feedback. Engages in self-reflection routinely. 	<ul style="list-style-type: none"> Recognizes sub-optimal performance as an opportunity for self-improvement. Receptive to feedback from multiple sources. Consistently incorporates feedback in learning plan. 	<ul style="list-style-type: none"> Demonstrates proficiency in reconciling disparate or conflicting feedback. Continuously self-reflects and incorporates self-improvement opportunities to maximize practice improvement. 	<ul style="list-style-type: none"> Mentors others on self-reflection. Mentors others on the process of self-improvement. Provides constructive feedback to others in a non-judgmental manner. 				
<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: <div style="text-align: right;"> Not Applicable <input type="checkbox"/> </div>								

3. Compassion, integrity, accountability, and respect for self and others – Professionalism				
Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> Demonstrates compassion, sensitivity and responsiveness to patients and families. Demonstrates non-discriminatory behavior in all interactions including diverse and vulnerable populations. Consistently demonstrates professional behavior, including, boundaries, dress, and timeliness in all activities. 	<ul style="list-style-type: none"> Demonstrates appropriate steps to address impairment in self. Demonstrates compassionate practice of medicine, even in context of disagreement with patient beliefs. Incorporates patients' socio-cultural needs and beliefs into patient care. Advocates for quality patient care. 	<ul style="list-style-type: none"> Advocates to reduce healthcare disparities. Demonstrates appropriate steps to address impairment in colleagues. Committed to managing conflicts of interest with for-profit industries. 	<ul style="list-style-type: none"> Mentors others in the compassionate practice of medicine, even in context of disagreement with patient beliefs. Mentors others in sensitivity and responsiveness to diverse and vulnerable populations. 	<ul style="list-style-type: none"> Engages in scholarly activity regarding professionalism in the subspecialty. Advocates for quality patient care at a regional or national level. Advocates to reduce healthcare disparities at a regional or national level.

<input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/>
Comments: <div style="text-align: right; margin-top: 40px;"> Not Applicable <input style="width: 40px; height: 20px;" type="checkbox"/> </div>

4. Knowledge about, respect for, and adherence to the ethical principles relevant to the practice of medicine, remembering in particular that responsiveness to patients that supersedes self-interest is an essential aspect of medical practice – Professionalism				
Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> • Demonstrates ability to discuss common ethical principles and identify ethical issues in practice. 	<ul style="list-style-type: none"> • Analyzes and manages ethical issues in straightforward clinical situations. 	<ul style="list-style-type: none"> • Consistently displays responsiveness to patients that supersedes self-interest. 	<ul style="list-style-type: none"> • Analyzes and manages ethical issues in complex clinical situations. 	<ul style="list-style-type: none"> • Demonstrates leadership and mentorship in applying ethical principles. • Active participant on hospital ethics committee.
<input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/>				
Comments: <div style="text-align: right; margin-top: 40px;"> Not Applicable <input style="width: 40px; height: 20px;" type="checkbox"/> </div>				

5. Relationship development, teamwork, and managing conflict – Interpersonal and Communication Skills				
Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> • Develops a positive relationship with patients in uncomplicated situations. • Actively participates in team-based care. 	<ul style="list-style-type: none"> • Manages simple patient/family related conflicts. • Engages patients in shared decision making. • Consistently demonstrates respect for all team members. 	<ul style="list-style-type: none"> • Manages conflict in complex situations. • Uses easy-to-understand language in all phases of communication (avoids “medicalese” and considers the health literacy of the recipient). 	<ul style="list-style-type: none"> • Manages conflict across specialties and systems of care. • Leads team-based patient care activities. 	<ul style="list-style-type: none"> • Engages in scholarly activity regarding teamwork and conflict management. • Is proficient in crucial conversations.

		<ul style="list-style-type: none"> Consistently demonstrates respect for healthcare providers from other departments. 		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <div style="text-align: right;">Not Applicable <input type="checkbox"/></div>				

6. Demonstrates communication skills which result in effective information exchange and collaboration with patients, their families and other healthcare professionals – Interpersonal and Communication Skills				
Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> Completes documentation in a timely fashion. Requires guidance or assistance to engage in communication with persons of different socioeconomic and cultural backgrounds. Follows through on patient communications. 	<ul style="list-style-type: none"> Educates patients about their diseases and management including risks and benefits of treatment options. Effectively communicates the results of a neurologic consultation in a timely manner. Effectively communicates with other healthcare professionals. 	<ul style="list-style-type: none"> Effectively gathers information from collateral sources when necessary. Demonstrates synthesis, formulation, and thought process in documentation. Demonstrates effective non-verbal communication skills. 	<ul style="list-style-type: none"> Mentors colleagues in timely, accurate and efficient documentation. Consistently uses teach back in patient encounters. Models cross-cultural communication and establishes therapeutic relationships with persons of diverse socioeconomic and cultural backgrounds. 	<ul style="list-style-type: none"> Consistently receives highest tenth percentile patient/family feedback on communication skills on standardized validated assessments. Develops patient education materials related to the subspecialty. Engages in scholarly activity regarding interpersonal communication in the subspecialty.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

Not Applicable ☐

7. Research and other scholarly activity

Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none">• Reads subspecialty-scientific literature critically.	<ul style="list-style-type: none">• Critically evaluates and presents results of published research in the subspecialty at journal club or in a similar setting.	<ul style="list-style-type: none">• Writes a case report, review article, or chapter suitable for publication in the subspecialty, or• Presents an abstract or lecture in field of the subspecialty at a professional meeting.	<ul style="list-style-type: none">• Designs and initiates original research in field of the subspecialty.• Develops an educational curriculum in the subspecialty.	<ul style="list-style-type: none">• Publishes original peer-reviewed research.• Serves as a research mentor.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Comments:</p> <p>Not Applicable <input type="checkbox"/></p>				

Headache Medicine Milestones for Patient Care and Medical Knowledge

8. History – Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> Obtains a headache and pain history. 	<ul style="list-style-type: none"> Obtains a complete and relevant headache and pain history. Utilizes electronic medical record to formulate history without distracting from the patient interview. 	<ul style="list-style-type: none"> Obtains a complete, relevant, and organized headache and pain history synthesizing all available data 	<ul style="list-style-type: none"> Efficiently obtains a complete, relevant, and organized headache and pain history, including all relevant previous data. 	<ul style="list-style-type: none"> Efficiently obtains a complete, relevant, and organized headache and pain history incorporating subtle verbal and nonverbal cues. Mentors learners in obtaining a Headache Medicine history.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <div style="text-align: right; margin-top: 10px;"> Not Applicable <input type="checkbox"/> </div>				

9. Head and Neck Examination – Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> Performs a complete head and neck examination. 	<ul style="list-style-type: none"> Performs a complete and accurate head and neck examination. 	<ul style="list-style-type: none"> Performs a relevant and accurate head and neck examination, incorporating some additional appropriate maneuvers. 	<ul style="list-style-type: none"> Efficiently performs a relevant and accurate head and neck examination, incorporating all additional appropriate maneuvers. 	<ul style="list-style-type: none"> Consistently demonstrates mastery in performing a complete, relevant, and organized head and neck examination. Mentors learners in the performance of a Headache Medicine physical examination.

<input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/> <input style="width: 40px; height: 20px; margin: 0 auto 0 auto;" type="checkbox"/>
Comments: <div style="text-align: right; margin-top: 40px;"> Not Applicable <input style="width: 40px; height: 20px;" type="checkbox"/> </div>

10. Headache-Specific Neurological Examination – Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> Performs complete neurological examination. 	<ul style="list-style-type: none"> Performs complete and accurate neurological examination, including funduscopic exam. 	<ul style="list-style-type: none"> Performs a relevant and accurate neurological examination, incorporating some additional appropriate maneuvers. Consistently performs an accurate funduscopic exam and visualizes optic nerve head. 	<ul style="list-style-type: none"> Efficiently performs a relevant and accurate neurological examination, accurately incorporating all additional appropriate maneuvers. 	<ul style="list-style-type: none"> Consistently demonstrates mastery in performing a complete, relevant, and organized neurological examination. Able to describe, in detail, the funduscopic exam and additional examination findings.
<input style="width: 40px; height: 20px;" type="checkbox"/>	<input style="width: 40px; height: 20px;" type="checkbox"/>	<input style="width: 40px; height: 20px;" type="checkbox"/>	<input style="width: 40px; height: 20px;" type="checkbox"/>	<input style="width: 40px; height: 20px;" type="checkbox"/>
Comments: <div style="text-align: right; margin-top: 40px;"> Not Applicable <input style="width: 40px; height: 20px;" type="checkbox"/> </div>				

11. Headache Diagnosis – Medical Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> Summarizes history and examination findings. 	<ul style="list-style-type: none"> Summarizes key elements of history and examination findings and is able to generate a 	<ul style="list-style-type: none"> Synthesizes information to focus and prioritize headache diagnostic 	<ul style="list-style-type: none"> Efficiently uses ICHD criteria, pointing out pitfalls in diagnosis. 	<ul style="list-style-type: none"> Accurately correlates the clinical presentation with detailed anatomy/physiology of

<ul style="list-style-type: none"> Generates a short list of possible headache diagnoses. 	<p>good headache differential diagnosis using the framework of the most current of the ICHD.</p> <ul style="list-style-type: none"> Explains basic neuroanatomy and physiology of headache. 	<p>possibilities using the ICHD.</p> <ul style="list-style-type: none"> Correlates the clinical presentation with basic anatomy/physiology of the disorder. Accurately identifies the peripheral sensory distribution of the head and neck. 	<ul style="list-style-type: none"> Continuously reconsiders diagnosis as clinical presentation evolves. 	<p>the disorder, including the peripheral nerve distributions of the head and neck.</p> <ul style="list-style-type: none"> Effectively educates others about ICHD rationale and framework. Explains controversies in headache diagnosis.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Comments:</p> <p style="text-align: right;">Not Applicable <input type="checkbox"/></p>				

12. Diagnostic Investigation – Medical Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> Demonstrates general knowledge of diagnostic tests in headache medicine. 	<ul style="list-style-type: none"> Discusses diagnostic approach appropriate to headache presentation. Lists risks and benefits of tests to patient. 	<ul style="list-style-type: none"> Individualizes diagnostic approach to the specific patient. Accurately interprets results of common diagnostic tests. 	<ul style="list-style-type: none"> Explains diagnostic yield and cost effectiveness of testing. Accurately interprets results of less common diagnostic testing. Recognizes indications and implications of genetic testing. Recognizes indications of advanced imaging and other diagnostic studies. 	<ul style="list-style-type: none"> Demonstrates sophisticated knowledge of diagnostic testing and controversies.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

Not Applicable ☐

13. Management/Treatment – Patient Care

Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none">• Demonstrates basic knowledge of management of patients with common headache disorders.	<ul style="list-style-type: none">• Discusses approach to initial treatment of common headache disorders, including risks and benefits of treatment.• Identifies neurologic and other emergencies in headache medicine.	<ul style="list-style-type: none">• Discusses approach to all primary headache types as well as common secondary headache disorders.• Appropriately requests consultations from non-neurologic care providers for additional evaluation and management.	<ul style="list-style-type: none">• Adapts treatment based on patient response.• Identifies and manages complications of therapy.• Independently directs management of patients with neurologic emergencies.	<ul style="list-style-type: none">• Demonstrates sophisticated knowledge of treatment subtleties and controversies.• Explains to patients and teaches learners about new and experimental treatments for headache disorders.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

Not Applicable ☐

14. Management/Treatment Advanced Procedures – Patient Care

Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none">• Demonstrates basic knowledge of blood patches, nerve blocks, trigger point injections, and botulinum toxin use for headache disorders.	<ul style="list-style-type: none">• Demonstrates advanced knowledge of, and indications for, blood patches, nerve blocks, trigger point injections, and botulinum toxin for headache disorders.	<ul style="list-style-type: none">• Demonstrates advanced knowledge and skills in performing occipital nerve blocks, trigger point injections, and botulinum toxin treatment for headache	<ul style="list-style-type: none">• Demonstrates superior knowledge and skills in performing all commonly employed nerve blocks, trigger point injections, and botulinum toxin use	<ul style="list-style-type: none">• Teaches skills in nerve blocks, trigger point injections, and botulinum toxin use for headache disorders.

		disorders under direct supervision.	for headache disorders independently.	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <div style="text-align: right;"> Not Applicable <input type="checkbox"/> </div>				

TEMPLATE:

For development of subspecialty-specific milestones in Patient Care and Medical Knowledge

Develop not less than two (one for Patient Care and one for Medical Knowledge) and not more than twelve milestones (total for both milestones) using the template below. The milestones should be neither comprehensive nor prescriptive.

TEMPLATE – Competency									
Level 1	Level 2	Level 3	Level 4	Level 5					
•	•	•	•	•					
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Comments: <div style="text-align: right;">Not Applicable <input type="text"/></div>									