

# The Clinical Neurophysiology Milestone Project

*A Joint Initiative of*

The Accreditation Council for Graduate Medical Education

and

The American Board of Psychiatry and Neurology



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The Milestones are designed only for use in evaluation of the fellow in the context of their participation in ACGME-accredited residency or fellowship programs. The Milestones provide a framework for 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.

## Clinical Neurophysiology Milestones

**Chair: Ralph Józefowicz, MD**

### **Working Group**

Imran Ali, MD  
Laura Edgar, EdD, CAE  
Laurie Gutmann, MD  
Louise King, MS  
Noor Pirzada, MD

### **Advisory Group**

Larry Faulkner, MD  
Eric Holmboe, MD  
Steven Lewis, MD\*  
Mary Lieh-Lai, MD

*\*Acknowledgement: Special thanks to Steven Lewis, MD, who was an active member of both the Working and Advisory Groups.*

## 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. They are descriptors and targets for fellow performance as a fellow moves from entry into fellowship through graduation. 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 period, review and reporting will involve selecting milestone levels that best describe a fellow's current performance and attributes. Milestones are arranged into numbered levels. Tracking 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 (see the diagram on page v).

**Level 1:** The fellow demonstrates milestones expected of an incoming fellow.

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

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

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

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

## **Additional Notes**

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

Examples are provided with some milestones. Please note that the examples are not the required element or outcome; they are provided as a way to share the intent of the element.

Some milestone descriptions include statements about performing independently. These activities must occur in conformity to the ACGME supervision guidelines, as well as institutional and program policies. For example, a fellow who performs a procedure independently must, at a minimum, be supervised through oversight.

Patient Care milestones have a “Not Applicable” option. This option should only be used for those areas in which the fellow will receive no education/experience. For example, a fellow who is completing an EEG/NCS track with no exposure to EMG should have the EMG milestone set marked at “Not Applicable.” If the fellow has some exposure, an evaluation should be indicated. It is not expected that the fellow with limited exposure will receive a Level 4.

*Answers to Frequently Asked Questions about Milestones are available on the Milestones web page:*

<http://www.acgme.org/acmeweb/Portals/0/MilestonesFAQ.pdf>.

The diagram below presents an example set of milestones for one sub-competency in the same format as the ACGME 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 those milestones.

| Nerve Conduction Studies (NCS) — Patient Care  |   |   |   |  |
|--|---|---|---|--|
| Level 1  | Level 2   | Level 3   | Level 4   | Level 5  |
| <ul style="list-style-type: none"> <li>• Applies knowledge of peripheral nerve anatomy in the performance of NCS</li> <li>• Applies principles of electrical safety to the performance of NCS</li> <li>• Formulates basic NCS plan for specific, common clinical presentations</li> <li>• Identifies technical artifacts in the interpretation of NCS</li> </ul> | <ul style="list-style-type: none"> <li>• Performs and interprets common motor and sensory NCS</li> <li>• Performs and interprets late response studies (e.g., F waves, H reflexes)</li> <li>• Recognizes common anatomical variants in the interpretation of NCS</li> <li>• Creates a report for NCS</li> </ul> | <ul style="list-style-type: none"> <li>• Performs and interprets neuromuscular junction testing (e.g., repetitive stimulation study)</li> <li>• Performs and interprets uncommon motor and sensory NCS</li> <li>• Performs and interprets cranial nerve testing (e.g., blink reflex, facial nerve)</li> </ul> | <ul style="list-style-type: none"> <li>• Accurately interprets and provides a detailed report of common and uncommon nerve conduction study findings in conjunction with the EMG</li> <li>• Recognizes uncommon anatomical variants in the interpretation of NCS</li> </ul> | <ul style="list-style-type: none"> <li>• Performs and interprets special NCS procedures (e.g., autonomic testing)</li> </ul> |
| <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>   |
| Comments: <span style="float: right;">Not Applicable <input type="checkbox"/></span>   |   |   |   |  |

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).

| History — Patient Care                              |  |   |  |  |
|---|--|---|--|--|
| Level 1   | Level 2  | Level 3   | Level 4  | Level 5  |
| Obtains a relevant and organized neurologic history | Obtains a relevant and organized history incorporating subtle verbal and non-verbal cues | Obtains a focused history sufficient to guide subsequent neurophysiologic investigation | Consistently obtains a focused history sufficient to guide subsequent neurophysiologic investigation | Serves as a role model to other learners for focused history taking regarding neurophysiologic investigation |
| <input type="checkbox"/>                            | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   |
| <b>Comments:</b>                                    |  |   |  | <b>Not Applicable</b> <input type="checkbox"/>   |

| Neurological Exam — Patient Care  |   |   |  |  |
|---|---|---|--|--|
| Level 1   | Level 2   | Level 3   | Level 4  | Level 5  |
| Performs a relevant neurological exam incorporating some additional appropriate maneuvers | Performs a relevant neurological exam accurately incorporating all additional appropriate maneuvers | Performs a focused neurological examination sufficient to guide subsequent neurophysiologic investigation | Consistently performs a focused neurological examination sufficient to guide subsequent neurophysiologic investigation | Serves as a role model to other learners for performing a focused examination regarding neurophysiologic investigation |
| <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   |
| <b>Comments:</b>  |   |   |  | <b>Not Applicable</b> <input type="checkbox"/>   |

| Electroencephalogram (EEG) — Patient Care  |  |   |  |   |
|--|--|---|--|---|
| Level 1  | Level 2  | Level 3   | Level 4  | Level 5   |
| <p>Describes normal EEG features of awake and sleep states</p> <p>Recognizes common EEG artifacts</p> <p>Recognizes common EEG patterns associated with status epilepticus</p> | <p>Interprets common EEG abnormalities and creates a report</p> <p>Recognizes normal EEG variants</p> <p>Recognizes uncommon EEG patterns associated with status epilepticus</p> <p>Recognizes the indications and contraindications for use of activation procedures (e.g., sleep deprivation, photic stimulation, hyperventilation)</p> <p>Recognizes the indications for prolonged video EEG monitoring</p> | <p>Applies basic knowledge of electrical safety, filters, artifacts, montages, electrodes, signal analysis, and other relevant technical aspects to the performance and interpretation of EEG studies</p> <p>Utilizes appropriate technical standards for determining and reporting electrocerebral inactivity in brain death</p> <p>Interprets and reports EEG findings in children and adults, including normal variants and abnormal EEG patterns</p> <p>Interprets and reports findings of prolonged video EEG monitoring</p> | <p>Applies advanced knowledge of electrical safety, filters, artifacts, montages, electrodes, signal analysis, and other relevant technical aspects to the performance and interpretation of EEG studies</p> <p>Accurately interprets and reports EEG findings in children and adults, including normal variants and abnormal EEG patterns</p> <p>Accurately interprets and reports findings of prolonged video EEG monitoring</p> | <p>Plans, supervises, and interprets pre-surgical evaluation of patients with epilepsy (e.g., intracranial EEG monitoring and cortical mapping)</p> |
| <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>  |
| <p><b>Comments:</b></p>  |  |   |  | <p><b>Not Applicable</b> <input type="checkbox"/></p>   |



| Nerve Conduction Studies (NCS) — Patient Care                           |   |   |  |  |
|---|---|---|--|--|
| Level 1   | Level 2   | Level 3   | Level 4  | Level 5  |
| Applies knowledge of peripheral nerve anatomy in the performance of NCS | Performs and interprets common motor and sensory NCS                      | Performs and interprets neuromuscular junction testing (e.g., repetitive stimulation study) | Accurately interprets and provides a detailed report of common and uncommon nerve conduction study findings in conjunction with the electromyography (EMG) | Performs and interprets special NCS procedures (e.g., autonomic testing) |
| Applies principles of electrical safety to the performance of NCS       | Performs and interprets late response studies (e.g., F waves, H reflexes) | Performs and interprets uncommon motor and sensory NCS                                      | Recognizes uncommon anatomical variants in the interpretation of NCS   |  |
| Formulates basic NCS plan for specific, common clinical presentations   | Recognizes common anatomical variants in the interpretation of NCS        | Performs and interprets cranial nerve testing (e.g., blink reflex, facial nerve)            |  |  |
| Identifies technical artifacts in the interpretation of NCS             | Creates a report for NCS  |   |  |  |
| <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   |
| <b>Comments:</b>  |   |   |  | Not Applicable <input type="checkbox"/>                                  |

| EMG — Patient Care   |  |  |  |   |
|--|--|--|--|---|
| Level 1  | Level 2  | Level 3  | Level 4  | Level 5   |
| Applies knowledge of nerve and muscle anatomy in the performance of EMG<br><br>Applies principles of electrical safety to the performance of EMG<br><br>Formulates basic EMG plan for specific, common clinical presentations<br><br>Identifies technical artifacts in the interpretation of EMG | Performs and interprets EMG of commonly sampled muscles<br><br>Recognizes common EMG findings<br><br>Creates a report for an EMG study in conjunction with NCS | Performs and interprets EMG of uncommonly sampled muscles<br><br>Performs and interprets EMG of cranial nerve innervated muscles | Recognizes uncommon EMG findings<br><br>Accurately interprets and provides a detailed report of common and uncommon EMG findings in conjunction with NCS | Performs and interprets special EMG procedures (e.g., single fiber EMG, quantitative EMG studies) |
| <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  |
| <b>Comments:</b>   |  |  |  | Not Applicable <input type="checkbox"/>   |

| Evoked Potential (EP)/ Intra-operative Monitoring (IOM) — Patient Care  |  |  |  |   |
|---|--|--|--|---|
| Level 1   | Level 2  | Level 3  | Level 4  | Level 5   |
| <p>Describes normal waveforms related to commonly performed EP studies</p> <p>Correlates normal waveforms with associated anatomic structures and physiologic phenomena</p> | <p>Correlates common abnormalities associated with EP studies in various disease states</p> <p>Orders and utilizes appropriate basic procedures in patients undergoing IOM (e.g., brainstem auditory responses, transcranial magnetic stimulation)</p> | <p>Applies basic knowledge of technical aspects of EP/IOM studies</p> <p>Utilizes appropriate IOM studies (SSEPs, MEP) associated with the surgical procedures</p> <p>Provides appropriate feedback to surgeons during routine IOM procedures with supervision</p> | <p>Applies detailed knowledge of the technical aspects of EP/IOM studies and provides guidance to technologists and others</p> <p>Accurately interprets common findings of clinical significance during IOM, and provides timely feedback to surgeons independently</p> <p>Accurately interprets common findings of clinical significance associated with EP studies</p> | <p>Interprets uncommon findings of clinical significance during IOM and with EP studies</p> |
| <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  |
| <b>Comments:</b>  |  |  |  | Not yet achieved Level 1 <input type="checkbox"/>   |

| Sleep Disorders — Patient Care  |  |  |  |   |
|---|--|--|--|---|
| Level 1   | Level 2  | Level 3  | Level 4  | Level 5   |
| Obtains a relevant and focused history and performs a focused and relevant examination in a patient with suspected sleep disorder | Orders and utilizes appropriate sleep study modalities (e.g., polysomnography, multiple sleep latency testing) | Interprets polysomnographic features of common sleep disorders         | Accurately interprets clinical and neurophysiological features of common sleep disorders | Interprets and reports polysomnography findings in children and adults          |
| Applies basic knowledge of common sleep disorders to evaluation of patients   | Applies basic knowledge of the technical aspects of polysomnography  | Applies detailed knowledge of the technical aspects of polysomnography | Manages common sleep disorders utilizing pharmacologic and non-pharmacologic modalities  | Interprets clinical and neurophysiological features of uncommon sleep disorders |
| <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  |
| <b>Comments:</b>  |  |  |  | <b>Not yet achieved Level 1</b> <input type="checkbox"/>                        |

| Localization — Medical Knowledge                                       |   |  |   |  |
|--|---|--|---|--|
| Level 1  | Level 2   | Level 3  | Level 4   | Level 5  |
| Accurately localizes lesions to specific regions of the nervous system | Demonstrates basic knowledge of neuroanatomy and neurophysiology relevant to performing and interpreting neurophysiologic studies | Demonstrates detailed knowledge of neuroanatomy and neurophysiology relevant to performing and interpreting neurophysiologic studies | Consistently demonstrates sophisticated and detailed knowledge of neuroanatomy and neurophysiology relevant to performing and interpreting neurophysiologic studies | Teaches other learners neuroanatomy relevant to performing and interpreting neurophysiologic studies |
| <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>   |
| <b>Comments:</b>   |   |  |   | Not yet achieved Level 1 <input type="checkbox"/>  |

| Planning Neurophysiologic Testing — Medical Knowledge       |  |  |   |  |
|---|--|--|---|--|
| Level 1   | Level 2  | Level 3  | Level 4   | Level 5  |
| Knows the indications for ordering neurophysiologic testing | Knows the indications for ordering specific subtypes of neurophysiologic testing (e.g., single fiber EMG, multiple sleep latency test, inpatient video EEG monitoring) | Plans basic neurophysiologic testing relevant to the underlying disorder | Plans detailed neurophysiologic testing relevant to the underlying disorder | Guides other learners in planning neurophysiologic testing relevant to the underlying disorder |
| <input type="checkbox"/>                                    | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>   |
| <b>Comments:</b>  |  |  |   | Not yet achieved Level 1 <input type="checkbox"/>  |

| Neuromuscular Disorders — Medical Knowledge                          |  |  |   |   |
|--|--|--|---|---|
| Level 1  | Level 2  | Level 3  | Level 4   | Level 5   |
| Demonstrates knowledge of common patterns of neuromuscular disorders | Demonstrates knowledge of uncommon patterns of neuromuscular disorders | Demonstrates basic knowledge of neurophysiologic findings in common and uncommon neuromuscular disorders | Demonstrates detailed knowledge of neurophysiologic findings in common and uncommon neuromuscular disorders | Engages in scholarly activity related to neurophysiologic findings in neuromuscular disorders |
| <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  |
| <b>Comments:</b>   |  |  |   | <b>Not yet achieved Level 1</b> <input type="checkbox"/>                                      |

| Epilepsy — Medical Knowledge  |   |  |   |   |
|---|---|--|---|---|
| Level 1   | Level 2   | Level 3  | Level 4   | Level 5   |
| Demonstrates knowledge of common types of seizures and epilepsy, including epilepsy syndromes | Demonstrates knowledge of uncommon types of seizures and epilepsy, including epilepsy syndromes | Demonstrates basic knowledge of clinical and EEG findings in common and uncommon seizures and epilepsy | Demonstrates detailed knowledge of clinical and EEG findings in common and uncommon seizures and epilepsy | Engages in scholarly activity related to clinical and EEG findings in seizures and epilepsy |
| <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  |
| <b>Comments:</b>  |   |  |   | <b>Not yet achieved Level 1</b> <input type="checkbox"/>                                    |

| Sleep Disorders — Medical Knowledge  |  |  |   |   |
|--|--|--|---|---|
| Level 1  | Level 2  | Level 3  | Level 4   | Level 5   |
| Describes normal neurophysiologic features of sleep stages<br><br>Recognizes clinical features of common sleep disorders | Recognizes the indications for use of different sleep study modalities (e.g., polysomnography, multiple sleep latency testing) | Describes polysomnographic features of sleep disorders<br><br>Demonstrates knowledge of the technical aspects of polysomnography | Recognizes clinical and neurophysiological features of common sleep disorders | Interprets and reports polysomnography findings in children and adults<br><br>Recognizes clinical and neurophysiological features of uncommon sleep disorders |
| <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  |
| <b>Comments:</b> <div style="text-align: right;"> <b>Not yet achieved Level 1</b> <input type="checkbox"/> </div>        |  |  |   |   |

| EP/ IOM — Medical Knowledge  |   |   |  |   |
|--|---|---|--|---|
| Level 1  | Level 2   | Level 3   | Level 4  | Level 5   |
| Describes fundamental neurophysiologic principles of sensory and motor EP studies<br><br>Describes indications and limitations of EP studies | Describes common abnormalities associated with EP studies in various disease states<br><br>Describes basic procedures utilized in IOM (e.g., brainstem auditory responses, transcranial magnetic stimulation) | Demonstrates basic knowledge of technical aspects of EP/IOM studies<br><br>Describes common indications for IOM and appropriate studies associated with the surgical procedures | Demonstrates detailed knowledge of the technical aspects of EP/IOM studies<br><br>Describes common findings of clinical significance during IOM<br><br>Describes common findings of clinical significance associated with EP studies | Describes uncommon findings of clinical significance during IOM and with EP studies |
| <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>  |
| <b>Comments:</b>   |   |   |  | <b>Not yet achieved Level 1</b> <input type="checkbox"/>                            |

| Systems thinking, including cost- and risk-effective practice — Systems-based Practice |   |   |   |   |
|--|---|---|---|---|
| Level 1  | Level 2   | Level 3   | Level 4   | Level 5   |
| Describes basic cost and risk implications of care                                     | Describes cost- and risk-benefit ratios in patient care | Makes clinical decisions that balance cost- and risk-benefit ratios | Incorporates available quality measures in patient care | Engages in scholarly activity regarding cost- and risk-effective practice in clinical neurophysiology |
| <input type="checkbox"/>   | <input type="checkbox"/>                                | <input type="checkbox"/>  | <input type="checkbox"/>                                | <input type="checkbox"/>  |
| <b>Comments:</b>   |   |   |   |   |



| Work in inter-professional teams to enhance patient safety — Systems-based Practice |   |  |   |   |
|---|---|--|---|---|
| Level 1   | Level 2                                       | Level 3  | Level 4   | Level 5   |
| Describes team members' roles in maintaining patient safety                         | Identifies and reports errors and near-misses | Describes potential sources of system failure in clinical care such as minor, major, and sentinel events | Participates in a team-based approach to medical error analysis | Engages in scholarly activity regarding error analysis and patient safety in clinical neurophysiology |
| <input type="checkbox"/>  | <input type="checkbox"/>                      | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  |
| <b>Comments:</b>  |   |  |   |   |

| Self-directed learning — Practice-based Learning and Improvement   |                          |  |   |   |
|--|--------------------------|--|---|---|
| <ul style="list-style-type: none"> <li>Identify strengths, deficiencies, and limits in one's knowledge and expertise</li> <li>Set learning and improvement goals</li> <li>Identify and perform appropriate learning activities</li> <li>Use information technology to optimize learning</li> </ul> |                          |  |   |   |
| Level 1  | Level 2                  | Level 3  | Level 4   | Level 5   |
| Acknowledges gaps in knowledge and expertise in clinical neurophysiology   | Incorporates feedback    | Develops an appropriate learning plan based upon clinical experience | Completes an appropriate learning plan based upon clinical experience | Engages in scholarly activity regarding practice-based learning and improvement in clinical neurophysiology |
| <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  |
| <b>Comments:</b>   |                          |  |   |   |

| Locate, appraise, and assimilate evidence from scientific studies related to the patient’s health problems – Practice-based Learning and Improvement |  |  |  |   |
|--|--|--|--|---|
| Level 1  | Level 2  | Level 3                                    | Level 4  | Level 5   |
| Uses information technology to search and access relevant medical information  | Uses scholarly articles and guidelines to answer patient care issues | Critically evaluates scientific literature | Incorporates appropriate evidence-based information into patient care<br><br>Understands the limits of evidence-based medicine in patient care | Engages in scholarly activity regarding evidence-based medicine in clinical neurophysiology |
| <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>                   | <input type="checkbox"/>   | <input type="checkbox"/>  |
| <b>Comments:</b>   |  |  |  |   |

| Compassion, integrity, accountability, and respect for self and others — Professionalism  |  |  |   |  |
|---|--|--|---|--|
| Level 1   | Level 2  | Level 3  | Level 4   | Level 5  |
| <p>Demonstrates compassion, sensitivity, and responsiveness to patients and families</p> <p>Demonstrates non-discriminatory behavior in all interactions, including diverse and vulnerable populations</p> <p>Consistently demonstrates professional behavior, including dress and timeliness</p> | <p>Describes effects of sleep deprivation and substance abuse on performance</p> <p>Demonstrates appropriate steps to address impairment in self</p> | <p>Demonstrates compassionate practice of medicine, even in context of disagreement with patient beliefs</p> <p>Incorporates patients' sociocultural needs and beliefs into patient care</p> <p>Demonstrates appropriate steps to address impairment in colleagues</p> | <p>Mentors others in the compassionate practice of medicine, even in context of disagreement with patient beliefs</p> <p>Mentors others in sensitivity and responsiveness to diverse and vulnerable populations</p> <p>Advocates for quality patient care</p> | <p>Engages in scholarly activity regarding professionalism in clinical neurophysiology</p> |
| <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>   |
| <b>Comments:</b>  |  |  |   |  |

| 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  |
| Describes basic ethical principles   | Determines presence of ethical issues in practice | Analyzes and manages ethical issues in straightforward clinical situations | Analyzes and manages ethical issues in complex clinical situations | Demonstrates leadership and mentorship in applying ethical principles in clinical neurophysiology settings |
| <input type="checkbox"/>   | <input type="checkbox"/>                          | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>   |
| <b>Comments:</b>   |   |  |  |  |

| Relationship development, teamwork, and managing conflict — Interpersonal and Communication Skills                         |  |   |   |  |
|--|--|---|---|--|
| Level 1  | Level 2  | Level 3   | Level 4   | Level 5  |
| Develops a positive relationship with patients in uncomplicated situations<br><br>Actively participates in team-based care | Manages simple patient-/family-related conflicts<br><br>Engages patients in shared decision making | Manages conflict in complex situations<br><br>Uses easy-to-understand language in all phases of communication | Manages conflict across specialties and systems of care<br><br>Leads team-based patient care activities | Engages in scholarly activity regarding teamwork and conflict management |
| <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>   |
| <b>Comments:</b>   |  |   |   |  |

| Information sharing, gathering, and technology — Interpersonal and Communication Skills |  |  |   |   |
|---|--|--|---|---|
| Level 1   | Level 2  | Level 3  | Level 4   | Level 5   |
| <p>Completes documentation in a timely fashion</p>                                      | <p>Educates patients about their diseases and management, including risks and benefits of treatment options</p> <p>Completes all documentation accurately, including use of electronic health records (EHR), to promote patient safety</p> | <p>Effectively communicates the results of a neurologic consultation in a timely manner</p> <p>Effectively gathers information from collateral sources when necessary</p> <p>Demonstrates synthesis, formulation, and thought process in documentation</p> | <p>Effectively and ethically uses all forms of communication</p> <p>Mentors colleagues in timely, accurate, and efficient documentation</p> | <p>Develops patient education materials regarding clinical neurophysiology</p> <p>Engages in scholarly activity regarding interpersonal communication in clinical neurophysiology</p> |
| <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>  |
| <b>Comments:</b>  |  |  |   |   |