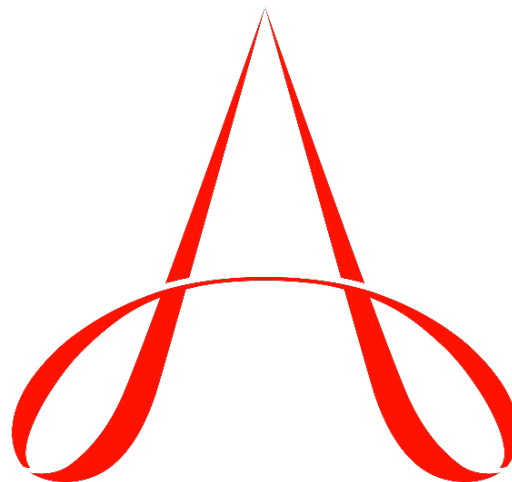




# Clinical Cardiac Electrophysiology Milestones

The Accreditation Council for Graduate Medical Education



**A C G M E**

Second Revision: December 2020

First Revision: October 2014

# Clinical Cardiac Electrophysiology 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.

## **Clinical Cardiac Electrophysiology Milestones Work Group**

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American Board of Internal Medicine  
Heart Rhythm Society  
Review Committee for Internal Medicine

## Understanding Milestone Levels and Reporting

This document presents the Milestones, which programs use in a semi-annual review of fellow performance, and then report to the ACGME. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME Competencies organized in a developmental framework. The narrative descriptions are targets for resident/fellow performance throughout their educational program.

Milestones are arranged into levels. Tracking from Level 1 to Level 5 is synonymous with moving from novice to expert fellow in the specialty or subspecialty. For each reporting period, the Clinical Competency Committee will review the completed evaluations to select the milestone levels that best describe each learner's current performance, abilities, and attributes for each subcompetency.

These levels *do not* correspond with post-graduate year of education. Depending on previous experience, a junior fellow may achieve higher levels early in his/her educational program just as a senior fellow may be at a lower level later in his/her educational program. There is no predetermined timing for a resident to attain any particular level. Fellows may also regress in achievement of their milestones. This may happen for many reasons, such as over scoring in a previous review, a disjointed experience in a particular procedure, or a significant act by the fellow.

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

## Additional Notes

Level 4 is designed as a graduation *goal* but *does not* represent a graduation *requirement*. Making decisions about readiness for graduation and unsupervised practice is the purview of the program director. Furthermore, Milestones 2.0 include revisions and changes that preclude using Milestones as a sole assessment in high-stakes decisions (i.e., determination of eligibility for certification or credentialing). Level 5 is designed to represent an expert fellow whose achievements in a subcompetency are greater than the expectation. Milestones are primarily designed for formative, developmental purposes to support continuous quality improvement for individual learners, education programs, and the specialty. The ACGME and its partners will continue to evaluate and perform research on the Milestones to assess their impact and value.

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

A Supplemental Guide is also available to provide the intent of each subcompetency, examples for each level, assessment methods or tools, and other available resources. The Supplemental Guide, like examples contained within the Milestones, is designed only to assist the program director and Clinical Competency Committee, and is not meant to demonstrate any required element or outcome.

Supplemental Guides and other resources are available on the Milestones page of each specialty section of the ACGME website. On [www.acgme.org](http://www.acgme.org), choose the applicable specialty under the “Specialties” menu, then select the “Milestones” link in the lower navigation bar.

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.

Professionalism 2: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
Takes responsibility for failure to complete tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future  Recognizes the principles of conflict of interest in relationships with industry and other entities	Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations  Recognizes personal potential conflicts with industry	Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations  Seeks assistance in managing personal relationships with industry and other entities to minimize bias and undue influence in practice	Recognizes situations that may impact others' ability to complete tasks and responsibilities in a timely manner  Identifies, discloses, and manages relationships with industry and other entities to minimize bias and undue influence in practice	Mentors others to complete tasks and responsibilities in a timely manner
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b> <span style="float: right;">Not Yet Completed Level 1 <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).

Patient Care 1: Atrial Fibrillation				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs a disease specific history and physical exam and develops a diagnostic plan for patients with suspected or known atrial fibrillation; identifies reversible causes of atrial fibrillation</p> <p>Identifies indications for stroke prevention and rate and rhythm control and modifiable risk factors for atrial fibrillation</p> <p>Obtains vascular access, positions catheters, and performs basic electrophysiology evaluation</p>	<p>Selects and interprets monitoring and additional diagnostic testing for a patient with atrial fibrillation</p> <p>Identifies patient comorbidities that impact choice of therapies</p> <p>Performs components of ablation procedure for atrial fibrillation, with assistance</p>	<p>Develops a comprehensive treatment plan for a patient with refractory atrial fibrillation and multiple comorbidities</p> <p>Individualizes pharmacologic and considers procedural therapeutic options for stroke prevention and rate and rhythm control, with assistance</p> <p>Formulates strategies and performs ablation for atrial fibrillation, with assistance; independently performs atrioventricular node ablation for rate control</p>	<p>Independently develops and adapts a treatment plan for a patient with refractory atrial fibrillation and multiple comorbidities</p> <p>Independently individualizes pharmacologic and procedural therapeutic options for stroke prevention and rate and rhythm control</p> <p>Independently implements strategies and performs ablation for atrial fibrillation, repeat ablation, and related arrhythmias</p>	<p>Leads interdisciplinary care efforts for patients with atrial fibrillation</p> <p>Independently selects and applies innovative treatment protocols for atrial fibrillation</p> <p>Independently adopts novel strategies and technology in procedural treatment of atrial fibrillation</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>Comments:</b></p> <p style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></p> <p style="text-align: right;">Not Yet Assessable <input type="checkbox"/></p>				

Patient Care 2: Supraventricular Tachycardia				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs a disease specific history and physical exam and develops a diagnostic plan for patients with suspected or known supraventricular tachycardia</p> <p>Obtains vascular access, positions catheters, and performs basic electrophysiology evaluation</p>	<p>Selects and interprets results of monitoring and additional diagnostic testing for a patient with supraventricular tachycardia</p> <p>Performs induction and diagnostic maneuvers for differentiation of supraventricular tachycardia mechanisms, with assistance</p>	<p>Develops a comprehensive treatment plan for a patient with supraventricular tachycardia including pharmacologic and/or ablative strategies</p> <p>Diagnoses arrhythmia mechanisms and performs ablation for supraventricular tachycardias, with assistance</p>	<p>Independently develops and executes a treatment plan for a patient with supraventricular tachycardia including pharmacologic and/or ablative strategies</p> <p>Independently diagnoses arrhythmia mechanisms and performs catheter ablation for supraventricular tachycardias</p>	<p>Independently evaluates and treats complex supraventricular tachycardia including complex substrates and specialized populations</p> <p>Independently adopts novel technology in ablation and performs ablation in high-risk or complex arrhythmias</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>Comments:</b></p> <p style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></p> <p style="text-align: right;">Not Yet Assessable <input type="checkbox"/></p>				



Patient Care 3: Bradycardia				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies symptoms and causes of bradycardia and treatment of reversible causes	Selects and interprets monitoring and additional diagnostic testing for a patient with bradycardia and/or chronotropic incompetence	Develops a comprehensive treatment plan including identifying pacing indications and device selection for a patient with bradycardia and multiple comorbidities	Independently develops and adapts a treatment plan including consideration of cardiovascular implantable electronic device type and location and long-term implications	Independently selects and applies innovative diagnostic and treatment protocols
Identifies the steps to implant a pacemaker and can create an incision/pocket, obtain vascular access, and close the incision	Performs elements of pacemaker implant including effective manipulation of pacing leads/and or leadless device	Implants a pacemaker, evaluates and interprets interrogation data and performs programming, with assistance	Independently implants a pacemaker in patients with complex comorbidities, interprets data and performs programming	Independently adopts novel technology in pacing
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>				Not Yet Completed Level 1 <input type="checkbox"/> Not Yet Assessable <input type="checkbox"/>

Patient Care 4: Syncope and Palpitations				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs a symptom-specific history and physical exam, and develops a differential diagnosis for patients with syncope and/or palpitations and identifies patients, with high-risk features</p> <p>Identifies steps to perform indicated diagnostic testing</p>	<p>Selects and interprets monitoring and additional diagnostic testing to establish a symptom rhythm correlation for a patient with syncope and/or palpitations</p> <p>Performs indicated testing, including diagnostic electrophysiology study and drug challenge; implants loop recorder, with assistance</p>	<p>Identifies diagnosis/etiology of syncope and initiates therapeutic plan for mechanism underlying symptom profile, with assistance</p> <p>Independently implants loop recorder</p>	<p>Independently develops and adapts a testing, treatment, and surveillance plan for patient specific diagnosis</p> <p>Independently performs appropriate testing, including electrophysiology study, or drug challenge</p>	<p>Leads an interdisciplinary team for patients with syncope and/or palpitations</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>Comments:</b></p> <p style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></p> <p style="text-align: right;">Not Yet Assessable <input type="checkbox"/></p>				

Patient Care 5: Ventricular Arrhythmias				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a disease specific history and physical exam and develops a diagnostic plan for patients with suspected or known ventricular arrhythmia	Selects and interprets monitoring and additional diagnostic testing for a patient with ventricular arrhythmia	Develops a comprehensive treatment plan including identifying indications for medical, catheter, and/or device-based therapy incorporating shared decision making	Independently develops and implements a treatment plan for a patient with recurrent ventricular arrhythmia; identifies and manages those at high risk of complication	Leads an interdisciplinary team for the management of a patient with ventricular arrhythmia
Identifies arrhythmogenic substrate (includes anatomic, functional, and genetic) and potentially reversible factors for ventricular arrhythmia; determines indications for intervention	Initiates antiarrhythmic drugs and therapies to modify underlying arrhythmogenic substrate; assesses device programming	Individualizes pharmacologic choice for acute or chronic therapy; optimizes cardiac implantable electronic device (CIED) programming with assistance	Independently individualizes pharmacologic and CIED therapies; escalates choice of therapy options as needed	Independently selects and applies innovative treatment protocols and leads the interdisciplinary care team
Obtains vascular access, positions catheters, and performs basic electrophysiology evaluation	Performs diagnostic maneuvers and components of ablation for ventricular arrhythmia, with assistance	Formulates strategies and performs ablation for ventricular arrhythmia in normal hearts, with assistance	Independently performs ablation for ventricular arrhythmia in patients with or without structural heart disease	Independently performs ablation for ventricular arrhythmia in the setting of complex and high-risk substrate
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>				
				Not Yet Completed Level 1 <input type="checkbox"/>
				Not Yet Assessable <input type="checkbox"/>

Patient Care 6: Sudden Cardiac Death				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies patient populations at risk for sudden cardiac death including familial syndromes and cardiac substrate-based conditions	Selects and interprets monitoring and additional diagnostic testing, including electrophysiologic, genetic, and imaging, for risk stratification for sudden cardiac death	Develops a comprehensive treatment plan including identifying indications for medical, catheter, and/or device-based therapy incorporating shared decision making	Independently develops a comprehensive treatment plan including identifying indications for medical, catheter, and/or device-based therapy including consideration of defibrillator type and location and long-term implications	Leads interdisciplinary efforts in the prevention and management of sudden cardiac death
Identifies the steps to implant a defibrillator and can create an incision/pocket, obtain vascular access, and close the incision	Performs elements of defibrillator placement and replacement including implantation of defibrillator system via transvenous and alternative approaches	Implants a defibrillator system, interprets device parameters, programs device, and applies indications for defibrillation testing, with assistance	Independently implants, assesses, and individualizes programming of the defibrillator system	Independently selects and applies innovative treatment protocols and technology in defibrillator therapy
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b> <div style="text-align: right;">                     Not Yet Completed Level 1 <input type="checkbox"/>                      Not Yet Assessable <input type="checkbox"/> </div>				

Patient Care 7: Heart Failure				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies the relationship between arrhythmia and heart failure	Selects and interprets monitoring and additional diagnostic testing for a patient with arrhythmia and heart failure	Develops a comprehensive treatment plan for a patient with arrhythmia and heart failure	Independently develops and adapts a treatment plan for a patient with arrhythmia and heart failure	Leads interdisciplinary efforts for patients with arrhythmia and heart failure
Identifies indications for arrhythmia control and/or need for cardiac resynchronization therapy	Identifies patient comorbidities that impact choice of therapies	Individualizes pharmacologic and ablation/device therapy for arrhythmia suppression and cardiac resynchronization therapy optimization	Independently individualizes pharmacologic and ablation/device therapy for arrhythmia suppression and cardiac resynchronization therapy optimization	Independently selects and applies innovative treatment protocols
Interprets intra-procedural anatomy for cardiac resynchronization therapy	Performs cannulation and venogram of coronary venous system or other cardiac resynchronization therapy targets	Implants cardiac resynchronization therapy device, with assistance	Independently implants cardiac resynchronization therapy device, including in patients with complex anatomy including device upgrades	Applies advanced techniques to overcome challenging anatomy
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>				
				Not Yet Completed Level 1 <input type="checkbox"/>
				Not Yet Assessable <input type="checkbox"/>

Patient Care 8: Procedural Complications				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Recognizes clinical symptoms and signs of common peri-procedural complications from ablation or CIED implantation</p> <p>Identifies symptoms of pericardial tamponade</p>	<p>Evaluates routine peri-procedural complications and conditions</p> <p>Identifies therapeutic options for hemodynamic compromise</p>	<p>Manages complex peri-procedural complications and conditions</p> <p>Manages pericardiocentesis, with assistance</p>	<p>Anticipates, mitigates, and manages peri-procedural problems in patients with complex conditions</p> <p>Independently manages pericardiocentesis and/or escalates to multidisciplinary rescue interventions, as indicated</p>	<p>Develops a clinical pathway for prevention and management of peri-procedural problems</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>Comments:</b></p> <p style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></p> <p style="text-align: right;">Not Yet Assessable <input type="checkbox"/></p>				

Patient Care 9: Ambulatory Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies requirements for follow-up of patients with arrhythmic conditions, including those with modifiable risk factors, antiarrhythmic drug therapy, anticoagulation, and ambulatory monitoring	Manages routine ambulatory care and incorporates multidisciplinary care, with oversight	Manages complex ambulatory care and incorporates multidisciplinary care, with oversight	Independently manages ambulatory care of patients with arrhythmia disorders, including those with multiple comorbidities	Advances quality of clinical practice by developing protocols for improved management of patients with arrhythmias and other comorbidities
Describes important elements of ambulatory CIED device management	Manages routine CIED follow-up, including remote monitoring and surveillance for arrhythmias, identification of CIED complications, and optimization of cardiac resynchronization therapy, with oversight	Manages complex CIED follow-up, including remote monitoring and surveillance for arrhythmias, identification and management of CIED complications, and optimization of cardiac resynchronization therapy, with oversight	Independently manages complex CIED follow-up, including remote monitoring, optimizing cardiac resynchronization therapy, developing treatment plan for arrhythmias, and identification and mitigation for long-term CIED complications	Leads interdisciplinary efforts in management of outpatient care of patients with a CIED
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>				
				Not Yet Completed Level 1 <input type="checkbox"/>
				Not Yet Assessable <input type="checkbox"/>

Medical Knowledge 1: Arrhythmia Diagnosis and Interpretation				
Level 1	Level 2	Level 3	Level 4	Level 5
Correlates normal cardiac electrophysiology and anatomy with arrhythmia mechanisms	Correlates both normal and pathological cardiac electrophysiology and anatomy with arrhythmia mechanisms	Identifies electrophysiologic mechanisms and integrates with diagnostic testing	Applies new scientific advancements to knowledge base	Advances knowledge of new and emerging diagnostic tests and interpretation
Interprets results of common diagnostic testing relevant to CIED/arrhythmia management	Interprets complex diagnostic information relevant to CIED/arrhythmia management	Synthesizes complex diagnostic information accurately to reach high-probability diagnoses	Anticipates and accounts for errors and biases when interpreting diagnostic tests	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>				
				Not Yet Completed Level 1 <input type="checkbox"/>
				Not Yet Assessable <input type="checkbox"/>



Medical Knowledge 2: Critical Thinking and Decision Making				
Level 1	Level 2	Level 3	Level 4	Level 5
Incorporates key elements of patient history and clinical data into an accurate patient assessment	Develops an analytic, prioritized differential diagnosis for common presentations	Develops a prioritized differential diagnosis for complex presentations	Synthesizes information to reach high probability diagnoses with re-appraisal as needed	Mentors peers and leads clinical team in critical thinking and decision making
Lists therapeutic options for common clinical presentations	Explains risks, benefits, and alternatives of standard therapeutic options	Justifies optimal therapeutic option based on individual patient presentation and patient preferences	Develops therapeutic plan for patients with complex presentations and uncommon disorders	Mentors peers and leads clinical team in optimal therapeutic approaches to patient care
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>				
Not Yet Completed Level 1 <input type="checkbox"/> Not Yet Assessable <input type="checkbox"/>				

Medical Knowledge 3: Electrophysiology (Cellular Physiology, Pharmacology, Mechanisms)				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies key clinical electrophysiology and pathophysiology concepts (e.g., refractory periods, autonomic control, repolarization, arrhythmia mechanism, remodeling)	Explains key clinical electrophysiology and pathophysiology concepts	Applies key clinical electrophysiology and pathophysiology concepts	Integrates key clinical electrophysiology and pathophysiology concepts into care	Develops or researches new electrophysiology concepts
Identifies key basic science concepts (e.g., cellular electrophysiology, ion channels, anatomy, pharmacology, genetics)	Explains key basic science concepts applicable to electrophysiology	Applies key basic science concepts applicable to electrophysiology	Integrates key basic science concepts applicable to electrophysiology into care	Develops or researches key basic science concepts applicable to electrophysiology
Identifies key biophysical principles in ablation and devices (e.g., ablation, pacing, defibrillation, electromagnetic interference)	Explains key biophysical principles in ablation and devices or other arrhythmia therapies	Applies key biophysical principles in ablation and devices or other arrhythmia therapies	Integrates key biophysical principles in ablation and devices or other arrhythmia therapies into care	Develops or researches key biophysical principles in ablation and devices or other arrhythmia therapies
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>				
				Not Yet Completed Level 1 <input type="checkbox"/>
				Not Yet Assessable <input type="checkbox"/>

Medical Knowledge 4: Scholarly Activity				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies knowledge gaps open to scholarly investigation	Designs a scholarly activity, with assistance	Implements scholarly work, including critical appraisal and analysis of project data	Produces scholarly work for dissemination as an abstract or presentation	Dissemination or implementation of independent scholarly work that has generated new medical knowledge, educational programs, or process improvement
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>			Not Yet Completed Level 1	<input type="checkbox"/>
			Not Yet Assessable	<input type="checkbox"/>

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

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 teams	Coordinates care of patients in complex clinical situations, effectively using the roles of their interprofessional teams	Role models effective coordination of patient-centered care among different disciplines and specialties	Analyzes the process of care coordination and leads in the design and implementation of improvements
Identifies key elements for effective transitions of care	Performs effective transitions of care in routine clinical situations	Performs effective transitions of care in complex clinical situations	Role models and advocates for effective transitions of care within and across health care delivery systems	Improves quality of transitions of care within and across health care delivery systems to optimize patient outcomes
	Demonstrates general knowledge of financial, cultural, and social barriers to adherence of care	Identifies financial, cultural, and social barriers to adherence of care to specific populations	Adapts practice to address the financial, cultural, and social barriers to adherence of care	Leads innovations and advocates for populations with health care inequities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b> <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

Systems-Based Practice 3: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Identifies key components of the health care system (e.g., hospital, skilled nursing facility, finance, personnel, technology)</p> <p>Describes basic health payment models, (e.g., government, private, public, uninsured care) and practice models</p>	<p>Describes how components of a complex health care system are interrelated, and how this impacts patient care</p> <p>Delivers care with consideration of various health care payment models</p> <p>Demonstrates essential skills for documentation required for independent practice (e.g., electronic health record, documentation required for billing and coding)</p>	<p>Discusses how individual practice affects the broader system (e.g., length of stay, readmission rates, clinical efficiency)</p> <p>Engages with patients in shared decision making, informed by various health care payment models</p> <p>Seeks knowledge in non-clinical topics needed for independent practice (e.g., malpractice insurance, government regulation, compliance)</p>	<p>Manages various components of the complex health care system to provide efficient and effective patient care and transition of care</p> <p>Advocates for patient care needs (e.g., community resources, patient assistance resources) with consideration of the benefits and limitations of various health care payment models</p> <p>Applies knowledge in non-clinical topics needed for independent practice</p>	<p>Advocates for or leads systems change that enhances high-value, efficient, and effective patient care and transition of care</p> <p>Participates in health policy advocacy activities</p> <p>Educates others in non-clinical topics to prepare them for independent practice</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>Comments:</b></p> <p style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></p>				

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 to manage a patient with an arrhythmia disorder	Articulates clinical questions and elicits patient preferences to guide evidence-based care	Locates and applies the best available evidence to the care of patients with an arrhythmia while integrating patient preference	Critically appraises and applies available, potentially conflicting evidence to guide care of an individual patient	Develops initiatives to educate 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"/>
<b>Comments:</b> <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

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 feedback and performance data in order to form goals	Occasionally seeks feedback and performance data with adaptability and humility	Systematically seeks feedback and performance data with adaptability and humility	Mentors others to seek feedback and performance data
Acknowledges limits and gaps between expectations and performance; demonstrates self-awareness	Analyzes the factors which contribute to limits and gaps; demonstrates appropriate help-seeking behaviors	Creates and implements a learning plan	Uses performance data to assess learning plan and improves it when necessary	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"/>
<b>Comments:</b> <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				



Professionalism 1: Professional Behavior and Ethical Principles				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies and describes 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 self and others	Role models exceptional professional behavior
Demonstrates knowledge of ethical principles (e.g., informed consent, advance directives, confidentiality, patient autonomy)	Applies knowledge of ethical principles to routine situations	Recognizes need to seek help in managing and resolving complex ethical situations	Uses appropriate resources for managing and resolving ethical dilemmas (e.g., ethics consultations, risk management)	Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b> <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

Professionalism 2: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Takes responsibility for failure to complete tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future</p> <p>Recognizes the principles of conflict of interest in relationships with industry and other entities</p>	<p>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p> <p>Recognizes personal potential conflicts with industry</p>	<p>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations</p> <p>Seeks assistance in managing personal relationships with industry and other entities to minimize bias and undue influence in practice</p>	<p>Recognizes situations that may impact others' ability to complete tasks and responsibilities in a timely manner</p> <p>Identifies, discloses, and manages relationships with industry and other entities to minimize bias and undue influence in practice</p>	<p>Mentors others to complete tasks and responsibilities in a timely manner</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>Comments:</b></p> <p style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></p>				

Professionalism 3: Self-Awareness and Well-Being				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the importance of personal and professional well-being	Independently recognizes status of personal and professional well-being	With assistance, proposes a plan to optimize personal and professional well-being	Independently develops a plan to optimize personal and professional well-being	Participates in a system change to improve well-being in self and others
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b> <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates respect and establishes rapport in patient encounters	Establishes a therapeutic relationship in routine patient encounters	Establishes a therapeutic relationship in challenging patient encounters, with assistance	Independently establishes a therapeutic relationship in challenging patient encounters	Mentors others in situational awareness and critical self-reflection to consistently develop positive therapeutic relationships
Knows barriers to effective communication (e.g., language, disability, health literacy, cultural, personal bias)	Identifies barriers to effective communication in patient encounters	Attempts to minimize communication barriers, including reflection on any personal biases	Proactively minimizes communication barriers and independently manages personal biases	Role models self-awareness to minimize communication barriers
Identifies the need to adjust communication strategies to achieve shared decision making	Organizes and initiates communication with patient/family to facilitate shared decision making	Uses shared decision making to implement a personalized care plan, with assistance	Independently, uses shared decision making to implement a personalized care plan	Role models shared decision making
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b> <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

Interpersonal and Communication Skills 2: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully receives a consultation request	Respectfully and thoroughly completes consultations with effective documentation and communication in common cases, with assistance	Completes consultations with effective documentation and communication in common cases, with assistance	Completes consultations with effective documentation and communication in complex cases	Uses consultations as educational opportunities to improve clinical care
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	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
	Participates in team-based discussions to optimize team performance	Initiates team-based discussions to optimize team performance	Facilitates team-based discussions to optimize team performance	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"/>
<b>Comments:</b>				
Not Yet Completed Level 1 <input type="checkbox"/>				

Interpersonal and Communication Skills 3: Communication within Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Accurately records information in the patient record and safeguards patient personal health information	Demonstrates organized diagnostic and therapeutic reasoning through notes in the patient record  Identifies appropriate communication channels (e.g., cell phone/ pager usage, medical record, email) as required by institutional policy	Concisely reports diagnostic and therapeutic reasoning in the patient record  Respectfully communicates concerns about the system	Independently communicates timely information in a written format and verbally when appropriate  Uses appropriate channels to offer clear and constructive suggestions to improve the system	Models written communication to improve others' performance  Guides departmental or institutional communication around policies and procedures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b> <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				