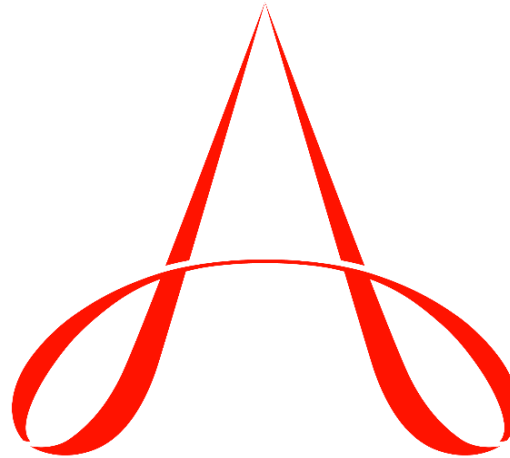




# Urology Milestones

The Accreditation Council for Graduate Medical Education



ACGME

Second Revision: April 2020

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# Urology Milestones

The Milestones are designed only for use in evaluation of residents in the context of their participation in ACGME-accredited residency programs. The Milestones provide a framework for the assessment of the development of the resident 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.

## **Urology Milestones**

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American Board of Urology  
Review Committee for Urology  
Society for Academic Urologists

## Understanding Milestone Levels and Reporting

This document presents the Milestones, which programs use in a semi-annual review of resident 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 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 resident 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 resident may achieve higher levels early in his/her educational program just as a senior resident 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. Residents 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 resident.

Selection of a level implies the resident 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 resident 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.

Examples are provided for some milestones within this document. Please note: 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 ACGME supervision guidelines as described in the Program Requirements, as well as to institutional and program policies. For example, a resident 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 resident's performance on the milestones for each sub-competency will be indicated by selecting the level of milestones that best describes that resident's performance in relation to those milestones.

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 local quality improvement initiatives (e.g., community vaccination rate, infection rate, smoking cessation)	Participates in local quality improvement initiatives	Demonstrates skills required to identify, develop, implement, and analyze a quality improvement project	Designs,, 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="float: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

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: Patient Evaluation				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains history and physical exam to form a patient assessment	Evaluates patients; orders and interprets diagnostic testing	Develops a plan to manage patients with straightforward conditions	Develops a plan to manage patients with complex conditions and adapts plan for changing clinical situation	Develops a clinical pathway for the management of patients with complex conditions or identifies clinical trials for patients
<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 2: Peri-Procedural Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies alterations in normal physiology	Accurately and reliably gathers and reports clinical information pertaining to common peri-procedural alterations and complications	Independently identifies and prioritizes tasks necessary for management of common peri-procedural alterations and complications	Independently identifies and prioritizes tasks necessary for management of complex and/or less common peri-procedural alterations and complications	Proactively recognizes potential risk factors for complications, and implements measures to prevent or mitigate them, applying effective team management skills to manage multiple scenarios simultaneously
<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 3: Endoscopic Procedures				
Level 1	Level 2	Level 3	Level 4	Level 5
Prepares patient and equipment for endoscopic procedures (e.g., lithotomy positioning, assemble endoscope)	Independently performs bedside endoscopic procedures (e.g., cystoscopy with catheter placement over a wire)	Independently performs simple endoscopic procedures (e.g., simple transurethral resection of a bladder tumor (TURBT), simple ureteroscopy (URS), small transurethral resection of the prostate (TURP))	Independently performs complex endoscopic procedures (e.g., percutaneous nephrolithotomy (PCNL), complex URS, complex TURBT, large TURP)	Independently performs complex endoscopic procedures in altered anatomy (e.g., horseshoe kidney, urinary diversion, spinal malformation)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b> <div style="float: right;">           Not Yet Completed Level 1 <input type="checkbox"/>            Not Yet Assessable <input type="checkbox"/> </div>				

Patient Care 4: Open Procedures				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic skills (e.g., positioning, knot tying, suturing)	Independently performs bedside open procedures (e.g., incision and drainage, priapism aspiration and irrigation, circumcision, removal of genital wart)	Independently performs simple open procedures (e.g., scrotal procedures, vasectomy, cystorrhaphy, mid-urethral sling)	Independently performs complex open procedures (e.g., partial nephrectomy, prosthetic replacement, cystectomy and ileal conduit, ureteral reconstruction)	Independently performs uncommon complex open procedures (e.g., retroperitoneal lymph node dissection (RPLND), nephrectomy with caval thrombus, reconstructive genital surgery)
<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 5: Minimally Invasive Procedures (Laparoscopic and Robotic)				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic skills (e.g., positioning, draping, docking and undocking)	Assists during minimally invasive procedures (e.g., port placement, bedside assistant)	Independently performs simple portions of the procedure (e.g., bladder takedown, colon reflection, pelvic lymph node dissection)	Independently performs critical (complex) portions of the procedure (e.g., hilar dissection, renorrhaphy, anastomosis)	Independently performs advanced minimally invasive procedures (e.g., cystectomy, complex partial nephrectomy, complex reconstruction)
<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 6: Office-Based Procedures				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic skills in office procedures (e.g., Foley catheter placement, drain removal)	Performs simple office-based procedures, with direct supervision (e.g., prostate biopsy, urodynamics interpretation, vasectomy, urethral stricture dilation)	Independently performs simple office-based procedures, including percutaneous suprapubic tube placement	Independently performs complex office-based procedures (e.g., renal ultrasound, bladder biopsy, Botox injection)	Independently performs advanced office-based procedures (e.g., stage 1 neuromodulation, minimally invasive benign prostatic hyperplasia (BPH) procedure, penile ultrasound)
<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>				

Medical Knowledge 1: Clinical Medical Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of anatomy and physiology as it pertains to surgical conditions	Demonstrates knowledge of pathophysiology and treatments of simple urologic conditions	Demonstrates knowledge of pathophysiology and treatments of complex urologic conditions considering patient factors (e.g., comorbidity, social context)	Demonstrates comprehensive knowledge, including guidelines, of the full spectrum of urologic diseases, treatments, and populations	Creates a curriculum for clinical medical knowledge
<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>				

Medical Knowledge 2: Clinical Reasoning				
Level 1	Level 2	Level 3	Level 4	Level 5
Integrates patient-specific information to generate an appropriate working diagnosis	Provides a prioritized differential diagnosis using supporting rationale	Independently synthesizes clinical information to inform diagnosis and therapy in simple cases and adapts based on a patient's clinical course and additional data	Independently synthesizes clinical information to inform diagnosis and therapy in complex cases, recognizing sources of error	Teaches others to recognize sources of diagnostic error
<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>				

Systems-Based Practice 1: Patient Safety and Quality Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of common patient safety events and institutional reporting system	Identifies and reports patient safety events	Participates in analysis of patient safety events (simulated or actual)	Offers strategies (simulated or actual) to prevent patient safety events	Actively engages and leads teams and processes to prevent patient safety events
Demonstrates knowledge of basic quality improvement methodologies and metrics	Describes local quality improvement initiatives (e.g., multimodal analgesics, antibiotic stewardship, smoking cessation, hospital acquired infection)	Participates in local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses quality improvement initiatives at the institutional 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 and community health needs	Coordinates multidisciplinary care of patients in routine clinical situations, considering inequities and disparities for their local population (e.g., cultural barriers)	Coordinates multidisciplinary care of patients in complex clinical situation and incorporates local resources into the plan (e.g., home parenteral nutrition, postoperative intravenous feeding, intensive care unit)	Leads care coordination of patients with barriers or other disparities in care (e.g., trauma patient with no access to care)	Designs innovative care coordination strategies for populations with health care inequities
Performs safe and effective transitions of care/hand-offs in routine clinical situations	Performs safe and effective transitions of care/hand-offs in complex clinical situations	Supervises safe and effective transitions of care/hand-offs of junior residents	Resolves conflicts in transitions of care between teams	Leads in the design and implementation of improvements to transitions of care
<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
Identifies basic needs for effective transition to practice (e.g., information technology, legal, billing and coding, financial, personnel)	Demonstrates use of information technology required for medical practice (e.g., electronic health record, documentation required for billing and coding)	Describes core administrative knowledge needed for transition to independent practice (e.g., contract negotiations, malpractice insurance, government regulation, compliance)	Analyzes individual practice patterns and professional requirements in preparation for practice	Educates others to prepare them for transition to practice
Describes basic health payment systems (e.g., government, private, public, uninsured care) and practice models	Describes how components of a complex health care system are interrelated and how this impacts patient care	Discusses how individual practice affects the broader system performance (e.g., length of stay, readmission rates, clinical efficiency)	Manages various components of the complex health care system to provide efficient and effective patient care (e.g., patient payment models, insurance)	Advocates for or leads systems change that enhances high-value, efficient, and effective patient care
<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 1: Evidence-Based and Informed Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates how to access available evidence	Articulates clinical questions to guide evidence-based care	Integrates best available evidence with patient preferences to guide care	Tailors patient care in the setting of conflicting or absent evidence	Coaches others to critically appraise and apply evidence for patients with complex conditions
<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
Identifies gap(s) between expectations and actual performance	Analyzes and reflects on the factors which contribute to gap(s) between expectations and actual performance	Institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance	Continuously reflects on remaining gaps and institutes behavioral adjustments to narrow them	Coaches others on reflective practice
Establishes goals for personal and professional development	Identifies opportunities for performance improvement; designs a learning plan	Integrates practice data and feedback with humility to implement a learning plan	Uses performance data to measure the effectiveness of the learning plan and adapts when necessary	Coaches others in the design and implementation of learning plans
<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
<p>Demonstrates professional behavior in routine situations and knows how to report professionalism lapses</p> <p>Demonstrates knowledge of ethical principles underlying shared decision making and patient confidentiality</p>	<p>Demonstrates insight into personal triggers for professionalism lapses, develops mitigation strategies</p> <p>Analyzes straightforward situations using ethical principles</p>	<p>Demonstrates professional behavior in complex or stressful situations</p> <p>Seeks help in managing and resolving complex ethical situations</p>	<p>Recognizes and intervenes in situations to prevent professionalism lapses in self and others</p> <p>Recognizes and uses appropriate resources for managing and resolving ethical dilemmas (e.g., ethics consultations, literature review)</p>	<p>Coaches others when their behavior fails to meet professional expectations</p> <p>Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution</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 2: Administrative Tasks				
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	Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations	Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations	Recognizes situations that may impact others' ability to complete tasks and responsibilities in a timely manner and proposes solutions	Develops systems to enhance other's ability to efficiently complete administrative tasks and responsibilities
<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 3: Well-Being and Awareness				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes status of personal and professional well-being, with assistance	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	Coaches others when emotional responses do not meet professional expectations
<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>				

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

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Demonstrates respect and establishes rapport with patient and family (e.g., situational awareness of language, disability, health literacy level, cultural)</p> <p>Communicates with patients and their families in an understandable and respectful manner</p>	<p>Establishes a therapeutic relationship in straightforward encounters</p> <p>Identifies barriers to effective communication (e.g., health literacy, cultural)</p>	<p>Establishes a therapeutic relationship in challenging encounters (e.g., shared decision making)</p> <p>When prompted, reflects on personal biases while attempting to minimize communication barriers</p>	<p>Facilitates difficult discussions specific to patient and family conferences, (e.g., end-of-life, explaining complications, therapeutic uncertainty)</p> <p>Independently recognizes personal biases while attempting to proactively minimize communication barriers</p>	<p>Mentors others in situational awareness and critical self-reflection</p> <p>Coaches others in the facilitation of crucial conversations</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>				

Interpersonal and Communication Skills 2: Patient Counseling and Shared Decision Making				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic understanding of informed consent process	Answers questions about treatment plan and seeks guidance when appropriate	Counsels patient through decision-making process, including questions, for simple clinical problems	Counsels patient through decision-making process, including questions, for complex clinical problems	Counsels patient through decision-making process, including questions, for uncommon clinical problems
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b> 				



Interpersonal and Communication Skills 3: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully interacts and actively communicates with all members of health care team (e.g., politely accepts and requests consults)	Communicates in an approachable and productive manner to facilitate team work (e.g., active listening updates in timely fashion duality)	Actively recognizes and mitigates communication barriers and biases with members of the health care team	Leads and coordinates recommendations from multidisciplinary members of the health care team (e.g., facilitates conflict resolution)	Exemplar of flexible communication strategies
<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 4: Communication within Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Accurately records information in the patient record in a timely manner while safeguarding patient personal health information	Documents diagnostic and therapeutic reasoning in the patient record with appropriate use of documentation shortcuts	Concisely reports diagnostic and therapeutic reasoning	Efficiently communicates in an organized fashion that includes contingency plans	Facilitates improved written and verbal communication of 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>				