

Urology Milestones for the Middle East



May 2017

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The Milestones are designed only for use in evaluation of residents in the context of their participation in ACGME-I-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 competency in a specialty. 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.

Milestones Reporting

This document presents milestones designed for programs to use in semi-annual review of resident performance and reporting to the ACGME-I. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME-I competencies organized in a developmental framework from less to more advanced. They are descriptors and targets for resident performance as a learner moves from entry into their program through graduation.

For each period, review and reporting will involve selecting milestone levels that best describe each resident's current performance and attributes. Milestones are arranged in numbered levels. Tracking from "Critical Deficiencies"/"Level 1" to "Aspirational"/"Level 5" is synonymous with moving from novice to expert in the specialty. These levels do not correspond with time in the educational program. Dependent upon previous education and experience, residents may enter a program at varying points in the Milestones.

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

Level 1: The resident demonstrates milestones expected of an incoming resident.

Level 2: The resident is advancing and demonstrates additional milestones.

Level 3: The resident continues to advance and demonstrate additional milestones; the resident demonstrates the majority of milestones targeted for residency in this sub-competency.

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

Level 5: The resident has advanced beyond performance targets set for residency, 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 residents will reach this level.

Additional Notes

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

Answers to Frequently Asked Questions about Milestones are posted on the ACGME-I website.

The diagram below presents an example set of milestones for one sub-competency in the same format as the ACGME-I Report Worksheet. For each reporting period, a learner’s performance on the milestones for each sub-competency will be indicated by selecting the level of milestones that best describes that learner’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 (actual or simulated)	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 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: Not yet achieved Level 1 <input type="checkbox"/>				

Selecting a response box in the middle of a level implies that milestones in that level and in lower levels have been substantially demonstrated.

Selecting a response box on the line in between levels indicates that milestones in lower levels have been substantially demonstrated as well as **some** milestones in the higher level(s).

Patient Care 1: Gathers Information by Interviewing the Patient or Surrogate and Performing a Physical Exam				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Acquires general history from patient and able to elicit genitourinary complaints</p> <p>Performs an accurate general physical examination</p> <p><i>Examples:</i> Obtains basic elements of a complaint, including onset, duration, quality of pain, associated symptoms, exacerbating factors Performs a focused general physical exam</p>	<p>Acquires accurate and relevant history from the patient in an efficiently customized, prioritized, and hypothesis-driven fashion for genitourinary complaints</p> <p>Performs an accurate physical examination that is appropriately targeted to a patient's genitourinary complaints and medical condition</p> <p><i>Examples:</i> Obtains routine history for patient newly diagnosed with T1c prostate cancer Performs scrotal/genital examination in adults and identifies common pathology, such as hydrocele and testis tumors Identifies physical findings warranting immediate surgical intervention (e.g., suspected torsion)</p>	<p>Obtains relevant historical subtleties that inform and prioritize both differential diagnoses and diagnostic plans, including sensitive, complicated, and detailed information that may not often be volunteered by the patient</p> <p>Identifies common genitourinary exam findings routinely, but inconsistently able to identify subtle physical exam findings</p> <p><i>Examples:</i> Obtains history for patient newly diagnosed with prostate cancer, including family history and details of erectile function and urinary continence Performs scrotal/genital examination in adults and children, and identifies common and subtle physical findings</p>	<p>Role models gathering subtle and reliable information from the patient for junior members of the health care team, particularly for sensitive aspects of genitourinary conditions</p> <p>Routinely identifies subtle or unusual physical findings pertinent to genitourinary conditions</p> <p><i>Examples:</i> Obtains history from a patient with metastatic cancer with a past history of definitive treatment for prostate cancer Differentiates retractile versus undescended testis in child</p>	<p>Highly efficient at gathering information, including history and physical exam</p> <p><i>Example:</i> Rapidly focuses on presenting problem; elicits key information in a prioritized, rapid fashion</p>
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Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 2: Uses Diagnostic Tests and Procedures, Including Performance and Interpretation of Imaging Studies				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Selects and performs appropriate diagnostic tests and/or imaging procedures for general complaints</p>	<p>Selects and performs appropriate diagnostic tests and/or imaging procedures based on patient's genitourinary complaints and medical condition</p>	<p>Selects appropriate routine diagnostic tests based on patient's genitourinary complaints and medical condition. Is familiar with indications for advanced diagnostic tests and/or procedures</p> <p>Makes appropriate clinical decisions based on common diagnostic test results. Applies results of advanced diagnostic testing with supervision</p> <p>Selects and performs imaging studies based on patient's genitourinary complaint and medical condition</p>	<p>Consistently employs routine and advanced diagnostic tests and imaging procedures in a judicious fashion based on patient's genitourinary complaints and medical condition</p> <p>Makes appropriate clinical decisions based on common and advanced diagnostic test results</p>	<p>Employs and performs routine and advanced diagnostic tests in an efficient fashion based on patient's genitourinary complaints and medical condition</p>
<p><i>Example:</i> Orders non-contrast computed tomography (CT) scan to evaluate renal colic</p>	<p><i>Examples:</i> Orders appropriate tests for common post-operative concerns, such as hypoxia or tachycardia</p> <p>Performs bladder scan to assess post-void residual urine volume</p>	<p><i>Examples:</i> Employs uroflowmetry appropriately in the evaluation of voiding dysfunction</p> <p>Understands indications for urodynamic evaluation</p>	<p><i>Examples:</i> Formulates clinical question to be addressed by urodynamic evaluation</p> <p>Interprets results of urodynamic testing in context of patient's medical history and exam</p>	<p><i>Example:</i> Applies appropriate and selective CT scanning versus plain film radiography for follow-up in patients with stone disease</p>

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		<i>Performs ultrasound guided interventions, such as transrectal ultrasound guided prostatic nerve block and biopsy</i>	<i>Selects appropriate imaging modality, balancing risks (i.e., radiation exposure), benefits and costs</i>	
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Patient Care 3: Develops a Patient Care Plan, including Medical, Surgical, and/or Radiological Interventions. Counsel Pre-operative Patients Regarding Treatment Options. Discuss Risks, Benefits and Alternatives (Informed Consent Process). Counsel Patients Regarding Potential Short- and Long-Term Impact of Interventions on Quantity and Quality of Life, as Applicable. Adapt Initial Plan as Sub-acute or Chronic Condition Evolves				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Develops rudimentary plan for routine clinical problem</p> <p>Understands basic elements of informed consent</p> <p><i>Example: Identifies shock wave lithotripsy as management option for urinary calculi</i></p>	<p>Develops plan for routine clinical problem with defined treatment options in otherwise healthy patient</p> <p>Counsels patient for routine, lower-risk interventions</p> <p><i>Examples: Identifies shock wave lithotripsy and/or ureteroscopic fragmentation for routine symptomatic proximal ureteral stone</i></p> <p><i>Obtains informed consent for selected stone treatment</i></p> <p><i>Considers metabolic evaluation when patient presents with episode of recurrent nephrolithiasis</i></p>	<p>Develops plan for more complex clinical problem in otherwise healthy patient</p> <p>Counsels patients for routine, intermediate risk urologic interventions</p> <p><i>Examples: Identifies and prioritizes management options for incidental small renal mass in an otherwise healthy patient</i></p> <p><i>Identifies medical and surgical management options for patient with LUTS</i></p> <p><i>If patient with LUTS does not improve with medical management, appropriately selects operative intervention</i></p>	<p>Develops plan for complex clinical problem in patient with multiple co-morbid conditions</p> <p>Counsels patients for complex, higher-risk urologic interventions, with potential impact on quantity and/or quality of life</p> <p><i>Examples: Identifies and prioritizes management option for incidental renal mass in elderly female with chronic kidney disease and significant co-morbidities</i></p> <p><i>Discusses risks, benefits, alternatives, and expected recovery, with understanding of quality of life impact, of radical cystectomy with various urinary diversions</i></p>	<p>Routinely and efficiently develops plan for complex clinical problem in patient with multiple co-morbid conditions</p> <p>Counsels patients for complex, higher-risk urologic interventions, with potential impact on quantity and/or quality of life</p> <p><i>Examples: Identifies and prioritizes management options for older patient with caval thrombus and renal tumor</i></p> <p><i>Discusses risks, benefits, and alternatives of intervention with significant mortality or morbidity risk</i></p>

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		<i>Discusses risks, benefits, alternatives, and expected recovery course for straightforward radical nephrectomy</i>							
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Comments:							Not Yet Achieved Level 1	<input type="checkbox"/>	

Patient Care 4: Performs Intra-Operative and Post-Operative Management of Patients, including Recognition and Treatment of Physiologic Alterations and Complications.				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Identifies alterations in normal physiology</p> <p><i>Example: Readily identifies signs of physiologic alteration, such as hypotension or tachycardia</i></p>	<p>Identifies common intra-operative and post-operative alterations and complications</p> <p>Manages common complications, with appropriate help-seeking behavior as necessary</p> <p><i>Examples: Readily identifies, evaluates, and appropriately manages post-operative ileus</i></p> <p><i>Seeks assistance from upper level residents and/or faculty as appropriate for resident experience and clinical condition of patient</i></p>	<p>Identifies and manages less common intra-operative and post-operative alterations and complications</p> <p>Identifies and manages common later complications of urologic interventions</p> <p><i>Examples: Recognizes and manages partial disruption of ureteropelvic junction during percutaneous nephrostolithotomy, either intra-operatively or post-operatively</i></p> <p><i>Recognizes symptoms of and manages bladder neck contracture after radical prostatectomy</i></p>	<p>Identifies and manages common and uncommon intra-operative and post-operative physiologic alterations and complications</p> <p><i>Examples: Recognizes development of uretero-enteric anastomotic stricture following ileal loop urinary diversion</i></p> <p><i>Appropriately manages immediate intervention for stricture as well as further evaluation (i.e., for recurrence of urothelial carcinoma)</i></p>	<p>Efficiently identifies and manages common and uncommon intra-operative and post-operative physiologic alterations and complications</p> <p><i>Example: Rapidly anticipates and takes action to prevent development of post-operative complications</i></p> <p><i>Initiates early nutritional supplementation in at-risk post-operative patients</i></p>
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Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 5: Performs Open Surgical Procedures				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Closes incisions for routine urologic procedures under direct supervision (as defined in the Program Requirements)</p> <p><i>Example: Closure of the abdomen after a midline incision</i></p>	<p>Creates and closes surgical wounds for routine urologic procedures</p> <p>Performs routine urologic procedures appropriate for level of education</p> <p><i>Examples: Circumcision in an adult with phimosis Hydrocelectomy for a moderate sized hydrocele</i></p>	<p>Plans, creates, and closes surgical wounds for routine urologic procedures</p> <p>Manipulates, repairs, and excises (as necessary) internal structures with appropriate instrument selection and technique for routine urologic procedures</p> <p><i>Examples: Radical orchiectomy for a testicular mass Orchidopexy for an inguinal undescended testis Bladder neck/urethral sling for female stress urinary incontinence Opening and closing of abdominal and flank incisions</i></p>	<p>Plans, creates, and closes surgical wounds for routine and complex urologic procedures</p> <p>Manipulates, repairs, and/or excises (as necessary) internal structures with appropriate instrument selection for a majority of urologic procedures</p> <p>Demonstrates capacity to perform surgical procedures independently</p> <p><i>Examples: Open partial nephrectomy for a small polar renal mass Ileal conduit urinary diversion Placement of inflatable penile prosthesis</i></p>	<p>Manipulates, repairs, and/or excises (as necessary) internal structures with appropriate instrument selection for a majority of routine and complex urologic procedures</p> <p><i>Examples: Cystectomy and orthotopic neobladder Radical nephrectomy for renal cancer with infrahepatic caval tumor thrombus</i></p>
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Patient Care 6: Performs Endoscopic Procedures of the Upper and Lower Urinary Tract				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Obtains access and perform examination of bladder in a female under direct supervision (as defined in the Program Requirements)</p> <p><i>Example:</i> Cystoscopy in an adult female for removal of a ureteral stent</p>	<p>Obtains access and performs examination of bladder and ureter for routine cases</p> <p><i>Examples:</i> Rigid cystoscopy in a male and female patient</p>	<p>Obtains access to bladder, ureter, and kidney, as appropriate for level of education</p> <p>Manipulates endoscopic equipment with appropriate instrument selection and correct force, speed, depth, and distance for routine transurethral and ureteroscopic cases, as appropriate for level of education</p> <p><i>Examples:</i> Transurethral resection of bladder tumor (TURBT) for a 3cm papillary bladder tumor</p>	<p>Obtains access to bladder, ureter, and kidney for routine and complex cases</p> <p>Manipulates endoscopic equipment with appropriate instrument selection and correct force, speed, depth, and distance for a majority of transurethral and ureteroscopic and percutaneous cases</p> <p>Performs routine transurethral, ureteroscopic, and percutaneous procedures with independence</p> <p><i>Examples:</i> Transurethral resection of the prostate (TURP) involving resection of about 40gm of prostate chips</p>	<p>Manipulates endoscopic equipment with appropriate instrument selection and correct force, speed, depth, and distance for a majority of routine and complex transurethral and ureteroscopic and percutaneous cases</p> <p>Obtains percutaneous renal access</p> <p><i>Examples:</i> TURP for a 60-gram prostate Flexible ureteroscopy holmium laser lithotripsy and</p>

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	<p><i>Insert a ureteral stent in the patient with a ureteral stone that is not impacted</i> <i>Bladder biopsy with cold cup forceps</i></p> <p><i>Obtain retrograde access to the kidney with normal anatomy of the ureter and kidney</i></p> <p><i>Routine diagnostic ureteroscopy</i></p>	<p><i>Ureteroscopy and fragmentation of a small proximal or distal ureteral stone</i></p> <p><i>Dilation of a percutaneous renal tract for percutaneous nephroscopy</i></p>	<p><i>TURBT for papillary lesions that are large or in difficult locations (e.g., bladder dome)</i></p> <p><i>Retrograde access to kidney requiring balloon dilation of ureter</i></p> <p><i>Flexible ureteroscopy with fragmentation of renal calculus</i></p> <p><i>Flexible ureteroscopy with biopsy of urothelial lesion in upper tract</i></p> <p><i>Percutaneous nephrolithotomy for a 3cm renal pelvic stone</i></p>	<p><i>extraction of a 1cm lower pole renal stone</i> <i>Percutaneous nephrolithotomy for a staghorn stone</i></p> <p><i>Percutaneous access for percutaneous nephrolithotomy under fluoroscopic guidance in the operating room (OR)</i></p>					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Comments: Not Yet Achieved Level 1 <input type="checkbox"/></p>									

Patient Care 7: Performs Laparoscopic/Robot-Assisted Surgical Procedures				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Manipulates laparoscopic equipment as assistant for routine cases without robotic assistance under direct supervision (as defined in the Program Requirements)</p> <p><i>Example: Holds the laparoscope for laparoscopic renal cyst decortication and uncomplicated simple nephrectomy</i></p>	<p>Manipulates laparoscopic equipment with correct force, speed, depth, and distance as assistant for routine cases</p> <p><i>Example: Functions as first assistant for a laparoscopic nephrectomy</i></p>	<p>Obtains access and insufflate abdomen for routine cases</p> <p>Manipulates laparoscopic equipment with appropriate instrument selection and correct force, speed, depth, and distance for a portion of routine cases, as appropriate for level of education</p> <p><i>Examples: Obtains routine access to the peritoneal cavity with establishment of pneumoperitoneum</i></p> <p><i>Assists and inserts trocars at the appropriate locations for procedures appropriate for level of education</i></p> <p><i>Performs some portion of a laparoscopic surgery appropriate for level of education</i></p>	<p>Manipulates laparoscopic and/or robotic equipment with appropriate instrument selection and correct force, speed, depth, and distance for routine cases</p> <p>Performs routine laparoscopic procedures with independence</p> <p><i>Example: Laparoscopic radical nephrectomy for a 7cm renal mass</i></p>	<p>Manipulates laparoscopic and/or robotic equipment with appropriate instrument selection and correct force, speed, depth, and distance for a majority of routine and complex cases</p> <p><i>Examples: Robot assisted laparoscopic radical prostatectomy</i></p> <p><i>Robot assisted laparoscopic pyeloplasty</i></p>
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Patient Care 8: Performs Office-Based Procedures				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs routine outpatient procedures under direct supervision (as defined in the Program Requirements)</p> <p><i>Examples: Removal of surgical drains Removal of skin sutures and staples</i></p>	<p>Obtains access to bladder for routine office procedures</p> <p><i>Examples: Flexible cystoscopy for bladder cancer surveillance Flexible cystoscopy for removal of ureteral stent</i></p>	<p>Manipulates endoscopic and office surgical equipment with correct force, speed, depth, and distance for routine procedures</p> <p><i>Example: Transrectal ultrasound guided needle biopsy of the prostate</i></p>	<p>Manipulates endoscopic and office surgical equipment with correct force, speed, depth, and distance for routine and complex procedures</p> <p>Demonstrates capacity to teach and supervise performance of office-based procedures. Interprets office-based ultrasound of the kidney, bladder, and genitalia</p> <p>Performs routine office-based procedures with independence</p> <p><i>Examples: Flexible cystoscopy with dilation of urethral stricture Routine office vasectomy Percutaneous suprapubic tube insertion</i></p>	<p>Performs complex diagnostic and therapeutic outpatient procedures</p> <p><i>Examples: Performs and interprets videourodynamic studies Performs outpatient minimally invasive treatment for benign prostate hyperplasia (BPH) Trans rectal ultrasound scan (TRUS) implantation of fiducial marker for prostate cancer</i></p>
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Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 1: Surgical Care				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands normal physiology, fluid and electrolyte balance, hemostasis, sepsis, and wound healing</p> <p>Understands the principles of safe surgical practice (e.g., checklist, surgical consent, aseptic technique, patient positioning, skin preparation, draping, use of appropriate instruments, universal precautions)</p>	<p>Understands the effects of age, pregnancy, and obesity on the surgical patient</p> <p>Understands alterations in nutrition, including obesity and cachexia; understands the indications for enteral and parenteral feeding</p> <p>Understands the effects of alcohol, tobacco, and substance abuse</p>	<p>Understands the effects of comorbidities on the surgical patient (e.g., cardiac, pulmonary, renal, hepatic failure)</p> <p>Understands the impact of psychosocial disorders (e.g., depression, body dysmorphic disorder) on pre- and post-operative management</p> <p>Understands the effects of chemotherapy, radiation, immunosuppression, and medications, including homeopathic regimens</p>	<p>Understands the management of complex multisystem surgical pathophysiology, including intensive care and organ system support (e.g., dialysis, ventilator use)</p> <p>Understands potential reasons to decline offering surgical services</p> <p>Understands the process of professional and legal discharge of a patient from practice</p>	<p>Applies an evidence-based approach to innovative and complex obstetric procedures</p> <p>Systematically reviews outcomes and publishes in peer-reviewed journals</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 2: Differential Diagnosis				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Creates a differential diagnosis for general complaints from patient's history and physical</p> <p><i>Example: For abdominal pain, considers urologic and non-urologic etiologies</i></p>	<p>Creates a differential diagnosis that includes common causes of urologic complaints</p> <p><i>Examples: For flank pain, considers common etiologies, such as urinary lithiasis and pyelonephritis</i></p> <p><i>For hematuria, considers common etiologies, such as infection, prostatic hyperplasia, and malignancy</i></p>	<p>Creates a differential diagnosis that includes common and uncommon causes of urologic complaints</p> <p>Prioritizes potential causes of patient complaint using information gathering skills</p> <p><i>Examples: For flank pain, considers less common etiologies, such as spontaneous hemorrhage from possible benign or malignant renal neoplasm (in addition to common etiologies listed above)</i></p> <p><i>For hematuria, considers less common etiologies, such as renal source of bleeding</i></p>	<p>Creates a differential diagnosis that includes common and uncommon causes of urologic complaints</p> <p>Rapidly generates differential and strategy to finalize diagnosis</p> <p><i>Examples: Generates differential and diagnostic strategy for range of urologic complaints, such as potential genitourinary malignancy, lower urinary tract symptoms, and flank pain</i></p>	<p>Creates a differential diagnosis that includes common, uncommon and rare causes of urologic complaints</p> <p>Rapidly generates differential and strategy to finalize diagnosis for multiple urologic complaints</p> <p><i>Examples: Generates differential and diagnostic strategy for multiple urologic complaints, such as lower urinary tract symptoms (LUTS) and renal mass</i></p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 3: Evidence-Based Medicine				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands the basis for clinical guidelines in treatment of urologic patients</p> <p>Understands the difference between clinical recommendations from evidence, clinical principles, and expert opinion</p>	<p>Demonstrates knowledge of guidelines in managing urologic patients with basic symptoms</p> <p><i>Examples:</i> <i>Recognizes need for imaging and endoscopic evaluation when required for asymptomatic microhematuria patients</i></p> <p><i>Understands evaluation of lower urinary tract symptoms in men related to benign prostatic hypertrophy</i></p> <p><i>Understands recommendations related to detection of early prostate cancer</i></p>	<p>Demonstrates knowledge of guidelines in treatment of patients requiring basic medical or procedural intervention</p> <p><i>Examples:</i> <i>Counsels patients with urinary stones on appropriate dietary and fluid recommendations</i></p> <p><i>Recognizes need for timely intervention in prepubertal boys with undescended testes</i></p> <p><i>Understands how to correctly treat patients with priapism using intracavernosal agents</i></p>	<p>Demonstrates knowledge of guidelines in treatment of patients with complex conditions or malignancies</p> <p><i>Examples:</i> <i>Correctly institutes intravesical therapy regimen for patients with nonmuscle invasive bladder cancer</i></p> <p><i>Correctly recommends options for patients with asymptomatic metastatic castration-resistant prostate cancer</i></p>	<p>Demonstrates knowledge of limitations of guidelines and other tools in managing complex patients that do not fit into standard categories</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			Not Yet Achieved Level 1 <input type="checkbox"/>	

Medical Knowledge 4: Core Domains				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Demonstrates basic understanding of urologic principles related to anatomy, physiology, and epidemiology</p> <p><i>Examples:</i> <i>Understands the anatomic layers traversed through an open flank incision</i></p> <p><i>Recognizes the physiologic consequences related to fluid and electrolyte disturbances</i></p>	<p>Demonstrates knowledge of issues related to general care of all urologic patients as measured by performance on national standardized testing and other objective measures</p> <p><i>Examples:</i> <i>Understands types of radiographic studies used in evaluation and associated issues related to radiation safety</i></p> <p><i>Correctly recognizes types of urologic infections</i></p> <p><i>Understands physiologic alterations related to calculus disease</i></p>	<p>Demonstrates knowledge of issues related to specific basic urologic populations as measured by performance on national standardized testing and other objective measures</p> <p><i>Examples:</i> <i>Understands embryologic issues related to pediatric urology, such as disorders of sexual differentiation</i></p> <p><i>Understands pathophysiology related to voiding dysfunction and urinary incontinence</i></p> <p><i>Correctly identifies and understands causes of male infertility</i></p>	<p>Demonstrates knowledge of issues related to advanced urologic populations as measured by performance on national standardized testing and other objective measures</p> <p><i>Examples:</i> <i>Understands specific issues related to renal transplantation and renovascular disease</i></p> <p><i>Correctly identifies causes and management of urinary fistulae</i></p> <p><i>Understands specific recommendations and issues related to medical oncology in urologic cancer patients</i></p>	<p>Demonstrates evidence of advanced knowledge of subspecialties within urology consistent with an independent practicing physician</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			Not Yet Achieved Level 1 <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 (actual or simulated)	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 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"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Systems-Based Practice 2: System Navigation for Patient-Centered Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of care coordination	Coordinates care of patients in routine clinical situations effectively utilizing the roles of the interprofessional teams	Coordinates care of patients in complex clinical situations effectively utilizing 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 safe and effective transitions of care and handoffs	Performs safe and effective transitions of care/handoffs in routine clinical situations	Performs safe and effective transitions of care/handoffs in complex clinical situations	Role models and advocates for safe and effective transitions of care/handoffs within and across health care delivery systems, including outpatient settings	Improves quality of transitions of care within and across health care delivery systems to optimize patient outcomes
Demonstrates knowledge of population and community health needs and disparities	Identifies specific population and community health needs and inequities for their local population	Uses local resources effectively to meet the needs of a patient population and community	Participates in changing and adapting practice to provide for the needs of specific populations	Leads innovations and advocates for populations and communities with health care inequities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Systems-Based Practice 3: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies components of the complex health care system	Describes the physician's role and how the interrelated components of complex health care system impact patient care	Analyzes how personal practice affects the system (e.g., length of stay, readmission rates, clinical efficiency)	Manages the interrelated components of the complex health care systems for efficient and effective patient care	Advocates for or leads change to enhance systems for high value, efficient, and effective patient care
Describes basic health payment systems, including government, private, public, and uninsured care and different practice models	Delivers care informed by patient specific payment model	Utilizes shared decision making in patient care, taking into consideration payment models	Advocates for patient care understanding the limitations of each patient's payment model (e.g., community resources, patient assistance resources)	Participates in advocacy activities for health policy to better align payment systems with high value care
		Identifies resources and effectively plans for transition to practice (e.g., information technology, legal, billing and coding, financial, personnel)	Describes basic elements needed to transition to practice (e.g., contract negotiations, malpractice insurance, government regulation, compliance)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

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, and incorporate patient preferences and values in order to care for a routine patient	Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based care	Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients	Critically appraises and applies evidence even in the face of uncertainty and conflicting evidence to guide care, tailored to the individual patient	Coaches others to critically appraise and apply evidence for complex patients, and/or participates in the development of guidelines
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Accepts responsibility for personal and professional development by establishing goals</p> <p>Identifies the factors that contribute to gap(s) between expectations and actual performance</p> <p>Actively seeks opportunities to improve</p>	<p>Demonstrates openness to performance data (feedback and other input) in order to inform goals</p> <p>Analyzes and reflects on the factors that contribute to gap(s) between expectations and actual performance</p> <p>Designs and implements a learning plan, with prompting</p>	<p>Seeks performance data episodically, with adaptability and humility</p> <p>Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance</p> <p>Independently creates and implements a learning plan</p>	<p>Intentionally seeks performance data consistently, with adaptability and humility</p> <p>Challenges assumptions and considers alternatives in narrowing the gap(s) between expectations and actual performance</p> <p>Uses performance data to measure the effectiveness of the learning plan and, when necessary, improves it</p>	<p>Role models consistently seeking performance data, with adaptability and humility</p> <p>Coaches others on reflective practice</p> <p>Facilitates the design and implementation of learning plans for others</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Professionalism 1: Professional Behavior and Ethical Principles				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Identifies and describes potential triggers for professionalism lapses</p> <p>Describes when and how to appropriately report professionalism lapses, including strategies for addressing common barriers</p> <p>Demonstrates knowledge of the ethical principles underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics</p>	<p>Demonstrates insight into professional behavior in routine situations</p> <p>Takes responsibility for own professionalism lapses</p> <p>Analyzes straightforward situations using ethical principles</p>	<p>Demonstrates professional behavior in complex or stressful situations</p> <p>Analyzes complex situations using ethical principles</p> <p>Recognizes need to seek help in managing and resolving complex ethical situations</p>	<p>Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others</p> <p>Recognizes and utilizes appropriate resources for managing and resolving ethical dilemmas as needed (e.g., ethics consultations, literature review, risk management/legal consultation)</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"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

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>Responds promptly to requests or reminders to complete tasks and responsibilities</p>	<p>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p> <p>Recognizes situations that may impact own ability to complete tasks and responsibilities in a timely manner</p>	<p>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations</p> <p>Proactively implements strategies to ensure that the needs of patients, teams, and systems are met</p>	<p>Recognizes situations that may impact others' ability to complete tasks and responsibilities in a timely manner</p>	<p>Takes ownership of system outcomes</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Professionalism 3: Self-Awareness and Help-Seeking				
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 or limitations in knowledge/skills do not meet professional expectations
Recognizes limits in the knowledge/skills of self or team, with assistance	Independently recognizes limits in the knowledge/skills of self or team Demonstrates appropriate help-seeking behaviors	With assistance, proposes a plan to remediate or improve limits in the knowledge/skills of self or team	Independently develops a plan to remediate or improve limits in the knowledge/skills of self or team	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Uses language and non-verbal behavior to demonstrate respect and establish rapport</p> <p>Identifies common barriers to effective communication (e.g., language, disability) while accurately communicating own role within the health care system</p> <p>Identifies the need to adjust communication strategies based on assessment of patient/family expectations and understanding of their health status and treatment options</p>	<p>Establishes a therapeutic relationship in straightforward encounters using active listening and clear language</p> <p>Identifies complex barriers to effective communication (e.g., health literacy, cultural)</p> <p>Organizes and initiates communication with patients/families by introducing stakeholders, setting the agenda, clarifying expectations, and verifying an understanding of the clinical situation</p>	<p>Establishes a therapeutic relationship in challenging patient encounters</p> <p>When prompted, reflects on personal biases while attempting to minimize communication barriers</p> <p>With guidance, sensitively and compassionately delivers medical information; elicits patient/family values, goals and preferences; and acknowledges uncertainty and conflict</p>	<p>Easily establishes therapeutic relationships, with attention to patient/family concerns and context, regardless of complexity</p> <p>Independently recognizes personal biases while attempting to proactively minimize communication barriers</p> <p>Independently uses shared decision making to align patient/family values, goals, and preferences with treatment options to make a personalized care plan</p>	<p>Mentors others in situational awareness and critical self-reflection to consistently develop positive therapeutic relationships</p> <p>Role models self-awareness practice while identifying teaching a contextual approach to minimize communication barriers</p> <p>Role models shared decision making in patient/family communication in situations with a high degree of uncertainty/conflict</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Interpersonal and Communication Skills 2: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully requests a consultation	Clearly and concisely requests a consultation	Checks own understanding of consultant recommendations	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
Respectfully receives a consultation request	Clearly and concisely responds to a consultation request	Checks understanding of recommendations when providing consultation	Communicates feedback and constructive criticism to superiors	Facilitates regular health care team-based feedback in complex situations
Uses language that values all members of the health care team	Communicates information effectively with all health care team members Solicits feedback on performance as a member of the health care team	Uses active listening to adapt communication style to fit team needs Communicates concerns and provides feedback to peers and learners		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved 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	Demonstrates organized diagnostic and therapeutic reasoning through notes in the patient record	Concisely reports diagnostic and therapeutic reasoning in the patient record	Communicates clearly, concisely, in a timely manner, and in an organized written form, including anticipatory guidance	Models feedback to improve others' written communication
Safeguards patient personal health information	Demonstrates accurate, timely, and appropriate use of documentation shortcuts	Appropriately selects direct (e.g., telephone, in-person) and indirect (e.g., progress notes, text messages) forms of communication based on context	Produces written or verbal communication (e.g., patient notes, e-mail, etc.) that serves as an example for others to follow	Guides departmental or institutional communication around policies and procedures
Communicates through appropriate channels as required by institutional policy (e.g. patient safety reports, cell phone/pager usage)	Documents required data in formats specified by institutional policy	Uses appropriate channels to offer clear and constructive suggestions to improve the system	Initiates difficult conversations with appropriate stakeholders to improve the system	Facilitates dialogue regarding systems issues among larger community stakeholders (e.g., institution, health care system, field)
	Respectfully communicates concerns about the system			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>