

# Plastic Surgery Milestones for the Middle East



January 2019

## The Plastic Surgery Milestones for the Middle East

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 competence 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 "Level 1" to "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 one who has had some education in plastic surgery.

**Level 2:** The resident is advancing and demonstrating additional milestones.

**Level 3:** The resident continues to advance and demonstrate additional milestones; the resident consistently demonstrates the majority of milestones targeted for residency.

**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: Surgical Care				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination of the surgical patient and employs algorithms such as advanced trauma life support and advanced cardiac life support</p> <p>Manages several uncomplicated patients, with assistance</p> <p>Independently performs basic techniques in the care of the surgical patient, (e.g., nasogastric tube placement, urethral catheterization, knot tying)</p> <p>Gathers and categorizes information</p>	<p>Manages a surgical patient with single system disease with assistance, and deviates from algorithms when indicated</p> <p>Provides surgical consultations with assistance</p> <p>Independently performs routine procedures (e.g., incision and drainage, central line placement, chest tube placement, biopsy, wound closures and laceration repair)</p> <p>Recognizes patterns and establishes major priorities while being able to describe at least one solution</p>	<p>Manages a surgical patient with multiple system diseases with assistance</p> <p>Independently manages multiple patients and surgical consultations</p> <p>Recognizes exceptions and describes three or more solutions</p>	<p>Independently manages a surgical patient with multiple system diseases; manages a surgical patient with one or more life threatening conditions with consultation</p> <p>Manages a surgical service</p> <p>Applies known solutions in novel ways; anticipates and has a plan for potential problems</p>	<p>Teaches and supervises other learners who manage patients</p> <p>Develops and employs simulation for teaching and assessment of surgical skills</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 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 performance (e.g., checklist, surgical consent, aseptic technique, patient positioning, skin preparation, draping, use of appropriate instruments, universal precautions)</p>	<p>Understands the effect 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 effect of comorbidities on the surgical patient (e.g., cardiac, pulmonary, renal, hepatic failure)</p> <p>Understands psychosocial disorders (e.g., depression, body dysmorphic disorder)</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>Systematically reviews outcomes and publishes in peer-reviewed journals</p>
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Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 2: Wound Care				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination of patients with acute or chronic wounds and burns</p> <p>Assists with procedures (e.g., wound preparation, negative pressure therapy); initiates burn resuscitation</p> <p>Provides routine post-operative care</p>	<p>Explains risks and benefits of wound procedures and obtains consent</p> <p>Performs routine procedures (e.g., skin grafts, local flaps, burn debridement, and regional flaps) with assistance</p> <p>Recognizes complications (e.g., infections, exposed vital structures, ischemia) and enlists help; prescribes rehabilitation program and initiates preventive measures</p>	<p>Formulates a treatment plan with assistance for wound preparation and closure</p> <p>Independently performs routine procedures; performs complex procedures (e.g., microvascular flaps) with assistance</p> <p>Initiates treatment for wound recurrence and manages complications with assistance</p>	<p>Independently formulates a treatment plan for wound preparation and closure, including for patients with comorbidities and previous surgeries</p> <p>Functions as member of wound care team</p> <p>Independently performs complex procedures (e.g., microvascular flap, surgical treatment of burn scar contracture)</p> <p>Independently manages complications and optimizes functional outcomes through physical and occupational therapy</p>	<p>Designs cost-effective management plan</p> <p>Leads a multidisciplinary wound care team</p> <p>Helps lead a burn center</p> <p>Develops a plan for vocational rehabilitation</p>
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Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 2: Wound Care				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands pathophysiology of wounds, burns, pressure ulcers, and necrotizing infections</p> <p>Understands prevention of acute and chronic wounds and burn resuscitation</p>	<p>Understands indications for interventions in acute and chronic wounds and burns</p> <p>Recognizes populations at risk of developing wounds (e.g., spinal cord injury)</p> <p>Understands the diagnostic tools used to assess and stage wounds (e.g., cultures, biopsies, imaging)</p>	<p>Understands treatments of burns, pressure ulcers, radiation wounds, and necrotizing infections</p> <p>Understands surgical principles of routine procedures (e.g., wound preparation, biologic dressings, skin substitutes, grafts)</p>	<p>Understands anticipated course and outcomes of treatment (e.g., dressing changes versus surgical closures)</p> <p>Understands surgical principles of complex procedures (e.g., vascularized soft tissue coverage, hyperbaric oxygen, bio-scaffolds)</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"/>	

Patient Care 3: Tissue Transfer				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination of patients with simple and complex reconstructive problems</p> <p>Independently performs dressing changes, negative pressure wound therapy, and uses topicals; assists with complex wound care</p> <p>Provides routine post-operative care for patients with complex wounds requiring loco-regional tissue transfer</p>	<p>Explains risks and benefits, and obtains consent for flaps, grafts, and complex wound care options</p> <p>Performs routine procedures (e.g., debridement, complex closures, split and full thickness skin grafts, adjacent tissue transfers, bone graft harvesting) with assistance; performs microsurgical repairs in a simulated environment</p> <p>Provides post-operative care with assistance for microvascular tissue transfer, and recognizes complications (e.g., dehiscence, infection, flap compromise)</p>	<p>Formulates a treatment plan (risk/benefits, options/alternatives) with assistance for complex reconstructive surgery</p> <p>Independently performs routine procedures; performs complex procedures (e.g., microvascular tissue transfers, nerve repairs, grafting) with assistance</p> <p>Manages complications with assistance</p>	<p>Independently formulates a treatment plan for complex reconstructive surgery in patients with comorbidities and previous surgeries</p> <p>Independently performs complex procedures</p> <p>Independently manages complex complications (e.g., microvascular flap compromises, loco-regional tissue transfer failures); manages secondary deformities</p>	<p>Leads surgical team through complex composite tissue reconstruction</p> <p>Performs prefabricated composite tissue transfer</p> <p>Performs vascularized composite allotransplantation</p>
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Comments:			Not Yet Achieved Level 1 <input type="checkbox"/>	

Medical Knowledge 3: Tissue Transfer				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands the physiology and pathophysiology of grafts, flaps, tissue expansions, and microvascular transfers</p> <p>Understands basic surgical anatomy of grafts, flaps, tissue expansion, and microvascular transfers</p>	<p>Understands the basic surgical treatments for soft tissue defects, and draws basic types of flaps (e.g., adjacent tissue transfer, axial and perforator flaps)</p> <p>Demonstrates knowledge of surgical instrumentation, devices and suture materials used in tissue transfer</p>	<p>Understands the anatomy and indications for options in tissue transfer, and lists potential treatment options for various defects</p> <p>Understands surgical principles of treatment options for complicated wounds; understands complex tissue transfer procedures, (e.g., composite microvascular transfers, nerve repair, grafting)</p>	<p>Independently analyzes and selects treatment options for soft tissue defects</p> <p>Understands alternatives following complications</p>	<p>Systematically reviews tissue transfer options and publishes in peer-reviewed journals</p> <p>Understands the principles of tissue engineering</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"/>	

Patient Care 4: Congenital Anomalies				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination of patients with craniofacial anomalies</p> <p>Assists with congenital anomaly and craniofacial procedures (e.g., making incisions, performing skin closures)</p> <p>Provides routine post-operative care for pediatric patients</p>	<p>Explains the risks and benefits of treatment for routine congenital anomalies, (e.g., cleft surgery and giant congenital nevi, vascular anomalies), and obtains consent</p> <p>Performs routine procedures for congenital anomalies (e.g., tissue expansion, prominent ear correction) with assistance</p> <p>Recognizes complications (e.g., airway compromises, feeding difficulties) and gets multidisciplinary consults</p>	<p>Formulates a treatment plan with assistance for routine congenital anomalies</p> <p>Independently performs routine procedures; performs complex procedures (e.g., cleft lip, palate repair) with assistance</p> <p>Manages complications (e.g., exposed expanders, palatal fistulae) with assistance</p>	<p>Formulates a treatment plan, with assistance for craniofacial surgery</p> <p>Independently performs complex procedures</p> <p>Independently manages complications and secondary deformities of congenital anomalies</p>	<p>Independently treats patients with complex craniofacial anomalies (e.g., craniosynostosis, hemifacial microsomia)</p>
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Medical Knowledge 4: Congenital Anomalies				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Describes normal and abnormal embryology of clefts and craniofacial anomalies</p> <p>Understands the normal anatomy of the craniofacial soft tissue and skeleton</p>	<p>Understands the diagnosis, basic surgical treatments, and special needs of craniofacial patients</p> <p>Understands the concepts of staged interdisciplinary treatment in the care of the cleft and craniofacial patient</p>	<p>Understands the indications for and the timing of the staged treatment protocols for cleft, craniofacial, and vascular anomaly patients</p> <p>Understands the anatomy and surgical principles of repairs (e.g., the steps of a cleft repair, microtia)</p>	<p>Understands the effects of treatment for craniofacial patients, such as therapies for vascular anomalies and cleft care</p> <p>Understands the anatomy and surgical principles of craniofacial procedures (e.g., cranial vault remodeling, distraction osteogenesis, secondary cleft deformities)</p>	<p>Understands the composition and management of multidisciplinary craniofacial team</p>
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Comments:			Not Yet Achieved Level 1 <input type="checkbox"/>	

Patient Care 5: Head and Neck				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical of the patient with skin cancer and aero-digestive tract malignancy</p> <p>Assists with procedures (e.g., skin biopsies, excision of minor skin lesions)</p> <p>Provides routine post-operative care; initiates cancer surveillance</p>	<p>Explains risks and benefits of extirpative and reconstructive procedures and obtains consent</p> <p>Performs routine excisions and reconstructions (e.g., adjacent tissue transfer and skin graft) with assistance</p> <p>Recognizes complications (e.g., bleeding, orocutaneous fistula, flap compromise) and enlists help; prescribes post-operative rehabilitation</p>	<p>Formulates a treatment plan with assistance</p> <p>Independently performs routine procedures; performs complex procedures (e.g., pedicled flaps, myocutaneous flaps, repair of complex eyelid and full thickness nasal defects) with assistance</p> <p>Manages complications with assistance</p>	<p>Independently formulates a treatment plan, including for patients with comorbidities</p> <p>Independently performs complex reconstructions, including microvascular, bone, nerve, and soft tissue transfers</p> <p>Independently manages complications (e.g., failed microvascular transfers)</p>	<p>Helps lead a multidisciplinary head and neck cancer team</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 5: Head and Neck				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands benign and malignant diseases, including the skin and aero-digestive tract</p> <p>Understands the anatomy of the head and neck (e.g., periorbita, salivary glands, lymphatic systems)</p> <p>Understands the epidemiology and staging of head, neck, and skin cancer</p>	<p>Understands surgical treatments for cancers of the head and neck (e.g., melanoma, parotid, and pharynx)</p> <p>Understands the principles of extirpation (e.g., margins) and reconstruction for lesions of the head and neck; understands diagnostic work-up and imaging studies</p> <p>Understands the role of additional modalities (e.g., tracheostomy, feeding tube)</p>	<p>Understands the indications for surgical and non-surgical treatment and ancillary procedures (e.g., sentinel node biopsy)</p> <p>Understands the principles of routine procedures (e.g., wedge resections of the lip, local facial flaps)</p> <p>Understands the effects of prior treatment modalities on reconstructive options (e.g., osteoradionecrosis)</p> <p>Understands the management of regional and distant metastases</p>	<p>Understands the sequelae of interventions (e.g., surgical deformities, long-term outcomes)</p> <p>Understands the principles of complex procedures (e.g., neck dissection, microsurgical bone transfer, total nasal reconstruction)</p> <p>Understands adjunctive reconstructive options (e.g., dental implants, maxillofacial prosthetics)</p>	<p>Understands novel diagnostic and treatment modalities for head and neck cancer</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"/>

Patient Care 6: Maxillofacial Trauma				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination and orders diagnostic and imaging studies</p> <p>Triages and performs advanced trauma life support protocols; assists with procedures (e.g., closing lacerations, early stabilization of fractures)</p> <p>Provides routine post-operative care</p>	<p>Elicits the focused clinical findings associated with common facial fractures and soft tissue injuries; interprets radiological findings; explains the risks and benefits of treatment and obtains consent</p> <p>Performs routine procedures (e.g., laceration repair, maxillomandibular fixation [MMF], open reduction internal fixation) with assistance</p> <p>Recognizes complications (e.g., airway compromise, cerebrospinal fluid leak) and enlists help</p>	<p>Formulates a treatment plan with assistance</p> <p>Independently performs routine procedures; performs complex procedures (e.g., nasoethmoid [NOE], panfacial fracture treatment) with assistance</p> <p>Manages complications with assistance</p>	<p>Independently formulates a treatment plan, including for patients with polytrauma and comorbidities</p> <p>Independently performs complex procedures</p> <p>Independently manages complications (e.g., nasal airway obstruction, facial nerve injuries)</p>	<p>Manages complex secondary deformities (e.g., enophthalmos, malocclusion)</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 6: Maxillofacial Trauma				
Level 1	Level 2	Level 3	Level 4	Level 5
Understands etiology and incidence of the routine facial soft tissue injuries and fractures	Understands etiology and incidence of injuries to associated structures and late effects of injury (e.g., enophthalmos, malocclusion)	Understands indications and timing for the operative and non-operative treatment of facial trauma	Understands the late sequelae of facial trauma (e.g., ectropion, airway obstruction, mucocele)	Systematically reviews outcomes and publishes in peer-reviewed journals
Understands the anatomy of the head and neck; describes the pattern of facial fractures	Understands the principles of surgical treatment (e.g., open versus closed approaches, methods of fixation)	Understands the surgical principles of routine procedures (e.g., eyelid laceration repair, MMF, closed nasal reduction)	Understands the surgical principles of complex procedures (e.g., canalicular repair, repair NOE with telecanthus)	
Understands the risks of other injuries (e.g., airway compromise, cervical spine injury)	Understands the management of associated injuries (e.g., tracheostomy)			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			Not Yet Achieved Level 1 <input type="checkbox"/>	

Patient Care 7: Facial Aesthetics				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs focused history and physical examination of patients presenting with aesthetic facial concerns</p> <p>Assists with facial aesthetic procedures, (e.g., making incisions, simple suture skin closure)</p>	<p>Explains risks and benefits of facial aesthetic procedures and obtains consent</p> <p>Performs routine facial aesthetic procedures (e.g., upper blepharoplasty, scar revision, harvesting of cartilage grafts, fat injections, injection of neuromodulators) with assistance</p> <p>Recognizes complications (e.g., hematoma, seroma, wound dehiscence, necrosis, chemosis, brow ptosis) and enlists appropriate help</p>	<p>Formulates a treatment plan (risks, benefits, options, and alternatives) with assistance</p> <p>Independently performs routine procedures; performs complex procedures (e.g., facelifts, necklifts, tip rhinoplasty, chemical peels, laser resurfacing) with assistance</p> <p>Manages complications (e.g., scleral show, brow ptosis, eyelid ptosis, soft tissue granulomas) with assistance</p>	<p>Independently assesses, diagnoses, and formulates treatment plans, including for patients with comorbidities, previous surgeries, and complicating factors</p> <p>Independently performs procedures (e.g., primary rhinoplasties, lower blepharoplasties, and facelifts)</p> <p>Independently manages complications</p>	<p>Independently treats complex secondary deformities of facial aging/prior surgery</p> <p>Leads an integrated center for the treatment of facial aesthetics</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 7: Facial Aesthetics				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands normal anatomy of skin and soft tissue of the face</p> <p>Describes the normal relationships, angles, and proportions in facial analysis</p>	<p>Understands concepts of facial aging and basic surgical and non-surgical treatments for the aging face</p> <p>Understands concepts of skin resurfacing (e.g., laser science, chemical peel)</p> <p>Appreciates the assessment and impact of psychological factors on outcomes in aesthetic facial surgery</p>	<p>Understands indications for various treatment options for addressing the aging face</p> <p>Understands anatomy and principles of surgical and non-surgical procedures, (e.g., fillers, peels, neuromodulators, browlifts, blepharoplasties, facelifts, rhinoplasties, necklifts, fat grafting)</p>	<p>Understands the effects of treatment of surgical and non-surgical options and understands possible complications</p> <p>Understands anatomy and surgical principles of complex treatments for the aging face, (e.g., endoscopic procedures, deep plane facelifts, secondary rhinoplasties), and the dynamics of combining various procedures for treatment of facial aging</p>	<p>Understands and contributes to outcomes research in aesthetic facial surgery</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"/>	

Patient Care 8: Non-Cancer Breast Surgery				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination of patients with a benign breast condition and orders diagnostic tests and imaging studies</p> <p>Assists with breast procedures (e.g., making incisions, skin closures)</p> <p>Provides routine post-operative care for the breast patient</p>	<p>Explains risks and benefits of breast procedures and obtains consent; is able to interpret diagnostic studies</p> <p>Performs routine procedures (e.g., reduction mammoplasty, gynecomastia, mastopexy), with assistance</p> <p>Recognizes complications (e.g., hematoma, infections, implant complications) and enlists help</p>	<p>Formulates a treatment plan with assistance for routine breast procedures (e.g., primary breast augmentation, reduction, and mastopexy)</p> <p>Independently performs routine procedures; performs complex procedures (e.g., augmentation/mastopexy, congenital breast deformity), with assistance</p> <p>Manages complications, with assistance</p>	<p>Independently formulates a treatment plan, including for patients with comorbidities or previous unsatisfactory outcomes; documents medical necessity</p> <p>Independently performs complex procedures; adapts standard treatment plans to special circumstances (e.g., prior surgical scars, unsatisfactory outcomes of previous surgery)</p> <p>Independently manages complications, secondary deformities, and the dissatisfied patient</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 8: Non-Cancer Breast Surgery				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands benign breast conditions (e.g., ptosis, hypermastia, gynecomastia, involutional changes, and congenital anomalies)</p> <p>Understands the anatomy, embryology, and physiology of the breast</p> <p>Understands principles of imaging for benign breast procedures</p>	<p>Understands surgical treatment for benign breast conditions</p> <p>Understands concepts of symmetry, aesthetic ideals, and proportions of the breast</p> <p>Understands characteristics of breast prostheses and long-term monitoring</p>	<p>Understands indications for treatment options (e.g., augmentation, skin/parenchyma reduction)</p> <p>Understands principles of routine surgical procedures (e.g., augmentation mammoplasty, reduction mammoplasty, mastopexy)</p>	<p>Understands effects of surgical procedures on nipple areolar perfusion, breast sensation, and lactation</p> <p>Understands principles of complex surgical procedures (e.g., augmentation/mastopexy, tuberous breast deformity)</p> <p>Understands evolving technologies such as fat grafting</p>	<p>Systematically reviews outcomes of patient cohorts 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"/>

Patient Care 9: Breast Reconstruction				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination of the patient with breast cancer</p> <p>Assists with procedures (e.g., making incisions, skin closures)</p> <p>Provides routine post-operative care</p>	<p>Explains risks and benefits of breast reconstruction procedures and obtains consent</p> <p>Performs routine procedures (e.g., flap elevation, tissue expanders), with assistance</p> <p>Recognizes complications (e.g., flap compromise, implant complication) and enlists help</p>	<p>Formulates a treatment plan, with assistance</p> <p>Independently performs routine procedures; performs complex procedures (e.g., microsurgical procedure, treatment of opposite breast), with assistance</p> <p>Manages complications, with assistance</p>	<p>Independently formulates a treatment plan, including for patients with comorbidities, previous surgeries, and complicating factors</p> <p>Independently performs complex procedures</p> <p>Independently manages complications and secondary deformities</p>	<p>Manages complicated patients with multiple previous treatment failures</p> <p>Helps lead interdisciplinary team and teaches breast reconstructive procedures</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 9: Breast Reconstruction				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands pathophysiology of malignant breast disease</p> <p>Understands the anatomy of breast and lymphatic drainage</p>	<p>Understands surgical treatments for malignant breast disease; understands sentinel lymph node mapping and metastatic patterns</p> <p>Understands surgical principles of implant-based breast reconstruction</p>	<p>Understands indications for adjuvant treatments and the impact of primary and adjuvant treatments on reconstruction</p> <p>Understands surgical principles of pedicled flap breast reconstruction</p>	<p>Understands the late effects of radiation and chemotherapy on breast reconstruction</p> <p>Understands surgical principles of microsurgical breast reconstruction (e.g., transverse rectus abdominis myocutaneous [TRAM], deep inferior epigastric perforator [DIEP], superior gluteal artery perforator [SGAP], and transverse upper gracilis [TUG])</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"/>

Patient Care 10: Reconstruction of the Trunk and Perineum				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination of patients with trunk/perineal defects and orders diagnostic and imaging studies</p> <p>Assists with procedures (e.g., making incisions, closing wounds)</p> <p>Provides routine post-operative care, including pressure relief management</p>	<p>Explains risks and benefits of procedures (e.g., components separation, pressure ulcer reconstruction) and obtains consent; interprets diagnostic and imaging studies</p> <p>Performs routine procedures (e.g., debridement, component separation, myocutaneous flap), with assistance</p> <p>Provides critical care, recognizes complications (e.g., organ injury, organ system failure) and enlists help; initiates rehabilitation</p>	<p>Formulates a treatment plan with assistance for routine conditions (e.g., sternal wounds, primary ventral hernia, and primary pressure ulcers)</p> <p>Independently performs routine procedures; performs complex procedures (e.g., composite chest wall reconstruction, urogenital reconstruction), with assistance</p> <p>Manages complications (e.g., soft-tissue loss, flap compromise), with assistance</p>	<p>Independently formulates a treatment plan, including for patients with comorbidities (e.g., previous surgeries, enterocutaneous fistulae, congenital anomalies)</p> <p>Independently performs complex procedures</p> <p>Independently manages complications and secondary deformities</p>	<p>Independently treats complex secondary deformities of the trunk and perineum</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 10: Reconstruction of Trunk and Perineum				
Level 1	Level 2	Level 3	Level 4	Level 5
Understands congenital, benign, and malignant diseases of the trunk/perineum	Understands the concepts of restoration of chest wall stability, return of abdominal domain, and wound control	Understands surgical treatments for irradiated wounds, congenital anomalies, hernias, chest wall defects, and pressure ulcers	Understands the effects of treatment on gastrointestinal, cardiopulmonary and genitourinary, and musculoskeletal functions	Systematically reviews outcomes and publishes in peer-reviewed journals
Understands the anatomy of the chest wall, abdominal wall, back, and perineum	Understands indications for coverage of exposed vital structures, provision of dynamic support, and functional restoration	Understands surgical principles of routine procedures (e.g., pressure ulcer reconstruction, components separation hernia repair)	Understands surgical principles of complex procedures (e.g., perineal reconstruction, recurrent ventral hernia, composite chest wall defects)	
Understands respiratory mechanics, nutrition, and pressure offloading	Understands staged management of major defects (e.g., negative pressure therapy)	Understands the principles and indications for biologic and synthetic materials		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 11: Upper Extremity Trauma				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination and orders diagnostic and imaging studies</p> <p>Assists with procedures (e.g., making incisions, skin closures, applying splints and dressings)</p> <p>Provides routine post-operative care</p>	<p>Explains the risks and benefits of hand trauma procedures and obtains consent; interprets imaging studies</p> <p>Performs routine procedures with assistance (e.g., repair of simple hand fractures, tendon, nerve lacerations)</p> <p>Recognizes complications (e.g., vascular compromise, compartment syndrome) and enlists help; prescribes post-operative rehabilitation</p>	<p>Formulates a treatment plan, with assistance, for common hand injuries (e.g., tendon injury, nerve lacerations, fracture/dislocation)</p> <p>Independently performs routine procedures; performs complex procedures (e.g., repair of the mangled hand and revascularization, microvascular flap coverage), with assistance</p> <p>Manages complications, with assistance</p>	<p>Independently formulates a treatment plan, including for patients with comorbidities and a devascularized or mangled extremity</p> <p>Independently performs complex procedures</p> <p>Independently manages complications and secondary deformities (e.g., contractures, non-unions, tendon rupture)</p>	<p>Contributes to the practice of hand surgery through research and innovative treatments</p> <p>Manages work-related injuries and return-to-work issues</p> <p>Manages chronic regional pain syndromes</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 11: Upper Extremity Trauma				
Level 1	Level 2	Level 3	Level 4	Level 5
Understands common fractures/dislocations and soft tissue injuries	Understands principles of soft tissue coverage and bony stabilization	Understands complicating factors (e.g., exposed critical structures, bone loss, vascular compromise)	Understands biomechanics of tendon transfers	Understands principles of nerve and tendon transfers for combined nerve and brachial plexus injuries
Understands of the anatomy, function, and basic biomechanics of the upper extremity	Understands principles of bone fixation and flaps	Understands the principles of routine vessel, nerve, tendon, and bony repairs	Understands the principles of complex procedures (e.g., nerve grafting, secondary tendon reconstruction, replantation)	Understands the composition and management of multidisciplinary hand center
Understands principles of splinting and casting	Understands the diagnosis and treatment of vascular injuries and acute compartment syndrome	Understands the principles of post-operative hand therapy regimens	Understands the principles of prosthetics, secondary rehabilitation, and chronic regional pain syndromes	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 12: Non-Trauma Hand				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination of patients with non-traumatic hand disorders</p> <p>Assists with procedures (e.g., skin incisions, abscess drainage, skin closures, and injections)</p>	<p>Explains risks and benefits of non-trauma and congenital hand reconstruction procedures and obtains consent; interprets imaging and electrodiagnostic studies</p> <p>Performs routine procedures (e.g., nerve decompression, ganglion, tumor excision), with assistance</p>	<p>Formulates a treatment plan, with assistance, for routine hand conditions (e.g., infections, degenerative arthritis, ganglion, tumors, nerve compressions, Dupuytren’s contracture)</p> <p>Independently performs routine procedures; performs complex procedure (e.g., arthroplasty, contracture release, syndactyly reconstruction tendon transfers), with assistance</p>	<p>Independently formulates a treatment plan, including for patients with comorbidities, and complex conditions (e.g., previous hand surgeries, complex syndactyly)</p> <p>Independently performs complex procedures</p>	<p>Formulates a treatment plan for rheumatoid deformities and complex congenital hand anomalies</p> <p>Performs implant arthroplasty, pollicizations, and toe-to-hand transfers</p> <p>Helps manage an interdisciplinary hand surgery team</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 12: Non-Trauma Hand				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands the pathophysiology of non-traumatic hand disease (e.g., infection, degenerative change, compression neuropathy)</p> <p>Understands anatomy, biomechanics, and embryology of the hand and upper extremity</p>	<p>Understands treatments for infection, degenerative change, compression neuropathy</p> <p>Understands concepts of pharmacologic management, injections, incision, and drainage</p> <p>Understands principles of local and regional upper extremity anesthesia</p>	<p>Understands treatments for metabolic and contracture processes</p> <p>Understands surgical principles of routine procedures (e.g., nerve releases, fusions, tumor and ganglion excisions, contracture releases)</p> <p>Understands principles of post-operative hand therapy regimens</p>	<p>Understands treatments for autoimmune and congenital anomalies</p> <p>Understands surgical principles for complex procedures (e.g., tendon transfers, arthroplasties and ligament reconstructions, syndactyly release)</p>	<p>Understands anatomy and surgical principles for complex procedures (e.g., rheumatoid hand reconstruction, nerve transfers, thumb reconstructions, congenital hand reconstructions)</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"/>	

Patient Care 13: Cosmetic Trunk and Lower Extremity				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs history and physical examination and identifies aesthetic and functional problems	Explains risks and benefits of routine procedures (e.g., liposuction, abdominoplasty, brachioplasty, thigh lift) and obtains consent	Formulates a treatment plan with assistance; recognizes realistic and unrealistic patient expectations	Independently formulates a treatment plan, including for patients with comorbidities, previous surgeries, and massive weight loss; counsels patients regarding expectations	Manages complicated patients with multiple prior surgeries and unsatisfactory results
Assists with procedures (e.g., making incisions, skin closures)	Performs routine procedures (e.g., abdominoplasty, panniculectomy), with assistance	Independently perform routine procedures; performs complex procedures (e.g., circumferential body lift, brachioplasty), with assistance	Independently performs complex procedures	
Provides routine post-operative care	Recognizes complications (e.g., seroma, thromboembolism, skin loss) and enlists help	Manages complications, with assistance	Independently manages complications and secondary deformities; treats the dissatisfied patient	
<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 13: Cosmetic Trunk and Lower Extremity				
Level 1	Level 2	Level 3	Level 4	Level 5
Understands pathophysiology of obesity, lipodystrophy, and the effects of aging, parity, and massive weight loss	Understands bariatric surgery options and their metabolic effects; understands factors in patient selection for body contouring	Understands indications for treatment options in massive weight loss patients; understands aesthetic interrelation of procedures and safety of combined procedures	Differentiates between functional and aesthetic conditions	Systematically reviews outcomes and publishes in peer-reviewed journals
Understands anatomy of the trunk and extremities, and aesthetic ideals	Understands physiologic effects of liposuction	Understands surgical principles of routine procedures (e.g., liposuction, abdominoplasty, medial thigh lift, brachioplasty)	Understands surgical principles of complex and combined procedures	
Understands role of diet and exercise in weight management	Understands gender differences in aesthetic ideals			
Understands risk factors, diagnosis, and treatment of thromboembolic events	Understands the benefit of multidisciplinary bariatric programs			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			Not Yet Achieved Level 1 <input type="checkbox"/>	

Patient Care 14: Lower Extremity				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination and orders diagnostic and imaging studies</p> <p>Assists with procedures (e.g., making incisions, skin closure, applying splints and dressings)</p> <p>Provides routine post-operative care</p>	<p>Explains risks and benefits of procedures and obtains consent; interprets diagnostic studies</p> <p>Performs routine procedures (e.g., skin grafts), with assistance</p> <p>Recognizes complications (e.g., vascular compromise, compartment syndrome) and enlists help; prescribes post-operative rehabilitation</p>	<p>Formulates a treatment plan, with assistance</p> <p>Performs routine procedures independently; performs complex procedure (e.g., regional flaps, microvascular tissue transfer), with assistance</p> <p>Manages complications, with assistance</p>	<p>Independently formulates a treatment plan, including for patients with comorbidities, ischemia, and failed prior surgery</p> <p>Performs complex procedures independently</p> <p>Independently manages complications and secondary deformities</p>	<p>Helps lead a multidisciplinary limb salvage program</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 14: Lower Extremity				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands pathophysiology of acquired and congenital conditions of the lower extremity (e.g., venous and arterial insufficiency, diabetes mellitus, lymphatic disease, cancer, trauma)</p> <p>Understands the anatomy of the lower extremity</p> <p>Understands classification systems for bone and soft tissue loss</p>	<p>Understands principles of non-operative treatment for lower extremity conditions (e.g., venous hypertension, neuropathic ulcers, lymphedema) and the contraindications to limb salvage</p> <p>Understands the principles of surgical approaches and timing for congenital and acquired conditions</p>	<p>Understands indications for treatment of lower extremity conditions (e.g., musculoskeletal injury, arterial insufficiency, exposed prostheses, tumor resection, compartment syndrome)</p> <p>Understands the surgical principles of routine procedures (e.g., debridement, skin grafting, pedicled musculoskeletal, and fasciocutaneous flaps)</p>	<p>Understands the effect of procedures on quality of life and the role of adjunctive modalities (e.g., prostheses, rehabilitation)</p> <p>Understands the surgical principles of complex procedures (e.g., perforator flaps, microvascular reconstruction for lower limb salvage)</p>	<p>Understands the principles of nerve and tendon transfers of the lower extremity, and microsurgical treatment of lymphedema</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"/>	

Patient Care 15: War Injuries				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs history and physical examination of patients with simple and complex war injuries</p> <p>Provides routine post-operative care for patients with complex wounds</p>	<p>Explains risks and benefits, and obtains consent for reconstruction options</p> <p>Performs routine procedure (e.g., debridement, complex closures, split and full thickness skin grafts, adjacent tissues transfers, bone graft harvesting) with assistance; performs microsurgical repairs in a stimulated environment</p> <p>Provides post-operative care with assistance for microvascular tissue transfer, and recognizes complications (e.g., dehiscence, infection, flap compromise)</p>	<p>Formulates a treatment plan (risk/benefits, options/alternatives) with assistance for complex reconstructive surgery in war injuries</p> <p>Independently performs routine procedures; performs complex procedures (e.g., microvascular tissue transfers, nerve repairs, and grafting), with assistance</p> <p>Manages complications, with assistance</p>	<p>Independently formulates a treatment plan for complex reconstructive surgery in patients war injuries</p> <p>Independently performs complex procedures</p> <p>Independently manages complex complications; manages secondary deformities</p>	<p>Leads surgical team through complex tissue reconstruction</p> <p>Performs composite tissue transfer</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 15: War Injuries				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands pathophysiology of gunshot wound and blast injuries</p> <p>Understands principles of initial stabilization and debridement</p>	<p>Understands indications for intervention in acute and delay war injuries</p> <p>Recognizes populations at risk of developing complications</p> <p>Understands diagnostic tools for assessing injuries</p>	<p>Understands treatment of gunshot wound and blast injuries and difficulty stages presentation</p> <p>Understand underlying causes of complications in the injuries</p>	<p>Understands anticipated course and outcomes of treatment</p> <p>Understands surgical principles of complex 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"/>	

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 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 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 safe and effective transitions of care and hand-offs	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	Role models and advocates for safe and effective transitions of care/hand-offs 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	Uses 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
Accepts responsibility for personal and professional development by establishing goals	Demonstrates openness to performance data (feedback and other input) in order to inform goals	Seeks performance data episodically, with adaptability and humility	Intentionally seeks performance data consistently, with adaptability and humility	Role models consistently seeking performance data, with adaptability and humility
Identifies the factors that contribute to gap(s) between expectations and actual performance	Analyzes and reflects on the factors that contribute to gap(s) between expectations and actual performance	Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance	Challenges assumptions and considers alternatives in narrowing the gap(s) between expectations and actual performance	Coaches others on reflective practice
Actively seeks opportunities to improve	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Uses performance data to measure the effectiveness of the learning plan and, when necessary, improves it	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"/>
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 uses 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, email) 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  Respectfully communicates concerns about the system	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)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>