In general a Junior resident is expected to achieve the following learning objectives: Perform a thorough and accurate history and physical examination including history of the chief complaint, history and mechanism of the injury, past medical and surgical history, social history. The physical exam should include exam for identification of: peripheral nerve, tendon integrity and chronic tendon disorders (de Quervain's, ECU tendonitis, stenosing tenosynovitis), vascular status, skin and nail disorders, joint evaluation including stability and the presence of arthritis (CMC, PIP, DIP, MCP arthritis) as well as specific and pertinent provocative maneuvers; Apply the knowledge of the natural history of upper extremity disorders with and without surgical treatment;	In general a senior resident or fellow is expected to achieve the learning objectives of the junior resident in addition to: Demonstrate mastery of all elements in the realm of patient care as described for the junior level resident; Demonstrate the ability and maturity to directly supervise the junior level resident; Effectively follows all inpatients and any patients seen in the emergency room including ensuring appropriate follow up after discharge;
Perform a thorough and accurate history and physical examination including history of the chief complaint, history and mechanism of the injury, past medical and surgical history, social history. The physical exam should include exam for identification of: peripheral nerve, tendon integrity and chronic tendon disorders (de Quervain's, ECU tendonitis, stenosing tenosynovitis), vascular status, skin and nail disorders, joint evaluation including stability and the presence of arthritis (CMC, PIP, DIP, MCP arthritis) as well as specific and pertinent provocative maneuvers; Apply the knowledge of the natural history of upper extremity	Demonstrate mastery of all elements in the realm of patient care as described for the junior level resident; Demonstrate the ability and maturity to directly supervise the junior level resident; Effectively follows all inpatients and any patients seen in the emergency room including ensuring appropriate follow up after discharge;
including history of the chief complaint, history and mechanism of the injury, past medical and surgical history, social history. The physical exam should include exam for identification of: peripheral nerve, tendon integrity and chronic tendon disorders (de Quervain's, ECU tendonitis, stenosing tenosynovitis), vascular status, skin and nail disorders, joint evaluation including stability and the presence of arthritis (CMC, PIP, DIP, MCP arthritis) as well as specific and pertinent provocative maneuvers; Apply the knowledge of the natural history of upper extremity	described for the junior level resident; Demonstrate the ability and maturity to directly supervise the junior level resident; Effectively follows all inpatients and any patients seen in the emergency room including ensuring appropriate follow up after discharge;
exam should include exam for identification of: peripheral nerve, tendon integrity and chronic tendon disorders (de Quervain's, ECU tendonitis, stenosing tenosynovitis), vascular status, skin and nail disorders, joint evaluation including stability and the presence of arthritis (CMC, PIP, DIP, MCP arthritis) as well as specific and pertinent provocative maneuvers; Apply the knowledge of the natural history of upper extremity	level resident; Effectively follows all inpatients and any patients seen in the emergency room including ensuring appropriate follow up after discharge;
disorders, joint evaluation including stability and the presence of arthritis (CMC, PIP, DIP, MCP arthritis) as well as specific and pertinent provocative maneuvers; Apply the knowledge of the natural history of upper extremity	emergency room including ensuring appropriate follow up after discharge;
disorders with and without surgical treatment,	Demonstrate expertise in obtaining a history and physical examination in patients with hand and upper extremity conditions and disorders;
Evaluate the following conditions thoroughly with history, physical examination and radiographs as appropriate: animal and human bites, carpal tunnel syndrome, cubital tunnel syndrome, de Quervain's tendonitis, fingertip injuries and amputations, flexor and extensor injuries, flexor tenosynovitis, ganglia of the hand and wrist, infections - finger and hand, mallet finger injuries, phalangeal and metacarpal	Utilize information gathered in the history and exam to effectively generate a pertinent differential diagnosis, order necessary radiographic evaluations most appropriate to the differential diagnosis, and be able to formulate an appropriate treatment plan based on the information gathered.
fractures, soft tissue coverage problems (open tibia fracture, dorsal hand trauma), sprains and dislocations of the CMC, MCP, and PIP joints, static carpal instability, tendonitis, thumb basal joint arthritis, trigger finger;	Evaluate, diagnose, and treat the following conditions: all condition ascribed to the junior level trainee, arthritis of the hand, boutonniere deformity, Dupuytren's disease, flexor tendon injuries (describe suture techniques and their rationale, and perform a flexor tendon
Effectively communicate the history as taken from the patient and/or the patient's guardian or family in a succinct and accurate fashion;	repair, and describe postoperative regimens for flexor tendon rehabilitation and their rationale), intraarticular fractures of the distal radius and ulna, malunions of the distal radius (technique and planning of a corrective osteotomy for malunions including plating
Effectively communicate and demonstrate respectful and caring behavior when interacting with patients, their guardians and their families;	and grafting options), fractures of the scaphoid, osteonecrosis of the carpus, including Kienböck's and Preiser's disease, complex, intraarticular fractures of the phalanges and metacarpals, fractures of
Competent in assuming responsibility for specifically inquiring about the presence or absence of systemic disease relevant to conditions commonly encountered in the hand such as diabetes mellitus,	the base of the thumb metacarpal (Rolando, Bennett), tumors of the hand and wrist, static carpal instability (management of scapholunate dissociation and traumatic ligamentous injuries of the wrist, perilunate dislocations); dynamic carpal instability (treatment options for SL instability, midcarpal instability), upper extremity conditions related
	trigger finger; Effectively communicate the history as taken from the patient and/or the patient's guardian or family in a succinct and accurate fashion; Effectively communicate and demonstrate respectful and caring behavior when interacting with patients, their guardians and their families; Competent in assuming responsibility for specifically inquiring about the presence or absence of systemic disease relevant to conditions

Demonstrate knowledge and application of knowledge of non-	combined medial-ulnar nerve paralyses including tendon transfers and
operative treatment, which includes anti-inflammatories, hand therapy,	indication for arthrodesis (tendon transfers for major peripheral nerve
application of heat and cold as well as basics of splinting;	dysfunction including indications, techniques, complications, and
	risks), treatment of the rheumatoid hand, including thumb MP
Perform simple invasive procedures for patients suffering from hand-	arthrodesis, MCP interposition, wrist arthrodesis (complete and
related complaints – such as injections of trigger finger, carpal tunnel	partial), basic wrist arthroscopy (portal placement and familiarity with
and base of thumb arthritis at the CMC joint;	structures at risk), DRUJ instability, TFCC injury, radial tunnel
	syndrome, AIN palsy, PIN palsy, proximal median nerve entrapment,
Demonstrate the ability to systematically and accurately interpret plain	small joint arthroplasty (discuss the reconstructive ladder for soft
and special view radiographs and other imaging methods (MRI,	tissue deficiency of the upper and lower extremities);
arthrography, computed tomography imaging, angiography) commonly	
used in the evaluation of upper extremity disorders and understand the	Be familiar with hand surgery operating room protocols as related to
indications for ordering such exams, including their applications;	patient preparation and be able to direct the appropriate room setup,
	including the physical placement of the lights, surgical assistants,
Assess hand surgery problems/injuries in the emergency department,	scrub personnel and radiology technician;
obtain history, perform pertinent physical exam, develop differential	1 65 ,
diagnosis, and communicate findings in a succinct and professional	Be able to effectively participate as an assistant surgeon and perform
manner;	certain aspects of the corrective surgical procedure for all conditions
	ascribed to the junior level trainee: arthritis of the hand, boutonniere
Demonstrate facility in the more commonly encountered surgical	deformity, Dupuytren's disease, flexor tendon injuries, complex
procedure;	fractures of the distal radius, malunions of the distal radius, fractures
procedure,	of the scaphoid, osteonecrosis of the carpus, including Kienböck's
Generate an operative plan and perform a substantial portion of the	and Preiser's disease, complex, intraarticular fractures of the
corrective surgical procedures for the following conditions: animal and	phalanges and metacarpals, fractures of the base of the thumb
human bites, carpal tunnel syndrome, cubital tunnel syndrome, de	metacarpal (Rolando, Bennett), tumors of the hand and wrist, dynamic
Quervain's tendonitis, dorsal and volar ganglia of the hand and wrist,	carpal instability, upper extremity conditions related to cerebral palsy,
drainage of fingertip and hand deep space infections, extensor tendon	the "stroke hand", treatment of radial, ulnar and combined median-
injuries, fingertip injuries and amputations (initial stabilization and	ulnar nerve paralysis including tendon transfers and indication for
wound care), flexor tenosynovitis (purulent), mallet finger, phalangeal	arthrodesis, treatment of the rheumatoid hand, including thumb MP
and metacarpal fractures (extra-articular), tendonitis, trigger finger;	arthrodesis, treatment of the methatold hand, including thumb wir arthrodesis and MCP interposition arthroplasty, basic wrist
and metacarpar mactures (extra-articular), tendomus, trigger iniger,	arthroscopy, ulnar sided wrist pain and instability, radial tunnel
Demonstrate facility in the application of a brachial or forearm	syndrome, small joint arthroplasty, soft tissue coverage using a groin
tourniquet in the operating room, appropriate prepping and draping of	
	flap, reverse radial forearm flap, cross finger flap and random
the patient, and the appropriate application of a postoperative dressing	advancement flaps;
to control edema and hematoma formation;	
	Be prepared to be the primary surgeon on designated cases as
Manage the basic postoperative hand patient and inpatients with hand	technical skills permit.
conditions including presenting the patients during rounds with the	
faculty/consultant;	(Additions as further specified by the Review Committee)
Demonstrate knowledge of the basics of postoperative hand therapy	

and be able to generate appropriate orders for hand therapy and splinting;
Use information technology such as data from current clinical studies as well as information from current journals to support patient care decisions and patient education;
Demonstrate ability to practice culturally competent medicine.
(Additions as further specified by the Review Committee)

	Junior Resident	Senior Resident/Fellow
Medical Knowledge	Be familiar with bony and soft tissue anatomy of the hand and upper extremity;	Demonstrate mastery of all elements in the realm of medical knowledge as described for the junior level resident;
	Be familiar with standard surgical approaches to the upper extremity; Understand the basic science of fracture healing, wound healing,	Demonstrate a firm understanding of the fundamentals of hand and wrist anatomy including common anatomic variations and be able to instruct the junior resident in this realm;
	tendon healing, and nerve regeneration;	Demonstrate knowledge and expertise in the discussion of the natural
	Possess an understanding of the scientific basis of evaluation, diagnosis and treatment of commonly encountered hand surgical conditions including: carpal tunnel syndrome, trigger finger, tendonitis: de Quervain's, ECU, FCR, thumb basal joint arthritis (describe the basic	history of hand injuries/conditions including fractures, dislocations, tendon injuries, instability patterns, osteonecrosis, non-unions, and malunions;
	management of osteoarthritis of the hand and the radiographic findings, and understand the pathophysiology of arthritis in the hand including osteoarthritis, rheumatoid arthritis, and posttraumatic arthritis), animal and human bites, flexor and extensor injuries (classify and describe	Interpret and have an understanding of the significance of electrodiagnostic studies, vascular studies, autonomic function studies, and advanced radiographic study techniques;
	treatment for tendon lacerations, describe suture techniques for flexor tendon repair, and describe the basic steps of tendon healing, infections of the fingertip, tendon sheaths and deep spaces, recognize and list the classic signs of acute suppurative tenosynovitis, fingertip injuries and	Possess a basic understanding of the priorities of treatment of hand conditions, including the revascularization of devitalized parts, skeletal stabilization, tendon fixation, nerve reconstruction, and soft tissue coverage for complex injuries of the hand and wrist (possesses
	amputations), nail bed injuries; phalangeal and metacarpal fractures (describe an algorithm for management, and understand complications and risks associated with treatment), ganglia of the hand and wrist; mallet finger injuries; sprains and dislocations of the CMC, MCP and PIP joints (classify and describe treatment for joint injuries, static	a basic understanding of the goals of treatment and the techniques used to achieve these goals in the treatment of combined injuries of the hand and wrist, including skeletal fixation, tendon/nerve/vessel repair, and soft tissue coverage);
	carpal instability, and be familiar with the classification and radiographic findings), cubital tunnel syndrome, chronic carpal tunnel syndrome including tendon transfers and indication for arthrodesis (understand the principles of tendon transfer, and describe commonly	Demonstrate advanced knowledge and familiarity with rehabilitation methods for non-operative and postoperative treatment of hand conditions as listed above;
	utilized opponensplasty procedures), describe a classification of flaps (random pattern, axial pattern, island, free; local regional, distant) and cite common examples of each;	Develop an understanding of potential perioperative complications for both elective and emergent surgical hand and wrist conditions and the appropriate available treatment algorithms;
	Develop and discuss a differential diagnosis of hand and upper extremity conditions based on physical exam and history obtained from patient;	
	Demonstrate a working knowledge of the presentation and radiographic findings of common hand and upper extremity conditions;	Demonstrate knowledge of the use of instrument sets (mini-fragment, modular handsets, external fixation, Herbert and Acutrak screws, etc.) specific to the care of injuries of the hand and wrist and the

Demonstrate knowledge of complete history and physical exam results for patients on whom surgical treatment is being considered;	appropriate use of intraoperative imaging. (Additions as further specified by the Review Committee)
Demonstrate knowledge of the indications for basic surgical procedures in hand surgery conditions as listed above;	
Demonstrate knowledge of non-operative treatment and initial management of the above conditions (anti-inflammatories, hand therapy, application of modalities as appropriate based on scientific evidence, basic splinting);	
Demonstrate an understanding of simple invasive procedures for patients suffering from hand related complaints as listed such as injections, anesthetic blocks, suture repair of nail bed injuries and lacerations, closed reductions;	
Demonstrate basic understanding of the classic and contemporary literature pertaining to surgery of the hand and upper extremity;	
Demonstrate knowledge of the basics of postoperative hand therapy.	
(Additions as further specified by the Review Committee)	

	Junior Resident	Senior Resident/Fellow
Practice-Based	Demonstrate familiarity and understanding of reading materials	Demonstrate competence in the application of critical thinking and in
Learning &	describing the diagnosis and treatment of carpal tunnel, trigger finger, tendinitis and thumb base arthritis;	the appraisal of clinical studies read in peer reviewed literature as well as in the treatment of patients;
Improvement	tendinitis and thumb base artifitis;	as in the treatment of patients;
	Accurately locate, appraise and assimilate evidence from scientific studies relating to the patient's hand surgical problem, which requires knowledge of the pertinent recent literature, as may be obtained from the American and British Journal of Bone and Joint Surgery, American	Responsibly perform preoperative examination in the holding area of patients on whom hand surgery is being performed; Responsibly confirms the surgical site with the junior level resident;
	and British Journal of Hand Surgery, and the Journal of the American	
	Academy of Orthopaedic Surgeons;	Responsibly directs education of the junior resident and medical students on the team;
	Demonstrate facility in the critical reading of a manuscript, notably those from the American Journal of Hand Surgery, possibly through active participation in the service's Journal Club;	Successfully maintains a record of all operative cases via the ACGME web site;
	Demonstrate facility at using on-line search engines, such as MEDLINE, to locate and access appropriate educational materials and peer review reference articles relevant to patient care;	Self-evaluation of performance should include search, retrieve, and interpret peer reviewed medical literature relevant to hand diseases and disorders, apply study and case report conclusions to the care of individual patients;
	Successfully maintain a record of all operative cases via the resident operative log via the ACGME web site;	Reflective learning should include: communicate learned concepts to peers, incorporation of feedback into improvement of clinical activity,
	Facilitate the learning of 3 <sup>rd</sup> and 4 <sup>th</sup> year medical students and other health care professionals;	utilize patient information systems to assess measurable clinical practices and outcomes.
	Self-evaluation of performance should include the ability to analyze the effectiveness of his/her own interpretative, problem solving, and surgical skills;	(Additions as further specified by the Review Committee)
	Search, retrieve, and interpret peer reviewed medical literature relevant to hand diseases and disorders;	
	Apply study and case report conclusions to the care of individual patients;	
	Reflective learning should include: communicate learned concepts to peers, receptive to constructive criticism, incorporation of feedback into improvement of clinical activity, utilize patient information	

	systems to assess measurable clinical practices and outcomes. (Additions as further specified by the Review Committee)	
	Junior Resident	Senior Resident/Fellow
Interpersonal & Communication Skills	Demonstrate communication skills that result in an effective information exchange with patients, their families and caregivers, and other physicians and members of the health care team;	Demonstrate communication skills that result in an effective information exchange with patients, their families and caregivers, and other physicians and members of the health care team;
	Create and sustain a therapeutic and ethically sound relationship with patients and their families;	Create and sustains a therapeutic and ethically sound relationship with patients and their families;
	Effectively use listening skills in communication with all parties involved in patient care;	Effectively use listening skills in communication with all parties involved in patient care;
	Effectively provide information via various methods – Confidence and effectiveness in transmitting information verbally and written;	Effectively provide information via various methods – Confidence and effectiveness in transmitting information verbally and written;
	Effectively work with other members of the team, specifically medical assistants, chief residents, hand fellows and hand therapists;	Effectively work with other members of the team, specifically medical assistants, chief residents, hand fellows and hand therapists;
	Present at conferences, to other physicians, and mentors both formally and informally effectively and succinctly.	Present at conferences, to other physicians, and mentors both formally and informally effectively and succinctly;
	(Additions as further specified by the Review Committee)	Seek necessary help from hand fellows and therapists for the provision of appropriate care to the patient when necessary.
		(Additions as further specified by the Review Committee)

	Junior Resident	Senior Resident/Fellow
Professionalism	Patient primacy: trainees are expected to demonstrate an understanding of the importance of patient primacy by placing the interest of the patient above their own interest, providing autonomy to their patients to decide upon treatment once all treatment options and risks have been outlines for them. Understand and demonstrate the ability to obtain an informed consent from a patient, which includes the presentation of the natural history of both surgical and non- surgical care of the patient's condition, giving equitable care to all patients, treating all patients with respect regardless of race, gender and socioeconomic background;	Patient primacy: trainees are expected to demonstrate an understanding of the importance of patient primacy by placing the interest of the patient above their own interest, providing autonomy to their patients to decide upon treatment once all treatment options and risks have been outlines for them. Understand and demonstrate the ability to obtain an informed consent from a patient, which includes the presentation of the natural history of both surgical and non-surgical care of the patient's condition, giving equitable care to all patients, treating all patients with respect regardless of race, gender and socioeconomic background;
	Physician accountability and responsibility: follow through on duties and clinical tasks. Demonstrate timeliness in required activities, in completing medical records and in responding to patient and colleague calls. Exhibit regular attendance and active participation in hand surgery service and orthopaedic departmental training activities and scholarly endeavors. Strive for excellence in care and or scholarly activities as an orthopaedic surgeon and hand surgeon. Work to maintain personal physical and emotional health and demonstrate an understanding of and ability to recognize physician impairment in self and colleagues. Demonstrate sensitivity to the culture, age, gender and disabilities of fellow health care professionals and be respectful of the opinions of other healthcare professionals;	Physician accountability and responsibility: follow through on duties and clinical tasks. Demonstrate timeliness in required activities, in completing medical records and in responding to patient and colleague calls. Exhibit regular attendance and active participation in hand surgery service and orthopaedic departmental training activities and scholarly endeavors. Strive for excellence in care and or scholarly activities as an orthopaedic surgeon and hand surgeon. Work to maintain personal physical and emotional health and demonstrate an understanding of and ability to recognize physician impairment in self and colleagues. Demonstrate sensitivity to the culture, age, gender and disabilities of fellow health care professionals and be respectful of the opinions of other healthcare professionals. Demonstrate appropriate conduct in the timely completion of the dictated operative notes, chart operative
	Humanistic qualities and altruism: exhibits empathy and compassion in patient/physician interactions, sensitive to patient needs for comfort and encouragement, courteous and respectful in interactions with patients, staff and colleagues, maintains the welfare of their patients as their primary professional concern;	summaries and discharge summaries as well as clinic notes; Humanistic qualities and altruism: exhibit empathy and compassion in patient/physician interactions, sensitive to patient needs for comfort and encouragement, courteous and respectful in interactions with patients, staff and colleagues, maintains the welfare of their
	Ethical behavior including being trustworthy and cognizant of conflicts of interest. Maintaining integrity as a physician orthopaedic surgeon and hand surgeon pervades all of the components of professionalism. Demonstrate integrity when reporting back key clinical findings to supervising physicians. Be trustworthy in following through on clinical questions, laboratory results and other patient care responsibilities. Recognize and address actual and	<ul> <li>while patients, starr and concegues, maintains the wehate of their patients as their primary professional concern;</li> <li>Ethical behavior including being trustworthy and cognizant of conflicts of interest. Maintaining integrity as a physician orthopaedic surgeon and hand surgeon pervades all of the components of professionalism. Demonstrate integrity when reporting back key clinical findings to supervising physicians. Be</li> </ul>

potential conflicts of interest including orthopaedic device industry and pharmaceutical industry involvement in their medical education and program funding and guard against this influencing their current	trustworthy in following through on clinical questions, laboratory results and other patient care responsibilities. Recognize and address actual and potential conflicts of interest including orthopaedic device
and future treatment recommendation habits.	industry and pharmaceutical industry involvement in their medical education and program funding and guard against this influencing
(Additions as further specified by the Review Committee)	their current and future treatment recommendation habits
	(Additions as further specified by the Review Committee)

	Junior Resident	Senior Resident/Fellow
Systems-Based Practice	Demonstrate an understanding of how their patient care and other professional practices affect other health care professionals and the health care organization. Specifically, the identification of a proper site before surgery and a confirmation of the operative procedure to be done with the chief resident (or hand fellow or faculty) in the preoperative holding area are crucial in the duties of the junior resident.	In addition to the competencies listed for the PGY-3 trainee, the senior resident is responsible for the following: Demonstrate appropriate conduct in the timely completion of the dictated operative notes, chart operative summaries and discharge summaries as well as clinic notes. Understand how the delay of these activities affects patient care throughout the system overall;
	<ul> <li>Successfully teams with the chief resident and/or the hand fellow to ensure that all radiographic and clinical notes are available preoperatively and intraoperatively;</li> <li>Demonstrate the ability to partner with other members of the health care team to assess and coordinate the patient's health care. For example, within the context of hand surgery, the resident should demonstrate the ability to interact in the most efficient manner with hand therapists, such that no time is lost in the provision of appropriate hand therapy after injury or surgery;</li> <li>Partners – Demonstrate the ability to utilize multiple providers and resources as needed for optimal patient care. Understand the hand surgeon's role as well as when to consult other health professionals (physiatrist, nurse practitioner, visiting nurse, physical therapist, occupational therapist, podiatrist, social worker, vocational rehabilitation counselor, psychologist, others) in the outpatient and inpatient rehability to educate patients about outside resources, which might be of assistance to their physical, emotional and financial well being;</li> <li>Knowledge of the advantages and disadvantages of different health care systems that affect patients with hand diseases and disorders, which include the academic system, various private and public health care delivery systems, the governmental, volunteer and private agencies that are available to educate and assist patients, the</li> </ul>	Effectively partners with other members of the health care team; Serve as an example for the remaining members of the team, especially 2 <sup>nd</sup> and 3 <sup>nd</sup> year residents and 3 <sup>rd</sup> and 4 <sup>th</sup> year medical students. (Additions as further specified by the Review Committee)

disorders; Advocacy for the patient: demonstrate the ability to act as effective advocates for their patients in a variety of needs, such as dealing with insurance companies and HMOs for the preauthorization of medications, filing disability claims, preparing for postoperative rehabilitation, return to work issues, etc; Cost effective health care: utilization of appropriate, cost-effective diagnostic tests and antibiotics. Knowledge of the range of implants and devices needed in rendering hand surgical care as well as the associated costs. Knowledge of the availably of certain drugs (and unavailability of others) on the trainee's hospital formulary, and knowledge of the mechanisms by which compensation (by CMS and other carriers) is dependent upon the delivery of various levels of service to patients and the methods in place for quality review of inpatient and outpatient practice patterns. Knowledge of the local costs of medications, durable medical equipment, e.g., splins they prescribe, imaging and lab tests they order and costs related to surgical equipment, devices, and implants. Demonstrate a commitment to the practice of appropriate evidence based cost conscious patient care; Systems: demonstrate knowledge about how different health care delivery systems affect the management of patients with hand and orthopaedic diseases and disorders. Be familiar with types of practice management, equipment, insurance, economics, personnel, ethical aspects, quality assurance, and managed care issues relating to the practice of hand surgery and orthopaedic surgery. Identify the strengths and weaknesses of the system in which they are training and practicing. Demonstrate the ability to develop strategies to overcome systematic problems they have identifies, and or QI projects to improve it. Be familiar with the history of orthopaedic and hand surgical history. Understand the influence on hand surgery and orthopaedic hassociation, food and Drug Administration, HCFA and other governmental age	12	
advocates for their patients in a variety of needs, such as dealing with insurance companies and HMOs for the preauthorization of medications, filing disability claims, preparing for postoperative rehabilitation, return to work issues, etc; Cost effective health care: utilization of appropriate, cost-effective diagnostic tests and antibioties. Knowledge of the range of implants and devices needed in rendering hand surgical care as well as the associated costs. Knowledge of the availably of certain drugs (and unavailability of others) on the trainee's hospital formulary, and knowledge of the mechanisms by which compensation (by CMS and other carriers) is dependent upon the delivery of various levels of service to patients and the methods in place for quality review of inpatient and outpatient practice patterns. Knowledge of the local costs of medications, durable medical equipment, e.g., splints they prescribe, imaging and lab tests they order and costs related to surgical equipment, devices, and implants. Demonstrate a comminent to the practice of appropriate evidence based cost conscious patient care; Systems: demonstrate knowledge about how different health care delivery systems affect the management of patients with hand and orthopaedic diseases and disorders. Be familiar with types of practice management, equipment, insurance, economics, personnel, ethical aspects, quality assurance, and managed care issues relating to the practice of hand surgery and orthopaedic surgery. Identify the strengths and weaknesses of the stystem in which they are training and practicing. Demonstrate the isotoy of orthopaedic and hand surgical history. Understand the influence on hand surgery and orthopaedic surgery by the American Society for Surgery of the Hand, the American Academy of Orthopaedic Surgery, identify the Hand, the American Academy of Orthopaedic Surgery of the Hand, the American Academy of Orthopaedic Surgery of the Hand, the American Academy of Orthopaedic Surgery of the Hand, the American Academy of Orthopaedic	disorders;	
diagnostic tests and antibiotics. Knowledge of the range of implants and devices needed in rendering hand surgical care as well as the associated costs. Knowledge of the availably of certain drugs (and unavailability of others) on the traince's hospital formulary, and knowledge of the mechanisms by which compensation (by CMS and other carriers) is dependent upon the delivery of various levels of service to patients and the methods in place for quality review of inpatient and outpatient practice patterns. Knowledge of the local costs of medications, durable medical equipment, e.g., splints they prescribe, imaging and lab tests they order and costs related to surgical equipment, devices, and implants. Demonstrate a commitment to the practice of appropriate evidence based cost conscious patient care; Systems: demonstrate knowledge about how different health care delivery systems affect the management of patients with hand and orthopaedic diseases and disorders. Be familiar with types of practice management, equipment, insurance, economics, personnel, ethical aspects, quality assurance, and managed care issues relating to the practice of hand surgery and orthopaedic surgery. Identify the strengths and weaknesses of the system in which they are training and practicing. Demonstrate the ability to develop strategies to overcome systematic problems they have identifies, and or QI projects to improve it. Be familiar with the history of orthopaedic and hand surgical history. Understand the influence on hand surgery and orthopaedic surgery by the American Society for Surgery of the Hand, the American Academy of Orthopaedic Surgery of the Hand, the American Academy of Orthopaedic Surgery of the American Medical Association, food and Drug Administration, HCFA and other governmental agencies involved in health care	advocates for their patients in a variety of needs, such as dealing with insurance companies and HMOs for the preauthorization of medications, filing disability claims, preparing for postoperative	
delivery systems affect the management of patients with hand and orthopaedic diseases and disorders. Be familiar with types of practice management, equipment, insurance, economics, personnel, ethical aspects, quality assurance, and managed care issues relating to the practice of hand surgery and orthopaedic surgery. Identify the strengths and weaknesses of the system in which they are training and practicing. Demonstrate the ability to develop strategies to overcome systematic problems they have identifies, and or QI projects to improve it. Be familiar with the history of orthopaedic and hand surgical history. Understand the influence on hand surgery and orthopaedic surgery by the American Society for Surgery of the Hand, the American Academy of Orthopaedic Surgeons, the American Medical Association, food and Drug Administration, HCFA and other governmental agencies involved in health care	diagnostic tests and antibiotics. Knowledge of the range of implants and devices needed in rendering hand surgical care as well as the associated costs. Knowledge of the availably of certain drugs (and unavailability of others) on the trainee's hospital formulary, and knowledge of the mechanisms by which compensation (by CMS and other carriers) is dependent upon the delivery of various levels of service to patients and the methods in place for quality review of inpatient and outpatient practice patterns. Knowledge of the local costs of medications, durable medical equipment, e.g., splints they prescribe, imaging and lab tests they order and costs related to surgical equipment, devices, and implants. Demonstrate a commitment to the practice of appropriate evidence based cost	
	delivery systems affect the management of patients with hand and orthopaedic diseases and disorders. Be familiar with types of practice management, equipment, insurance, economics, personnel, ethical aspects, quality assurance, and managed care issues relating to the practice of hand surgery and orthopaedic surgery. Identify the strengths and weaknesses of the system in which they are training and practicing. Demonstrate the ability to develop strategies to overcome systematic problems they have identifies, and or QI projects to improve it. Be familiar with the history of orthopaedic and hand surgical history. Understand the influence on hand surgery and orthopaedic surgery by the American Society for Surgery of the Hand, the American Academy of Orthopaedic Surgeons, the American Medical Association, food and Drug Administration, HCFA and other governmental agencies involved in health care	