

AMERICAN BOARD OF INTERNAL MEDICINE

The following section includes a listing of subspecialty-specific definitions of medical knowledge, required procedures for certification, and an extensive series of forms to document physician competency and performance and related guidelines for education and training.

DEFINITIONS AND FORMS

Definitions of Subspecialty-Specific Medical Knowledge

List of Subspecialty-Specific Required Procedures for Certification

Attending's Form to Evaluate Trainees

Fellow's Form to Evaluate Attending Physicians

Fellow's Form to Evaluate a Subspecialty Training Program

Peer Evaluation: Professional Associate Ratings Form and Instructions

Feedback: Praise Card and Early Concern Note

Guidelines and Forms for Mini-Consultation Evaluation Exercise (CEX)

Problem-Remediation Summary for Subspecialty Fellows

Form to Evaluate Research Performance

Form to Evaluate Clinical Competence of Trainees

Designed for use by attending faculty during consult service and clinic teaching experiences, this form is consistent with the content of the ABIM tracking and candidate evaluation forms, specifies standards of behavior and performance at each end of the continuum for each component skill, and includes a nine-point rating scale.

The form also provides space for written comments from the attending physician about the trainee's performance during their contact on the consult service or in the clinic. The category called "needs attention" can be checked when the trainee's skill in that area is questionable.

Fellow's Form to Evaluate a Subspecialty Training Program

A new form developed this year to obtain feedback from subspecialty fellows on their training experience is enclosed. It targets 14 elements within the program along with perceptions of quality regarding teaching conferences, faculty, and opportunity for self-reflection.

Form to Evaluate Attending Physicians

Evaluation and feedback are vital to the education and continuing professional growth of physicians. The Residency Review Committee for Internal Medicine (RRC-IM), an organization separate from the ABIM and responsible for the accreditation of training programs, requires program directors to provide an opportunity for residents and subspecialty fellows to evaluate their attending physicians. Included is a form that trainees may use to evaluate and document the performance of attending physicians. Program directors are encouraged to provide constructive feedback to the attending faculty based on these evaluations.

Professional Associate Ratings (PARs) Form

This form demonstrates that peer ratings provide a reliable assessment of medical knowledge, problem-solving skills, and management of complex problems, as well as humanistic qualities (integrity, respect, and compassion) and the ability to manage psychosocial aspects of illness when a minimum of 10 ratings per subject are obtained.

Studies with practicing internists suggest that peer ratings can provide a feasible and reproducible measure of performance, as well as valuable feedback to physicians on their performance. The form can be used to provide peer ratings of selected aspects of the clinical skills, humanistic qualities, and professionalism of subspecialty fellows during training.

Praise Card and Early Concern Note

This card is designed to enhance feedback by a) providing *praise* or *early concern* about a trainee's performance, and b) facilitating the flow of information from the teaching faculty to the program director and the trainee. It also can serve as a memory jog to the evaluator who can use the card to note observed performance and incorporate that information into the *houseofficer evaluation form*.

Though illustrated as two separated forms, the praise card/early concern note has been printed as a convenient packet of pocket size double-sided cards which can be used by attending physicians on general medicine and subspecialty inpatient services and in the ambulatory care clinic. Packets are provided by the Board to programs upon request.

In some programs this card has been adapted for use by others who evaluate the performance of trainees, such as chief residents and nurses; program directors are encouraged to modify these cards accordingly. To maximize its utility, program directors should discuss the straightforward purpose of this card with the faculty and housestaff at departmental or division meetings, orientation sessions, or retreats.

Prior to each rotation, when routine material about the clinical service and teaching assignment is sent to the attending physician, a small packet of cards, return envelopes, and recapitulation of its purpose should be included.

As each card is completed, the faculty member should return it in an envelope to the program director for review and feedback to the trainee.

Mini-Consultation Evaluation Exercise (CEX)

The mini-CEX provides another opportunity to observe and evaluate trainees' consultative skills in medical interviewing, physical examination, clinical judgment and synthesis, and humanistic qualities. The mini-CEX is designed to enhance assessment

and promote education. Its advantages include the opportunity for the trainee to be observed interacting with a broad range of patients in a variety of settings, to be evaluated by a number of different faculty members, and to have greater flexibility in both the settings and timing in which evaluation occurs. The mini-CEX is also more efficient, taking between 15-20 minutes. To enhance the generalizability of the results of the mini-CEX and provide a valid, reliable measure of performance, the trainee should interact with a range of different patients (4-12) in a variety of settings (e.g., inpatient, clinic, other) and conduct a focused history and physical examination. A different faculty member should evaluate the trainee with each patient and complete the two-page mini-CEX form included in this publication.

Problem-Remediation Summary

When program directors encounter trainees who present significant deficiencies during training, the Problem-Remediation Summary should be used to help formulate and document the course for the trainee's expected improvement. This form is designed to describe the problem(s) identified, the program's remediation plans, and the trainee's progress and outcome. This form should be completed as necessary for the program director's documentation.

SUBSPECIALTY-SPECIFIC DEFINITIONS OF MEDICAL KNOWLEDGE

Cardiovascular Disease

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as a consultant in cardiology. This knowledge base incorporates the basic physiology, pathophysiology, pharmacology, pathogenesis, natural history, diagnostic methods, and therapeutic procedures requisite for the recognition, evaluation, management, and prevention of diseases of the heart and blood vessels. Essential knowledge includes the clinical areas of coronary, valvular, congenital, hypertensive, primary myocardial, and pericardial diseases; diseases of the aorta and pulmonary and peripheral vessels; congestive heart failure; cardiac arrhythmias; and preventive and rehabilitative cardiology. Also essential is an understanding of pulmonary disease, critical care medicine, cardiovascular surgery, cardiac pathology, and general internal medicine related to the subspecialty. Also required is the ability to interpret roentgenograms of the chest, electrocardiograms, angiograms, echo-cardiograms (transesophageal echo, Doppler), external pulse tracings, radionuclide scans, peripheral vascular studies, intracardiac electrocardiographic recordings, and cardiac catheterization data.

Clinical Cardiac Electrophysiology

This is defined as the specialized, currently accepted and up-to-date knowledge and information required to function as a cardiac electrophysiologist in the evaluation and management of patient. It encompasses knowledge of basic electrophysiology, including information and propagation of normal and abnormal impulses, autonomic nervous control of cardiac electrical activity, and mechanisms of clinically significant arrhythmias and conduction disturbances; evaluation and management of patients — both ambulatory and hospitalized — who have clinical syndromes resulting from bradyarrhythmias or tachyarrhythmias; indications for and interpretation of noninvasive diagnosis studies, including esophageal, scalar, and signal-averaged electrocardiography; ambulatory electrocardiography; continuous in-house cardiac monitoring; exercise testing; tilt testing; and relevant imaging studies.

Also included are indications for and effects of noninvasive therapeutic techniques, such as esophageal

and transcutaneous pacing, cardioversion, defibrillation, and cardiopulmonary resuscitation; indications for and effects of invasive therapeutic techniques, including pacemaker and cardioverter-defibrillator implantation and catheter and surgical ablation of/for arrhythmias.

Knowledge is also required in pharmacology, pharmacokinetics, and use of antiarrhythmic agents and other drugs that affect cardiac electrical activity.

Also essential is an understanding of ethical issues and of the risks associated with diagnostic and therapeutic techniques and knowledge of the sensitivity and specificity of diagnostic studies.

Critical Care Medicine

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as a critical care specialist in the evaluation and management of critically ill patients, and the appropriate application of this information to patient problems. This includes broad knowledge of physiology, pathophysiology, diagnosis, and therapy of disorders of the cardiovascular, respiratory, renal, gastrointestinal, genitourinary, neurologic, endocrine, hematologic, musculoskeletal, and immune systems as well as infectious diseases. It also is essential for those practicing in critical care medicine units to be knowledgeable about the medical management of trauma, burns, preoperative problems and anesthetic complications, pharmacokinetics and dynamics of critical illness; monitoring and medical instrumentation; biostatistics and experimental design; ethical, legal and psychosocial aspects of critical illness; and iatrogenic and nosocomial problems in critical care medicine.

Endocrinology, Diabetes, and Metabolism

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as a consultant in endocrinology, diabetes and metabolism. This knowledge base includes an appreciation of related physiology and biochemistry including cell and molecular biology. It encompasses an understanding of the pathophysiology, diagnosis and management of disorders of the parathyroids, pituitary, thyroid, pancreas, adrenal and gonads. The

endocrinologist also must demonstrate a comprehensive understanding of type I and type II diabetes mellitus including genetics, pathogenesis, patient monitoring and treatment objectives, acute and chronic complications, pregnancy, surgical risks, patient education, and psychosocial issues. In addition, the endocrinologist must understand and be able to manage hypoglycemic syndromes, metabolic and nutritional disorders, and hormone producing neoplasms. A broad knowledge of endocrine physiology in systemic diseases, neuroendocrinology, pediatric endocrinology and genetics also is required.

Gastroenterology

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as a gastroenterologist in evaluation and management of patients, and the appropriate application of this information to patient problems. This encompasses knowledge of common and uncommon gastroenterologic disease including cancer of the digestive system; the natural history of digestive disease including cancer of the digestive system; the natural history of digestive diseases in adults and children; factors involved in managing nutritional problems; surgical procedures employed in relation to digestive system disorders; and judicious use of special instruments and tests in the diagnosis and management of gastroenterologic disorders.

Geriatric Medicine

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as a geriatric medicine consultant in the evaluation and management of patients. It encompasses knowledge of the biology of aging and longevity, including changes in drug metabolism, immunology, and nutritional requirements of the elderly, as well as knowledge of epidemiology and research methodologies related to geriatric medicine. In addition, familiarity with geriatric assessment and rehabilitation; preventive medicine; management of patients in long-term care settings; and psychosocial, ethical, legal and economic issues is necessary. Also required is skill in the diagnosis and treatment of diseases that require a modified approach to management in the elderly, including situations of special concern, such as falls and incontinence as well as preoperative assessment and postoperative management of geriatric patients. An understanding is expected of the organ systems and other specialty areas that are relevant to the practice of geriatric medicine,

such as otorhinolaryngology, ophthalmology, gynecology, and dermatology. Also required is knowledge of related topics in neurology and psychiatry, including the diagnosis and management of cerebrovascular disease, dementia, sensory impairment, and other cognitive and affective changes that occur with aging.

Hematology

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as a hematologist in the evaluation and management of patients. This includes a broad knowledge of the morphology, physiology, and biochemistry of blood, marrow, lymphatic tissue and spleen; and basic pathophysiologic and molecular mechanisms and therapy of diseases of the blood including anemias, diseases of white cells and disorders of hemostasis and thrombosis. In addition, the hematologist must understand the etiology, epidemiology, natural history, diagnosis and management of neoplastic disease of blood-forming organs and lymphatic tissues and the hematologic manifestations of infectious diseases and solid tumors; the effects of other systemic disorders on the blood and management of the immunocompromised patient; and the genetic aspects of hematology. The hematologist must have knowledge of the indications of allogenic and autologous stem cell transplantation and the nature and management of post-transplant complications. Also required is knowledge of relevant drugs, their mechanisms of action, pharmacokinetics and clinical indications and limitations including effects, toxicity and interactions; laboratory evaluation of hematological disorders including tests of hemostasis and thrombosis, immunophenotyping and diagnostic DNA analysis, and regulation of anti-thrombotic therapy; and transfusion medicine including the evaluation of antibodies, blood compatibility and the use of blood-component therapy and apheresis.

Infectious Disease

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as an infectious disease specialist. This includes basic aspects and clinical features of infectious disease of all age groups, disease prevention and treatment, host defense mechanisms, and epidemiology. Also expected is a comprehensive understanding of infection control, viruses, parasites, fungi, rickettsiae, chlamydiae, bacteria, and mycobacteria; diseases caused by these microbes; immunologic diseases;

geographic medicine; the acquired immunodeficiency syndrome; principles of antimicrobial therapy; and guidelines for vaccination. Knowledge of infectious diseases encountered in organ transplantation, oncology, infection in childhood, surgical consultations, critical care medicine, and other subspecialties also is essential.

Interventional Cardiology

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to demonstrate a high level of competence as an interventionalist in the areas of case selection, procedural techniques, basic science, pharmacology and imaging. For case selection this knowledge incorporates the indications of angioplasty and related catheter-based interventions in management of ischemic heart disease, including factors that differentiate patients who require interventional procedures rather than coronary artery bypass surgery or medical therapy; indications for urgent catheterization in management of acute myocardial infarction, including factors that differentiate patients who require angioplasty, intracoronary thrombolysis, or coronary artery bypass surgery; indications for mitral, aortic, and pulmonary valvuloplasty in management of valvular disorders, including factors that differentiate patients who require surgical commissurotomy or valve repair or replacement; indications for catheter-based interventions in management of congenital heart disease in adults; indications for interventional approaches to management of hemodynamic compromise in patients who have acute coronary syndromes, including the use of pharmacologic agents, balloon counterpulsation, emergency pacing, and stent placement.

Comprehensive knowledge of procedural techniques is essential in the planning and execution of interventional procedures, including knowledge of options, limitations, outcomes, and complications as well as alternatives to be used if an initial approach fails; selection and use of guiding catheters, guidewires, balloon catheters, and other FDA-approved interventional devices, including atherectomy devices and coronary stents; knowledge of intravascular catheter techniques and their risks; use of antithrombotic agents in interventional procedures; management of hemorrhagic complications.

Knowledge of basic science encompasses vascular biology, including the processes of plaque formation, vascular injury, vasoreactivity, vascular healing, and

restenosis; hematology, including the clotting cascade, platelet function, thrombolysis, and methods of altering clot formation; coronary anatomy and physiology, including angiographic data such as distribution of vascular segments, lesion characteristics, and their importance in interventions; alterations in coronary flow due to obstructions in vessels; the assessment and effect of flow dynamics on myocardial perfusion; the function of collateral circulation; and the effect of arterial spasm or microembolization on coronary flow.

Knowledge of pharmacology includes biologic effects and appropriate use of vasoactive drugs, antiplatelet agents, thrombolytics, anticoagulants, and antiarrhythmics; biologic effects and appropriate use of angiographic contrast agents.

In addition, imaging-related knowledge is required of specific applications incorporating anatomic features and visualization of lesion morphology by angiography and intravascular ultrasonography; radiation physics, radiation risks and injury, and radiation safety, including methods to control radiation exposure for patients, physicians, and technicians.

Also required is knowledge of ethical issues and risks associated with diagnostic and therapeutic techniques; statistics, epidemiologic data, and economic issues related to interventional procedures.

Medical Oncology

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as a medical oncologist in the evaluation and management of patients, and the appropriate application of this information to patient problems. This includes knowledge of tumor biology; an understanding of the natural history of the various malignancies; the staging and post-treatment evaluation of patients; criteria for response; the pharmacology of anticancer drugs, including pharmacokinetics, drug interactions, therapeutic drug level monitoring, indications for and uses of radiotherapy, surgery, hematologic supportive care, and biological compounds in the management of patients; management of the complications of malignancy, including pain and neurologic, infectious, metabolic, and endocrine problems associated with malignancy or its treatment; and interpretation of diagnostic imaging tests, laboratory tests, and pathological materials.

Nephrology

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as a nephrologist. This includes a broad knowledge of the pathogenesis, natural history and management of congenital and acquired diseases of the kidney and urinary tract; renal physiology; disorders of fluid, electrolyte and acid base regulation; normal and disordered mineral metabolism; acute and chronic renal failure; the management of patients receiving immunosuppressive therapy; and the management and diagnosis of severe hypertension. The clinical nephrologist also must be proficient in the principles and applications of various forms of renal replacement therapy including the management and systems operations of hemodialysis, peritoneal dialysis (excluding placement of temporary peritoneal catheters) and renal transplantation.

Pulmonary Disease

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as a consultant in pulmonary disease. This knowledge base encompasses the etiology, pathogenesis, epidemiology, diagnosis, therapy and prevention of a broad spectrum of pulmonary diseases and conditions including obstructive lung disease, pulmonary malignancy, pulmonary infection, diffuse interstitial lung disease, pulmonary vascular disease, occupational and environmental lung disease, acute lung injury, pulmonary manifestations and complications of systemic disease (including AIDS), respiratory failure, disorders of ventilatory control, sleep disordered breathing, disorders of the pleura and mediastinum, and genetic and developmental disorders of the respiratory system.

Rheumatology

This is defined as the specialized, currently accepted, and up-to-date knowledge and information required to function as a consultant in rheumatology. This includes detailed knowledge and comprehensive understanding of the clinical findings and pathophysiology of rheumatic diseases, as well as current therapeutic principles. In addition, knowledge is essential in the following areas: normal and pathologic anatomy of the musculoskeletal system, humoral and cellular immunology relevant to rheumatic diseases, effect of immunogenetics on predisposition to rheumatic diseases, biochemistry of connective tissue and its association with heritable diseases of connective tissue, mechanisms and pathways of inflammation, diagnosis and treatment of

diseases that primarily affect the musculoskeletal system in adults and children; diseases of autoimmunity; system diseases with musculoskeletal manifestations; primary bone diseases, including metabolic diseases of bone; and problems in the field of sports medicine, diagnostic use of laboratory tests, imaging studies, and histopathologic examination, indications for use of drugs, physical therapy, rehabilitation, and orthopedic surgery, and pharmacology, pharmacokinetics, and side effects of drugs used in treating patients who have rheumatic diseases.

SUBSPECIALTY SPECIFIC REQUIRED PROCEDURES FOR CERTIFICATION

Cardiovascular Disease

- advanced cardiac life support (ACLS)
- including Cardioversion
- electrocardiography, including ambulatory monitoring and exercise testing
- echocardiography
- arterial catheter insertion
- right-heart catheterization, including insertion and management of temporary pacemakers

Clinical Cardiac Electrophysiology

- electrophysiologic studies including mapping, both with a catheter and intraoperatively
- surgical and other ablation procedures
- implantation of pacemakers, cardioverters and defibrillators

Critical Care Medicine

- maintenance of open airway
- oral/nasal intubation
- ventilator management, including experience with various modes
- insertion and management of chest tubes
- advanced cardiac life support (ACLS)
- placement of arterial, central venous, and pulmonary artery balloon flotation catheters
- calibration and operation of hemodynamic recording systems

Endocrinology, Diabetes, and Metabolism

- thyroid aspiration biopsy

Gastroenterology

- proctoscopy and/or flexible sigmoidoscopy
- diagnostic upper gastrointestinal endoscopy
- colonoscopy, including biopsy and polypectomy
- esophageal dilation
- therapeutic upper and lower gastrointestinal endoscopy
- liver biopsy

Hematology

- bone marrow aspiration and biopsy, including preparation, staining, examination, and interpretation of blood smears, bone marrow aspirates, and touch preparations of bone marrow biopsies
- measurement of complete blood count, including platelets and white cell differential, using automated or manual techniques with appropriate quality control
- administration of chemotherapeutic agents and biological products through all therapeutic routes; management and care of indwelling venous access catheters

Interventional Cardiology

- a minimum of 250 cardiac interventional procedures during 12 months of acceptable interventional cardiology fellowship training

Infectious Disease

- microscopic evaluation of diagnostic specimens including preparation, staining, and interpretation
- management, maintenance, and removal of indwelling venous access catheters
- administration of antimicrobial and biological products via all routes

Medical Oncology

- bone marrow aspiration and biopsy
- administration of chemotherapeutic agents and biological products through all therapeutic routes
- management and care of indwelling venous access catheters

Nephrology

- placement of temporary vascular access for hemodialysis and related procedures
- acute and chronic hemodialysis
- peritoneal dialysis (excluding placement of temporary peritoneal catheters)
- continuous renal replacement therapy (CRRT)
- percutaneous biopsy of both autologous and transplanted kidneys

Pulmonary Disease

- oral/nasal intubation
- fiberoptic bronchoscopy and accompanying procedures
- ventilator management
- thoracentesis and percutaneous pleural biopsy
- arterial puncture
- placement of arterial and pulmonary artery balloon flotation catheters
- calibration and operation of hemodynamic recording systems
- supervision of the technical aspects of pulmonary function testing
- progressive exercise testing
- insertion and management of chest tubes

Rheumatology

- diagnostic aspiration of and analysis by light and polarized light microscopy of synovial fluid from diarthrodial joints, bursae, and tenosynovial structures
- therapeutic injection of diarthrodial joints, bursae, tenosynovial structures, and entheses

EVALUATION OF SUBSPECIALTY TRAINEES

Trainee's Name _____ Rotation _____
 Evaluator's Name _____ Month(s) of _____ Evaluation Date _____

Please evaluate the trainee's performance of each component of clinical competence. Circle the rating which best describes the trainee's skills and abilities. Appended are descriptors to help define the extremes of behavior in each component. It is anticipated that few individuals will merit a rating of either 1 or 9; most will receive ratings between these gradations. Identify the major strengths and weaknesses you have observed in the trainee's performance under the comments portion on the reverse side.

1. CLINICAL JUDGMENT

	Unsatisfactory	Satisfactory	Superior	
	1 2 3	4 5 6	7 8 9	
Often fails to discern relationship of medical facts and clinical data, evaluate alternatives, or consider risks and benefits. Does not understand limitations of his/her knowledge or skills. Poorly established priorities. Illogical, rambling, incomplete, or inaccurate presentations or medical records. Indecisive in difficult management situations.				Regularly integrates medical facts and clinical data, weighs alternatives, understands limitations of knowledge, and incorporates consideration of risks and benefits. Spends time appropriate to the complexity of the problem. Presentations, records, and consultation notes always accurate, responsive, explicit, and concise.

2. MEDICAL KNOWLEDGE

	Unsatisfactory	Satisfactory	Superior	
	1 2 3	4 5 6	7 8 9	
Limited, poorly organized. Adds little to referring physician's knowledge.				Extensive and well applied. Consistently up-to-date.

3. CLINICAL SKILLS

	Unsatisfactory	Satisfactory	Superior	
	1 2 3	4 5 6	7 8 9	
<i>History Taking</i> Often incomplete, superficial, by rote, and not directed.				Always precise, logical, thorough, reliable, purposeful, and efficient. Suitably focused. Specificity and clarity convey sophistication.

	Unsatisfactory	Satisfactory	Superior	
	1 2 3	4 5 6	7 8 9	
<i>Physical Examination</i> Often incomplete, inaccurate, cursory, non-directed, insensitive, awkward or unreliable.				Complete, accurate, directed toward patient's problems. Elicits subtle findings, uses special techniques when necessary.

	Unsatisfactory	Satisfactory	Superior	
	1 2 3	4 5 6	7 8 9	
<i>Procedural Skills</i> Inept. Frequent disregard for risk to patient and patient's anxiety and comfort.				Always proficient. Minimizes risk and discomfort to patients. Provides proper explanation of purpose for conducting procedures.

4. HUMANISTIC QUALITIES

Unsatisfactory

Satisfactory

Superior

1 2 3

4 5 6

7 8 9

Lacks appropriate integrity, respect, compassion, empathy. Displays insensitivity and intolerance of patient's need for comfort and encouragement. Abuses trust and demonstrates unreliability. Poor rapport with patients and families. Does not appreciate patient's perception of illness. Flares at criticism.

Always demonstrates integrity, respect, compassion, and empathy for patients. Establishes trust. Primary concern is for the patient's welfare. Maintains credibility, excellent rapport with patients and families, and respects patient's need for information.

5. PROFESSIONALISM

Unsatisfactory

Satisfactory

Superior

1 2 3

4 5 6

7 8 9

Frequently irresponsible and uncommitted. Lacks Conscientiousness. Ineffective communication. Disruptive and disrespectful to other health care professionals. Shows disdain for professional colleagues. Records frequently tardy and illegible, even though complete and accurate.

Validates information. Provides effective communication. Responsive, reliable, committed, cooperative, conscientious, and respectful. Regard for opinions and skills of professional colleagues. Records are legible, timely, and responsive to referring physicians' needs and questions. Demonstrates ethical behavior. Personally reviews diagnostic data such as x-rays and biopsies.

6. MEDICAL CARE

Unsatisfactory

Satisfactory

Superior

1 2 3

4 5 6

7 8 9

Pedestrian diagnostic ability. Overreliance on tests and procedures. Misses major problems. Unable to establish priorities. Incomplete therapeutic plans.

Identifies all the patient's problems. Interrelates abnormal findings with altered physiology. Establishes sensible differential diagnoses. Provides orderly succession of testing and therapeutic recommendations. Educates patients and referring physicians. Marshals support of allied professionals when team efforts are required.

7. CONTINUING SCHOLARSHIP

Unsatisfactory

Satisfactory

Superior

1 2 3

4 5 6

7 8 9

Parrots lessons of the past. Satisfied with current fund of knowledge. Little evidence of reading. Bored with theoretical concepts of pathophysiological explanations.

Appropriate reference to the medical literature at conferences and in consultation notes. Constructive skepticism. Good teaching reputation. Enthused and stimulated by new comprehensions.

8. OVERALL CLINICAL COMPETENCE AS A SUBSPECIALIST

Unsatisfactory

Satisfactory

Superior

1 2 3

4 5 6

7 8 9

Based on the above ratings of each component skill, please provide an overall rating of and comments about the trainee's clinical performance.

Trainee's Signature _____

Evaluator's Signature _____

Date _____

EVALUATION OF ATTENDING PHYSICIAN

Attending Physician: _____ Service/Rotation: _____

Evaluator: _____ Month/Year: _____

For each of the following criteria, please rate (√) the attending physician whose rotation you have just completed.

	Not Observed	Marginal	Satisfactory	Very Good	Excellent
<u>Availability:</u>					
● Was usually prompt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Adhered to rounds and consult schedules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Kept interruptions to a minimum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Spent enough time on rounds; was unhurried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

	Not Observed	Marginal	Satisfactory	Very Good	Excellent
<u>Teaching:</u>					
● Kept discussions focused on case or topic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Asked questions in non-threatening way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Used bedside teaching to demonstrate history-taking and physical skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Emphasized problem-solving, (thought processes leading to decisions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Integrated social/ethical aspects of medicine cost containment, pain control, patient management, humanism)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Stimulated team members to read, research, and review pertinent topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Accommodated teaching to actively incorporate all members of team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Provided special help as needed to team members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

	Not Observed	Marginal	Satisfactory	Very Good	Excellent
<u>Professionalism and Humanistic Patient Care:</u>					
● Placed the patient's interests first	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Displayed sensitive, caring, respectful attitude toward patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Established rapport with team members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Showed respect for physicians in other specialties/ subspecialties and health care professionals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Served as a role model	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Was enthusiastic and stimulating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Demonstrated gender sensitivity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Recognized own limitations; was appropriately self-critical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

Fund of Knowledge/Continuing Scholarship:	Not Observed	Marginal	Satisfactory	Very Good	Excellent
● Demonstrated broad knowledge of medicine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Was up-to-date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Identified important elements in case analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Used relevant medical/scientific literature in supporting clinical advice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Discussed pertinent aspects of population and evidence-based medicine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

Organization:	Not Observed	Marginal	Satisfactory	Very Good	Excellent
● Reviewed expectations of each team member at beginning of rotation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Provided useful feedback including constructive criticism to team members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● Balanced service responsibilities and teaching functions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

Recommendations:	<u>Yes</u>	<u>No</u>
● Would you recommend that this faculty member continue to serve as an attending physician for the training program?	<input type="checkbox"/>	<input type="checkbox"/>
● To further enhance professional development, would you recommend that this faculty member receive formal training in teaching and faculty education?	<input type="checkbox"/>	<input type="checkbox"/>

Overall Comments: _____

		Poor (1)	2	3	4	Excellent (5)		Poor (1)	2	3	4	Excellent (5)	
II. TEACHING CONFERENCES:													
Please rate the quality of the teaching conferences listed below													
1. Professor's Rounds	N/A	①	②	③	④	⑤							
2. Chief of Service Rounds	N/A	①	②	③	④	⑤							
3. Grand Rounds	N/A	①	②	③	④	⑤							
4. Core Curriculum Lectures	N/A	①	②	③	④	⑤							
5. Morning Report	N/A	①	②	③	④	⑤							
6. Clinical Pathology Conference	N/A	①	②	③	④	⑤							
7. Morbidity and Mortality Conference	N/A	①	②	③	④	⑤							
8. Journal Club	N/A	①	②	③	④	⑤							
9. Subspecialty Conferences	N/A	①	②	③	④	⑤							
10. Research Seminars	N/A	①	②	③	④	⑤							
11. Radiology	N/A	①	②	③	④	⑤							
12. Ethics Seminars	N/A	①	②	③	④	⑤							
							6. Gastroenterology	N/A	①	②	③	④	⑤
							7. Geriatrics	N/A	①	②	③	④	⑤
							8. Hematology	N/A	①	②	③	④	⑤
							9. Hematology/Medical Oncology	N/A	①	②	③	④	⑤
							10. Infectious Disease	N/A	①	②	③	④	⑤
							11. Nephrology	N/A	①	②	③	④	⑤
							12. Medical Oncology	N/A	①	②	③	④	⑤
							13. Pulmonary Disease	N/A	①	②	③	④	⑤
							14. Rheumatology	N/A	①	②	③	④	⑤
							15. Adolescent Medicine	N/A	①	②	③	④	⑤
III. TEACHING FACULTY:							GENERAL QUESTIONS						
3. Availability	N/A	①	②	③	④	⑤	1. My colleagues behave in an appropriate manner.	Yes	○	No	○		
4. Commitment to teaching	N/A	①	②	③	④	⑤	2. My colleagues are reliable.	Yes	○	No	○		
5. Quality	N/A	①	②	③	④	⑤	3. In time of conflict or trouble, I turn to my colleagues for support.	Yes	○	No	○		
6. Promote scientific/discovery literacy	N/A	①	②	③	④	⑤	4. I would have members of my class as partners in my practice.	Yes	○	No	○		
							5. My attending physicians behave in an appropriate manner.	Yes	○	No	○		
							6. My attending physicians are reliable.	Yes	○	No	○		
							7. In times of conflict or trouble, I turn to my attending physicians for support.	Yes	○	No	○		
							8. The educational atmosphere encourages excellence.	Yes	○	No	○		
							9. The educational atmosphere recognizes excellence.	Yes	○	No	○		
							10. I wish someone would have motivated me more to expand and strengthen my knowledge base.	Yes	○	No	○		
IV. ON-CALL FACILITIES:													
1. Room Availability	N/A	①	②	③	④	⑤							
2. Privacy	N/A	①	②	③	④	⑤							
3. Safety	N/A	①	②	③	④	⑤							
4. Adequate housekeeping	N/A	①	②	③	④	⑤							
V. OVERALL QUALITY OF TRAINING:													
Please select your subspecialty and rate the overall quality of your training program.													
1. General Internal Medicine	N/A	①	②	③	④	⑤							
2. Cardiovascular Disease	N/A	①	②	③	④	⑤							
3. Critical Care Medicine	N/A	①	②	③	④	⑤							
4. Critical Care Medicine/Pulmonary Disease	N/A	①	②	③	④	⑤							
5. Endocrinology, Diabetes & Metabolism	N/A	①	②	③	④	⑤							

PROFESSIONAL ASSOCIATE RATINGS FORM

As part of the study on the predictive validity of certification by the ABIM, Dr. Paul Ramsey and his colleagues at the University of Washington developed an evaluation form for use by professional associates.¹ Self-administered questionnaires were designed to assess humanistic qualities, communication skills, and selected aspects of clinical skills. Results from this study indicate that peer ratings provide a practical method to assess these qualities and skills of internists and subspecialists.²

Based on the encouraging results of the predictive validity study, a second study was funded by the ABIM to explore possible sources of bias affecting peer ratings and to better characterize qualities.³ Results from the second study suggest that peer ratings provide a reliable assessment of medical knowledge, problem solving skills, and management of complex problems, as well as humanistic qualities (integrity, respect, and compassion) and the ability to manage psychosocial aspects of illness when 10 ratings per subject are obtained.

One criticism of peer ratings has been that assessments are perceived to be influenced by interpersonal relationships and may therefore merely reflect "popularity." The results suggest, however, that the ratings are not biased in a substantial manner by the relationship between the subject being evaluated and the peer completing the evaluation. The results also provide some support for the validity of peer ratings as measures of physicians' humanistic behavior and overall clinical competence.⁴

The results of these studies with practicing internists suggest that peer ratings can provide a feasible and reproducible measure of performance.⁵ They can also serve as valuable feedback to physicians on their performance. Therefore, the sample form that follows can be used to provide peer ratings of selected aspects of the clinical skills, humanistic qualities, and professionalism of subspecialty fellows during training.

-
1. Ramsey PG, Carline JD, Inui TS, Larson EB, LoGerfo JP and Wenrich MD, Predictive Validity of Certification by the American Board of Internal Medicine, *Ann Intern Med*, 1989; 110:719-726.
 2. Carline JD, Wenrich MD, Ramsey PG, Characteristics of Ratings of Physician Competence by Professional Associates. *Evaluation and the Health Professions*, 1989;12:409-423.
 3. Ramsey PG, Carline JD, Inui TS, Larson EB, LoGerfo JP, and Wenrich MD, Assessment of the Clinical Competence of Certified Internists: Final Report to the ABIM. Seattle: University of Washington, June 1990.
 4. Ramsey PG, Wenrich MD, Carline JD, Inui TS, Larson EB and LoGerfo JP, Use of Peer Ratings to Evaluate Physician Performance, *JAMA*, April 7, 1993; 1655-1660.
 5. Ramsey PR, Carline JD, Blank LL, Wenrich M, Feasibility of Hospital-based Use of Peer Ratings to Evaluate the Performance of Practicing Physicians, *Academic Medicine*, 1996; 71:364-370.

PROFESSIONAL ASSOCIATE RATING FORM

Please rate the physician named below in comparison to other subspecialists with whom you have worked. Circle one rating response per item. Circle the appropriate number between 1 and 9 where 1 is the lowest rating and 9 is the highest rating. If you have had insufficient contact to evaluate this physician on a particular characteristic, circle UA (unable to evaluate).

Name of Physician _____ Date _____

Your response will be anonymous. This physician will not know whether you have received or completed this questionnaire, and will not see or receive a copy of your responses.

EXAMPLE:

Responsiveness to Patients 1 2 3 4 5 6 7 8 9 UA

Unresponsive to patients' needs and wishes.

Very responsive to patients' needs and wishes.

A rating of 1 would indicate that Doctor X is the worst subspecialist with whom you have worked in his/her responsiveness to patients' needs and wishes. A score of 2 would indicate that Doctor X is among the bottom few subspecialists with whom you have worked in this characteristic.

A rating of 8 would indicate that Doctor X is among the top two or three subspecialists with whom you have worked in his/her responsiveness to patients' needs and wishes. A score of 9 would indicate that Doctor X is the single best subspecialist with whom you have worked in this characteristic.

Rating scale: 1 2 3 4 5 6 7 8 9 UA
Lowest score Highest score Unable to evaluate

Respect 1 2 3 4 5 6 7 8 9 UA

Shows inadequate personal commitment to honoring the choices and rights of other persons, especially regarding their medical care.

Always shows exceptional personal commitment to honoring the choices and rights of other persons, especially regarding their medical care.

Medical Knowledge 1 2 3 4 5 6 7 8 9 UA

Limited and fragmented.

Extensive and well-integrated.

Ambulatory Care Skills 1 2 3 4 5 6 7 8 9 UA

Very poor ability to diagnose and treat patients and coordinate care in the outpatient setting.

Excellent ability to diagnose and treat patients and coordinate care in the outpatient setting.

Integrity 1 2 3 4 5 6 7 8 9 UA

Shows inadequate commitment to honesty and trustworthiness in evaluating and demonstrating own skills and abilities.

Always shows exceptional commitment to honesty and trustworthiness in evaluating and demonstrating own skills and abilities.

Psychosocial Aspects of Illness	1	2	3	4	5	6	7	8	9	UA
Does not recognize or respond to psychosocial aspects of illness.										Recognizes and responds to psychosocial aspects of illness.
Management of Multiple Complex Problems	1	2	3	4	5	6	7	8	9	UA
Very limited ability to manage patients with multiple complex medical problems.										Excellent ability to manage patients with multiple complex medical problems.
Compassion	1	2	3	4	5	6	7	8	9	UA
Shows inadequate appreciation of patients' and families' special needs for comfort and help, or develops inappropriate emotional involvement.										Always appreciates patients' and families' special needs for comfort and help, but avoids inappropriate emotional involvement.
Responsibility	1	2	3	4	5	6	7	8	9	UA
Does not accept responsibility for own actions and decisions; blames patients or other professionals.										Fully accepts responsibility for own actions and decisions.
Management of Hospitalized Patients	1	2	3	4	5	6	7	8	9	UA
Very poor ability to diagnose and treat patients and coordinate care in the inpatient setting.										Excellent ability to diagnose and treat patients and coordinate care in the inpatient setting.
Problem-Solving	1	2	3	4	5	6	7	8	9	UA
Fails to critically assess information, risks, and benefits; does not identify major issues or make timely decisions.										Critically assesses information, risks, and benefits; identifies major issues and makes timely decisions.
Overall Clinical Skills	1	2	3	4	5	6	7	8	9	UA
Very poor overall clinical skills.										Outstanding overall clinical skills.

PRAISE CARD

Subject: Praise Card about Physician Performance
From: Program Director

Please complete and submit this card to me when you wish to praise the performance and/or professional behavior of a physician colleague. This information will be conveyed to the physician and noted in the departmental file.

Name of Physician: _____ Date: _____

My praise about the performance of this physician is based on his/her demonstration of exceptional ability in the following: (please ✓)

- | | |
|---|--|
| <input type="checkbox"/> clinical judgment | <input type="checkbox"/> humanistic qualities |
| <input type="checkbox"/> clinical skills | <input type="checkbox"/> professionalism |
| <input type="checkbox"/> medical knowledge | <input type="checkbox"/> team management and leadership |
| <input type="checkbox"/> communication skills | <input type="checkbox"/> critique of medical/scientific literature |
| <input type="checkbox"/> teaching | <input type="checkbox"/> conduct of research |

Comments: _____

Name: _____ Phone: _____

EARLY CONCERN NOTE

Subject: Early Concern Note About Physician Performance
From: Program Director

Please complete and submit this card to me when you have any concerns about the performance and/or professional behavior of a physician colleague. This information will be used confidentially and constructively to help the physician.

Name of Physician: _____ Date: _____

My concerns about the performance and/or professional behavior of this physician are based on: (please ✓)

- critical incident
- gut level reaction
- series of "red" flags

I have discussed my concerns with the physician	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
I feel uncomfortable discussing my concerns with the physician	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
Please call me about these concerns	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

Comments: _____

Name: _____ Phone: _____

GOALS FOR IMPLEMENTING THE MINI-CEX

Goal: A minimum of four mini-CEXs per fellow during the year.

Rationale:

The ABIM designed the mini-CEX to enhance assessment and promote education. Its advantages include the opportunity for fellows to be observed interacting with a broad range of patients in a variety of settings, to be evaluated by a number of different faculty members, and to have greater flexibility in both the settings and timing in which evaluation occurs.

The mini-CEX is also more efficient, it is snapshot of clinical performance, optimally taking between 15-20 minutes. To enhance the generalizability of the results of the mini-CEX and provide a valid reliable measure of performance there needs to be interaction with a range of different patients (4-12) in a variety of settings (e.g., inpatient, clinic, CCU, other) in which a focused history and physical examination can be conducted.

Settings:

Inpatient Consultative Services
Subspecialty Clinic
Other, including patient admission and/or discharge

Evaluators:

Attending Physicians
Program Director
Division Chief

Communication:

Convey written and verbal expectations of the mini-CEX to evaluators and evaluatees.

Reinforce goals and values of mini-CEX to faculty and residents at conferences, department meetings, pre-rotation briefings, written guidelines.

GUIDELINES FOR IMPLEMENTING THE MINI-CEX

The mini-consultation evaluation exercise (CEX) focuses on the core skills that subspecialty fellows demonstrate in patient encounters. It can be easily implemented by attending physicians as a routine, seamless evaluation of fellows in any setting. The mini-CEX is a 15-20 minute observation or “snapshot” of a fellow/patient interaction. Based on multiple encounters over time, this method provides a valid, reliable measure of fellows’ performance. *Attending physicians are encouraged to perform one mini-CEX per fellow during the rotation.*

Settings to Conduct Mini-CEX:

In-patient consultation services
Ambulatory
Other including admission, discharge

Mini-CEX Evaluators:

Attending Physicians
Program Director
Division Chief

Forms and Rating Scale: Packet includes 10 forms; after completing form, provide “original” to program director and “copy” to fellow. Nine point rating scale is used; *rating of 4 is defined as “marginal”* and conveys the expectation that with remediation the fellow will meet the standards for Board certification.

DESCRIPTORS OF COMPETENCIES DEMONSTRATED DURING THE MINI-CEX

Medical Interviewing Skills: Facilitates patient’s telling of story; effectively uses questions/directions to obtain accurate, adequate information needed; responds appropriately to affect, non-verbal cues.

Physical Examination Skills: Follows efficient, focused sequence; balances screening/diagnostic steps for problem; informs patient; sensitive to patient’s comfort, modesty.

Humanistic Qualities/Professionalism: Shows respect, compassion, empathy, establishes trust; attends to patient’s needs of comfort, modesty, confidentiality, information.

Clinical Judgment: Selectively orders/performs appropriate diagnostic studies, considers risks, benefits.

Counseling Skills: Explains rationale for test/treatment, obtains patient’s consent, educates/counsels regarding management.

Organization/Efficiency: Prioritizes; is timely; succinct.

Overall Clinical Competence as a Consultant Specialist: Demonstrates judgment, synthesis, caring, effectiveness, efficiency.

If you have any questions, please call ABIM at 215-446-3524.

Mini-Consultation Evaluation Exercise (CEX)

Evaluator: _____ **Date:** _____

Fellow: _____ F-1 F-2 F-3

Patient Problem/Dx: _____

Setting: Ambulatory In-patient consultation services Other _____

Patient: Age: _____ Sex: _____ New Follow-up

Complexity: Low Moderate High

Focus: Data Gathering Diagnosis Therapy Counseling

1. Medical Interviewing Skills (Not Observed)

1	2	3		4	5	6		7	8	9
UNSATISFACTORY				SATISFACTORY				SUPERIOR		

2. Physical Examination Skills (Not Observed)

1	2	3		4	5	6		7	8	9
UNSATISFACTORY				SATISFACTORY				SUPERIOR		

3. Humanistic Qualities/Professionalism

1	2	3		4	5	6		7	8	9
UNSATISFACTORY				SATISFACTORY				SUPERIOR		

4. Clinical Judgment (Not Observed)

1	2	3		4	5	6		7	8	9
UNSATISFACTORY				SATISFACTORY				SUPERIOR		

5. Counseling Skills (Not Observed)

1	2	3		4	5	6		7	8	9
UNSATISFACTORY				SATISFACTORY				SUPERIOR		

6. Organization/Efficiency (No Observed)

1	2	3		4	5	6		7	8	9
UNSATISFACTORY				SATISFACTORY				SUPERIOR		

7. Overall Clinical Competence as a consultant subspecialist (Not observed)

1	2	3		4	5	6		7	8	9
UNSATISFACTORY				SATISFACTORY				SUPERIOR		

Mini-CEX Time: Observing: _____ **Mins**

Providing Feedback: _____ **Mins**

Evaluator Satisfaction with Mini-CEX

LOW	1	2	3	4	5	6	7	8	9	HIGH
-----	---	---	---	---	---	---	---	---	---	------

Fellow Satisfaction with Mini-CEX

LOW	1	2	3	4	5	6	7	8	9	HIGH
-----	---	---	---	---	---	---	---	---	---	------

Comments: _____

Fellow Signature

Evaluator Signature

PROBLEM-REMEDATION SUMMARY FOR SUBSPECIALTY FELLOWS

Name: _____ Program: _____

Check (✓) Level: F-1 F-2 F-3 F-4 F-5

PROBLEM(S): Check (✓) applicable problem areas and provide description.

- Professionalism (attitude/behavior) Clinical judgment/synthesis Knowledge/continuing scholarship
- Humanistic patient care Conduct of research Other

Description of problem(s): _____

REMEDICATION PLAN

Time allotted to remediation (check (✓) applicable): 1 month 3 months 6 months 1 year Other

Date begun: _____ Date complete: _____

Summary of remediation planned, in process, or undertaken: *(e.g., increased supervision, repeated rotation(s), psychiatric consultation)*

Person(s) responsible for **determining** type of remediation:

Person(s) responsible for **implementing** remediation:

- Program Director
- Division Chief
- Evaluation Committee
- Faculty Advisor
- Other _____

- Program Director
- Division Chief
- Evaluation Committee
- Faculty Advisor
- Other _____

Person(s) responsible for **assessing** decision and outcome:

DECISION - OUTCOME (✓ only one)

- Program Director
- Division Chief
- Evaluation Committee
- Faculty Advisor
- Other _____

- Successful resolution of problem
- Remediation still in process
- Unresponsive to remediation
- Needs more/different remediation
- Not reappointed
- Termination

FORM TO EVALUATE RESEARCH PERFORMANCE

Physician's Name: _____ Date: _____

Level of Training: F-1 F-2 F-3 F-4 F-5 Subspecialty Area: _____

Research Interest: Basic Research Health Services Research
 Clinical Research Educational Research
 Other _____

Type of Research: Original research Collaborative

Indicate period of research time this evaluation covers: From: _____ To: _____

Briefly describe the goals and objectives of the research project(s) in which this physician is involved:

Components of Research Conduct (✓ rating applicable)		Unsatisfactory	Marginal	Satisfactory	Good	Outstanding
Attributes	Spirit of inquiry					
	Honesty					
	Scientific integrity					
	Collaboration					
	Productivity					
	Responsiveness to criticism					
Contents	Research methodology					
	Study design and interpretation					
	Research ethics					
	Responsible use of informed consent					
	Principles of authorship/research papers					
	Critical evaluation of scientific literature					
	Interpretation of data/biostatistics					

Indicate the strategies used to evaluate the physician's research activities: (✓ applicable)

- Observation and supervision
- Research design
- Grant writing
- Participation in research conferences
- Scientific presentations
- Publications/peer-reviewed journals
- Other _____

General Comments: _____

Have you reviewed this evaluation with the physician? Yes No

Evaluator's Name and Title: _____