

## **ORTHOPAEDIC SCIENCE ROTATION**

The Accreditation Council for Graduate Medical Education requires the educational program to provide a curriculum that must contain the following educational components to its Trainees; overall educational goals for the program, competency-based goals and objectives for each assignment (at each education level), delineation of responsibilities for patient care, progressive responsibility for patient management, and supervision of residents over the continuum of the program.

As required by the ACGME, please find enclosed overall educational goals for the program, service competency-based goals and objectives, and delineated lines of responsibility.

- Goals and Objectives
  - Overall Educational Goals for the Program
    - Service Competency-based Goals and Objectives
      - Patient Care
      - Medical Knowledge
      - Practice-based Learning and Improvement
      - Interpersonal and Communication Skills
      - Professionalism
      - Systems-based Practice
- Delineated Lines of Responsibility
  - General
  - Outpatient
  - Inpatient
  - Emergency
- Supervision
  - Purpose
    - Definitions
    - Attending Physician Responsibilities
    - Graduate Medical Trainee Responsibilities

## **ORTHOPAEDIC SCIENCE ROTATION**

### ***OVERALL EDUCATIONAL GOALS***

The Duke Orthopaedic Program enables the orthopaedic trainee to obtain adequate clinical and surgical skills in all areas of orthopaedic surgery for medical practice in the specialty in either an academic or community practice. This training occurs over a five-year period and is hospital based and defined by a curriculum that includes patient care on the wards, in the clinics, in the emergency department, and in the operating room. Progressive responsibility is accomplished in keeping with individual knowledge, skills and performance, always stressing safety and appropriate care of patients. Faculty members provide daily and continuous supervision, which is a mainstay of the Program. The faculty members' full time clinical practices are on site, and rotation assignments are arranged so that trainees have experience in all subspecialty areas of orthopaedic surgery. Research opportunities abound, with most of the faculty involved in laboratory and clinical research and providing guidance for project selection, completion, and adequate funding support. Ongoing and continuing medical education is assured and accomplished by at least eight hours of teaching conferences each week, attended by faculty, trainees, students and allied health personnel. The Duke orthopaedic trainee has daily and continuous contact with the faculty in the clinics, operative theater, ward rounds, teaching conferences, and individual rotation conferences.

Success is monitored by faculty observance of clinical performance, faculty evaluations on each resident every three months, weekly presentations at conferences, performance on yearly in-training examinations, success in obtaining top post-training fellowships, and performance on specialty Board examinations. Each Chief Resident must complete a written thesis on an orthopaedic topic, which is presented and judged at a symposium prior to graduation from the Program.

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### **GOALS AND OBJECTIVES**

#### **Patient Care**

*Junior Resident(s) (PGY-3):*

- The Junior Resident(s) serves for six weeks of this three month rotation as the night float on the Trauma Service.
- He/she will serve as the first assistant to the Chief Resident on-call and/or the attending on call for night orthopaedic trauma patients.
- The Junior Resident(s) has no daytime patient care duties.

#### **Medical Knowledge**

*Junior Resident(s) (PGY-3):*

- Prepare for and acquire knowledge in the orthopaedic sciences including anatomy, musculoskeletal pathology, orthopaedic basic science.
- Read and master the principles and concepts as outlined in the OKU: Musculoskeletal Tumors 2.
- Read and master the principles and concepts as outlined in Mankin: The Pathophysiology of Musculoskeletal Disease.
- Read and master the principles and concepts as outlined in Musculoskeletal Oncology Reference List.
- Successfully complete the AAOS Orthopaedic Basic Science Self-Assessment Examination.
- Successfully complete the AAOS Anatomy-Imaging Self-Assessment Examination.

#### **Practice-based Learning and Improvement**

*Junior Resident(s) (PGY-3):*

- Prepare and present Grand Rounds power point presentations on musculoskeletal pathology topics.
- Prepare for and participate/lead the OITE Review Sessions with appropriate review of the orthopaedic literature for each subjects outlined in the questions.
- Prepare for and participate in the Orthopaedic Complications Conference with appropriate literature review included in the subject matter.
- Prepare for and present the monthly Orthopaedic Science Anatomy Conference(s).
- Prepare for and present the General Orthopaedic Science Journal Club Conference.
- Prepare for and present the monthly Orthopaedic Science-Pathology Conference.
- Prepare for and present monthly the Orthopaedic Science-Basic Science Conference
- Able to locate, appraise, and assimilate evidence for past and ongoing scientific studies related to patient health issues.
- Able to use information technology and manage information access on-line medical information and support his/her education.

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### **GOALS AND OBJECTIVES**

#### **Interpersonal and Communication Skills**

*Junior Resident(s) (PGY-3):*

- Able to create and sustain a therapeutically and ethically sound relationships with patients and their families.
- Able to provide information via various methodologies and technologies.
- Able to work effectively with others as a member or leader of the health care team.

#### **Professionalism**

*Junior Resident(s) (PGY-3):*

- Interacts in a professional manner with inpatients, outpatients, referring physicians, physician associates, and attendings.
- Interacts effectively with members of the radiology and pathology teams in the preparation of musculoskeletal conferences in these disciplines.
- Demonstrates respect, compassion, and integrity in the response to the needs of patients and their families.
- Demonstrates ethical principles pertaining to patient confidentiality issues.
- Demonstrates sensitivity to culture, age, gender, and disabilities of patients of fellow health care professionals.

#### **Systems-based Practice**

*Junior Resident(s) (PGY-3):*

- Demonstrates an understanding as how his/her patient care in other professional practices affect other health care professionals, their health care organization, and the society and how these elements of the system affect his/her own practice.
- Demonstrates knowledge of how different types of medical practice and delivery systems differ from one another including methods of controlling health care costs and allocating resources.
- Practices cost-effective health care and resource allocation that does not compromise quality of care.
- Demonstrates the understanding and impact of correct coding during office visits and following operative cases.
- Acts as an advocate for quality patient care and assists patients in dealing with system complexities.
- Affectively partners with health care managers and health care providers who assess, coordinate, and improve health care and now how these activities can affect system performance.
- Attends the four (4) part Business of Medicine Series.
- Attends the Coding and Billing Seminar(s)

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***DELINEATED LINES OF RESPONSIBILITY***

**General**

*Junior Resident(s) (PGY-3):*

- The Junior Resident(s) are responsible for the following activities and report directly to the Chief of the Musculoskeletal Oncology Service and to the Program Director.
  - Prepare the audiovisual requirements and participate in all dedicated orthopaedic conferences including Attending Orthopaedic Lecture Series, Grand Rounds, Fracture Conference, and Orthopaedic Science Conference.
  - Prepare for and lead the Anatomy, Pathology, Basic Science and General Orthopaedic Journal Club Conferences on a rotating basis for the Orthopaedic Science Conference.
  - Serve as the night float Junior Resident(s) on the Orthopaedic Trauma Service on an alternating basis. In this capacity they “back up” the PGY-2 Resident but more definitively act as the first assistance to the Chief Resident and Attending Orthopaedic Surgeon on all orthopaedic night trauma surgical procedures.
  - Prepare for and present two (2) Musculoskeletal Oncology presentations for Grand Rounds each month.

**Outpatient**

*Junior Resident(s) (PGY-3):*

- There are no outpatient responsibilities for the orthopaedic science Junior Resident(s).

**Inpatient**

*Junior Resident(s) (PGY-3):*

- There are no inpatient responsibilities for the orthopaedic science Junior Resident(s).

**Emergency**

*Junior Resident(s) (PGY-3):*

- The Junior Resident(s) serves as the “night float” on the Trauma Service on a rotating basis.
- He/she will report directly to the On-Call Orthopaedic Chief Resident and/or the on-call Attending Orthopaedic Surgeon and act as first assistant in the care of orthopaedic night trauma surgical procedures.

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### ***SUPERVISION***

#### **Purpose**

- The training of graduate medical trainee physicians is a core mission of Duke Hospital, the Duke University School of Medicine and Health System. Graduate Medical Trainees must be supervised by teaching staff in such a way that trainees assume progressively increasing responsibility according to their level of education, ability, and experience. This document describes the principles and general guidelines for the supervision of trainees in the Duke University Health System. Individual graduate medical training programs may require additional supervision, and the guidelines for supervision in such programs will be described in their separate program documents. The education of graduate medical trainees requires a partnership of teaching physicians, teaching hospitals, and educational organizations. The policies outlined here provide a framework into which are integrated the pertinent policies of the Private Diagnostic Clinic (PDC), the bylaws of Duke University Hospital, and the standards of educational accrediting agencies. In addition to providing an environment for outstanding trainee education and clinical experience, these policies are expected to support the goal of delivering high quality patient care.

#### **Definitions**

- **Attending Physician:** A licensed independent practitioner who holds admitting and/or attending Physician privileges consistent with the requirements delineated in the Bylaws, Rules and Regulations of the Medical Staff of Duke University Hospital or with the requirements delineated in the governing regulations of the assigned and approved off-site healthcare entity.
- **Trainee:** A physician who participates in an approved graduate medical education (GME) program. The term includes interns, residents, and fellows in GME programs approved by the Duke Institutional Committee on Graduate Medical Education. (A medical student is never considered a graduate medical trainee).

#### **Attending Physician Responsibilities**

- In hospitals participating in a professional graduate medical education program(s), the medical staff has a defined process for supervision of each participant in the program(s) in carrying out patient care responsibilities. Such supervision will be provided by an attending physician with appropriate clinical privileges, with the expectation that the graduate medical trainee will develop into a practitioner who has the knowledge, skills and experience and abilities to provide care to the patients with the disease states applicable to his/her training program.
- The medical staff has overall responsibility for the quality of the professional services provided by individuals with clinical responsibilities. In a hospital, the management of each patient's care (including patients under the care of participants in professional graduate medical education programs) is the responsibility of a member of the medical staff with appropriate clinical privileges. Therefore, the medical staff assures that each participant in a professional graduate medical education program is supervised in his/her patient care responsibilities by a member of the medical staff who has been granted clinical privileges through the medical staff process.
- Each Program Training Director is responsible for providing written descriptions of the role, responsibilities, and patient care activities of participants in professional graduate medical education programs to the medical staff. It is the obligation of each attending physician to be knowledgeable of these responsibilities.
- The position of attending physician entails the dual roles of providing quality patient care and effective clinical teaching. Although some of this teaching is conducted in the classroom setting, the majority of it is through direct contact, mentoring, and role modeling with trainees. All patients

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seen by the trainee will have an assigned attending physician. The attending physician is expected to:

- Exercise control over the care rendered to each patient under the care of a resident, either through direct personal care of the patient or through supervision of medical trainees and/or medical personnel.
- Document the degree of participation according to existing hospital policies.
- Effectively role model safe, effective, efficient and compassionate patient care and provide timely
- Documentation to program directors required for trainee assessment and evaluation as mandated by the program's Residency Review Committee (RRC), where applicable.
- Participate in the educational activities of the training programs, and as appropriate, participate in institutional orientation programs, educational programs, and performance improvement teams, and institutional and departmental educational committees.
- Review and co-sign the history and physical within 24 hours,
- Review progress notes, and sign procedural and operative notes and discharge summaries.
- In general, the degree of attending involvement in patient care will be commensurate with the type of care that the patient is receiving and the level of training, education and experience of any medical trainee(s) involved in the patient's care.
- The intensity of supervision required is not the same under all circumstances; it varies by specialty, level of training, the experience and competency of the individual trainee, and the acuity of the specific clinical situation. An Attending may provide less direct personal care of a patient seen for routine care when supervising a senior level trainee, and may provide more direct personal care of a patient receiving complex care when supervising a junior level trainee. An Attending physician may authorize the supervision of a junior trainee by a more senior level trainee based on the attending physician's assessment of the senior level trainee' experience and competence, unless limited by existing or future hospital policies, such as the use of lasers.
- Medical care teams frequently are involved in the management of patients and many different physicians may act as the attending physician at different times during the course of a patient's illness. However, within the medical care team, the faculty attending physician must provide personal and identifiable service to the patient and/or appropriate medical direction of the trainee and when the trainee performs the service as part of the training program experience.
- The following are specific instances in which involvement of the attending physician is required.
- For Inpatient Care:
  - Review the patient's history, the record of examinations and tests, and make appropriate reviews of the patient's progress;
  - Examine the patient within 24 hours of admission, when there is a significant change in patient condition, or as required by good medical care;
  - Confirm or revise the diagnosis and determine major changes in the course of treatment to be followed;
  - Either perform the physician's services required by the patient or supervise the treatment so as to assure that appropriate services are provided by trainees or others, and that the care meets a proper quality level;
  - Be present and ready to perform any service that would be performed by an attending physician in a nonteaching setting. For major surgical or other complex, high-risk medical procedures, the attending physician must be immediately available to assist the trainee who is under the attending physician's direction;



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- Make decision(s) to authorize or deny elective and urgent admissions, discharge from an inpatient status or release from observation or outpatient status;
  - When an in-patient is to be transferred to another service, the attending physician or a designee of the referring service shall inform the patient of the change in service as soon as possible prior to the transfer. The receiving service shall assign a new attending physician who shall accept responsibility for patient care. Confirmation of the transfer to another level of care or acceptance of patients in transfer is the responsibility of the attending physician.
  - An attending physician's decision shall be required to authorize an in-patient's discharge, or release from observation or outpatient status.
    - Issue all "No Code" or DNR orders. "No Code" or DNR orders shall be issued only by an attending physician. In extenuating circumstances the order may be issued by the attending physician verbally, by telephone, while the responsible registered nurse and trainee listen to and witness the verbal-telephone order; such verbal-telephone order shall be signed 2010 - 2011 GME Trainee Manual - 100 - February 2, 2010 within twenty-four hours of issuance by the attending physician.
    - Assure a completed history and physical and a completed, appropriately signed, and witnessed consent form is placed in the patient's record prior to the performance of an operative or invasive procedure involving substantial risk.
    - Assure appropriate documentation is made immediately in the medical record when a procedure is completed on a patient.
- For Outpatient Care:
  - The extent and duration of the attending's physical presence will be variable, depending upon the nature of the patient care situation, the type and complexity of the service. The responsibility or independence given to trainees depends on their knowledge, manual skills and experience as judged by the responsible attending physician. The attending physician supervisor must be designated and available to all sites of training in accordance with Accreditation Council for Graduate Medical Education (ACGME) institutional and program requirements and specific departmental policies.

### **Graduate Medical Trainee Responsibilities**

- Each graduate medical trainee physician must meet or may exceed the qualifications for appointment to Associate member of the Medical Staff of Duke Hospital, whether in an Accreditation Council for Graduate Medical Education (ACGME) or non-ACGME graduate medical education program.
- Graduate Medical Trainees are expected to
  - Participate in care at levels commensurate with their individual degree of advancement within the teaching program and competence, under the general supervision of appropriately privileged attending physicians.
  - Perform their duties in accordance with the established practices, procedures and policies of the institution and those of its programs, clinical departments and other institutions to which the trainee is assigned.
  - Adhere to state licensure requirements, federal and state regulations, risk management and insurance requirements, and occupational health and safety requirements.



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- Fulfill all institutional requirements, such as attending the Graduate Medical Trainee Orientation, maintaining BLS/ACLS certification, completing required instructional exercises, as detailed in their annual Agreement of Appointment.

*This policy is consistent with that of Duke's Graduate Medical Education, Associate Dean and DIO; approved by the GMEC (ICGME) and by ECMS October 21, 2002.*