

## **ADULT RECONSTRUCTION SERVICE**

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
  - Outpatient Clinic
  - Inpatient
  - Operative
- Supervision
  - Purpose
    - Definitions
    - Attending Physician Responsibilities
    - Graduate Medical Trainee Responsibilities

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### ***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-2/PGY-3):*

- Possesses patient care competencies associated with his history, physical examination, diagnosis, treatment plan, and postoperative management.
- Demonstrates competency with surgical approaches to hip and knee, effectively supervises postoperative care and manages postoperative complications of hip arthroplasty and osteotomy.
- Demonstrates competency in surgical approaches to the hip and knee. Demonstrates competency in hip arthroplasty.
- Demonstrates competency in knee arthroplasty

##### *Chief Resident (PGY-5):*

- Possesses patient care competencies associated with history, physical examination, diagnosis, treatment, and postoperative management plans above and beyond that of the junior resident(s).
- Effectively supervises postoperative patient care and manages postoperative complications of primary and revision total hip and total knee arthroplasty.
- Ability to evaluate and treat painful total joint replacements.
- Demonstrates competency in primary and revision total joint arthroplasty techniques.

#### **Medical Knowledge**

##### *Junior Resident(s) (PGY-2/PGY-3):*

- Demonstrates basic knowledge of hip and knee implant design. Demonstrates basic knowledge of anatomy of the hip and knee.
- Demonstrates knowledge of preoperative templating techniques.
- Demonstrates knowledge of diagnosis and treatment of complications related to reconstructive procedures of the hip and knee.
- Demonstrates development of case presentation skills.
- Reads and understands material developed in the OKU Specialty Series on Hip and Knee Reconstruction.
- Satisfactorily completes the OKU Self Assessment Examination for Hip and Knee Reconstruction.
- Completes the reference syllabus for hip and knee reconstruction.

##### *Chief Resident (PGY-5):*

- Demonstrates knowledge of revision surgical approaches and procedures.
- Demonstrates knowledge of diagnosis and treatment of hip pain in symptomatic total hip replacements.
- Reads and understands material developed in the OKU Specialty Series on Hip and Knee Arthroplasty Reconstruction.
- Satisfactorily completes the OKU Self Assessment Examination for Hip and Knee Reconstruction.
- Completes the reference syllabus for hip and knee reconstruction.

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### **GOALS AND OBJECTIVES**

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

##### *Junior Resident(s) (PGY-2/PGY-3):*

- Demonstrates basic understanding of knowledge presented through core curriculum materials and is able to effectively assimilate into patient care practices.
- Participates and presents in complications conference with special reference to current literature.
- Participates in Adult Reconstruction Journal Club with special reference to current literature and evidence based medicine.
- Able to locate, appraise, and assimilate evidence from past and ongoing scientific studies to patient pathologies.
- Able to obtain and use information about his/her patient population and the larger population from which patients are drawn.
- Able to use information technology to manage information access on-line medical information and support his/her own education.
- Prepare for and participate in the monthly General Orthopaedic and Adult Reconstruction Journal Clubs.

##### *Chief Resident (PGY-5):*

- Able to effectively teach general concepts and core curriculum to medical students.
- Able to identify, locate, and utilize case-specific articles to enhance learning and teaching.
- Possesses ability to effectively teach preoperative templating and surgical approaches to non-arthroplasty to junior residents.
- Ability to analyze effectively his or her interpretative, problem solving and surgical skills.
- Able to locate, appraise, and assimilate evidence from past and ongoing scientific studies to patient pathologies.
- Able to obtain and use information about his/her patient population and the larger population from which patients are drawn.
- Able to use information technology to manage information access on-line medical information and support his/her own education.
- Teaches and mentors junior residents and medical students on the service.
- Prepare for and participate in the monthly General Orthopaedic and Adult Reconstruction Journal Clubs.

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### **GOALS AND OBJECTIVES**

#### Interpersonal and Communication Skills

*Junior Resident(s) (PGY-2/PGY-3):*

- Able to create and sustain therapeutic and ethically sound relationships with patients and their families.
- Able to work effectively with others as a member or leader of a health care team.
- Able to effectively provide information via various communication mediums.
- Able to effectively use listening skills.

*Chief Resident (PGY-5):*

- Able to create and sustain therapeutic and ethically sound relationships with patients and their families.
- Able to work effectively with others as a member or leader of a health care team.
- Able to effectively provide information via various communication mediums.
- Able to effectively use listening skills.

#### Professionalism

*Junior Resident(s) (PGY-2/PGY-3):*

- Exhibits a commitment to sound ethical principle in all aspects of patient care.
- Interacts with patient's family in a respectful, ethical, and compassionate manner.
- Develops and exhibits sensitivity to diverse patient and work force population with respect to age, culture, and gender.
- Demonstrates ethical principles pertaining to confidentiality issues.

*Chief Resident (PGY-5):*

- Exhibits a commitment to sound ethical principle in all aspects of patient care.
- Interacts with patient's family in a respectful, ethical, and compassionate manner.
- Develops and exhibits sensitivity to diverse patient and work force population with respect to age, culture, and gender.
- Demonstrates ethical principles pertaining to confidentiality issues.

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### **GOALS AND OBJECTIVES**

#### Systems-based Practice

##### *Junior Resident(s) (PGY-2/PGY-3):*

- Demonstrate awareness of economic issues of total joint arthroplasty.
- Demonstrates awareness of health care workers involvement in integrated care of the total joint arthroplasty patient.
- Practices cost-effective medical care within the system or practice model without compromising quality care.
- Able to assess, coordinate, and improve the care of patients within the current health care system(s) in the program.
- Has understanding of various health funding systems including private insurance, Medicare, Medicaid, Workers Compensation, and Vocational Rehabilitation.
- Demonstrates understanding of correct coding during patient office visits and surgery.

##### *Chief Resident (PGY-5):*

- Demonstrate awareness of economic issues of total joint arthroplasty.
- Demonstrates awareness of health care workers involvement in integrated care of the total joint arthroplasty patient.
- Practices cost-effective medical care within the system or practice model without compromising quality care.
- Able to assess, coordinate, and improve the care of patients within the current health care system(s) in the program.
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### ***DELINEATED LINES OF RESPONSIBILITY***

#### **Outpatient Clinic**

##### *Junior Resident(s) (PGY-2/ PGY-3):*

- The junior resident(s) will attend outpatient clinics devoted to adult reconstruction.
- The junior resident(s) will obtain a history, review of systems, and perform a physical examination.
- The patients will be presented to the attending orthopaedic surgeon who will review the physical examination, radiographs, differential diagnosis and treatment plan with the resident.
- The junior resident(s) will dictate notes on certain new patients to gain experience and adequately document the new patient evaluation.
- The junior resident(s) will also be introduced to basic outpatient procedures such as aspiration and injections of the knee under the attending orthopaedic surgeon's supervision.

##### *Chief Resident (PGY-5):*

- The Chief Resident will attend outpatient clinics devoted to adult reconstruction.
- They will obtain a history, review of systems, and perform a physical examination.
- The patients will be presented to the attending orthopaedic surgeon who will review the physical examination, radiographs, differential diagnosis and treatment plan with the resident.
- The Chief Resident will dictate notes on certain new patients to gain experience and adequately document the new patient evaluation.
- The Chief Resident will also be introduced to basic outpatient procedures such as aspiration and injections of the knee under the attending orthopaedic surgeon's supervision.

#### **Inpatient**

##### *Junior Resident(s) (PGY-2/ PGY-3):*

- The junior resident(s) is responsible for rounding on all of the orthopaedic patients assigned to the Adult Reconstruction Service on a daily basis.
- The junior resident(s) will report, round and/or coordinate with the Chief Resident and/or attending orthopaedic surgeon regarding the patient's status on a daily basis.
- Daily progress notes will be recorded in the patient's chart and postoperative checks will be performed on the day of surgery.

##### *Chief Resident (PGY-5):*

- The Chief Resident will assist the junior resident(s) in inpatient rounds and will report and coordinate with the junior resident(s) to the attending orthopaedic surgeon.

**ADULT RECONSTRUCTION SERVICE**  
***DELINEATED LINES OF RESPONSIBILITY***

Operative

*Junior Resident(s) (PGY-2/ PGY-3):*

- In the operating room the junior resident(s) will assist the attending orthopaedic surgeon in surgery and demonstrate familiarity with the anatomy and the operative approaches for primary total hip and total knee arthroplasty.
- With progress, the resident will be able to perform surgical approaches under the direct supervision of the attending orthopaedic surgeon.
- In time the junior resident(s) will perform an increasing percentage of the case under the direct supervision of the attending orthopaedic surgeon as his/her skills progress.

*Chief Resident (PGY-5):*

- The Chief Resident's responsibilities in the operating room include assisting the attending orthopaedic surgeon in all aspects of operative care.
- The actual performance of all or part of the operative procedure will be accomplished either under direct supervision or semi-independently in those situations deemed appropriate by the attending orthopaedic surgeon.



## **ADULT RECONSTRUCTION SERVICE**

### ***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,

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the majority of it is through direct contact, mentoring, and role modeling with trainees. All patients 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's 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

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- procedures, the attending physician must be immediately available to assist the trainee who is under the attending physician's direction;
- 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.*