

## **SPORTS MEDICINE 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
  - Inpatient
  - Operative
- Supervision
  - Purpose
    - Definitions
    - Attending Physician Responsibilities
    - Graduate Medical Trainee Responsibilities

## **SPORTS MEDICINE SERVICE**

### ***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/PGY-4):*

- Able to effectively develop the initial workup and clinical skills to facilitate adequate evaluation of common shoulder, elbow, knee, and ankle problems seen in the athletic patient population.
- Participate in preparticipation sports medicine physical examinations for high school, NC Central University, and Duke University men's and women's athletes.
- Develop clinical skills that include physical examination of the hip, knee, shoulder, elbow, and ankle.
- Develop physical examination skills to identify the typical findings of sports medicine injury to these joints including:
  - Knee: Ligamentous instability and meniscal pathology.
  - Shoulder: Conditions of impingement, rotator cuff arthropathy, glenohumeral instability, labral injury, and AC joint separation.
  - Elbow: Conditions of the medial and lateral epicondylitis and ulnar neuritis.
  - Ankle: Ankle sprains, Achilles tendon rupture, stress fractures to the navicular, fractures of the base of the 5<sup>th</sup> metatarsal, and osteochondral lesions of the talus.
- Develop surgical skills that include portal placement for diagnostic and operative arthroscopy of the knee and shoulder, harvest of bone-patellar tendon-bone, autografts, harvest of hamstring tendons for ACL reconstruction autografts, arthroscopic acromioplasty, deltopectoral approach for anterior shoulder stabilization, open debridement of medial/lateral epicondyle of the elbow.

*Chief Resident (PGY-5):*

- Teach refinement in advanced patient care in both the clinic and in the operating room in the evaluation and management of sports related injuries.
- Develop skills to take a detailed history, completes appropriate and accurate sports medicine physical examination.
- Review appropriate image studies to produce an appropriate diagnosis and/or differential diagnosis and treatment plan.
- Develop refined physical examination skills with particular emphasis on subtle and complex instabilities of the knee and shoulder. These would include:
  - Knee: Conditions of subtle instability pattern such as posterolateral rotatory instability.
  - Shoulder: Conditions of internal impingement, subtle labral lesions, SLAP tears, biceps tendon disorders, and posterior glenohumeral instability.
  - Elbow: Conditions of ulnar collateral ligament injury, valgus extension overload(s), posteromedial olecranon impingement, ulnar nerve instability/  
○ Subluxation, and posterolateral rotatory instability.
  - Ankle: Symptomatic os trigonum, peroneal tendon disorders, anterior tibial talar and posterior tibial talar impingement syndromes, chronic instability.
- Demonstrate basic understanding of appropriate indications for nonsurgical vs. surgical treatment and appropriate rehabilitation prescription for various injuries and conditions.

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### ***GOALS AND OBJECTIVES***

- Demonstrates an appropriate understanding to postoperative progression and rehabilitation of patients following common sports medicine surgical procedures including partial meniscectomy, meniscal repair, ACL reconstruction, ankle arthroscopy, shoulder stabilization, rotator cuff repair, and acromioplasty.
- Effectively and responsibly evaluate patients in various postoperative intervals and modifies rehabilitation protocols as appropriate.
- Possesses and demonstrates more advanced and refined surgical skills than the junior/senior residents, including advanced arthroscopic skills:
  - Knee: meniscal repair techniques, ACL reconstruction including tunnel placement and graft fixation techniques as well as the principles and execution of re-do ACL reconstruction.
  - Shoulder: arthroscopic open stabilization techniques, SLAP, labral repair techniques, arthroscopic rotator cuff repair techniques, and biceps tenodesis.
  - Elbow: diagnostic arthroscopy including portal placement, ulnar nerve transposition techniques, and ulnar collateral ligament reconstruction.

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**GOALS AND OBJECTIVES**

**Medical Knowledge**

*Junior Resident(s) (PGY-2/PGY-3/PGY-4):*

- Develops basic understanding of the anatomy of the shoulder, elbow, knee, and ankle as it relates to common sports medicine injuries.
- Possesses knowledge of appropriate imaging studies to properly evaluate common conditions encountered in the sports medicine practice including:
  - Anterior cruciate ligament injury.
  - Collateral ligament injury of the knee.
  - Shoulder instability.
  - Rotator cuff conditions.
  - Suspected meniscal pathology.
  - Osteochondral injuries to the knee, ankle, shoulder, and elbow.
- Able to read and interpret the significance of imaging studies to evaluate the above noted conditions.
- Successfully complete the OKU Specialty Series on Sports Medicine.
- Successfully complete the OKU Specialty Series Self-Assessment Examination for Sports Medicine.
- Successfully complete the Sports Medicine Reading Reference List.

*Chief Resident (PGY-5):*

- Develops a more advanced knowledge of the typical mechanisms of injury for common sports medicine problems.
- Possesses a strong working knowledge of arthroscopic and open surgical approaches including those for the shoulder, elbow, knee, and ankle.
- Possesses a strong working knowledge of arthroscopic and open surgical approaches including those of the shoulder, elbow, knee, and ankle.
- Develops an understanding of various surgical options to treat common sports medicine conditions including:
  - Advanced arthroscopic skills including knowledge of the appropriate use of accessory portals.
  - Assist to advanced arthroscopic techniques such as arthroscopic shoulder stabilization, superior labral repair, and osteochondral reconstruction.
- Possesses the arthroscopic skills necessary to successfully perform basic arthroscopic procedures such as diagnostic arthroscopy, arthroscopic meniscectomy, arthroscopic subacromial depression, and arthroscopic ACL reconstruction.
- Possesses working knowledge of and skills to implement more advanced arthroscopic techniques such as arthroscopic PCL reconstruction and multiple ligament repair/reconstruction.

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**GOALS AND OBJECTIVES**

**Practice-based Learning and Improvement**

*Junior Resident(s) (PGY-2/PGY-3/PGY-4):*

- Able to locate, appraise, and assimilate evidence from scientific studies related to patient health issues in the sports medicine field.
- Able to obtain and use information in various patient populations and larger populations from which patients are drawn.
- Develop skills to apply knowledge of study designs and statistical methods to appraisal of clinical studies.
- Able to use information technology to manage information, assess on-line medical information, and support self education.
- Able to facilitate education of medical students on the sports medicine service as well as other health professionals on an informal basis in clinics, operating rooms, and in the Sports Medicine Conference/Journal Club(s).
- Attends and participates in the Sports Medicine Conference and Journal Club(s).

*Chief Resident (PGY-5):*

- Able to locate, appraise, and assimilate evidence from scientific studies related to patient health issues in the sports medicine field.
- Able to obtain and use information in various patient populations and larger populations from which patients are drawn.
- Develop skills to apply knowledge of study designs and statistical methods to appraisal of clinical studies.
- Able to use information technology to manage information, assess on-line medical information, and support self education.
- Able to facilitate education of medical students on the sports medicine service as well as other health professionals on an informal basis in clinics, operating rooms, and in the Sports Medicine Conference/Journal Club(s).
- Attends and participates in the Sports Medicine Conference and Journal Club(s).
- Demonstrates leadership and responsibility for overseeing the appropriate care of patients on evidence-based medicine.

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**GOALS AND OBJECTIVES**

**Interpersonal and Communication Skills**

*Junior Resident(s) (PGY-2/ PGY-3/ PGY-4):*

- Communicates with radiology, sports medicine physical therapy, athletic trainers, and coaches on the interscholastic and intercollegiate level to coordinate patient care effectively, and specifically effectively communicating:
  - With radiology consultants the general requirements and necessity of imaging studies including specific questions the image study seeks to address.
  - Effectively communicates the basic principles of rehab protocols in procedures such as ACL reconstruction, partial meniscectomy, acromioplasty, and anterior stabilization to athletic trainers, physical therapists, and members of coaching staff(s).
- Able to create and sustain therapeutic and ethically sound relationship with athletes, coaches, and families.

*Chief Resident (PGY-5):*

- Communicates with radiology, sports medicine physical therapy, athletic trainers, and coaches on the interscholastic and intercollegiate level to coordinate patient care effectively, and specifically effectively communicating:
  - With radiology consultants the general requirements and necessity of imaging studies including specific questions the image study seeks to address.
  - Effectively communicates the basic principles of rehab protocols in procedures such as ACL reconstruction, partial meniscectomy, acromioplasty, and anterior stabilization to athletic trainers, physical therapists, and members of coaching staff(s).
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**GOALS AND OBJECTIVES**

**Professionalism**

*Junior Resident(s) (PGY-2/PGY-3/PGY-4):*

- Maintains the strictest confidence in any and all interactions dealing with patients, especially professional athletes with some measure of local, regional, and national celebrity. Refrains from discussion of the athlete with family, friends, and colleagues.
- Demonstrates respect, compassion, and integrity in 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.

*Chief Resident (PGY-5):*

- Maintains the strictest confidence in any and all interactions dealing with patients, especially professional athletes with some measure of local, regional, and national celebrity. Refrains from discussion of the athlete with family, friends, and colleagues.
- Demonstrates respect, compassion, and integrity in response to the needs of patients and their families.
- Demonstrates ethical principles pertaining to patient confidentiality issues.
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**GOALS AND OBJECTIVES**

**Systems-based Practice**

*Junior Resident(s) (PGY-2/PGY-3/PGY-4):*

- Demonstrates knowledge and indications of their impact on cost effectiveness and efficiency of patient care.
- Acts as an advocate for quality of patient care.
- Able to assess, coordinate, and improve the care of patients within the current health care models with an understanding of the complex venues of the delivery of sports medicine care including the training room, physical therapy, pre-participation physicals, duties of the sideline physician.
- Demonstrates the ability to practice culturally competent medicine.
- Able to provide health care services aimed at preventing sports medicine injury.
- Able to work with other health care physicians from various disciplines to provide excellent patient-focus care including athletic trainers, physical therapists, primary care physicians, members of coaching staff(s).

*Chief Resident (PGY-5):*

- Maintains the strictest confidence in any and all interactions dealing with all patients, especially professional athletes.
- Demonstrates knowledge and indications of their impact on cost effectiveness and efficiency of patient care.
- Acts as an advocate for quality of patient care.
- Able to assess, coordinate, and improve the care of patients within the current health care models with an understanding of the complex venues of the delivery of sports medicine care including the training room, physical therapy, preparticipation physicals, duties of the sideline physician.
- Demonstrates the ability to practice culturally competent medicine.
- Able to provide health care services aimed at preventing sports medicine injury.
- Able to work with other health care physicians from various disciplines to provide excellent patient-focus care including athletic trainers, physical therapists, primary care physicians, members of coaching staff(s).

**SPORTS MEDICINE SERVICE**  
***DELINEATED LINES OF RESPONSIBILITY***

**Outpatient**

*Junior Resident(s) (PGY-2/ PGY-3/ PGY-4):*

- Junior Resident(s) assist with preoperative workups in the outpatient clinics and the training room, and participate in pre-participation in physicals for high school, NC Central, and Duke Athletes.
- When in the outpatient clinic the Junior Resident(s) have the responsibility of evaluating new patients and presenting the findings to the attending orthopaedic surgeon.
- This requires obtaining appropriate history, performing physical examination, evaluating imaging studies, and formulating a plan.
- The resident will be responsible for the dictation of his findings up to the point of the official recommendation of the plan which will be made by the attending physician.
- On the sideline coverage the resident team physician will participate in the examination of all injured athletes and will assist the attending orthopaedic surgeon in formulating and executing a plan.
- He/she will learn through observation the appropriate go/no go return to play criteria of players within a given sport.

*Chief Resident (PGY-5):*

- The Chief Resident is responsible for assisting the attending orthopaedic sports medicine physician in all aspects of outpatient care. The Chief Resident is responsible for teaching and assisting junior residents in this setting.
- This requires obtaining appropriate history, performing physical examination, evaluating image studies, and formulating a plan.
- The Chief Resident will also see and evaluate postoperative patients as needed to facilitate patient care in the clinic.
- He/she will learn through observation the appropriate go/no go return to play criteria of players within a given sport.

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***DELINEATED LINES OF RESPONSIBILITY***

**Inpatient**

*Junior Resident(s) (PGY-2/ PGY-3/ PGY-4):*

- Junior Resident(s) are responsible for all phases of care in inpatient sports medicine patients. This includes rounding, writing appropriate progress notes, and handling overnight discharge orders for patients in the Ambulatory Surgical Unit.
- The Junior Resident(s) will report directly to the Chief Resident on service as well as the attending orthopaedic surgeon as appropriate.

*Chief Resident (PGY-5):*

- The Chief Resident is responsible for conducting rounds as needed and supervising the Junior Resident(s) and ultimately reporting to the attending orthopaedic surgeon.
- The Chief Resident works closely with the junior residents to insure appropriate management of all patients.

**Operative**

*Junior Resident(s) (PGY-2/ PGY-3/ PGY-4):*

- In the operating room the Junior Resident(s) are responsible for assisting the attending orthopaedic surgeon throughout the procedure.
- The residents will perform appropriate portions of the surgical procedure as directed by the attending orthopaedic surgeon and under the direct supervision of the attending orthopaedic surgeon.

*Chief Resident (PGY-5):*

- The Chief Resident 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 orthopaedic procedures will be done either under direct supervision or semi-independently in those situations deemed appropriate by the attending orthopaedic surgeon.
- The Chief Resident is also responsible for teaching the junior resident and enabling the junior resident to increase his surgical skills in the operating room.

## **SPORTS MEDICINE 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, 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.*