

# FOREWORD

## Shared Responsibility for Intercollegiate Sports Safety

Participation in intercollegiate athletics involves unavoidable exposure to an inherent risk of injury. However, student-athletes rightfully assume that those who sponsor intercollegiate athletics have taken reasonable precautions to minimize the risks of injury from athletics participation. In an effort to do so, the NCAA collects injury data in intercollegiate sports. When appropriate, the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports, in conjunction with the NCAA Sport Science Institute, makes recommendations to modify safety guidelines, equipment standards or a sport's rules of play.

It is important to recognize that rule books, safety guidelines and equipment standards, while helpful means of promoting safe athletics participation, are themselves insufficient to accomplish this goal. To effectively minimize the risks of injury from athletics participation, everyone involved in intercollegiate athletics must understand and respect the intent and objectives of applicable rules, guidelines and standards.

The institution, through its athletics director, is responsible for establishing a safe environment for its student-athletes to participate in its intercollegiate athletics program.

Coaches should adequately inform student-athletes about the sport's inherent risks of injury and instruct them how to minimize such risks while participating in games, practices and training.

The team physician and athletic health care team should assume responsibility for developing an appropriate injury prevention program and providing quality sports medicine care to injured student-athletes.

Student-athletes should fully understand and comply with the rules and standard of play that govern their sports and follow established procedures to minimize their risk of injury.

In summary, all people participating in, or associated with, an institution's intercollegiate athletics program share responsibility for taking steps to reduce effectively the risk of injury during intercollegiate athletic competition.

# GUIDELINE 1A

## SPORTS MEDICINE ADMINISTRATION

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The following components of a safe athletics program are an important part of injury prevention. They should serve both as a checklist and as a guideline for use by athletics administrators in the development of safe programs.

- 1. Preparticipation Medical Exam.** Before student-athletes accept the rigors of any organized sport, their health must be evaluated by qualified medical personnel. Such an examination should determine whether the student-athlete is medically cleared to engage in a particular sport.

Divisions I, II and III require student-athletes new to their campus to complete a sickle cell solubility test, to show results of a prior test or to sign a written release declining the test.

- 2. Health Insurance.** Each student-athlete should be covered by individual, parental or institutional medical insurance to defray the costs of significant injury or illness.

NCAA institutions must certify insurance coverage for medical expenses resulting from athletically related injuries in a covered event (see NCAA bylaws).

- 3. Preseason Preparation.** The student-athlete should be protected from premature exposure to the full rigors of sports. Preseason conditioning should provide the student-athlete with optimal readiness by the first practice (see Guideline 11, Preseason Preparation).
- 4. Acceptance of Risk.** Any informed consent or waiver by student-athletes (or, if minors, by their parents) should be based on an awareness of the risks of participating in intercollegiate sports.
- 5. Planning/Supervision.** Safety in intercollegiate athletics can be attained only by appropriate planning for and supervision of practice, competition and travel.
- 6. Safe Environments.** Member institutions should support a positive student-athlete development model through respect and sportsmanship. Each student-athlete should be afforded a reasonably safe environment protected from personal endangerment such as abuse (physical, sexual, emotional), assault, hazing or harmful punishment. Policies and procedures should be in place to immediately identify, report and protect individuals reporting

incidents of endangerment. Staff and students reporting such behaviors and incidents should be protected from any negative repercussion. These policies should govern student-to-student, coach-athlete and staff-athlete interaction.

*In the interest of the health and welfare of collegiate student-athletes, a student-athlete's health care providers must have clear authority for student-athlete care. Moreover, institutions should strive to adhere to the principles identified in the 2014 Inter-Association Consensus: Independent Medical Care for College Student-Athletes Guidelines (See Appendix C)*

- 7. Minimizing Potential Legal Liability.** Liability must be a concern of responsible athletics administrators and coaches. Those who sponsor and govern athletics programs should accept the responsibility of minimizing the risk of injury.
- 8. Equitable Medical Care.** Member institutions should neither practice nor condone illegal discrimination on the basis of race, creed, national origin, sex, age, disability, social status, financial status, sexual orientation or religious affiliation within their sports medicine programs.

Availability and accessibility to medical resources should be based on established medical criteria (e.g., injury rates, rehabilitation) rather than the sport itself.

Member institutions should not place their sports medicine staffs in compromising situations by having them provide inequitable treatment in violation of their medical codes of ethics.

Institutions should be encouraged to incorporate questions regarding adequacy of medical care, with special emphasis on equitable treatment, in exit interviews with student-athletes.

- 9. Equipment.** Purchasers of equipment should be aware of and use safety standards. In addition, attention should be directed to maintaining proper repair and fitting of equipment at all times in all sports.

#### **Student-athletes should:**

- Be informed what equipment is mandatory and what constitutes illegal equipment;
- Be provided the mandated equipment;



- c. Be instructed to wear and how to wear mandatory equipment during participation; and
  - d. Be instructed to notify the coaching staff when equipment becomes unsafe or illegal.
- 10. Facilities.** The adequacy and conditions of the facilities used for particular intercollegiate athletics events should not be overlooked, and periodic examination of the facilities should be conducted. Inspection of the facilities should include not only the competitive area, but also warm-up and adjacent areas. Athletic training facilities should adhere to local, state and federal regulations pertaining to health care facilities. A new Board of Certification Facilities best practices has been published.
- 11. Blood-Borne Pathogens.** In 1992, the Occupational Safety and Health Administration (OSHA) developed a standard directed to minimizing or eliminating occupational exposure to blood-borne pathogens. Each member institution should determine the applicability of the OSHA standard to its personnel and facilities.
- 12. Security and Safety Plan.** NCAA member institutions should develop a critical response plan to provide facility, staff and fan safety for potential incidents such as bombings, riots, fire, natural disasters, terrorism threats, etc.
- 13. Emergency Care.** NCAA member institutions should have on file and annually update an emergency action plan for each athletics venue (see Guideline 1C).
- 14. Catastrophic Incident Plan.** NCAA member institutions should develop a catastrophic incident guideline to provide a response plan and support that is necessary during and after a catastrophe such as death or permanent disability during an intercollegiate athletics-sponsored activity (see Guideline 1F).
- 15. Concussion Management Plan.** NCAA member institutions must have a concussion management plan for their student-athletes on file with specific components as described in NCAA bylaws (see Guideline 2I).
- 16. Drug Testing.** NCAA member institutions are responsible for ensuring compliance with NCAA drug testing program requirements (see NCAA Drug Testing Program book, NCAA bylaws, and Appendixes A and B).
- 17. Legislation.** NCAA member institutions are responsible for ensuring compliance with the NCAA bylaws relevant to health and safety as outlined in the division manuals (see Appendix B for a quick reference guide).

# GUIDELINE 1B

## INTERDISCIPLINARY HEALTH CARE TEAMS

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*In July 2014, the NCAA, in partnership with numerous medical and sport organizations, announced “Inter-Association Guidelines” ([www.NCAA.org/ssi](http://www.NCAA.org/ssi)) that addressed independent medical care in college student-athletes. (Appendix C) The section in teal that follows is taken directly from these guidelines.*

### BACKGROUND

Diagnosis, management, and return to play determinations for the college student-athlete are the responsibility of the institution’s athletic trainer (working under the supervision of a physician) and the team physician. Even though some have cited a potential tension between health and safety in athletics,<sup>1,2</sup> collegiate athletics endeavor to conduct programs in a manner designed to address the physical well-being of college student-athletes (i.e., to balance health and performance).<sup>3,4</sup> In the interest of the health and welfare of collegiate student-athletes, a student-athlete’s health care providers must have clear authority for student-athlete care. The foundational approach for independent medical care is to assume an “athlete-centered care” approach, which is similar to the more general “patient-centered care,” which refers to the delivery of health care services that are focused only on the individual patient’s needs and concerns.<sup>5</sup> The following 10 guiding principles, listed in the Inter-Association Consensus Statement on Best Practices for Sports Medicine Management for Secondary Schools and Colleges,<sup>5</sup> are paraphrased below to provide an example of policies that can be adopted that help to assure independent, objective medical care for college student-athletes:

1. The physical and psychosocial welfare of the individual student-athlete should always be the highest priority of the athletic trainer and the team physician.
2. Any program that delivers athletic training services to student-athletes should always have a designated medical director.
3. Sports medicine physicians and athletic trainers should always practice in a manner that integrates the best current research evidence within the preferences and values of each student-athlete.
4. The clinical responsibilities of an athletic trainer should always be performed in a manner that is consistent with the written or verbal instructions of a physician or standing orders and clinical man-

agement protocols that have been approved by a program’s designated medical director.

5. Decisions that affect the current or future health status of a student-athlete who has an injury or illness should only be made by a properly credentialed health professional (e.g., a physician or an athletic trainer who has a physician’s authorization to make the decision).
6. In every case that a physician has granted an athletic trainer the discretion to make decisions relating to an individual student-athlete’s injury management or sports participation status, all aspects of the care process and changes in the student-athlete’s disposition should be thoroughly documented.
7. Coaches must not be allowed to impose demands that are inconsistent with guidelines and recommendations established by sports medicine and athletic training professional organizations.
8. An athletic trainer’s role delineation and employment status should be determined through a formal administrative role for a physician who provides medical direction.
9. An athletic trainer’s professional qualifications and performance evaluations must not be primarily judged by administrative personnel who lack health care expertise, particularly in the context of hiring, promotion, and termination decisions.
10. Member institutions should adopt an administrative structure for delivery of integrated sports medicine and athletic training services to minimize the potential for any conflicts of interest that could adversely affect the health and well-being of student-athletes.

Team physician authority becomes the linchpin for independent medical care of student-athletes. Six pre-eminent sports physicians associations agree with respect to “... athletic trainers and other members of the athletic care network report to the team physician on medical issues.”<sup>6</sup> Consensus aside, a medical-legal authority is a matter of law in 48 states that require athletic trainers to report to a physician in their medical practice. Multiple models exist for collegiate sports medicine. Athletic health care professionals commonly work for the athletics department, student health services, private medical practice, or a combination thereof.

Irrespective of model, the answer for the college student-athlete is established.

### **EVENT COVERAGE SERVICES**

Institutions should have on file an appropriate athletics health care coverage (event) plan that includes equitable access to athletics health care providers for each NCAA sport and student-athlete.

The athletics health care coverage plan should take into consideration the emergency action plans for sport venues, the qualification of coaches to respond to an emergency, and a systemic approach to determine additional athletics health care needs for the venue and sport.

### **PROVIDERS**

The team physician integrates medical expertise with athletic trainers, medical consultants, and other health care professionals. Even if the team physician is not on site at all times, he/she should make regular on-site visits and check in frequently with the athletic training staff. The team physician is ultimately responsible for the clearance to participate and the return-to-play decisions for the institution's student-athletes.

Athletics health care providers (e.g. athletic trainers, team physicians) must be empowered to have the unchallengeable authority to stop any activity that they deem unsafe, and they should determine management and return-to-play of any ill or injured student-athletes without risk of employment status change.

Institutions and athletics health care providers should adhere to federal, state and local regulations; NCAA bylaws and sport playing rules; and the NCAA Sports Medicine Handbook. Athletics health care providers for the student-athlete should be appointed by and should report to institution administrators who are independent from coaches (e.g., health center, campus hospital/medical center, student affairs).

Campus health care facilities are being used more for medical provider oversight while creating a direct link to additional student services. These partnerships are desirable as they help eliminate gaps in medical record information and open care access for general medical conditions and mental health counseling.

An athletics program should feature an adequate number of athletic trainers who are able to provide for the safety and well-being of student-athletes across all

sports. These athletic trainers provide the clinical health care services and sideline care for student-athletes in intercollegiate athletics as part of a physician supervised medical model. Forty-nine states regulate the practice of athletic trainers, and the majority require that an athletic trainer work under the supervision or direction of a physician. All athletic trainers certified by the Board of Certification must provide health care services under the direction of a physician.

The core athletics health care team at many institutions also includes sports psychologist/mental health professionals, strength and conditioning specialists, and sports dietitians. In addition, some institutions include chiropractors, dentists, exercise scientists, facilities personnel, insurance coordinators, massage therapists, nurse practitioners, optometrists, physical therapists and physician assistants as part of their athletics health care team. These individuals must also meet current state and national credentialing requirements for their profession (e.g., licensure, certification, registration). A coach should not have a primary hiring or firing role in determining employment of these additional athletics health care team members.

### **EVALUATION**

An institution should evaluate its health care services on a routine basis. Performance appraisals for health care providers in the athletics setting are an important assessment component for establishing an effective quality improvement program for the sports medicine team. Performance appraisals should include two main areas: (1) individual staff performance and (2) athletics health care services. Athletics health care team members should be evaluated by a person who understands and can evaluate the delivery of quality health care.

An athletics program should use a systematic approach to determine the appropriate level of health care and staffing for student-athlete medical care and sport coverage at an institution. The Appropriate Medical Coverage for Intercollegiate Athletics assessment tool is a rating system using injury rates, the potential for catastrophic injury, and treatment/rehabilitation demands for both time-loss and non-time-loss injuries per sport. Consideration should also include a year-round assessment of squad sizes, travel, traditional and nontraditional season practices and competitions, out-of-season skill instruction sessions, year-round strength and conditioning, and individual health characteristics of team members.



Some examples of day-to-day duties at NCAA institutions include:

#### Medical Services

- Injury evaluation and treatment
- Injury rehabilitation and reconditioning
- After-hours/on-call consultation and injury/illness management
- Outside medical provider services
- Team physician services
- Concussion pre-injury baseline testing
- Concussion management
- Diagnostic testing
- Exclusive medical provider contracts
- Championships/tournament event coverage
- Injury prevention programs
- Visiting team services
- Ancillary medical services

#### Risk Minimization

- Injury prevention and care policies
- Environmental monitoring
- Emergency action plans
- Functional movement assessments/assessment of pre-existing conditions
- Mental health counseling referrals
- Nutrition suggestions and referral
- Safe facilities (e.g., BOC Facility Principles)
- Create/maintain appropriate medical referral system
- Review epidemiologic and current evidence-based research for clinical outcomes assessment
- Design and application of preventive and post-injury taping, bracing and padding
- Protective equipment selection, fitting and use

- Recommendations for sport rule changes
- Make appropriate play/no-play decisions
- First aid/CPR training
- Infection control
- Coordinate pre-participation medical examinations
- Practice/event coverage
- Knowledge of and recommendations for institutional and governing body drug testing
- Budget management to provide adequate resources to purchase risk-reduction supplies
- Use communication and interpersonal skills to create trust between student-athletes, coaches, administrators and the athletic training staff

#### Organization and Administration

- Budgeting
- Electronic medical record management
- Meetings (recruits, parents, coaches and administrators)
- Credential maintenance
- Pre-participation examination (PPE)/medical history
- Sports Medicine Team relations, staff scheduling, performance evaluations
- Emergency action plans (EAPs)
- Hosting physician clinics
- Insurance claims management
- Quality control for facilities and care
- Student-athlete transport to medical appointments
- Drug use prevention
- Inventory management
- Risk management
- Athlete, coach, peer education

#### Fiscal Management

- Insurance premiums

- Staffing and workload management
- Medical services
- Budget management
- Fundraising
- Academic success
- Contracts

### Academics

- Academic teaching/Athletic Training Education Program preceptor
- Life skills presentations
- Psychological issues and referrals
- Counseling referrals/medication documentation (e.g., for attention deficit hyperactivity disorder)
- Student retention through active return-to-play engagement

Of utmost importance is the daily documentation of these services through an adequate medical record-keeping system for any person (including current, prospective and visiting team student-athletes) with whom the athletics health care team is in contact.

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### REFERENCES

1. Matheson GO. *Maintaining professionalism in the athletic environment.* *Phys Sportsmed.* 2001 Feb;29(2)
2. Wolverton B. (2013, September 2) *Coach makes the call.* *The Chronicle of Higher Education.* [Available online] <http://chronicle.com/article/Trainers-Butt-Heads-With/141333/>
3. NCAA Bylaw 3.2.4.17 (Div. I and Div. II); 3.2.4.16 (Div. III).
4. National Collegiate Athletic Association. (2013). *2013-14 NCAA Division I Manual.* Indianapolis, IN: NCAA.
5. Courson R et al. *Inter-association consensus statement on best practices for sports medicine management for secondary schools and colleges.* *J Athletic Training* 2014; 49:128-137.
6. Herring SA, Kibler WB, Putukian M. *Team Physician Consensus Statement: 2013 update.* *Med Sci Sports Exerc.* 2013 Aug;45(8):1618-22.
7. Delany J, Goodson P, Makeoff R, Perko A, Rawlings H [Chair]. *Rawlings panel on intercollegiate athletics at the University of North Carolina at Chapel Hill.* Aug 29 '13. [http://rawlingspanel.web.unc.edu/files/2013/09/Rawlings-Panel\\_Intercollegiate-Athletics-at-UNC-Chapel-Hill.pdf](http://rawlingspanel.web.unc.edu/files/2013/09/Rawlings-Panel_Intercollegiate-Athletics-at-UNC-Chapel-Hill.pdf)

# Inter-Association Consensus Statement on Best Practices for Sports Medicine Management for Secondary Schools and Colleges

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## Introduction

Although significant advances have occurred within the last few decades, the field of athletic training and sports medicine can be traced back to the ancient Greek civilization and the establishment of the Olympic Games.<sup>1</sup> Today, there are more than 900 different sports world wide, however, not all of them have a physical component.<sup>2</sup> In the United States alone, there are over 7.6 million students participating in organized secondary school athletics, while in 2012, over 420,000 student-athletes represented their colleges in athletic play.<sup>3,4</sup> Athletics are part of the educational process and add to the growth of an adolescent and young adult. Secondary school students involved in athletics with proper coaching demonstrate better academic success, miss less school, and learn lifelong lessons for success.<sup>5</sup>

It is estimated that over 1.4 million injuries occur yearly to athletes playing at the secondary school level and approximately 209,000 yearly at the collegiate level across 25 NCAA sports.<sup>6,7</sup> These statistics take into account injuries that occur in both practice and game situations. In addition, an unknown number of injuries occur in non-scholastic sports, primarily as a result of overuse, either alone or resulting from the cumulative effects of non-scholastic or scholastic sports participation. As the concerns grow over musculoskeletal injuries, as well as life threatening conditions and traumatic brain injuries such as concussions, more secondary schools and colleges are being forced to evaluate the medical services that they are providing their athletes. Secondary schools with proper medical teams that include an athletic trainer have seen a lower incidence of injuries both acute and re-occurring than schools without athletic trainers. These schools also see more diagnosed concussions, demonstrating better identification of athletes with a concussion.<sup>8</sup> According to the American Medical Association, “the athletic medicine unit should be composed of an allopathic [MD] or osteopathic [DO] physician director with unlimited license to practice

medicine, an athletic health coordinator (preferably an athletic trainer certified by the Board of Certification, Inc. (BOC)), and other necessary personnel.”<sup>9</sup> This document on Best Practice in Sports Medicine Management brings together resources and views from eleven different associations that have an invested interest in the health and well-being of the student-athlete.

Modern athletic training is a young, fast growing, healthcare profession,<sup>10</sup> thus many physicians and administrators are still developing the proper working relationship and expectations for the athletic trainer. There is a wide variance in the administration of the sports medicine program, in the chain of command, and in the selection and evaluation of the sports medicine team. Further, different athletic training settings (e.g., secondary school, small college, large college) see a wide variance in terms of staffing, available resources and budgets.

This consensus paper is written to help guide superintendents of schools, secondary school athletic directors, college/university athletic department administrators, athletic trainers and team/school physicians by presenting the best practices in sports medicine management in the secondary and collegiate settings. This document outlines important considerations regarding: (1) duties and responsibilities of the athletic trainer and team physician; (2) supervisory relationships and the chain of command within the sports medicine team members; (3) decision-making authority relating to approval for participation of student-athletes, as well as injury management and return to sport participation status following injury/illness; (4) administrative authority for the selection, renewal, and dismissal of related medical personnel; and (5) performance appraisal tools for the sports medicine team. To date, these recommendations have been endorsed by the American Academy of Pediatrics, American College Health Association, American Medical Society for Sports Medicine, American Orthopaedic Society for Sports Medicine, College Athletic Trainers’ Society, National Association of Collegiate Directors of Athletics, National Association of Intercollegiate Athletics, National Athletic Trainers’ Association, National Federation of State High School Associations, and National Interscholastic Athletic Administrators Association.

### **Athlete-Centered Medicine**

The term “patient-centered care” refers to the delivery of healthcare services that are focused on the individual patient’s needs and concerns. This same concept, or “athlete-centered care,” is highly applicable and desired in sports medicine.<sup>11</sup> Sports medicine physicians and athletic trainers are often presented with an ethical dilemma that arises whenever an individual athlete’s best medical interests conflict with the performance expectations of authority figures (e.g., coaches, parents). In almost every circumstance involving the provision of medical care, the legal responsibility for the decision to allow an injured athlete to return to sports participation ultimately belongs to a licensed physician.<sup>12</sup> In many situations, a physician who is a sports medicine specialist will authorize an athletic trainer to guide the rate at which an injured athlete is exposed to progressively increasing physical demands, but the physician is still ultimately responsible for the athletic trainer’s clinical practice decisions.<sup>13</sup>

Appendix 1 provides a set of 10 principles to guide institutions and organizations in assessment of existing administrative policies, procedures, and professional service relationships. Many of these principles correspond to concepts addressed by the BOC Standards of Professional Practice,<sup>14</sup> the Code of Ethics of the National Athletic Trainers’ Association,<sup>15</sup> and state medical practice regulations.

## Duties and Responsibilities of the Athletic Trainer and Team Physician

All stakeholders who have as their primary focus the immediate and long-term health and wellbeing of the individual athlete should be involved in the creation of the specific institution's job descriptions and expectations for all sports medicine providers. This section outlines duties and responsibilities of the athletic trainers, as well as the team physician who has ultimate responsibility for care provided by the sports medicine team.

The athletic trainer's principal responsibility is to provide for the wellbeing of individual athletes, allowing them to achieve their maximum potential. To accomplish this, athletic trainers work under the direction of the team physician or school medical director, and generally are responsible for or actively involved with:

- Development and implementation of a comprehensive emergency action plan.
- Injury prevention, recognition, diagnosis, referral, treatment and rehabilitation.
- Establishment of criteria for safe return to practice and play and implementation of the return to play process.
- Establishment and operation of treatment facilities for both practice and game situations that follow national and local standards of healthcare facilities.
- Determination of which venues and activity settings require the on-site presence of the athletic trainer and team physician and which require that they be available.
- Guidelines for the selection, fit, function and maintenance of all athletic equipment.
- Maintenance of accurate medical records for each athlete.
- Reviewing the design and implementation of strength and conditioning programs for safety and appropriateness related to injury/illness prevention, and providing recommendations for change when indicated.
- Establishment of a safe practice and playing environment through monitoring environmental risk factors such as meteorological conditions.
- Communication with coaches of injured/ill athletes' condition and progress, in cooperation with the team physician (HIPAA/FERPA rules apply).
- Communication with parents/guardians and spouses when appropriate of injured/ill athlete's status, in cooperation with the team physician (HIPAA/FERPA rules apply).

Like all health care providers, the team physician's first obligation is to the wellbeing of the athletes that are under the care of the sports medicine team. The physician's judgment should be governed only by medical considerations. The team physician should actively integrate medical expertise with other healthcare providers, including medical specialists, athletic trainers, and allied health professionals.<sup>16</sup> The team physician must have the ultimate authority for making medical decisions regarding the athletes' safe participation.

The team physician has ultimate responsibility for the following duties:

- Provision for proper preparation for safe return to participation after an illness or injury.
- Development of a chain of command with the team physician placed highest.
- Coordination of pre-participation screening, examination and evaluation.
- Management of on-the-field injuries.

- Provision for medical management of injury and illness.
- Coordination of rehabilitation and return to participation.
- Integration of medical expertise with other healthcare providers, including medical specialists, athletic trainers and allied health professionals.
- Provision for appropriate education and counseling regarding nutrition, strength and conditioning, ergogenic aids, substance abuse, and other medical issues that could affect the athlete.
- Provision for proper documentation and medical record keeping.
- Establishment and defining of the relationships of all involved parties.
- Education of athletes, parents/guardians, spouses, administrators, coaches and other necessary parties of concern regarding the athletes.
- Planning and training for emergencies during competition and practice.
- Addressing equipment and supply issues.
- Provision for proper event coverage.
- Assessment of environmental concerns and playing conditions.

### **Supervisory Relationships and Chain of Command within the Sports Medicine Team in the Secondary School and College/University Settings**

A variety of models exist for sports medicine administration. Regardless of the model utilized, there should be a clear delineation of responsibilities, particularly in cases where the athletic trainer may have responsibilities other than medical care (administrative and academic). This delineation should also define the supervisory relationships for each area of responsibility so that potential role conflicts are minimized and medical care is not sacrificed. Those personnel charged with supervision of the athletic trainer’s various roles must be cognizant of the shared roles and responsibilities they have regarding the athletic trainer. Deliberate effort must be made to avoid providing conflicting directions to the athletic trainer. All involved should realize that quality medical care must supersede other responsibilities in times of conflict. Clear delineation of responsibilities and supervisory roles should be documented in advance of employment and shared routinely as part of the hiring and selection process with subsequent documentation as part of the employment contract. Table 1 outlines typical models of supervisory relationships in sports medicine along with advantages and disadvantages of each. It should be noted that some institutions may have models that vary from those listed below or utilize some combination of those presented. Regardless of the model utilized, in no case should there be a supervisory relationship where members of the sports medicine team report to a coach due to both perceived and real conflicts of interest. The athletic trainer should report to the team or school physician.

**Table 1: Typical Models of Supervisory Relationships in Sports Medicine**

<p><b>Athletic Trainer Employed by Athletic Department:</b> Historically, the most common model provides for the athletic trainer being employed by the institution’s athletic department, while the team physician is employed externally and serves in a voluntary role or is contracted for service to the institution or school (athletics only or the institution as a whole) either through a retainer or a fee for</p>
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service. A common occurrence in this model is for the athletic trainer to have split responsibilities between athletics and academics. In some cases, the split responsibilities are a part of the regular contract or employment agreement. In other cases, the athletic trainer is employed by athletics and is compensated additionally or has release time for service to academics. In this model a member of the athletic training staff may have responsibility for administrative oversight, including the financial, logistic and operational aspects of the sports medicine program.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Provides for a closer relationship between the sports medicine personnel and the athletic department personnel.</li> <li>• May also enhance communication between the medical staff and athletics.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential conflict of interest may arise due to athletics having significant control over the athlete’s medical care.</li> <li>• Athletic trainer and/or team physician may be challenged in their medical decisions by pressure from athletics for inappropriate return to play, medical clearance and in making other medical decisions.</li> <li>• Potential for role conflict where the athletic trainer may sacrifice patient medical care responsibilities in favor of athletic department administrative responsibilities and educational responsibilities.</li> </ul>

**Athletic Trainer and Team Physician employed full time by the Athletic Department:** This model may be found in larger institutions where the financial resources and volume of medical demands are greater. In this model a member of the athletic training staff may have responsibility for administrative oversight, including the financial, logistic and operational aspects of the sports medicine program.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Provides for a closer relationship between the sports medicine personnel with the athletic department personnel.</li> <li>• May also enhance communication between the medical staff and athletics.</li> <li>• Provides for a clearer delineation of responsibility for the team physician and a closer relationship between team physicians and athletic trainers.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential conflict of interest may arise due to athletics having essentially total control over the athlete’s medical care.</li> <li>• Athletic trainer and/or team physician may be challenged in their medical decisions by pressure from athletics for inappropriate return to play, medical clearance and in making other medical decisions.</li> </ul>

**Athletic Trainer employed by the Educational Program:** More common in secondary schools than in college settings, this model provides for the athletic trainer being employed by the institution’s educational program, while the team physician is employed externally and serves in a voluntary role or is contracted for service to the institution (athletics only or the institution as a whole) either through a retainer or a fee for service. A variation of this model may include the team physician also being employed by the educational program. A common occurrence in this model is for the athletic trainer to have primary responsibilities in academics as an instructor and/or preceptor with a defined role in athletics. In some cases, the split responsibilities are a part of the regular contract. In other cases the athletic trainer is employed by academics and compensated additionally or has release time for service to athletics.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Provides for a reduced or minimal conflict of interest in making medical decisions based solely upon the athlete’s medical needs.</li> <li>• This model may provide professional advancement opportunities for the athletic trainer through academic promotions, longevity and enhanced credentials.</li> <li>• Potential conflict between clinical practices taught in the classroom and carried out in the clinical setting is reduced thereby increasing consistency and clarity of instruction to the athletic training students.</li> <li>• Increased expectation and monitoring of continuing</li> </ul>	<ul style="list-style-type: none"> <li>• Athletics may perceive a lack of commitment toward its personnel and there may be greater communication challenges between the medical staff and athletics.</li> <li>• Potential for the athletic trainer to experience role conflict and possibly sacrifice the athlete’s medical care in favor of educational demands and responsibilities.</li> </ul>

education by the educational department may encourage the athletic trainer to stay abreast of the most current and evidence-based clinical practices thereby leading to improved quality of care for the athlete.	
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**Athletic Trainer and/or team physician employed by the University Health Center or School Health Services:** In this model, the University Health Center is responsible for providing all healthcare services to the students, including those involved in athletics. This model requires a well-thought out communication plan so that the relationship is seamless, and information is provided to athletic personnel in a timely fashion.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Provides for minimal conflict of interest in making medical decisions based solely upon the athlete’s medical needs.</li> <li>• Athletic trainer is considered a medical provider, and is afforded all the rights and privileges as such.</li> <li>• Typically, salaries are comparable to other medical professionals.</li> <li>• Typically, separate staff members are assigned to various administrative tasks, freeing up the athletic trainer for clinical care and allowing a better work/life balance.</li> <li>• Provision of medical services and related activities such as billing/reimbursement management are under the supervision of staff with the most expertise in these areas.</li> <li>• Medical records, referrals, and other related services are managed in one place without duplication or division of efforts.</li> <li>• Comprehensive care for the student-athlete is facilitated as both participation-related and other health care can be delivered through the Health Service.</li> </ul>	<ul style="list-style-type: none"> <li>• Athletics may perceive a lack of commitment toward its personnel and there may be greater communication challenges between the medical staff and athletics.</li> <li>• The athletic department will no longer have control over the healthcare of athletes or the employment of athletic trainers, and will no longer receive insurance reimbursements from sports medicine services (when applicable).</li> <li>• It is critical that the staff of the Health Service understand the intricacies and demands of an athletic program; it may become necessary to teach present and new staff intricacies either at the outset or as new personnel are hired.</li> <li>• Student health services may not employ the most expert sports medicine specialists in the area.</li> </ul>

**Medical care is contracted with an outside hospital or private group:** In this model the institution contracts out to a separate entity, usually a hospital, for provision of all medical services. The awarding of these contracts may be based upon bids.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Significantly reduces the athletic department’s responsibility for and control over medical decisions and should allow for more unity among the members of the medical team.</li> <li>• Can provide for more seamless continuity of care between the medical providers.</li> </ul>	<ul style="list-style-type: none"> <li>• Due to lack of medical expertise, the institution may be challenged in evaluating the competitive bids regarding the best medical care provider versus the best financial package.</li> <li>• Some outside groups may be lacking in appropriate personnel for every medical situation or the specialty needs that may arise.</li> <li>• There may be greater communication challenges between athletics and medical personnel.</li> <li>• Difficulty may exist in determining the appropriate needs for equipment, expendable supplies, and staffing, and how this may be reconciled between the parties.</li> </ul>

**Decision-Making Authority Relating to Approval for Participation of Athletes as well as Injury Management and Return to Sport Participation Status Following Injury/Illness in the College/University Setting**

The potential for conflict of interest is omnipresent in sports medicine. When sports medicine team members provide care to the athlete but are employees or appointees of the institution, the potential exists

for medical decisions to be made outside of the athlete's best interest. Irrespective of level of play, there is immense pressure toward medical clearance for sport participation. Owing an obligation to athlete welfare, the institution must establish a clear line of unchallengeable authority to the team physician and athletic trainer.<sup>17-19</sup>

Line of authority affords sports medicine providers freedom from personal and professional bias in their ethical and medicolegal obligation to the athlete's health.<sup>20,21</sup> The ability to act unencumbered fosters perceptual, if not actual, best interest medical decisions for and by athletes.

Institution ownership of athlete health and welfare can be demonstrated by including the athletic trainer or team physician in senior level athletic administration. This may be accomplished irrespective of the individual's appointment, whether through athletics, academics, university health services, or private practice. Freedom in their professional practice is garnered as neither the team physician or athletic trainer, then, has a coach as their primary supervisor nor shall a coach have authority over appointment or employment of sports medicine providers.<sup>3,7</sup>

Shared responsibility for sports safety involves not just the sports medicine providers, but the athletic administration, coaches, participants, and all associated with the athletic program.<sup>7</sup> Medical decisions made in the athletes' best interests are ultimately serving the team's best interests and thereby providing for the institution's well-being. The healthcare provider's primary responsibility is for the health and safety of the student-athlete; however, an additional responsibility is to protect their institution from liability. Shared responsibility means that roles and authorities must be distinct, defined, and *not* shared as each entity performs duty unique to their discipline.

The team physician as the final authority for medical clearance is well established in the literature and as a medicolegal principle.<sup>6,22</sup> When return to play decisions are delegated to an athletic trainer, by a team physician, the team physician is still ultimately responsible. The institution must affirm, in policy and protocol, that sports medicine providers are empowered to make best-interest decisions regarding the athlete at all times and in all settings, and those decisions are authoritative and not to be ignored. This organizational principle must be clearly communicated throughout, from the top-down, both in policy and in actual practice.

Communication is essential among athlete, team physician, athletic trainer, coaches, strength coaches, parents/guardians, spouse, and administration regarding the approval for participation and injury and illness management. Sports medicine providers bound by HIPAA and FERPA must adhere to mandated guidelines. All communications must be legally compliant, accurate, and consistent. Communication policies should outline specific information that will be reported, by whom, to whom, and in what manner.

Athletes bear responsibility to report injury/illness, whether related or unrelated to sport. The athletic trainer informs the team physician, with serial communication as warranted. The athletic trainer communicates participation status to all coaches, including indicated activity limits. Coaches should notify the athletic trainer as they suspect an athlete has suffered injury, illness or other adverse condition or is having a performance or conditioning issue.

Return to play decisions in the midst of the emotion of competition should be made in an objective and unbiased fashion. Participation decisions should be based on best available evidence in balance with the sports medicine provider's experience and judgment, utilizing specialty medical expertise, as warranted.

Using objective criteria, athletes are allowed participation based on medical history, clinical evaluation and symptoms. Progressive return to play with conditioning followed by sports specific activity, limited

practice, and full practice prior to competition can allow for an individualized approach as athletes advance at different rates given varying conditions and severity.<sup>23</sup>

The athlete must be an active participant in medical decisions. Parents/guardians and spouse may be involved whether the athlete is a minor or emancipated. All sports medicine providers must clearly communicate the short-term and long-term risks associated with continued athletic participation.<sup>24</sup> Points for discussion, as indicated, are: 1) operative and non-operative, with outcomes as known; 2) options that may delay return to play but further the athlete's best medical interests; 3) options that may hasten return to play but are not in the athlete's best medical interests. The information must be in plain and simple language so the athlete can understand any potential adverse consequences, inclusive of catastrophic consequences, and make a responsible decision.<sup>25</sup> Sports medicine providers should assess the athlete's understanding of the provided information and capacity to make the necessary decision, and assure the athlete has the freedom to choose among the medical alternatives without coercion or manipulation.

Economics has to be considered in the question of medical clearance for participation. Team physicians and athletic trainers must recognize the value of competitive athletics to the athlete. "Value" may be measured in money. At all levels, the athlete, his/her family, and interested others may weigh dreams and finances along with the short- and long-term prognosis differently than the sports medicine provider, even to the point of rejection of the athlete's best medical option.

### **Decision-Making Authority Relating to Approval for Participation of Athletes as well as Injury Management and Return to Sport Participation Status Following Injury/Illness in the Secondary School Setting**

Athletic trainers in the secondary school setting work in conjunction with team physicians. The team physician should be actively involved in the athletic healthcare program, across all teams, throughout the year. Athletic trainers need to develop a close working relationship with their team physician so that competent decision making occurs through a collaborative process. Additionally, the relationship must be one of mutual trust and confidence. This relationship facilitates open communication, and shared understanding of expectations of both parties. It allows the athletic trainer to truly be an extension of the team physician, operating under standing orders and following written policies and procedures, to provide the best possible care for the athletes. The team physician should be willing to communicate with the athletic trainer at any time, and make athlete evaluation and follow-up care a priority.

Students wishing to participate in sports must undergo a comprehensive physical examination.<sup>26-30</sup> The purpose of this exam is to search for conditions which might predispose an athlete to sudden death, catastrophic injury, or significant exacerbation of a preexisting injury/illness without appropriate management or rehabilitation while participating in sports.<sup>0</sup> Athletic trainers or other school personnel should hold from participation any athlete who has not provided the school with documentation verifying successful completion of the examination.

All athletic trainers should have in place written policies and procedures regarding injury management and return to play decision-making criteria. These documents may be developed jointly by the athletic trainer and team physician with the final written document approved by the team physician and with the support of the school administration. Additionally, all schools should have written emergency action plans which are practiced and followed in the event of serious injury or illness.<sup>1</sup> The policies and procedures should include specific return to play protocols for concussions and other injury/illness situations. They should also indicate

that the team physician and, by extension, the collaborating athletic trainer have the final and unquestionable authority regarding return to play decisions. While parents/guardians, coaches and family physicians can exclude an athlete from participation, none can overrule the exclusion decision of the team physician working with the athletic trainer. While the athletic trainer's administrative supervisor may be the athletic director, medical supervision should rest with the team physician. Since the athletic trainer represents the interests of the school, he/she should be supported in his/her medical decisions by the athletic director and other school administrators, provided he/she follows the adopted policies and procedures.

Athletes should be encouraged to report their injuries rather than hide them. If in the opinion of the athletic trainer, an injury/illness warrants removal from part or all of the practice or competition, the athletic trainer should have the authority to do so. Communication with the coach, the athlete's parents/guardians, and in some cases the athletic director, is advised. However, communicating the injury situation with those individuals should not be misconstrued as seeking their approval to hold the athlete out of competition or practice. Parents/guardians and coaches also have the ability to hold an athlete from participation, but are not allowed to override the athletic trainer's decision to remove or hold an athlete from participation due to injury/illness.

When athletes seek medical attention outside the school's designated sports medicine providers, it is advisable for the outside provider to contact the athletic trainer. Formal methods of communication (communication forms) should be developed to facilitate this communication and the expectations of the outside medical provider. Doing so creates a dialogue between the outside provider and the school sports medicine providers, and serves to facilitate agreement regarding the rehabilitation process and return to play decisions. When the outside provider deems the athlete medically able to return to participation, it is the responsibility of the athletic trainer to further determine functional (or sport-specific) readiness to return to full participation. Athletic trainers should work cooperatively with the treating physicians and communicate frequently throughout the athlete's recovery.

Athletic trainers should recognize that physicians are the higher medical authority. The athletic trainer has an ethical obligation both to maximize the well-being of the athlete and to minimize the liability exposure of the school. Therefore, when the athletic trainer is able to document evidence of functional levels insufficient to ensure the athlete's safety, the athletic trainer should express his/her concerns both to the treating physician and to the team physician. Whether or not the treating physician agrees, authority for the final decision on the athlete's return to play should remain with the team physician. The team physician should be willing to overrule the treating physician if he/she agrees with the athletic trainer that it is necessary to restrict the athlete's participation status.

It is recommended that:

- Athletic trainers work under the direction of a team physician based on their state practice act and professional standards.
- Athletic trainers have policies and procedures which are written in conjunction with the team physician and supported by the school administration.
- Athletic trainers communicate return to play concerns with the team physician, with whom the final return to play authority rests.
- All athletes undergo a comprehensive pre-participation physical examination, and that no athlete is allowed to practice or compete until providing documentation of the examination.

- All schools with athletic programs have Emergency Action Plans that are written, posted, and practiced by all who have responsibility for the acute management of athlete's injuries/illnesses.
- All schools have an appointed or designated team physician.
- All schools with athletic programs provide an appropriate number of sports medicine providers, specifically and most appropriately athletic trainers, based on the number of athletic teams and athletes.

### **Policy and Procedure Recommendations Regarding Administrative Authority for Selection, Renewal and Dismissal of Athletic Trainer in the College/University Setting**

The sports medicine staff should have final unchallengeable authority for the health and welfare of the athletes. The athletic trainer should be appointed as a senior athletic administrator to provide for the health, safety and welfare of all athletes as well as having input into administrative areas such as budget, risk management, institutional liability, quality assurance and athlete satisfaction. This sends a clear message by the athletic director of the value and esteem for athlete welfare. As a senior administrative appointment, the athletic director shall not cede authority over sports medicine or sports medicine providers to a coach. The institution and all applicable employees should be aware of and adhere to all state regulations regarding the credentialing of all sports medicine providers.

The athletic trainer should be directed and supervised in regard to administrative tasks, by the athletic director; in regard to medical competence, by the team physician; and in regard to academic competence, by the academic department chair or dean. A coach should never be the direct supervisor of an athletic trainer due to conflict of interest issues. All institutional employment protocols and procedures for selection, evaluation, renewal, and dismissal should be followed. A clear, complete outline of the specific job expectations should be provided and understood before the employment agreement is finalized. When an athletic trainer is responsible to more than one department, a clear delineation of reporting lines, percent duty expectations, and performance appraisal weighting should be established.

### **Policy and Procedure Recommendations Regarding Administrative Authority for Selection, Renewal and Dismissal of Athletic Trainer in the Secondary School Setting**

#### **Selection of an Athletic Trainer**

If there is a head athletic trainer on staff, this individual should have significant responsibility in the hiring process within the school's policies and procedures. This includes developing the position vacancy notice, reviewing applications, checking references and confirming appropriate credentials/licenses of the candidates, as well as selecting the top applicants to begin the interview process. In the absence of a head athletic trainer, the athletic director and principal should be responsible for the hiring process, as well as the school's HR department, if applicable.

All aspects of the athletic trainer position should be addressed in the interview.<sup>31</sup> These would include, but are not limited to, supervision, direction, evaluation, authority, budget, policies, protocols and applicable district, state and national laws/rules/analysis of liability and malpractice coverage. It should be noted during the interview that unquestionable final authority for rendering medical decisions should rest with the team physician or his/her designee, who could be the athletic trainer.

## Retention of an Athletic Trainer

Renewal of the athletic trainer’s employment should be based on a comprehensive, fair and equitable evaluation process involving all aspects of the job performance and duties. The evaluation process should be performed by the team physician, athletic director, and principal, each evaluating competence in their areas of responsibility as outlined by Table 2.

**Table 2**

<b>Team Physician</b>	<b>Athletic Director</b>	<b>Principal</b>
Athletic training services* Education Customer service Communication skills Quality of work Job knowledge Professional conduct	Education Administrative duties Budgeting and finance** Equipment Parent/guardian and coaching education Customer services Communication skills Attendance and punctuality Professional conduct	Customer service Communication skills Attendance and punctuality Professional conduct

*\*possibly including involvement of the school nurse, depending on his/her level of interaction with the athletic program*

*\*\*including input from the school’s business manager*

The team physician should evaluate athletic training services, and review of all non-medical duties associated with functioning as an athletic trainer should be completed by the team physician, the athletic director and/or principal or designee. In some areas of the review, the athletic director and team physician may ask for a coach’s input. The coach’s voice should not be the only one heard in the review process but could serve as a start of communication and dialogue. This way, conflicts of personality and lack of understanding of the athletic trainer’s responsibilities will not come into play during the review process. Just as the coach would not want the athletic trainer to evaluate their ability to coach, select starting line ups or play selection, the athletic trainer does not want a coach to evaluate how an athletic trainer evaluates, manages and treats an athlete’s knee injury. Situations where the athletic director is also a coach may present a potential conflict of interest. In these cases, the performance review of the athletic trainer should be the responsibility of the team physician and a suitable alternate or designee (i.e. assistant athletic director or principal).

## Dismissal of an Athletic Trainer:

The periodic performance appraisal process holds employees accountable for competent performance in the following areas:<sup>1</sup>

- Technical standards – derived from the job description
- Behavioral standards – derived from the district handbook
- Mandatory standards – applicable to all individuals
- Goals and objectives – as mutually agreed upon at the beginning of service

- Competencies – developed in accordance with the individual’s job and in compliance with governing agencies that set required standards

In addition, the periodic performance appraisal process should include the following:

- Needs assessment for future educational programming
- Career development for future career aspirations
- Physical demands checklist to determine the physical requirements of each job
- Education record
- Personal note section for documentation of accomplishments/anecdotes
- Performance log for documentation of corrective action in a specified time period

An employee may appeal the review/dismissal decision to the appropriate school/medical administration within a specified time period if his/her overall performance appraisal score or any individual score is viewed as unsatisfactory.

### **Performance Appraisal Tools for Athletic Trainers in the Secondary School and College/University Settings** Performance Appraisal

Performance appraisals for athletic trainers in the athletic setting are an important assessment component for establishing an effective Quality Improvement Program for the sports medicine team. The goal of this section is to provide a framework and resources that enable an administrator to effectively and efficiently evaluate the performance of sports medicine staff in a manner that enhances the selection, evaluation, retention, and support required to facilitate a successful and adequate sports medicine program protecting the athletes’ well-being. These program-specific tools should be in addition to the institution or school’s normal human resources policies and practices.

The performance appraisal tools should be built upon established goals and job objectives for each athletic trainer and serve as a two-way document providing an open, ongoing active review process throughout the year. The appraisals should be goal-oriented, focusing not just on past performance but also on future improvement and professional development. Performance appraisals should include two main areas:

1. Individual Staff Performance
2. Athletic Training Services Metrics

### Program Evaluation

Institutions/schools should have clearly written organizational charts that outline healthcare services reporting and supervision plans. All members of the sports medicine team should have clear written job descriptions that serve as a platform for developing yearly goals, benchmarks, and day-to-day job duties. These should be developed and reviewed at the beginning of the year so that staff can plan and perform their jobs effectively. Supervisors should provide timely feedback and periodic review throughout the year avoiding the one-time end of the year assessment. This written and planned process allows for open and transparent communications between staff and supervisors. Written goals and benchmarks provide a clear understanding

for job success and movement toward promotion. Written job objectives can help demonstrate day-to-day workloads and priorities to athletic administrators and human resources departments.

### Individual Staff Performance

Individual staff performance is best evaluated using tools available for both announced and unannounced evaluations. These tools should be designed for the specific setting (e.g. athletics, clinic, health center, hospital, academics) so that athletic directors as well as healthcare administrators feel comfortable with conducting the evaluation and interpreting the results.

The performance process should include not only tools, but also a description of the process and the roles for all of the team members—team physician, athletic director, coaches, athletes, faculty, and peer athletic trainers.

Institutions/schools should distinguish between the roles of the athletic director and the team physician in the evaluation process. There should be options for allowing athletes the opportunity to provide feedback such as through an athlete committee, a standard survey, a per-visit feedback form, or an exit interview. The goal is to allow coaches or athletes to provide valuable feedback in a manner that can lead to improvements in care and service.

Staff members should be encouraged to provide a self-assessment of their performance toward accomplishing their set goals and job objectives. This helps with the two-way communication model described above as perceptions and expectations may differ between employee and supervisors.

A supervisor should be encouraged to set one-on-one meetings with each employee to discuss the employee's goals, his/her accomplishments, continuing education, and areas for improvement. As noted throughout this section, the review process should be goal-oriented and should take place throughout the year rather than singularly at the end.

### Teaching

An important component to some sports medicine programs is the education and clinical supervision of young professionals in accredited programs, in the secondary school setting or teaching related classes. Staff workloads should account for the teaching/clinical education responsibilities as well as medical care responsibilities. Many staff members within sports medicine have a faculty teaching, adjunct instructor or clinical instructor role that should be accounted for in the initial goal setting stage and in individual job objectives at the beginning of the year and should be tied directly to the instructor evaluations. These academic/clinical evaluations should be used as part of a staff member's overall performance appraisal and captured within the promotion and remediation planning and workload modifications.

### Promotion and Remediation Plans

Formal performance appraisals can be used in discussions on raises, promotion, and workload modifications. Performance appraisals should include a formal remediation plan with an established timeline that is individually based for each sports medicine team member in order to correct unsatisfactory actions and seek professional development opportunities.

### Athletic Training Service Metrics

It is important to consider the evaluation of the overall sports medicine program in addition to the individual staff performance measurement. Outcomes from tracking specific metrics for the medical care of athletes provided in the sports medicine setting can provide data for administrators about the overall assessment of whether the program works and can identify adjustments that may improve the service. The results are often used to support resource allocation and other policy decisions to improve service delivery and program effectiveness. Tracking metrics could be as simple as tracking the number of visits to the facility, injury evaluations and treatment performed each year, or insurance claims processed. An example of a more complex program evaluation tool is the Recommendations and Guidelines for Appropriate Medical Coverage for Intercollegiate Athletics (AMCIA).<sup>32</sup> An alternative service model tool that can help demonstrate the value and performance of a sports medicine program includes the new College-University Value Model and upcoming Secondary School Value Model.<sup>33</sup>

Self-assessment tools can be used to determine whether staff are following best practices and program policies as well as assess the adequacy of the healthcare facility. A walk-through checklist for facilities and programs can be used to evaluate and serve as a guide. Athletic trainers transitioning into a new job or job setting can benefit from this type of checklist to search for gaps in the program that should be addressed. The BOC Facility Principles checklist<sup>34</sup> or an emergency plan checklist for all athletic staff are two good examples of evaluation tools measuring program compliance and identifying areas for improvement. The Secondary School Student Athletes Bill of Rights also lists key components of a safe and effective athletic program.<sup>35</sup>

Any gaps or expansions in service should follow a formal remediation plan for correcting the problems or realigning to the mission. These redirections in the program should involve a plan, timeline and process for accomplishing the new goals.

### **Repository for Forms**

In support for all of these aspects, the NATA has created a repository of example forms, so that athletic trainers coming into a new setting will not have to start from scratch. This repository is expected to grow and will serve to provide resources for membership access and provide consistency in evaluating athletic trainers across schools and institutions.

### **DISCLAIMER**

The National Athletic Trainers' Association (NATA) and the Inter-Association Workgroup advise individuals, schools, athletic training facilities, and institutions to carefully and independently consider the recommendations. The information contained in the document is neither exhaustive nor exclusive to all circumstances or individuals. Variables such as institutional human resource guidelines, state or federal statutes, rules, or regulations, as well as regional environmental conditions, may impact the relevance and implementation of these recommendations. The NATA and the Inter-Association Workgroup advise their members and others to carefully and independently consider each of the recommendations (including the applicability of same to any particular circumstance or individual). The foregoing statement should not be relied upon as an independent basis for care but rather as a resource available to NATA members or others. Moreover, no opinion is expressed herein regarding the quality of care that adheres to or differs from any of NATA's other statements. The NATA and the Inter-Association Workgroup reserve the right to rescind or modify their statements at any time.

## **Appendix 1**

### **10 Principles to Guide Administration of Sports Medicine-Athletic Training Services<sup>13</sup>**

1. The physical and psychosocial welfare of the individual athlete must always be the highest priority of the athletic trainer and the team physician.
2. Any program that delivers athletic training services, including "outreach" services provided to secondary schools or other athletic organizations, must always have a designated medical director.
3. Sports medicine physicians and athletic trainers must always practice in a manner that integrates the best current research evidence within the preferences and values of each athlete.
4. The clinical responsibilities of an athletic trainer must always be performed in a manner that is consistent with the written or verbal instructions of a physician or standing orders and clinical management protocols that have been approved by a program's designated medical director.
5. Decisions that affect the current or future health status of an athlete-who has an injury or illness must only be made by a properly credentialed health professional (e.g., a physician or an athletic trainer who has a physician's authorization to make the decision).
6. In every case that a physician has granted an athletic trainer the discretion to make decisions relating to an individual athlete's injury management or sports participation status, all aspects of the care process and changes in the athlete's disposition must be thoroughly documented.
7. To minimize the potential for occurrence of a catastrophic event or development of a disabling condition, coaches must not be allowed to impose demands that are inconsistent with guidelines and recommendations established by sports medicine-athletic training professional organizations.
8. An inherent conflict of interest exists when an athletic trainer's role delineation and employment status are primarily determined by coaches or athletic program administrators, which should be avoided through a formal administrative role for a physician who provides medical direction.
9. An athletic trainer's professional qualifications and performance evaluations must not be primarily judged by administrative personnel who lack healthcare expertise, particularly in the context of hiring, promotion, and termination decisions.
10. Universities, colleges, and secondary schools should adopt an administrative structure for delivery of integrated sports medicine and athletic training services to minimize the potential for any conflict of interests that could adversely affect the health and well-being of athletes.

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<sup>1</sup> Klafs CE, Arnheim DD. The science of sports injury prevention and management: Modern principles of athletic training. St. Louis MO: The C.V. Mosby Company; 1977.

<sup>2</sup> Top End Sports: The Sport and Science Resource. List of Every Sport. <http://www.topendsports.com/sport/sports-all.htm>. Accessed March 3, 2013.

<sup>3</sup> National Federation of State High School Associations. 2011-12 high school athletics participation survey. <http://www.nfhs.org>. Accessed April 15, 2013.

<sup>4</sup> Statistic Brain. NCAA College Athletics Statistics. <http://www.statisticbrain.com/ncaa-college-athletics-statistics>. Accessed April 28, 2013.

<sup>5</sup> National Federation of State High School Associations. The case for high school activities. <https://www.nchsa.org/intranet/downloadManagerControl.php?mode=getFile&elementID=7680&type=5&atomID=9981>. Accessed March 1, 2013.

<sup>6</sup> Centers for Disease Control and Prevention (CDC). Sports-related injuries among high school athletes - United States, 2005-06 school year. *MMWR Morbidity and Mortality Weekly Report* 2006;55(38):1037-1040.

<sup>7</sup> Datalys Center for Sports Injury Research and Prevention, pers. comm., April 15.

<sup>8</sup> LaBella C, et al "A comparative analysis of injury rates and patterns among girls' soccer and basketball players at schools with and without athletic trainers from 2006/07-2008/09" *AAP* 2012.

- <sup>9</sup> American Medical Association. Policy H-470.995 Athletic (Sports) Medicine. <https://ssl3.ama-assn.org/apps/ecom/PolicyFinderForm.pl?site=www.ama-assn.org&uri=%2fresources%2fdoc%2fPolicyFinder%2fpolicyfiles%2fHnE%2fH-470.995.HTM>. Updated November 2012. Accessed April 10, 2013.
- <sup>10</sup> United States Department of Labor. Bureau of Labor Statistics: Occupational Outlook Handbook. <http://www.bls.gov/ooH/healthcare/athletic-trainers.htm>. Accessed March 3, 2013.
- <sup>11</sup> Bardes CL. Defining patient-centered medicine. *N Eng J Med*. 2012; 366:782-783.
- <sup>12</sup> Creighton DW, Shrier I, Shultz R, Meeuwisse WH, Matheson GO. Return-to-play in sport: a decision-based model. *Clin J Sport Med*. 2010; 20:379-385.
- <sup>13</sup> Wilkerson G. Patient-centered care and conflict interests in sports medicine-athletic training. *International Journal of Athletic Therapy and Training* 2012;17(4):1-3.
- <sup>14</sup> Board of Certification, Inc. BOC Standards of Professional Practice. [http://www.bocatc.org/images/stories/multiple\\_references/standard-aprofessionalpractice.pdf](http://www.bocatc.org/images/stories/multiple_references/standard-aprofessionalpractice.pdf). Implemented January 1, 2006. Accessed April 6, 2012.
- <sup>15</sup> National Athletic Trainers' Association. NATA Code of Ethics. <http://www.nata.org/codeofethics>. Implemented September 28, 2005. Accessed April 6, 2012.
- <sup>16</sup> Team physician consensus statement. *Medicine and science in sports and exercise*. Apr 2000;32(4):877-878.
- <sup>17</sup> National Collegiate Athletic Association. *2012-13 NCAA Sports Medicine Handbook*. Aug 2012.
- <sup>18</sup> National Collegiate Athletic Association. *2012-13 NCAA Division I*. July 2012.
- <sup>19</sup> Matheson GO, Shultz R, Bido J, Mitten MJ, Meeuwisse WH, Shrier I. Return-to-play decisions: are they the team physician's responsibility? *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*. Jan 2011;21(1):25-30.
- <sup>20</sup> Furrow BR. The problem of the sports doctor: Serving two (or is it three or four?) masters. *Saint Louis University Law Journal*. 2006;50.1:165-183.
- <sup>21</sup> Ross JR, Capozzi JD, Matava MJ. Discussing treatment options with a minor: the conflicts related to autonomy, beneficence, and paternalism. *The Journal of bone and joint surgery. American volume*. Jan 4 2012;94(1):e3(1-4).
- <sup>22</sup> The team physician and return-to-play issues: a consensus statement. *Medicine and science in sports and exercise*. Jul 2002;34(7):1212-1214.
- <sup>23</sup> Brukner P. Return to play--a personal perspective. *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*. Nov 2005;15(6):459-460.
- <sup>24</sup> Best TM, Brolinson PG. Return to play: the sideline dilemma. *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*. Nov 2005;15(6):403-404.
- <sup>25</sup> Mitten MJ, Mitten RJ. Legal considerations in treating the injured athlete. *The Journal of orthopaedic and sports physical therapy*. Jan 1995;21(1):38-43.
- <sup>26</sup> Almquist, J., McLeod, T., Cavanna, A., Jenkinson, D., Lincoln, A., Loud, K., et al. (2008). Summary Statement: Appropriate Care for the Secondary School-Aged Athlete. *Journal of Athletic Training*, 416-427.
- <sup>27</sup> American Academy of Family Physicians; American Academy of Pediatrics; American College of Sports Medicine; Bernhardt, D; Roberts, W (Editors). (2010). *Pre-Participation Physical Evaluation, 4th Edition*. Elk Grove Village, IL: American Academy of Pediatrics.
- <sup>28</sup> Casa, D. J., Guskiewicz, K. M., Anderson, S. A., Courson, R. W., Heck, J. F., Jimenez, C. C., et al. (2012). National Athletic Trainers Association Position Statement: Preventing Sudden Death in Sports. *Journal of Athletic Training*, 96-118.
- <sup>29</sup> Drezner, J. A., Courson, R. W., Roberts, W. O., Moresso, V. N., Link, M. S., & Maron, B. J. (2007). Inter-Association Task Force Recommendations on Emergency Preparedness and Management of Sudden Cardiac Arrest in High School and College Athletic Programs: A Consensus Statement. *Journal of Athletic Training*, 143-158.
- <sup>30</sup> Herring, S. A., Putukian, M., & Kibler, W. B. (2012). Sideline Preparedness for the Team Physician. *Medicine & Science in Sport & Exercise*, 2442-2445.
- <sup>31</sup> Ray, Richard. *Management Strategies in Athletic Training*. 3<sup>rd</sup> Ed. 2005. pp 72-85, 95-110, 301-302
- <sup>32</sup> National Athletic Trainers' Association. Recommendations and Guidelines for Appropriate Medical Coverage of Intercollegiate Athletics. <http://www.nata.org/sites/default/files/AMCIARecsandGuides.pdf>. June 2007. Accessed April 10, 2013.
- <sup>33</sup> National Athletic Trainers' Association. College-University Value Model. <http://www.nata.org/sites/default/files/College-Value-Model.pdf>. Accessed April 10, 2013.
- <sup>34</sup> Board of Certification, Inc. BOC Facility Principles. [http://www.bocatc.org/images/stories/resources/boc\\_facility\\_safety\\_1305af.pdf](http://www.bocatc.org/images/stories/resources/boc_facility_safety_1305af.pdf). Published April 2013. Accessed July 3, 2013.
- <sup>35</sup> Youth Sports Safety Alliance. Secondary School Student Athletes' Bill of Rights. <http://www.youthsportssafetyalliance.org/docs/Athletes-Bill-of-Rights.pdf>. Accessed April 10, 2013.

## APPENDIX C

# INTER-ASSOCIATION CONSENSUS: INDEPENDENT MEDICAL CARE GUIDELINES

September 2014

## PURPOSE

The Safety in College Football Summit resulted in inter-association consensus guidelines for three paramount safety issues in collegiate athletics:

1. Independent medical care in the collegiate setting;
2. Concussion diagnosis and management; and
3. Football practice contact.

This document addresses independent medical care for college student-athletes in all sports.

## BACKGROUND

Diagnosis, management, and return to play determinations for the college student-athlete are the responsibility of the institution's athletic trainer (working under the supervision of a physician) and the team physician. Even though some have cited a potential tension between health and safety in athletics,<sup>1,2</sup> collegiate athletics endeavor to conduct programs in a manner designed to address the physical well-being of college student-athletes (i.e., to balance health and performance).<sup>3,4</sup> In the interest of the health and welfare of collegiate student-athletes, a student-athlete's health care providers must have clear authority for student-athlete care. The foundational approach for independent medical care is to assume an "athlete-centered care" approach, which is similar to the more general "patient-centered care," which refers to the delivery of health care services that are focused only on the individual patient's needs and concerns.<sup>5</sup> The following 10 guiding principles, listed in the Inter-Association Consensus Statement on Best Practices for Sports Medicine Management for Secondary Schools and Colleges,<sup>5</sup> are paraphrased below to provide an example of policies that can be adopted that help to assure independent, objective medical care for college student-athletes:

1. The physical and psychosocial welfare of the individual student-athlete should always be the highest priority of the athletic trainer and the team physician.
2. Any program that delivers athletic training services to student-athletes should always have a designated medical director.
3. Sports medicine physicians and athletic trainers should always practice in a manner that integrates the best current research evidence within the preferences and values of each student-athlete.
4. The clinical responsibilities of an athletic trainer

should always be performed in a manner that is consistent with the written or verbal instructions of a physician or standing orders and clinical management protocols that have been approved by a program's designated medical director.

5. Decisions that affect the current or future health status of a student-athlete who has an injury or illness should only be made by a properly credentialed health professional (e.g., a physician or an athletic trainer who has a physician's authorization to make the decision).
6. In every case that a physician has granted an athletic trainer the discretion to make decisions relating to an individual student-athlete's injury management or sports participation status, all aspects of the care process and changes in the student-athlete's disposition should be thoroughly documented.
7. Coaches must not be allowed to impose demands that are inconsistent with guidelines and recommendations established by sports medicine and athletic training professional organizations.
8. An athletic trainer's role delineation and employment status should be determined through a formal administrative role for a physician who provides medical direction.
9. An athletic trainer's professional qualifications and performance evaluations must not be primarily judged by administrative personnel who lack health care expertise, particularly in the context of hiring, promotion, and termination decisions.
10. Member institutions should adopt an administrative structure for delivery of integrated sports medicine and athletic training services to minimize the potential for any conflicts of interest that could adversely affect the health and well-being of student-athletes.

Team physician authority becomes the linchpin for independent medical care of student-athletes. Six pre-eminent sports physicians associations agree with respect to "... athletic trainers and other members of the athletic care network report to the team physician on medical issues."<sup>6</sup> Consensus aside, a medical-legal authority is a matter of law in 48 states that require athletic trainers to report to a physician in their medical practice. The NCAA Sports Medicine Handbook's Guideline 1B opens with a charge to athletics and institutional leadership to "create an administrative system where athletics health care professionals –

team physicians and athletic trainers – are able to make medical decisions with only the best interests of student-athletes at the forefront.”<sup>7</sup> Multiple models exist for collegiate sports medicine. Athletic health care professionals commonly work for the athletics department, student health services, private medical practice, or a combination thereof. Irrespective of model, the answer for the college student-athlete is established independence for appointed athletics health care providers.<sup>8</sup>

## GUIDELINES

Institutional medical line of authority should be established independently of a coach, and in the sole interest of student-athlete health and welfare. Medical line of authority should be transparent and evident in athletics departments, and organizational structure should establish collaborative interactions with the medical director and primary athletics health care providers (defined as all institutional team physicians and athletic trainers) so that the safety, excellence and wellness of student-athletes are evident in all aspects of athletics and are student-athlete centered.

Institutions should, at a minimum, designate a licensed physician (M.D. or D.O.) to serve as medical director, and that medical director should oversee the medical tasks of all primary athletics health care providers. Institutions should consider a board certified physician, if available. The medical director may also serve as team physician. All athletic trainers should be directed and supervised for medical tasks by a team physician and/or the medical director. The medical director and primary athletics health care providers should be empowered with unchallengeable autonomous authority to determine medical management and return-to-play decisions of student-athletes.

## REFERENCES

1. Matheson GO. Maintaining professionalism in the athletic environment. *Phys Sportsmed*. 2001 Feb;29(2)
2. Wolverton B. (2013, September 2) Coach makes the call. *The Chronicle of Higher Education*. [Available online] <http://chronicle.com/article/Trainers-Butt-Heads-With/141333/>
3. NCAA Bylaw 3.2.4.17 (Div. I and Div. II); 3.2.4.16 (Div. III).
4. National Collegiate Athletic Association. (2013). 2013-14 NCAA Division I Manual. Indianapolis, IN: NCAA.
5. Courson R et al. Inter-association consensus statement on best practices for sports medicine management for secondary schools and colleges. *J Athletic Training* 2014; 49:128-137.
6. Herring SA, Kibler WB, Putukian M. Team Physician Consensus

## ENDORSEMENTS

This Consensus Best Practice, Independent Medical Care for College Student-Athletes, has been endorsed by:

- American Academy of Neurology
- American College of Sports Medicine
- American Association of Neurological Surgeons
- American Medical Society for Sports Medicine
- American Osteopathic Academy for Sports Medicine
- College Athletic Trainers' Society
- Congress of Neurological Surgeons
- National Athletic Trainers' Association
- NCAA Concussion Task Force
- Sports Neuropsychological Society

*Statement: 2013 update. Med Sci Sports Exerc. 2013 Aug;45(8):1618-22.*

7. National Collegiate Athletic Association. (2013). 2013-14 NCAA Sports Medicine Handbook. Indianapolis, IN: NCAA.
8. Delany J, Goodson P, Makeoff R, Perko A, Rawlings H [Chair]. Rawlings panel on intercollegiate athletics at the University of North Carolina at Chapel Hill. Aug 29, 2013. [Available online] [http://rawlingspanel.web.unc.edu/files/2013/09/Rawlings-Panel\\_Intercollegiate-Athletics-at-UNC-Chapel-Hill.pdf](http://rawlingspanel.web.unc.edu/files/2013/09/Rawlings-Panel_Intercollegiate-Athletics-at-UNC-Chapel-Hill.pdf)