Michigan State University: Review of Sports Medicine Services
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General Information

Purpose
At the request of the Director of Intercollegiate Athletics of Michigan State University, a medical review of services provided to the Department was conducted. The review included a general assessment of core medical providers for student-athletes including physicians, athletic trainers and selected external providers. The Athletic Director’s expressed desire for the broad review was to seek optimum comprehensive health care services for student-athletes. This is aligned with the Department’s “Core Values” of: respect, focus, integrity, accountability, positive attitude, and specifically continuous improvement. While fundamentally different than an audit, the review was an opportunity to provide limited assurance in the areas of policies, procedures, culture, structure, and staffing. The Athletic Director sought to ensure that the structure provided independent medical care and affirmed the unchallengeable autonomous authority of core medical providers to determine medical management, inclusive of return-to-play determination. Additionally, the review sought to identify areas for growth, improvement and opportunities for enhanced student-athlete health care.

Medical Services Agreement
The Athletic Department’s renewable annual contract for medical services is with the MSU Health Team (Colleges of Human Medicine and Osteopathic Medicine), inclusive of specific exhibits addressing Sports Medicine, Osteopathic Manipulative Medicine, Psychiatric Services, Radiology, and outlines the leadership position Director of Sports Medicine and Performance. The contract states that the medical oversite of the athletic training staff is the responsibility of the Director of Sports Medicine and Performance who is also the University’s MSU Sports Medicine’s Director of Primary Care Services. In no circumstance do any physicians report to an Athletic Department employee. The Executive Associate Athletics Director for Student-Athlete Services has non-medical administrative responsibilities and oversight (i.e., budget, contract administration with the MSU Health Team).

Recommendations
The following recommendations are a summary of communications that took place with the University and Athletic Department administration.

Core Sports Medicine Providers
Core sports medicine providers include physicians, orthopedic surgery, athletic training staff, sports nutrition / dietitian, psychiatry, strength & conditioning, and other external health care providers. The overall culture appears to be good among health care providers including mutual respect among physicians and athletic trainers. Clarity can be made by delineating conflicting reporting structures in some areas, including strength & conditioning, nutrition and psychiatry. While presently reporting through the MSU Health Team, historically, core sports medicine providers reported through leadership in the Radiology Department. Continuing education for physicians and athletic training staff is in place. Longevity is among the strengths of the athletic training staff, resulting in exemplary expertise. Due to longevity across the athletic training staff, continuity planning should be put into
place. The culture appears good among the orthopedic physicians, working well together and within the MSU Health Team Sports Medicine Group. Team physicians are assigned by the MSU Health Team to each athletic department sports program (team).

**Director of Student-Athlete Health Care**

Comprehensive health care leadership and oversight should be the responsibility of a designated individual identified as the Director of Student-Athlete Health Care (or similar title). With reporting structures clarified and documented, all core sports medicine and health care providers should be accountable to this individual from a medical and administrative perspective. This individual should have a medical background and be provided and compensated for non-clinical time to be available for leadership, administrative and supervisory responsibilities. While a non-athletic department position, communication with head coaches and athletic department administrative staff is a significant component of this position. Consideration should be given as to the role this individual has with the MSU Health Team, MSU Health Team Sports Medicine Clinic, Intercollegiate Athletics, and other associated areas. This position could be in conjunction / lieu of the current Director of Sports Medicine and Performance.

**Physicians**

Physicians report to and are reviewed by the MSU Health Team. All teams have a primary care physician assigned to them as their team physician. Fellowship-trained sports medicine orthopedists share responsibility for coverage. The Department of Neurology provides concussion consultation upon request of team physicians and a Department of Neurology physician is available on the sidelines at all football games. Primary care, orthopedic, and neurology coverage and staffing for games and training room (in addition to the MSU Health Team clinic location) appears adequate and appropriate.

**Head Athletic Trainer & Athletic Trainers**

The Head Athletic Trainer currently reports medically to the Director of Sports Medicine and Performance and administratively to the Executive Associate Director of Athletics for Student-Athlete Services. Athletic training includes staff with experience and certification in ASTYM, dry needling, massage, active release, and casting / splinting. Injury prevention and research (Fusionetics, ACL prevention, etc.) is in place with continued enhancements possible. The Head Athletic Trainer carries critical and positive roles in the care of student-athletes, based upon years of relationships with coaches, physicians and staff. Due to time constraints and administrative duties, consideration should be given for the Head Athletic Trainer to not serve jointly as the trainer for the football program. The athletic training program is abundantly staffed (FTE athletic trainers, graduate athletic trainers, internships, PhD’s for teaching & research, and volunteer students). All injury reports, initial evaluations, weekly updates and discharge notes should be reviewed with the team physician prior to the coaching staff. Consideration should be given to have athletic trainers report directly to a medical unit from both a medical and administrative perspective. Hours worked by athletic trainers should continue to be monitored.
360 Evaluations
The Director of Student-Athlete Health Care, Head Athletic Trainer, staff athletic trainers, and orthopedic sports medicine specialists should undergo an annual 360-degree evaluation to include input from all key individuals upstream and downstream from the position (i.e., Director of Student-Athlete Health Care should be evaluated by all direct reports, athletic trainers, orthopedic consultants, coaches, athletic department administrators, and student-athletes). The performance of the Head Athletic Trainer is currently reviewed annually by the Executive Associate Director of Athletics for Student-Athlete Services for non-medical duties related to the position. This includes the review of appropriate certification and is based upon feedback from various areas that are served by the athletic training staff.

Additional Health Care Providers
Additional health care providers for specific services to student-athletes are a component of comprehensive health care. Consideration should be given to have physicians review and document care in the areas of mental health, dietetics and other services. This would provide streamlined access for providers when reviewing medical information for comprehensive student-athlete health assessment.

- **Strength & Conditioning** – As is the current structure, medical oversight of the strength & conditioning providers by athletic training staff is important. It is understood, due to NCAA Bylaws, that this area has expanded time-based opportunities with student-athletes. It is important that this sport-specific time is managed and optimized, while ensuring medical oversight. Administrative and conflict-resolution is managed by the Executive Associate Director of Athletics for Student-Athlete Services. Medically, continue to reinforce that strength & conditioning staff have awareness of student-athletes with medical conditions that could affect training including sickle cell trait, asthma, cardiovascular conditions and diabetes. Appropriate certification is required of all individuals that serve as full-time strength & conditioning providers.

- **Sports Nutrition** – Consideration should be given to the expansion of services in this area, inclusive of dietitians. Current staffing levels, for all student-athletes, creates limitations for medical consultations for weight loss, weight gain, diabetes, anemia, and eating disorders.

- **Mental Health Services** – Oversight of mental health services for student-athletes are currently provided by the Department of Psychiatry. Consideration should be given to have formal reporting through the Director of Student-Athlete Health Care. The scope of mental health services should be clarified inclusive of performance enhancement, substance abuse & treatment, depression / anxiety screening & treatment, eating disorders, and victim services.

- **Pharmacy Services** – Pharmacy services are provided through the MSU Clinic Pharmacy and a single training room site (utilizing a double-lock system).
• **Additional Services** – Additional services were discussed including chiropractic care (not utilized at MSU), massage therapy (limited use), performance enhancement coaches (limited use), dental services (per referral), and optometry services (per referral).

**Sports Medicine Advisory Team**
A Sports Medicine Advisory Team (SMAT) should be established for all specialists utilized for consultation and referrals. SMAT should be comprised of **MSU Health Team** and non-MSU Health Team providers. SMAT members should be vetted including appropriate board certification and licensure. SMAT members should sign a business associate agreement outlining expectations including privacy, priority appointments, and timeliness of medical records. Consideration should be given to an annual SMAT appreciation reception. Outside consultants in all necessary fields appear to be available and willing to assist. Referrals should be determined by the team physician and **Head Athletic Trainer** in consultation with the **Director of Student-Athlete Health**. The SMAT should be active and meet biannually and document those discussions. Their role should be to address medical care issues, review provider evaluations, and update policies and procedures. Members of SMAT may be considered from the following areas (at least two from each field considered): Orthopedic Subspecialists; Neurology; Cardiology; Neurosurgery; Psychiatry; Psychology; Radiology; Dental; Optometry; Emergency Services; Hospital Services; Pharmacy Services; Clinical Center; and Student Health Services.

**Physical Therapist (PT)**
Consideration should be given to enhance physical therapy services with the addition of a **Physical Therapist** (PT / ATC) to direct rehabilitation. This person would not be assigned to a sport to cover but instead assist in the rehabilitation of all major injuries. This would be of particular value for sports that are managed by graduate assistant athletic trainers.

**Electronic Medical Records (EMR)**
All physician records are kept within the **MSU Health Team**’s EMR system; Athena. All full-time athletic trainers document their work with student-athletes in SIMS. Those two systems (Athena and SIMS) are not compatible. The EMR system should be utilized by all medical providers. This can be completed by scanning in notes from non-compatible systems from athletic trainers, consultants, and others. Consideration for the **MSU Health Team** to conduct an annual and randomized review of medical & operative charts of physicians (general practice & orthopedic) should be performed by an outside unbiased physician. If injury reports are distributed electronically, they should be encrypted and password protected to insure HIPPA / FERPA compliance and confidentially.

**Policies & Procedures**
Consideration should be given to updating policies and procedures annually. The policies and procedures for medical care is appropriate and in good order. Ensuring annual reviews has a positive impact on the comprehensive health care for student-athletes. Areas that may be covered in the policies and procedures area include, but are not limited to: DIA Medical Advisory Board (meeting at least bi-annually); Student-Athlete Physicals (detail all aspects of physical care); Documentation of Injuries & Illness (physician awareness); Medical Waiver & Disqualification from Athletic Participation (Medical Advisory Board); Student-Athlete Referral to Outside Consultants (outside system

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conditions); athletic training inventory & facility management (regulatory standards); Ancillary Medical Supplies & Services for Student-Athletes; Student-Athlete Selected Services (Outside the Scope of MSU); Nutritional Services (medical records); Concussion Protocol (return-to-play); Drug & Alcohol Policy / Testing (third-party collections - code of conduct & sanctions – incoming student-athletes baseline); and Student-Athlete Mental Health & Wellness (complex with suggested separate policies based upon different diseases, risks and protocols).

Consideration may be made for inclusion of policies pertaining to: Student-Athletes with Disabilities; Medical Disqualification; Eye injury; Dental injury; Depression / Anxiety; Learning Disabilities, including ADHD; Eating disorders; Victim Services; and EMR / HIPPA / FERPA – MSU IT should be actively engaged to determine HIPPA / FERPA compliance with all electronic transmission of medical information and storage of medical records.

Policies appearing and appropriate include: Student-Athlete Medical Insurance Policy; Pre-Existing Injuries to Incoming Student-Athletes; Acknowledgement of Potential Injury from Continued Athletic Participation with Pre-Existing Injury; Post-Participation Sports Medicine & Performance; Emergency Room and/or Urgent Care Clinic Use by Student-Athletes; Athletic Training & Physician Coverage of DIA Sponsored Athletic Teams and Events; Visiting Team Athletic Training Needs; Athletic Training for Summer Camp Medical Coverage; Release of Student-Athlete Medical Records; Ancillary Medical Supplies and Services for Student-Athletes; Distribution of Prescription Drugs and Other Medications to Student-Athletes; Influenza Vaccinations; Transportation for Student-Athletes with Disabilities; Research Studies Involving Student-Athletes; Management of Blood borne Pathogens; Pregnant Student-Athletes; Lightning Policy; Aerial Lift Usage; Sickle Cell Policy; Emergency Action Plan; First Aid and CPR Training; Extreme Hot & Cold Weather; Patient Privacy – Chaperones – and Informed Consent for Examinations – Treatment – Procedures.

Facilities
Training rooms are adequate with two primary locations and multiple smaller training rooms at other facilities. Physician offices are available in all training rooms, in addition to the MSU Health Team Sports Medicine Clinic. Procedures for practice and games is appropriate including emergency action plans, AED, EMS response time, hospital / level-1 trauma center, and fan & visitor safety. Ensure all food stations meet state regulations standards to serve food and medical facilities meet OSHA standards.

Insurance / Billing
Consideration should be given to conducting a billable insurance audit that annually determines the percentage of student-athletes with billable health insurance in the State of Michigan.