

APPENDIX I
MICHIGAN ATHLETICS SUMMARY RESPONSE TO
EXTERNAL REVIEWERS COMMENTS AND RECOMMENDATIONS

Overview: In the Fall of 2014, Michigan Athletics prepared and submitted to University President Mark Schlissel its draft *Review of In-Game Player Safety Procedures/Communication Plan* (“the Review”). That document and the procedures and protocols explained or referenced in it were subsequently reviewed by three external reviewers: John P. DiFiori, MD; Timothy Neal, MS, ATC; and Tad Seifert, MD.

The reviews and recommendations of these three individuals have been forwarded to Michigan Athletics for consideration and response. This document is a summary of the external reviews as to each section of the *Review* and the Michigan Athletics response to those reviews. The sections identified below correspond to the relevant sections of the *Review*.

Introduction

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) suggests considering including information of the number of universities to which this plan was compared, including names and/or conferences; allowing sideline personnel to initiate communication with the Spotter; and identifying the number of years for which the “Eye in the Sky” or Spotter has been in use in the NFL. Dr. Seifert also suggests that UM consider noting the time frequency with which the Department’s review of this document will occur.

Dr. DiFiori (UCLA) and Mr. Neal (ATC) do not have any comments or recommendations regarding these sections.

MICHIGAN ATHLETICS RESPONSE:

This plan has been benchmarked against those of the other Big Ten Conference schools, as well as various institutions of the ACC, SEC, Pac 12 and Big 12 Conferences. Sideline personnel already have the capability to communicate freely with the Spotter as needed through the use of 2-way radio communication. The NFL started the “Eye in the Sky”/ “Medical Spotter” program in 2011; 2014 was the NFL’s third full season to utilize the program. The summary and review document and the procedures and protocols referenced within and attached to it will be reviewed at least annually. Specific sections and/or procedures or protocols may be reviewed more frequently as appropriate based upon emerging best practices or self-identified improvement opportunities.

I. Medical Team Model

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) suggests explaining how the team physician reporting and supervisory model compares to other NCAA Division I peer institutions and clarifying the frequency at which the medical team model utilized at Michigan Athletics will be evaluated and benchmarked against best practices. Dr. DiFiori (UCLA) finds the medical team model utilized by Michigan Athletics to meet standards of similar NCAA institutions and concludes that the reporting structure “provides a decision making process that avoids potential conflicts of interest, and ensures that the primary concern is the health and safety of the student-athlete.” Dr. DiFiori also comments that the on-field health and safety program implemented at Michigan Athletics “appropriately utilizes the resources of the University Health Services, the University Health System, and Department of Athletics. The physician and ATC staffs are well trained and experienced sports medicine professionals.” Dr. DiFiori recommends: Having a University NCAA Compliance Officer assigned to liaison with sports medicine, to provide input on issues such as the use of nutritional supplements, second opinions, and preparticipation issues, as well as consult on new

initiatives or assessing the implementation of NCAA mandated standards (e.g., the use of medication to treat ADHD); and assigning University legal counsel to work with the sports medicine staff regarding areas such as participation clearances and drug policies. Mr. Neal (ATC) has no comments or recommendations regarding this section.

MICHIGAN ATHLETICS RESPONSE:

All members of the Big Ten Conference utilize a structure for their team physicians similar to that in place at Michigan Athletics except Indiana University, Purdue University and Rutgers University. The evaluation and benchmarking of the medical team model in place is ongoing and reviewed at least annually or more frequently as new best practices are published. The Director of Michigan Athletics Compliance Services consults with departmental Student-Athlete Health and Welfare personnel on various issues as needed or requested. University legal counsel is available to the Student-Athlete Health and Welfare group and consults with those personnel on a variety of issues as needed.

II. On-Field Medical Team Staffing

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) suggests specifying that all team physicians (excepting fellows) are either Board Eligible or Board Certified and queries who would make any decision to increase medical team staffing. Dr. DiFiori (UCLA) notes that on-field medical staffing is generally comparable to other institutions for home events, and that the number of physicians on the sidelines, possibly as many as 8, creates a possibility of miscommunication. Thus, he recommends that physicians present on the sidelines should be based upon medical need and that two of the 8 physicians be assigned “back up” or “on deck” roles, locating them off the sidelines in an adjacent area to be called upon as needed. Mr. Neal (ATC) suggests considering having the athletic trainer assigned to the ambulance also serve as liaison to the visiting team and game officials, and asks a few questions about the role of the Spotter.

MICHIGAN ATHLETICS RESPONSE:

All Michigan Athletics team physicians are board certified. Any decisions regarding levels of medical team staffing are made by the Medical Executive Committee, comprised of the Head Team Physician/Director of Medical Services, Head Team Orthopedic Surgeon/Director of Surgical Services, and the Associate Athletic Director – Student-Athlete Health and Welfare, following thorough discussion with, and possibly input from, other members of the medical team and/or athletics administration. All physicians on the sidelines have various responsibilities during a game, particularly in the event of an emergency situation, visiting team injuries, or situations involving potential injury to multiple student-athletes. It is understood, however, that physicians other than the primary physicians for a particular game, are in a “back up” or “on deck” role (currently, Drs. Bedi, Carpenter, A. Miller, and resident and Fellow physicians) and are not to enter the team space (between the 25 yard lines) unless called upon to do so. As the University of Michigan is an academic medical institution, the inclusion of Fellow and resident physicians is believed by the medical team to be appropriate and necessary for training. An ATC is specifically assigned to the visiting team, but is separate from the ATC who is assigned to the ambulance. However, assigning both of these duties to a single ATC could limit that individual’s availability for either purpose, as the ambulance personnel and the transport vehicle to take an injured player to the ambulance are located on the Michigan side of the field and the ATC assigned to the visiting team would be located on the opposing sideline. The Spotter attends and is in place for all home and away games. It is too early to determine whether the newly passed Big Ten Conference rule mandating a spotter at every game will impact the role and communications of the Spotter utilized by Michigan Athletics, as the implementation plan for the conference-required spotter will not be developed by the member institutions until Spring - Summer 2015.

III. On-Field Medical Team Roles and Responsibilities

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) and Mr. Neal (ATC) had no comments or recommendations regarding this section. Dr. DiFiori (UCLA) recommends that the duties and roles of each sideline physician be clearly defined and delineated, and that the authority of the Head Team Physician and Head Orthopedic Surgeon be clearly defined to all sideline medical team members. He also notes that the role of the team neurologist should be clear and that the relative roles of the Head Team Physician and team neurologist regarding assessment of suspected concussion and return to play decisions should be specified.

MICHIGAN ATHLETICS RESPONSE:

The Roles and Responsibilities table above has been amended to provide more detail of specific roles and duties for each sideline physician as recommended by Dr. DiFiori.

IV. On-Field Communication

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) suggests that consideration be given to specifying who will be operating as the primary communication link should the Head ATC be unavailable. Dr. DiFiori (UCLA) notes that this section is coherent and meets standards. Dr. DiFiori recommends that the Head Team Physician, the Head Football ATC, and all certified football ATCs have radio communication. Mr. Neal (ATC) suggests having a graduate assistant or student athletic trainer assigned to the Head ATC to be on radio communication for the Head ATC; suggests having the Head ATC, Team Physician, or Assistant ATC inform the coach(es) that a player is unavailable due to an evaluation; and adding neurology to the chain of command reference to “orthopedic and medical conditions” (third bullet point of this section).

MICHIGAN ATHLETICS RESPONSE:

The chain of command (Section VI, first paragraph) provides for another ATC on the field to step in as the primary communication link should the Head ATC become unavailable. The Team Neurologist will be put on radio communication with other sideline medical team members. Going forward, those with radio access will include the offensive team ATC, the defensive team ATC, the Orthopedic Fellow (all games) and the Primary Care Sports Medicine Fellow (home games and other games s/he attends), and Team Neurologist. For education and supervision reasons, the fellows are usually positioned right next to the attending physician who is their supervisor and can communicate with the spotter and attending physician as needed. It is believed that this is a better process to avoid distractions from radio traffic for the attending physicians during an evaluation. Additionally, the certified athletic trainer designated as the “Spotter” / “Eye-in-the-Sky” will also utilize two-way radio communication, as well as hard-line phone and/or cell phone communication directly with medical team members on the field.

This level of radio saturation is believed to be sufficient to enhance necessary communications, but not so broad as to impede understanding of sideline responsibilities, cause distractions, or elevate confusion. As indicated in this section, the Head ATC is already the primary communication link to the coaching staff regarding the status of an injured student-athlete, under evaluation or otherwise. Neurology is a sub-specialty of medical issues and the neurologist’s role is currently identified in the chain of command statement (Section VI, first paragraph) regarding medical decision-making. Recent Big Ten plans for league-provided independent sideline medical personnel may radically change the requirements and expectations for sideline communication and Michigan Athletics will meet best practices as identified in developing conference regulations or protocols.

V. On-Field Injury Management Process

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) notes a typographical error (“student athletes helmet” should be “student athlete’s helmet”). Dr. DiFiori (UCLA) notes that this section is coherent and meets standards. Dr. DiFiori recommends designating the specific team physicians having authority to enter the field of play; designating the person(s) responsible for storing a helmet taken from a student-athlete undergoing evaluation, as well as the location in which the helmet will be stored; and designating the person(s) who have authority to request return of the helmet on behalf of the student-athlete. Mr. Neal (ATC) recommends assigning one athletic trainer assistant to each bench area (i.e., offensive and defensive), to check with players for possible injury and communicate with the Spotter regarding any potential injury issues observed by the Spotter. Mr. Neal also suggests changing sideline terminology to use only one “out” word to avoid confusion regarding a student-athlete’s status.

MICHIGAN ATHLETICS RESPONSE:

The typographical error noted by Dr. Seifert has been corrected. All team physicians and athletic trainers have authority to enter the field of play to address perceived medical or injury situations. Equipment Operations Team members are responsible for storing helmets taken from student-athletes undergoing evaluation and the helmet(s) is to be stored out of view in a secure location. Any medical team member may request the helmet on behalf of the student-athlete. These roles are understood by all sideline medical personnel. The current distribution of ATCs on the sidelines is believed by the medical team to be appropriate for the distribution of duties as designed by the medical team. Upon reviewing terminology used by the sideline medical team to describe the status of a student-athlete undergoing evaluation or removed from play for the remainder of the game, it is concluded that current terminology used by the medical team is clear, does not cause confusion, and is uniformly understood by team members. In fact, revision of current terminology could result in confusion as team members comfortable with prior terms may be confused by newly introduced terms. Existing terminology will be reviewed with the new coaching staff to ensure uniform understanding across coaches and medical team members.

VI. On-Field Chain of Command and Return to Play Decision Making

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. DiFiori (UCLA) recommends clearly specifying the sports medicine physician and orthopedic surgeon who have final authority for return to play decisions.

MICHIGAN ATHLETICS RESPONSE:

In practice, there is no confusion between the physicians and athletic trainers as to who has final return to play decision-making authority: This authority has always and continues to reside with the physicians. There has not been any ambiguity on this issue resulting in confusion, miscommunication, or failure to timely implement a physician’s return to play decision. This policy is understood by the entire medical team and is reinforced in various communications with team members. Notation that the physicians will make these decisions “in consultation” with athletic trainers is only intended to reflect that the physicians may wish to receive that input, not that they are required to do so. The Michigan Athletics medical team believes that identifying all physicians who have authority to make a return to play decision, rather than a single sports medicine physician and single orthopedic surgeon, is preferable so that all physicians have clear authority to render a return to play decision (which may also be a “no” return to play decision) without regard to a specific physician being available and present when the decision needs to be rendered.

In the usual course of events, the primary sports medicine physician and primary orthopedic surgeon, respectively, are the recognized first physicians to respond to and attend a medical or orthopedic injury requiring physician involvement during a game. Other physicians with sideline access, all of whom are board-certified, are in a “back up” or “on deck” role and are not to enter the team space (between the 25 yard lines) unless called upon to do so.

VII. Policy & Procedure Review Process

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) recommends specifying when the next scheduled review of position statements and consensus documents will take place. Dr. DiFiori (UCLA) finds the policy and procedure review process to be coherent and exceeding standards. Mr. Neal (ATC) suggests considering the development of additional subject matter policies, adding risk management to the list of internal reviewers of new policy and procedure, and inquiries regarding consideration of recommendations for policy enhancements and review of the NCAA Sports Medicine Handbook.

MICHIGAN ATHLETICS RESPONSE:

Position statements and consensus documents will be reviewed at least annually and the text of the Background Summary and Preliminary Review document has been modified to reflect this. Development of additional policies appropriate to the Michigan Athletics community is an ongoing consideration. As noted in the Policy & Procedures Development and Review Process document (attachment 3), the list of internal reviewers of new policy or procedure is not all inclusive and University risk management is engaged in the review as appropriate. Recommendations for policy enhancements may be made at any time by any member of the Michigan Athletics medical team or other Michigan Athletics administrators and are discussed by the medical team and implemented as appropriate. The NCAA Sports Medicine Handbook is sent to all team physicians, athletic trainers, strength coaches, performance nutritionists, and athletics counseling personnel on an annual basis for review. It is specifically reviewed by Dr. Hendrickson, the Head Team Physician, and Darryl Conway, the Associate Athletic Director- Student-Athlete Health and Welfare at least annually and more frequently as needed and any modifications to existing policies, procedures, or practices are reviewed and discussed with the entire medical team prior to implementation.

VIII. On-Field Emergency Action Plan

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) has no comments or recommendations regarding this section. Dr. DiFiori (UCLA) finds the on-field emergency action plan to be coherent and states that it meets standards. Mr. Neal (ATC) asks whether the ambulance ATC (athletic trainer) is in communication with the spotter and how the EAP is communicated to the visiting team. He also raises minor questions regarding venue specific EAP with maps, releasing ambulances post-game, having only athletic trainers accompany injured students to the hospital, and who contacts the student-athlete’s family in an emergency event.

MICHIGAN ATHLETICS RESPONSE:

The ambulance ATC is not in communication with the spotter, as there are other individuals with duties that would fall in between the spotter and ambulance in sequencing of responsibilities that are better situated to communicate needs to the ambulance should an ambulance be required. The EAP is communicated to the visiting teams’ head athletic trainer by a letter sent prior to the team’s arrival, face to face communication on the field, and in the form of a pocket card provided to the visiting team upon arrival. Venue-specific EAPS are located in all locker rooms. The ambulance checks in with the home locker room 45 minutes post-game and is released by the athletic trainer only after checking with the home and visiting ATCs and physicians. The EMS service also checks in with the visiting ATC to confirm no EMS services are required before departing the venue post-game. Michigan

Athletics disagrees that a rule that only athletic trainers may accompany injured students to the hospital is appropriate or advantageous. Depending upon the circumstances, an athletic training student may be an appropriate companion during ambulance transport, with the athletic trainer or other medical team personnel traveling to the hospital separately as appropriate. The Director of Football Operations coordinates communications with the student-athlete's family in the event of an emergency, although the program staff member or coach who may actually communicate with the family may vary depending on the nature of the information and prior communications and relationship with the family.

IX. Catastrophic Incident Plan

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) has no comments or recommendations regarding this section. Dr. DiFiori (UCLA) notes that the catastrophic incident plan is thorough and suggests that the Head Team Physician and Head Athletic Trainer be included in the notification process if they are not already directly involved in the matter. Mr. Neal (ATC) asks whether the plan has been reviewed and approved by University risk management and legal counsel.

MICHIGAN ATHLETICS RESPONSE:

The Head Team Physician and sport-specific Head Athletic Trainer are notified in the event of injury to a student-athlete, including death. Legal counsel has reviewed the catastrophic incident plan.

X. Concussion Position Statement and U-M Concussion Plan

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) made no recommendations regarding this section. Dr. DiFiori (UCLA) agrees with the UM policy. Mr. Neal (ATC) suggests including information on helmet fitting; certification of equipment managers fitting helmets; a return to academics protocol, notification of parents/guardians and academic staff regarding concussion injury; implementation of a stepwise progression return to play plan; and inclusion of a statement that the team physician has final determination on medical clearance of student-athletes.

MICHIGAN ATHLETICS RESPONSE:

The recommendations Mr. Neal makes are all existing Athletic Department policies and standards regarding helmet fitting, certification of equipment managers (Michigan Athletics equipment managers are certified by the Athletic Equipment Managers Association, as recommended), and implementing a return to play protocol. These are all identified in the NATA Position Statement: Management of Sport Concussion, co-authored by Dr. Jeffery Kutcher. Dr. Kutcher and Dr. Hendrickson reviewed the concussion management plan as recently as Fall 2014. A stepwise progression plan is utilized for return to play progression, as noted in the education materials for coaches and student-athletes and set forth in the NCAA Sports Medicine Handbook. Dr. Kutcher has reviewed the concussion management plan against the NATA Position Statement, and Dr. Hendrickson has reviewed the plan to the NCAA Sports Medicine Handbook, both as recently as Fall 2014, and Michigan Athletics' concussion management plan is in accord with both sources. Michigan Athletics' concussion management plan was created "with the understanding that each concussion, as well as each student-athlete, is unique", and that individualized concussion management is the hallmark of the plan. The plan and executive summary also note that when a student-athlete is diagnosed with a concussion, "the academic support staff of the student-athlete's sport will be notified", and that any restrictions and/or modifications in a student-athlete's academic program "will be prescribed by a University of Michigan Team Physician in consultation with University of Michigan Academic Success Center personnel." Finally, the concussion management plan executive summary states that a University of Michigan Team Physician has the final authority in deciding in and when an injured student-athlete may return to practice and/or competition. Notification of parents/guardians or other personal friends of the student-athlete is made on a case by case basis, depending upon the preferences of the student-athlete as established pre-concussion, during the onboarding process.

XI. Cervical Spine Injury Management Plan

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) suggested that UM consider implementing mock unannounced drills and referencing the frequency of same. Dr. DiFiori (UCLA) notes that the plan meets standards, but recommends specifying the frequency of practice sessions. Mr. Neal (ATC) recommends: Including the practicing of removal of facemasks from helmets; confirming that athletic trainers are equipped with tools to assist in the removal of facemasks attached to helmets; and instructing football players and other student-athletes not to touch or roll over an injured teammate.

MICHIGAN ATHLETICS RESPONSE:

Michigan Athletics will consider opportunities to implement mock, unannounced drills. Practice sessions have been increased from 1-2 times per year, to 3 practice sessions held during the 2014 football season. Michigan Athletics will continue to increase practice opportunities for its medical team. In June, 2015, a new national protocol for the management of cervical spine injury will become effective and several practice sessions to teach and drill the new protocol will be conducted. All aspects of cervical spine injury management are practiced, including practicing the removal of facemasks and supplying athletic trainers with the tools necessary to facilitate facemask removal from helmets. The recommendation to instruct student-athletes, particularly football players, not to touch or roll over an injured teammate will be implemented immediately, to reaffirm this principle with our student-athletes.

XII. Concussion Education Process for Coaches

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) suggests articulating that coaches “will” receive additional concussion education when a student-athlete has suffered a concussion (rather than the earlier “may”). Dr. DiFiori (UCLA) finds the concussion education process for coaches to be very thorough. Mr. Neal (ATC) recommends educating coaches on the return to participation progression, as well as a few minor edits to the concussion education materials.

MICHIGAN ATHLETICS RESPONSE:

The text indicating that a concussion event “may” prompt additional education to the coaches will be changed to provide that additional education will be provided to coaches “as appropriate”. Instruction on the return to participation progression is, and has been, included in the concussion education material for coaches, and coaches are provided an opportunity to ask questions of and engage in a dialogue with medical team personnel regarding return to participation as part of the education process.

XIII. Concussion Education Process for Student-Athletes

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. Seifert (Norton) suggests articulating that student-athletes “will” receive additional concussion education when a student-athlete has suffered a concussion (rather than the earlier “may”). Dr. DiFiori (UCLA) finds the concussion education process for student-athletes to be well designed. Mr. Neal (ATC) recommends a few minor edits to the concussion education materials.

MICHIGAN ATHLETICS RESPONSE:

The text indicating that a concussion event “may” prompt additional education to student-athletes will be changed to provide that additional education will be provided “as appropriate”.

XIV. On-Field Medication Management

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Dr. DiFiori (UCLA) recommends adding information regarding the dispensation of over the counter (OTCs) medications, addressing how OTC and prescription medications are dispensed on the sidelines, and stating how a physician becomes aware of OTCs dispensed on the sideline by an ATC to ensure that other medications which could cause adverse effects are not subsequently dispensed by the physician. He also recommends developing a specific policy for the use of ketorolac. Dr. Seifert (Norton) and Mr. Neal (ATC) had no comments or recommendations regarding this section.

MICHIGAN ATHLETICS RESPONSE:

The dispensation of OTC or prescription medication from the sideline is very uncommon. All prescription medications, of all types and classifications, are dispensed only by physicians based upon their professional determination that the medication is appropriate for the medical concern and patient. Typically, if a medication – OTC or prescription - is administered on the sideline it is in conjunction with an injury the physician is attending, and so dispensation occurs with the physician’s knowledge and direction. Where an OTC medication is administered by an ATC at the sidelines, the ATC relays that information to the Head ATC as quickly as practicable. This will often be during the game or, at the latest, during a debrief with the Head ATC post-game regarding any sideline medical issues. The Head ATC, in turn, may advise the physicians of the OTC medication being administered during the game, or at the latest during his post-game debrief with the appropriate physician(s) (orthopedic or medical). All medications distributed to student-athletes, at sideline or otherwise, are documented in the appropriate student-athlete medical records by the ATC or ordering physician, as appropriate. Michigan Athletics will develop a policy to notify the Head Medical or Orthopedic physicians *during the game* whenever an OTC medication is distributed on the sideline. Ketorolac is dispensed only upon a physician’s order. Thus, a specific policy regarding its use is believed unwarranted, as its use is limited by sound medical judgment, as is the case with any other prescription medication.

XV. Other U-M Athletic Teams

The external reviewers made no comments or recommendations regarding this section.

IN-GAME PLAYER SAFETY PROCEDURES / COMMUNICATION PLAN

BACKGROUND AND REVIEW

Status Summary

SUMMARY OF EXTERNAL REVIEWER COMMENTS:

Regarding V of this Status Summary, Dr. Seifert (Norton) suggests that UM consider language referencing that sports medicine/athletic training staff reserve the right to remove the athlete from the field of play to be observed in the locker room by qualified medical personnel, and specifying that a player diagnosed with concussion or suspected concussion not be permitted to meet or talk to the press until medically cleared.

Regarding VIII, Dr. Seifert suggests specifying the frequency of benchmarking UM's Emergency Action Plan against those of other college or professional programs.

Dr. DiFiori and Mr. Neal made no recommendations regarding this Status Summary.

MICHIGAN ATHLETICS RESPONSE:

Regarding V., Michigan Athletics medical team personnel already have the option to remove student-athletes from the field to be observed in the locker room or other private space, and exercise that authority as needed. Michigan Athletics agrees that a student-athlete diagnosed with concussion or suspected concussion should not be permitted to speak with the media until medically cleared and will implement this enhancement to its protocols immediately.

Regarding VIII, benchmarking of Michigan Athletics' Emergency Action Plan occurs at least annually and may occur more frequently based upon emerging best practices and announced modifications to the policies of professional or other collegiate programs.