Douglas L. Strong  
3014 Fleming Administration Building  
503 Thompson Street  
Ann Arbor, Michigan 48109

Vice President Strong:

Thank you for the opportunity to formally review the University of Michigan's Athletic Department in-game player safety procedures and communication plan. Your sports medicine and athletic training staff should be commended for the development of this very thorough action plan. The document is well written and could almost certainly stand alone with little to no changes being made. I feel it is very much in line with best practice standards at other comparable NCAA Division I Universities.

With that being said, I have discovered a few areas within the document that could potentially be improved. These are clearly outlined in the following pages. When possible, I try to clearly reference the specific page number and paragraph of the area of recommended change.

Please do not hesitate to contact me for questions or any need clarifications, should they arise. Once again, my sincere thanks for allowing me to be a part of this process.

Regards,

[Signature]

Tad Seifert, MD  
Director, Sports Concussion Program, Norton Healthcare  
Clinical Assistant Professor of Neurology, University of Kentucky  
Team Neurologist, Western Kentucky University  
Head, NCAA Headache Task Force
Recommended edits to the University of Michigan Athletic Department's in-game player safety procedures and communication plan

Page 1, second paragraph, fourth line
- "...against other NCAA Division I universities."
- May consider elaborating on this further (i.e. the number of other universities to which this plan was compared, names and/or conferences of other universities).

Page 1, first paragraph, lines 6-8
- "...identify possible student-athletes that may need further evaluation by a member of the medical team on the field, and communicate immediately and directly with medical team members."
- May also consider allowing sideline personnel to initiate communication with the spotter to clarify the manner of injury.

Page 2, first paragraph, next-to-last line
- "...within the NFL for a couple of years."
- Would define specifically the number of years this has been in practice within the NFL (i.e. two years, three years, etc.)

Page 3, first paragraph, next-to-last line
- "...in implementing (and periodically reviewing)...."  
- May consider specifically noting the time frequency with which this review will occur.

Page 4, second paragraph, lines 5-7
- "University of Michigan Team Physicians are hired by and have a reporting and supervisory structure separate from the Athletic Department through the U-M Health System and the U-M Health Service."
- It could potentially be beneficial to also comment as to where this does (or doesn't) compare similarly to other NCAA Division I peer institutions.

Page 5, second paragraph, lines 7-8
- "...the recommendation is that the medical team model of the Department continue to be evaluated and benchmarked against then-currently known best practices...."
- Clarify the frequency of said evaluation.

Page 5, Section II, general suggestion
- It could potentially be useful to specify that all team physicians (with the exception of fellows) are either Board Eligible or Board Certified.

Page 6, second paragraph, lines 1-2
- "...not increase medical team staffing without thoughtful consideration of the team member's roles and responsibilities."
- By whom would this decision be made? The associate AD? Other team physicians? Both?

Page 9, first bullet point, last two lines
- "...other certified athletic trainers operating on the sidelines will assume the duties as the case manager and primary communications link."
• Consider specifying further this chain-of-command (i.e., who specifically will be operating as the primary communication link should the head athletic trainer be otherwise unable)

1 age 10, second paragraph, first and second bullet points
• Typographical errors: change “student athletes helmet” to “student athlete’s helmet”

1 age 10, last paragraph, lines 10-12
• “The process of reviewing position statements and consensus documents was last completed by Student-Athlete Health and Welfare personnel on June 2, 2014.”
• Consider specifying when the next scheduled review will take place

1 age 13, second paragraph, third line
• “One immediate recommendation would be to increase practice opportunities,...”
• Consider implementing mock unannounced drills and generally referencing the frequency of which these would take place.

1 age 13, fifth paragraph, second line
• “...certified athletic trainer may take the opportunity to provide coaches....”
• Consider changing “may” to “will”

1 age 14, third paragraph, second line
• “...certified athletic trainer may take the opportunity to provide the student-athlete...”
• Consider changing “may” to “will”

1 age 17, Section V, first bullet point, general suggestions
• May consider inserting language referencing that sports medicine/athletic training staff will reserve the right (option) to remove the athlete from the field of play to be observed in the locker room by qualified medical personnel
• May consider further specifying that if a player is diagnosed with a concussion/suspected concussion, he is not permitted to meet or talk to the press until he is medically cleared

1 age 17, Section VIII, general suggestion
• Consider specifying the frequency of stated “further investigation”
January 26, 2015

Douglas L. Strong
Interim Executive Vice President and CFO
University of Michigan
3014 Fleming Administrative Building
503 Thompson Street
Ann Arbor, Michigan 48109-1340

Dear Mr. Strong

As per your request, I have completed the review of the materials provided to me regarding the University of Michigan Athletic Department's in-game player safety procedures and communication plan.

Attached are my specific comments regarding this document. The comments are labeled to correspond to each of the 14 subheadings of section 2, "Medical Team Model." The other supporting documents are discussed within this framework.

Overall, I believe the University of Michigan has a highly qualified staff of Team Physicians and Athletic Trainers who are dedicated to providing care for the student-athletes. It is clear that they are incorporating the resources of the University and the University Medical Center in this effort. Furthermore, the educational programs are well designed and thorough.

In my comments, I have mentioned some areas related to the designation of decision making authority, communication, and the roles of the staff that may need to be more clearly defined. Likewise, the specific protocol for the dispensing of medications on the sideline and in the locker room deserves further clarification. Some of these issues may already be clear to the staff, but perhaps difficult for an external observer to ascertain from the document provided.

It has been my pleasure to provide this review for the University of Michigan. Please do not hesitate to contact me if I can provide any further assistance.

Sincerely,

John P. DiFiori, M.D.
Professor of Family Medicine and Orthopaedics,
Chief Division of Sports Medicine and Non-operative Orthopaedics
David Geffen School of Medicine at UCLA
Head Team Physician,
UCLA Department of Intercollegiate Athletics
Specific Comments

University Michigan Department of Athletics

In-Game Player Safety Procedures and Communication Plan

I. Medical Team Model

As discussed in the review, the model for providing medical care can vary depending on the setting and overall resources at an institution. The model described certainly meets standards within similar NCAA institutions. With the essential addition of the position of Associate Athletic Director - Student-Athlete Health and Welfare, the program 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.

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.

Areas for Improvement: Consider the addition of a University NCAA Compliance Officer assigned to liaison with sports medicine. This individual can provide input on issues such as the use of nutritional supplements, second opinions, and preparticipation issues. The medical staff may choose to consult with this individual when considering new initiatives, or assessing the implementation of NCAA mandated standards (e.g. the use of medication to treat ADHD). Similarly, legal counsel within Athletics should be assigned a role to work with the sports medicine staff in areas that may involve preparticipation clearance and drug testing policies, for example. Perhaps such an arrangement already exists, and if so, should be considered for inclusion in the document since these individuals are likely to have an ongoing role throughout each year at an institution such as Michigan.

II. On-Field Medical Staffing

The description of the on the field staffing is generally comparable to other institutions for home events. As mentioned in the document, the use of additional personnel placed at a non-sideline location to observe for injuries not easily observed by on the field staff is being explored by many institutions.
Areas for improvement: As described there at least 6 physicians on the sidelines, and 2 others who “may be present to assist...” This would then mean that 8 physicians who potentially have a role in providing care are present on the sidelines. In my opinion, this creates the possibility of miscommunication. Further, the description that some physicians “may be present to assist...” suggests that they are not essential. The number of physicians should be based upon medical need. If, in fact, 8 physicians are deemed necessary to be present at a home event, consideration should be given to assigning 2 physicians to “back up” or “on deck” roles where they are to be called upon only as needed by the Head Team Physician (e.g. to assist in transport to the ER). In this way, these 2 “back up” physicians can be located off the sidelines in an adjacent designated area.

III. On-Field Roles and Responsibilities

The description overall meet standards in terms of level and expertise of staffing.

However, the specific game by game duties of each sideline physician should be clearly delineated rather than grouped. Importantly, the roles and responsibilities of the Head Team Physician and the Head Orthopaedic Team Physician are not specifically described. It is critical that the individual who has ultimate decision making authority is clearly identified to all physicians and the ATC staff. This individual needs to be aware of all medical and musculoskeletal issues. This individual should either determine the course of action, or delegate and assert approval of the course of action recommended by one of the other team physicians. It is also noted that the role of the 2 additional team physicians described in section II, who “may be present to assist...” is not described here though it is assumed that they would be included in the Orthopaedic and Primary Care Team Physician category.

The role of the team neurologist is not clear. The document reads that the team neurologist will “assist with the evaluation and return-to-play determination of injured student-athletes.” This statement does not indicate the types of injuries that would fall under the responsibility of the team neurologist. (The way it is written, the role could extend to any and all injuries.)

With respect to concussions, presumably the head team physician (and the other sports medicine trained primary care physicians) is trained and experienced in concussion diagnosis and management. The document does not indicate if the team neurologist is expected to perform the initial assessment and determine management of suspected concussions, or if the neurologist evaluates only at the request of the Head Team Physician. Further, if an ATC initially evaluates an athlete and suspects a concussion, does the ATC discuss the case with the Head Team Physician or does the ATC consult directly with the team neurologist? The document should specify if both the head team physician (and other primary care sports medicine team physicians) as well as the team neurologist are expected to assess athletes with suspected concussion, and if so, how it is determined who will make the assessment and return to play decision.
The described role of the Head Football Athletic Trainer should ensure that he/she is aware of all injuries being evaluated by the other ATC staff. The radio communication system may already provide for this, but the document does not specify this.

Recommendations for improvement:
It is essential that the sideline roles and authority of the Head Team Physician and Head Orthopaedic Team Physician are clearly defined to all who provide sideline care. All injuries requiring a physician evaluation should be communicated to one (or both) of these individuals. The role of each of the other physicians in attendance should be delineated as generally described above. If the individual physician staffing varies from game to game, the roles for each physician who is assigned to a specific game should be documented. This should be done well in advance of each event. Preferably, the specific game by game physician assignments/roles are listed prior to the start of the season.

IV. On-Field Communication

This section is coherent and meets standards.

One recommendation is to specify that the Head Team Physician have a radio. This designation can be part of the specific game by game assignments, but it is recommended that the same individual is designated as much as possible to ensure optimal communication.

Another recommendation is that the Head Football ATC, and ALL of the certified football ATCSs (total of 5 individuals per the list on page 4) have radios.

V. On-Field Injury Management Process

This section is coherent and meets standards.

Recommendations:

The staff should consider designating which specific team physicians have the authority to initially enter the field of play. For example, the Head Team Physician and Head Team Orthopaedist can be designated. If they become occupied in caring for an injury the “second physician in command” and/or “second orthopaedist in command” would assume that responsibility. These assignments can be predetermined in advance of each game.

Once the decision is made to remove the player from play and secure the helmet, the person responsible for storing the helmet, and the location for that should be designated. (e.g. equipment manager) Further, if it is later determined that the athlete may return to play, the person(s) who has
the authority to then request the helmet on behalf of the athlete should be identified in the
document. This would help to ensure that the helmet is not inadvertently relinquished and provided
to the athlete.

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

Recommendation
The final authority for return to play decision making should be clearly specified for each game and
fall to one sports medicine physician and one orthopaedic surgeon. This is critical to avoid
miscommunication. The terminology used, e.g. "the main decision makers" is somewhat ambiguous
as to who has that responsibility. Assuming the Head Team Physician and Head Team Orthopaedist
are present, they should be responsible, and should be in communication with one another. If either
one of these individuals are not present at that particular game, then the individual assuming their
role should be designated. Thus, no more than two individuals have authority for each game. The
game by game assignments can be designated at the beginning of each season.

VII. Policy and Procedure Review Process
Coherent. Exceeds standards.

VIII. On-Field Emergency Action Plan
Coherent. Meets standards.

IX. Catastrophic Incident Plan
Thorough. Would specify that Head Team Physician and Head ATC are both notified if they are not
already directly involved.

X. Concussion Position Statement and U-M Concussion Plan
Agree with policy.

XI. Cervical Spine Injury Management Plan
Meets standards. The policy should specify how frequently the practice sessions are conducted.
University of Michigan
Student-Athlete Health and Welfare
Athletic In-Game Player Safety Procedures and Communication Plan

Review
Timothy Neal, MS, ATC

January 7, 2015

General Review Summary

I have reviewed the University of Michigan Athletic In-Game Player Safety Procedures and Communication Plan information provided me on December 19, 2014, and additional information I requested on December 23, 2014. This review considered and compared National Collegiate Athletic Association (NCAA) and National Athletic Trainers' Association (NATA) standards, and benchmarking of Division I athletic medicine operations with that of the University of Michigan. The information provided and requested focused on the following areas:

- Background summary
- NCAA Medical team model
- Policy & procedure review
- Emergency action plan
- Catastrophic injury plan
- NCAA, NATA, College Athletic Trainers' Society concussion statements
- University of Michigan concussion plan
- University of Michigan cervical spine injury management
- Concussion education for University of Michigan coaches
- Concussion education for University of Michigan student-athletes
- NCAA on-field medication management

In review of the information provided and requested, I base my professional opinion as a NATA certified athletic trainer with 35 years of experience at the Division I level providing care and coverage for football student-athletes, as well as leading the Syracuse University sports medicine department for 14 years. I also have experience with national standards as NATA Liaison to the NCAA Football Rules Committee for two 3-year terms, writing the language for the NCAA helmet contact penalty and defenseless opponent penalty, and as a member of the 2010 NCAA Panel on the Medical Management of Concussions. Additionally, as an expert witness in litigation cases, I examined the information provided for areas of potential litigation risk to the University of Michigan.

In my professional opinion, the University of Michigan Athletic Medicine Department meets NCAA and NATA standards in sports medicine. Under the leadership of Mr. Darryl Conway, ATC, Associate Athletic Director for Student-Athlete Health and Welfare, the athletic training staff and team physicians have planned for and are continuously reviewing and examining enhancements to student-athlete safety and welfare.
While this review focused on the medical coverage to the U-M football team, the policies and procedures for all student-athletes in the area of concussion education and management meets NCAA and NATA standards in terms of health history concussion questions, education, communication, available medical professionals providing evaluation and care, neuropsychological pretesting, post-concussion evaluations, and return to play procedures to ensure the welfare of student-athletes' long-term well-being. Enhancements to the Concussion Management Plan will be addressed in Section #7. Additionally, developing a role for the Associate Athletic Director for Student-Athlete Health and Welfare to become an in-game spotter to assist the football athletic medicine staff in detecting injuries is innovative as compared to benchmarks of other programs. There is adequate staffing of athletic trainers and physicians at football games. Both the Emergency Action Plan and Catastrophic Incident Plan are in compliance with national standards.

I have provided questions and comments on particular sections for your consideration. Sections 2, 6, and 11 have no questions or recommendations. These questions and recommendations are offered to enhance clarity in communication, future policy and procedure development, or to address potential future risk to the University of Michigan.

Questions and Recommendations

The following questions or recommendations are related to information provided, University of Michigan Student-Athlete Health and Welfare In-Game Player Safety Procedures and Communication Plan.

Section #1- Background Summary

- Page 5. II. On-Field Medical Team Staffing. Consider having the athletic trainer assigned to the ambulance being the liaison to the visiting team and game officials, checking with them at half-time and following the game in the locker room before releasing the ambulance.
- Page 6. II. On-Field Medical Team Staffing. Is the Spotter attending away games as well as home games? How is his role affected with the new Big 10 rule of having spotters at every football game? Will the U-M Spotter be an additional spotter and how is communication going to work?
- Pages 8-9. IV. On-Field Communication. Regarding two-way communication, only athletic training assistants and fellows in orthopedics and primary care have communication with the Spotter. How is information given to the head athletic trainer? Suggest having the graduate assistant athletic trainer or senior athletic training student assigned to the head athletic trainer for the game and giving them a two-way communication set. This way, through the student assistant, the head athletic trainer is connected to the Spotter and physicians, along with his assistants who can alert the head athletic trainer that there is a problem in the bench area that he needs to communicate to the coaching staff.
- Page 9. V. On-Field Communication. Consider adding how and by whom a player’s initial status is communicated to the coaching staff. It is customary that either the head athletic trainer, assistant athletic trainer, or team physician contact a certain coach or coaches to inform them that a player is presently unavailable due to an evaluation. Having worked Division I football for over 35 years as a certified athletic trainer, I can attest to the quickened urgency in notification because of the fast pace of college football games, giving coaches time to make personnel adjustments. Even in optimal situations, it can be challenging to notify a coach in time to get substitutes into the game in a timely fashion. Suggest having a designated coach approach the athletic medicine staff when a player is being evaluated. This coach is then providing initial
evaluation process status to the appropriate coach, awaiting a determination by the medical staff on the availability of a player to participate.

- Pages 9-10. V. On-Field Injury Management Process. Recommend assigning each of the two full-time athletic training assistants to monitor an offensive or defensive bench area. The assistant athletic trainer then is in their respective bench area, checking with players during offensive and defensive changes for injury. The assistant athletic trainer is also in communication with the Spotter, who can assist with alerting the assistant athletic trainer of any player exhibiting signs of a problem coming off the field to their respective bench.

- Page 9. IV. On-Field Communication. On bullet point three, “Chain of Command...”, add neurologist after “medical conditions;”.

- Page 10. IV. On-Field Injury Management Process. Suggest changing terminology to lessen misunderstanding by using only one “out” word. For example, instead of using the present terms of, “cleared; out while we assess; out”, use, “cleared; out for now (or out while we assess), DONE FOR THE DAY”. I went to the latter terms early in my career because “out” can get confusing: for now or for the day? In the heat of the moment it can be confusing using “out” in different ways. DONE FOR THE DAY means no further participation for coaches and student-athlete.

- Page 11. VIII. On-Field Emergency Action Plan (EAP). Is the athletic trainer assigned to the ambulance in communication with the Spotter? If an emergency occurs in the bench area, at field level, the athletic trainer assigned to the ambulance may not be able to witness it. The Spotter can then alert the ambulance via two-way communication to the athletic trainer assigned with the ambulance.

- Page 11. VIII. On-Field Emergency Action Plan (EAP). How is the EAP communicated to the visiting team medical staff? By letter and personal meeting prior to the game? Consider spelling it out and by whom.

- Page 12. IX. Catastrophic Incident Plan. Has the Catastrophic Incident Plan been reviewed and approved by risk management and legal counsel?

- Page 13. XII. Concussion Education Process for Coaches. Are coaches given the Concussion Return to Play Process used by athletic medicine? Suggest this be incorporated to educate coaches that it is a step-wise process of return, taking anywhere from days to weeks. The coach should not expect the student-athlete to return to full participation when concussion symptoms disappear. Explaining the process proactively educates the coaches on time-frames.

Section #3- Policy and Procedure Development & Review Process

- Page 2. Policy & Procedure Manual (Yearly/Ongoing). Consider development of a Student-Athlete Psychological Concerns Policy, Transgender Student-Athlete Policy, and a Student-Athlete Post-Eligibility Medical Care Policy.


- Page 3. Position Statement Review. How are recommendations made for policy enhancements following the review by the athletic medicine staff? Are recommendations sent to Mr. Conway and the physicians? Is a report made by the respective staff members, even if there are no changes recommended, indicating they performed the review? Who reviews the entire NCAA Sports Medicine Handbook?
Section #4 - University of Michigan Athletic Medicine Emergency Action Plan (EAP), Michigan Stadium Game Day

- Are there venue specific EAP with maps located in the locker rooms, including game officials, in the event the ambulance is needed to respond to the locker rooms?
- **Emergency Communications.** Who releases the ambulance from their responsibilities post-game, and are the visiting team and game officials checked post-game prior to the ambulance being released? If so, suggest waiting one-half hour post-game to check on home team, visiting team, and officials. If no ambulance is needed, release the ambulance from their responsibilities for the game.
- **Emergency Team Roles, bullet point #4.** Recommend only certified athletic trainers accompany the injured student-athlete to the hospital; full-time athletic medicine staff members should have this responsibility, not an athletic training student. Shouldn’t the certified athletic trainer assigned to the ambulance accompany the student-athlete, or a member of the football team athletic training staff?
- **Emergency Team Roles.** Who contacts the student-athlete’s family members of the emergency?

Other Emergency Action Plan Thoughts:

- Is there a list of contact information from the Big 10 Conference office regarding game officials? Officials are also taken to hospitals, and it would be useful to have a list of contact information in the possession of the referee in the official’s locker room for use in an emergency. I have had some experience with this, including a sudden cardiac event with the use of an AED on a game official in 2001. The Big East Conference developed a football official’s emergency contact list which made it convenient in contacting family members following an emergency to an official at a football game.
- Does the University of Michigan have contact information for coaches and staff for use in an emergency? I have been with coaches who go to hospitals and having contact information in the possession of the athletic medicine staff or football operations director is very helpful in the aftermath of an emergency, especially if the patient is unconscious.
- Are there venue specific Emergency Action Plans posted at all athletic venues at U-M?

Section #5 - Catastrophic Injury Plan

- The template used by the University of Michigan is based on the original template I wrote for Syracuse University in 2002 and shared nationally. The Catastrophic Incident Plan is in compliance with national standards.
- I was the original author of the 2004 NCAA Sports Medicine Guideline 1f, Catastrophic Incident in Athletics chapter. I also authored the revisions in 2008.
- The plan has 16 members of the management team. Limiting the team to five or six members may lessen any miscommunication coming from this group. Others on the team can be incorporated as needed.
- Suggest adding section on contacting the family following a catastrophic incident.
- Suggest using care when permitting others to update team members on someone’s status. This can get miscommunicated. This is why only management team can speak on situation. May also be a HIPPA privacy issue?
- Confirm that the University of Michigan Offices of Risk Management and General Counsel approve the Catastrophic Incident Plan.
Section #7- University of Michigan Concussion Management Plan

- Consider adding a statement on proper helmet fitting to prevent injury, and re-fitting of helmets prior to return to contact activity following a concussion.
- Are your equipment managers who fit helmets certified by the Athletic Equipment Managers Association?
- Develop a U-M Return to Academics protocol. Items to include:
  - a point person to communicate with academics, usually the academic coordinator who receives information from U-M Athletic Medicine staff that the student-athlete has sustained a concussion
  - a form letter notifying the student-athlete’s home college of the concussion and signs/symptoms of post-concussion to be sent to their instructors
  - a notification to the Office of Disability Services for some student-athletes needing assistance
  - follow-up procedures with academics to monitor any issues in grades or completion of work that may indicate a post-concussion syndrome affecting cognitive function
- I noted in the University of Michigan Medical Release of Information sent to me on December 24, 2014, that parents/guardians and academic staff are not on the list of those to receive injury information on a student-athlete. Suggest modifying this list to include academics and parent/guardians in order to speak with those entities to formalize communication for clarity and to assist the concussed student-athlete with their academic needs.


- The student-athlete must be asymptomatic of concussion symptoms before initiating a Return to Play Plan.
- The student-athlete’s neuropsychological and balance scores have to return to baseline test scores before being evaluated by a team physician to initiate the Return to Play Plan. A student-athlete may say they are asymptomatic in order to get back to activity before being truly ready; objective test scores back to baseline are verification that the student-athlete is ready to start the protocol.
- The team physician, in consideration of the student-athlete being asymptomatic and neuropsychological and balance scores are back to baseline test levels, then clears the student-athlete to initiate the Return to Play Plan. (Who clears the student-athlete? Is it the neurologist or the primary care physician? Document this in the Return to Play Plan.)
- At any time if signs or symptoms return during exertion, the student-athlete returns to complete physical and/or mental rest until once again asymptomatic. Once asymptomatic, start at step one.
- All steps are supervised by a certified athletic trainer, and progression is reported to the team physician responsible for clearing student-athletes following concussions.
- Day or days of each step are at least one or more, given the severity of the concussion, speed of resolution, and the number of life-time concussions.
  - Step one: Light aerobic exercise- walking, swimming or riding a stationary bike. No resistance training. If asymptomatic, proceed to step two.
o Step two: Mode, duration, and intensity-dependent exercises that are based on the sport: running, drills without equipment, etc. If asymptomatic, then proceed to step three.

o Step three: Sport-specific activity with no head impact: drills wearing protective equipment (if required), increased running and conditioning drills. If asymptomatic, proceed to step four.

o Step four: Non-contact sport drills and resumption of resistance training. If asymptomatic, proceed to step five.

o Step five: Full-contact practice. Suggest first day of contact only take half of full-contact repetitions. If asymptomatic, proceed to step six.

o Step six: Final clearance by team physician after consultation with the athletic trainer on the progress of steps one-five. Full clearance for activity.

• Monitor student-athlete’s academic progress and psychological health following the concussion and return to play.

Recommend putting in the Concussion Management Plan a statement on the team physician making the final determination on the medical clearance of student-athletes, particularly concussions, and that the student-athlete’s long-term well-being relative to the number of concussions will be taken into consideration for further participation clearance. Also suggest developing a letter after a second concussion to be signed by the student-athlete acknowledging any further concussion may result in medical disqualification from contact sports at the University of Michigan. I developed this mechanism at Syracuse University in consultation with General Counsel and Risk Management, and the letter was given the student-athlete after discussions with the team physician on the student-athlete’s concussion history, usually after their second concussion. In the event of another concussion, there is a proactive understanding of a medical disqualification. This system worked very well, with several student-athletes across various sports, male and female student-athletes, being medically disqualified for concussions and their vulnerability of sustaining further concussions with continued participation, putting their long-term well-being at risk.

Section #8- Cervical Spine Injury Management

• Page 2. Cervical Spine Injury Training Scenarios, Miscellaneous. Need to add practicing the removal of facemasks from helmets. The NATA Position Statement: Acute Management of the Cervical Spine-Injured Athlete, provided in the review, recommends on page 308, Airway, #12, “Rescuers should immediately attempt to expose the airway, removing any existing barriers (e.g., protective facemasks).” All certified athletic trainers and athletic training students need to have this skill if covering a sport where the student-athlete wears a helmet. Recommend having skill sheet developed and list all that have practiced this skill. In the event of an emergency where airway exposure is required, and if a delay in facemask removal is suspected in a poor outcome, questions will be raised if the person attempting the removal has the proper tools and has practiced this skill annually.

• Are athletic trainers working in sports that have facemasks attached to helmets (football, ice hockey, men’s lacrosse) equipped with tools such as Angel’s Scissors and/or electric screwdrivers to remove facemasks?

• Are football players (and all student-athletes) instructed at their team meetings not to touch or roll over an injured teammate? This prevents untoward motion to a potentially spine-injured player prior to the arrival of athletic medicine staff.
Section #9- Concussion Education- Coach’s Meeting PowerPoint (ppt.) Presentation

- ppt. Slide #1. Suggest changing picture depicting the injured, presumably unconscious, Penn State player.
- ppt. Slide #3, Signs, Symptoms, & Behaviors. Abnormal pupil size should be removed. This is a late sign, long after a person with an intracranial bleed will be conscious. Approximately 10% of humans have an unequal pupil congenitally, so this can be a confusion sign in a conscious player who is lucid.
- ppt. Slide #7, Return to Play. Move up before Slide #6, Concussion Management. This follows Slide #5, Key Points (with picture of wrestlers) informing the coaches there is a graded return to play protocol, not just being out one day. This change flows from being out the day of injury to return to activity.
- Add slide: Return to Play Steps after Concussion Management slide. See steps in Section #7 comments. This way coaches know the return is over several days, not the next day. This reduces confusion on progression.
- ppt. Slide #9, Coach’s Role. Add bullet point that any questions from parents/guardians regarding their child’s concussion are to be referred to the athletic medicine staff.

Section #10- Concussion Education- Student-Athlete Health & Welfare Education Seminar PowerPoint (ppt.) Presentation

- ppt. Slide #14, Concussion. Change picture as with Coach’s education slide.
- Add slide after slide #20, U-M Concussion Policy. List the Return to Play Steps as outlined in Section #7.
- ppt. Slide 21, “I Think I Have a Concussion”. Recommend taking out statement, “Is better to miss one game, than entire season.” This implies to the student-athlete that they will miss only one game if they report a concussion, which may not be the case. The student-athlete returns when they have been cleared to return following the Return to Play Plan, which could be several games based on the severity of the concussion.
- In review of the entire educational presentation, suggest adding a slide on the dangers of energy drinks, discouraging their use.

Future Considerations

Given the enhanced role of the Associate Athletic Director for Student-Athlete Health and Welfare (Mr. Conway), consideration should be given to employing and/or designating a highly qualified professional (i.e., athletic trainer) to coordinate and confirm that quality measures of health care are documented and implemented. This health care professional would monitor and ensure that all athletic medicine staff members are familiar with, acknowledge, and comply with federal, state, U-M Athletic Department, Big Ten, NCAA, NATA and U-M Athletic Medicine Department policies and procedures. Since U-M Athletic Medicine Department employs twenty-four (24) athletic trainers assigned to deliver medical care to student-athletes in thirty-one (31) sports in numerous facilities, this health care professional would ensure that quality controls are documented, implemented, and monitored. This professional would assist the University of Michigan and its Athletic Medicine Department as a benchmark for “Excellence in Student-Athlete Health and Welfare” by compliance to quality control measures, thereby reducing institutional liability risks.
In closing, thank you for the opportunity to review the University of Michigan Student-Athlete Health and Welfare In-Game Player Safety Procedures and Communications Plan. I hope that this report will increase the quality of medical service to present and future University of Michigan student-athletes. If questions exist regarding my findings and recommendations, please contact me:

Email: timothyneal1957@gmail.com

Phone: 315.877.5151

Address:

Timothy Neal
8285 Dampier Circle
Liverpool, NY 13090