Eagle Care – A Sport Club
Concussion Management Model

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The Issues

• Concussion awareness has increased astronomically in recent years.
• The NCAA, CDC, NATA and other professional and medical organizations have established definitive guidelines for concussion management.
• There is lack of a national peer standard for sport club concussion management.
• 39 states now have laws and provisions in place designed to protect athletes from problems associated with a diagnosed concussion.

• These laws focus primarily on the public school student-athlete.
• “[the] game should come in a distant second when a player’s future cognitive ability hangs in the balance.” - Free-Lance Star newspaper editorial.
• The concept of cognitive rest is a hurdle for most concussion programs.
• Understanding cognitive rest requires on-going education and dialog at all levels.

• At the college/university level education must involve the administrators of the academic program.
Our Response

• The Department of Campus Recreation at the University of Mary Washington recognized the importance of having an appropriate concussion management model in place to safeguard the well-being of all student-athletes participating in the Sport Club program.
• The Department of Campus Recreation partnered with UMW Athletics and the Mary Washington Healthcare and its Neuroscience Center of Excellence to create and sustain a viable concussion management program.
• It was extremely important that the program respect the requirements of HIPAA and FERPA while guaranteeing the safe return-to-play of all student-athletes following a mild Traumatic Brain Injury (mTBI).
• Our program is titled Eagle Care.
Eagle CARE

• C.A.R.E. provides an outline for the key components of the program.
C.A.R.E.

- C - Collaborate.
C.A.R.E.

- UMW Campus Recreation collaborated with the UMW Head Athletic Trainer and Mary Washington Healthcare to recognize the need for better concussion management for our 26 sport clubs involving approximately 600 student athlete participants.
C.A.R.E.

• A – Acknowledge and Assessment.
C.A.R.E.

- UMW Campus Recreation, UMW Athletics, and Mary Washington Healthcare acknowledge the importance of accurate assessment and management of all head injuries and the potential long-term effects of this injury on brain function.
C.A.R.E.

• Preseason baseline brain function assessment is provided by the ImPACT program.

(Immediate Post-Concussion Assessment and Cognitive Testing - http://impacttest.com/)
C.A.R.E.

• ImPACT is a software tool utilized to evaluate recovery after concussion. ImPACT evaluates multiple aspects of neurocognitive function, including memory, attention, brain processing speed, reaction time, and post concussion symptoms.
C.A.R.E.

• The post-injury assessment and monitoring of all head injuries is performed by appropriately trained medical personnel of the Mary Washington Healthcare system.
C.A.R.E.

• **R** – Recognize and Respond.
C.A.R.E.

- Eagle Care allows for the timely recognition and response to any mTBI sustained by a student-athlete during their participation in a Department of Campus Recreation sponsored sport club practice or event.
C.A.R.E.

• The model allows for the timely recognition and response of injuries sustained at our home venues as well as at any away venue.
The model recognizes that medical information is private and cannot be freely shared with third parties without the expressed written approval of an individual.
C.A.R.E.

- **E** – Educate.
C.A.R.E.

• The Campus Recreation Professional Staff recognizes that compliance to any initiative requires knowledge and the WIIFM factor.
C.A.R.E.

- A thorough education component has been developed and utilized to educate student athletes, coaches, parents, and UMW faculty and staff to the etiology of mTBI and to the appropriate follow-up management of the injury to guarantee the safe return of the student athlete to sports and academic endeavors.
C.A.R.E.

• An important component of education is teaching colleagues about cognitive rest – what it is and why it is so important in the recovery of a head injury.
C.A.R.E.

• A function of the cognitive rest education component is the understanding that head injuries cannot be treated but must be managed.
Education and Baseline Testing

1. Concussion education session for all sport club officers and coaches presented by the Department of Campus Recreation and Mary Washington Healthcare.
Education and Baseline Testing

2. Student-athlete signs participation agreement to include baseline testing.
Education and Baseline Testing

3. Baseline testing for the high risk sports: baseball, boxing, cheerleading, field hockey, lacrosse (men and women), polo, rugby (men and women), ski and snowboard, soccer, and women’s volleyball.
Pearls

• Concussions and other brain injuries can be serious and potentially life threatening injuries.
• Research indicates that these injuries can also have serious consequences later in life if not managed properly at the time of the initial incident.
• A concussion occurs when there is a direct or indirect insult to the brain. As a result, impairment of mental functions such as memory, balance/equilibrium and vision may occur.
It is important to recognize that many sport-related concussions do not result in a loss of consciousness.
• As a result, all suspected head injuries must be taken seriously.
• Coaches and teammates are crucial in identifying those student-athletes who may have a concussion because a concussed athlete may not be aware of their condition or may be trying to hide their injury to remain in practice or competition.
• All Eagle Sport Club officers, first responders, and coaches are required to attend the concussion education session presented by the Department of Campus Recreation and Mary Washington Healthcare during the first week of fall semester classes.
• All Eagle Sport Club student-athletes and coaches must read the NCAA Concussion Fact Sheet provided by the Department of Campus Recreation and sign the statement of acknowledgement regarding the sport club concussion management protocol.
• Student-athletes that have already had ImPACT testing must provide a copy of the test results to the Director of Campus Recreation.
• The data helps physicians evaluate recovery following concussions and assists them in making recommendations for return to play.
• ImPACT testing is conducted by the professional staff of the Department of Campus Recreation.
• Each Eagle Sport Club president is contacted with the date and time of their club’s testing sessions.
• The test administrator confirms that all tests are certified as valid.
• The student-athlete maintains a copy of the baseline test and the data is stored in the ImPACT data base.
• This information is made available to Mary Washington Healthcare staff in the event a student-athlete presents to the hospital with a concussion or other head trauma.
Management and Assessment

1. When a head trauma is suspected, the student-athlete is immediately removed from play.
Management and Assessment

2. The club first responder or coach performs the sideline assessment following SCAT guidelines. A laminated card is provided in all team first aid kits.

Sport Concussion Assessment Tool
http://www.irbplayerwelfare.com/pdfs/Pocket_SCAT2_EN.pdf
3. A student-athlete that loses consciousness or whose condition worsens is immediately transported to Mary Washington Hospital by ambulance/rescue squad.
Management and Assessment

4. A student-athlete who is conscious but has exhibited signs and/or symptoms of a concussion is referred to Mary Washington Hospital for evaluation.
Management and Assessment

5. The student-athlete or club representative will notify physician upon arrival of the availability of ImPACT data for the injured student-athlete.
Pearls

- A student-athlete suspected of having a concussion is not permitted to return-to-play on the day of the injury.
The following situations indicate a medical emergency and require immediate activation of the Emergency Medical System:
1. A student-athlete with a witnessed loss of consciousness of any duration.
2. A student-athlete with symptoms of a concussion, and who is not stable - i.e. condition is worsening.
3. A student-athlete exhibiting any of the following symptoms:
– Deterioration of neurological function to include any one or a combination of the following:
• headaches that worsen
• seizures
• focal neurologic signs
• looks very drowsy or can’t be awakened
• repeated vomiting
• slurred speech
• can’t recognize people or places

• increasing confusion or irritability
• weakness or numbness in arms or legs
• neck pain
• unusual behavior change
• significant irritability, any loss of consciousness greater than 30 seconds or longer
– Decreasing level of consciousness.
– Decreasing or irregular respirations.
– Any signs or symptoms of associated injuries, spine or skull fracture, or bleeding.
– Mental status changes: lethargy, difficulty maintaining mental arousal, confusion or agitation.
– Seizure activity.
• All sport club presidents are responsible for making certain that visiting sport clubs receive a copy of our concussion policy prior to travel and for providing the same concussion care for visiting student-athletes.
• Any sport club student-athlete who sustains a suspected concussion at practice or competition away from UMW will be treated according to the emergency protocol on-site.
Post Concussion Treatment Plan

1. Return to play is a medical decision that must be made by a physician.
2. The student-athlete may not return to practice or competition without the written consent of a concussion specialist or other physician.
Post Concussion Treatment Plan

3. The Sport Club President must ensure that the student-athlete does not return to play until the date specified by the physician.
Post Concussion Treatment Plan

4. A follow-up ImPACT test will be given 24 to 48 hours post-concussion and as prescribed by the physician.
Pearls

• Once the physician has cleared the student-athlete to return to play, it is strongly recommended that the athlete is progressed back to full activity following the step-wise process detailed below.
• Progression is individualized, and is determined on a case-by-case basis.
Factors that may slow the rate of progression include previous history of concussion, the duration and type of symptoms, the age of the athlete, and the sport in which the athlete participates.
• Step wise progression:
1. Complete cognitive rest. Activities requiring concentration and attention may worsen symptoms and delay recovery.
2. Light exercise. This step should not begin until the athlete is no longer having concussion symptoms and is cleared by a physician for further activity. At this point the athlete may begin walking for exercise or riding an exercise bike. No weight-lifting is done at this point.
3. Running without gear or equipment.
4. Non-contact training drills in full equipment. Weight-training can now begin.
5. Full contact practice or training.
6. Return to competition.
• The Sport Club President must ensure that the student-athlete does not return to play until the date specified by the physician.
• If post-concussion symptoms occur at any stage, the student-athlete should stop the activity and the treating physician should be contacted for additional evaluation.
R2P Options for the Physician

1. Cleared to return to play without restriction.
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2. Follow-up ImPACT test required.
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3. Cleared to return to play with restrictions.
R2P Options for the Physician

1. Cleared to return to play without restriction.
2. Follow-up ImPACT test required.
3. Cleared to return to play with restrictions.
4. Cleared to return to play without restriction on a specific date.
R2P Options for the Physician

1. Cleared to return to play without restriction.
2. Follow-up ImPACT test required.
3. Cleared to return to play with restrictions.
4. Cleared to return to play without restriction on a specific date.
5. Return appointment with physician required.
FERPA and HIPAA guidelines requires UMW Campus Recreation professional staff to acknowledge that they do not have consent to view a medical diagnosis without the expressed written consent of the student-athlete. The physician is required to limit return to play notes with this in understanding.
Contact Sports and Concussion

Get your head in the game – keep your head in the game!
Thank you for sharing your valuable time with us. Are there any questions?

Get your head in the game – keep your head in the game!