Certificate of Compliance

The attached Concussion Management/Safety Plan/Protocol (4/12/2019) is consistent with the Inter-association Consensus: Diagnosis and Management of Sport-Related Concussion Best Practices and otherwise meets the requirements of Constitutions 3.2.4.18 and 3.2.4.18.1.

Ryan H. Cobb MS ATC — 4/23/19

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Sr. Associate AD

Date

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Laura Dixon MS ATC
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Date

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University Health Service Physician
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Date

Cal Sports Medicine Concussion Management Plan

4/12/19

PRE-INJURY MANAGEMENT

- All incoming student athletes undergo a pre-participation physical exam (PPE) that includes a thorough history and physical exam. A yearly interval history is taken in subsequent years of participation. If there is a history of concussion or head injury, further questioning includes details surrounding previous injuries (mechanism, symptoms, duration, work up), and evaluation for modifiers (prior concussion history, learning disabilities requiring stimulant medications, psychiatric history, migraines, seizure history). If a student athlete has significant history of prior concussion(s) or head injury, or significant other modifiers, a Cal Team Physician may request additional consultation with neuropsychology or other specialists.
- Student athletes will undergo baseline neuropsychological (NP) testing and symptom evaluation using the computerized Immediate Post-Concussion Assessment and Cognitive Testing program (ImPACT), Standardized Assessment of Concussion (SAC), and a baseline balance assessment.
- Cal team physician will determine initial pre-participation clearance status.

ACUTE INJURY/SIDELINE MANAGEMENT

- In the event of a suspected head injury, immediate concern should be given to rule out cervical spine trauma, skull fracture, and intracranial injury. Evaluation follows standard ABCDE first aid principles.
- If a student athlete exhibits any signs, symptoms or behaviors consistent with a concussion, the student athlete shall be removed from practice or competition and not allowed to return to play until they are evaluated by a Cal sports medicine healthcare provider with experience in the evaluation and management of concussion.
- If no certified athletic trainer (ATC) or team physician is available, and the student athlete has minimal symptoms, contact the ATC / team physician to determine a plan for evaluation of the student athlete. If unable to contact the Cal sports medicine staff, contact UHS Urgent Care at 510-642-3188. Symptomatic student athletes should not transport themselves.
- For away contests when an ATC is not available, the host institutions medical staff should be utilized.
- If an ATC is on site and the student athlete is stable medically, the SAC, symptom and balance assessment along with physical examination should be used for the evaluation of the injured student athlete.
- If an ATC is on site and the assessment is concussion, the student athlete cannot return to play or practice the same calendar day.
- If the student athlete is evaluated by the team physician and/or other clinician and the diagnosis is concussion, the student athlete cannot return to play or practice the same calendar day.
- If a student athlete is diagnosed with concussion, or suspicion of concussion exists, the student athlete will receive serial monitoring for changes or deterioration.
- A student athlete with suspected spine/skull/intracranial injury, worsening symptoms, especially worsening headache, repetitive vomiting, increased confusion, garbled speech, lethargy or extreme

sleepiness, trouble using their arms or legs, convulsions or seizure activity, should be transported emergently by paramedic to the emergency room. Objective findings such as Glasgow Coma Scale <13, focal neurological deficit, or loss of consciousness longer than 1 minute also requires emergent transport.

POST-ACUTE INJURY MANAGEMENT

- Physician evaluation of all concussed student athletes with timing dependent on ATC assessment & clinical judgment. The ATC should contact the team physician to discuss follow up.
- The team physician will:
    - Determine additional testing / consultation as indicated
    - Educate student athlete regarding importance of reporting all / any symptoms
    - Determine if any modifications to school or other demands necessary (e.g. refer to Disabled Students Program (DSP), communicate with professors, parents, others)
- Follow up / ongoing management
    - Daily follow up of symptoms using symptom checklist
    - Post-injury neuropsychological (NP) testing (e.g. ImPACT), SAC testing, and balance testing as determined by team physician.
    - Follow up with ATC/team physician once ready to progress activities as well as to return to full play (If not seen in follow up by team physician, must be discussed)
- Cognitive and physical rest until instructed otherwise by team physician or designee.
- Student athletes with concussion and a responsible party will be provided with oral and/or written instructions upon discharge.
- Student athletes with a prolonged recovery will be evaluated by a physician in order to consider additional diagnoses (including Post-concussion syndrome, sleep dysfunction, migraine or other headache disorders, mood disorders such a anxiety and depression, and ocular or vestibular dysfunction) and best management options

RETURN-TO-LEARN MANAGEMENT

- Individualized decision; made by the team physician. Consultation from other specialists will be obtained in more complex cases. Possible consultants include, but are not limited to, neuropsychologist, counseling and psychological services staff, disabled students program staff, academic counselors, learning specialists, faculty athletic representative, and academic faculty/staff.
- A letter verifying a concussion/head injury may be provided by a physician to assist academic faculty/staff with providing accommodations. The following statement is included in this correspondence: “Major exams may not be representative of academic ability in the immediate post-concussive period. We recommend no finals/major exams or projects for 7 days following the diagnosis of concussion.”
- General guideline of graduated progression in cognitive/academic activity:
    - No classroom activity on same day of concussion
    - Remain at home and rest if experiencing significant symptoms with cognitive stimulation (like computer use or reading) lasting <30 minutes

    - Once able to tolerate 30 minutes of cognitive activity, it is ok to resume modified class attendance (modified class attendance options include attending the first 30 minutes of classes, breaks between classes, half-days, etc)
    - Upon return to class, load can be increased as tolerated. If exacerbation of symptoms, return back to previous level of cognitive activity where there were no symptoms and attempt to progress again after 24 hours
- Physician re-evaluation will take place if symptoms worsen with academic challenges or if full return to academics has not been achieved within 2 weeks.
- Student athletes will not return to full contact/play until full return to academics has been achieved.
- Campus resources, including learning specialists, the disabled students program staff, and the ADAAA office, will be engaged in cases that cannot be managed through schedule modification/academic accommodations.
- All accommodations and services will comply with Americans with Disabilities Act Amendments Act (ADAAA).

RETURN-TO-PLAY MANAGEMENT

- Individualized decision; made by the team physician or medically qualified physician designee. Consultation from the athletic trainer, student athlete, neuropsychological / balance testing, and additional outside consultation as appropriate.
- Time student athlete held out of activity, rate of progression, all individualized, with decision made by team physician.
- Modifiers to consider:
    - Age
    - Prior history of concussion (#, specifics of injury(s), severity of injuries, recency)
    - Learning disabilities (e.g. ADHD)
    - Migraine History
    - Seizure history
    - Other (e.g. emotional readiness, anxiety, depression, parental concern)

- A student athlete with signs / symptoms of concussion at rest or exertion should not continue to play.
- Supervised, gradual progression in activity; step-wise with gradual increments in physical exertion and risk of contact (progression to the next step only if no worsening or new symptoms):
    - Limited physical and cognitive activity until the student has returned to baseline
    - Cardiovascular challenge/light aerobic activity (15 – 20 minutes)
    - Unlimited cardiovascular activity, sport-specific exercise without head impact
    - Non-contact training drills, progressive resistance training
    - Full-contact practice / unrestricted training
    - Return to game play
- Rate of progression and final clearance is determined by the team physician
    - No return to contact until NP and balance testing considered acceptable
    - If NP testing interpreted as abnormal, repeat NP testing as appropriate, with at least 48 hours between repeat testing, or as determined by team physician.

CLEARANCE AND FINAL FOLLOW UP

- Final authority for return-to-play shall reside with Cal team physician or team physician designee.
- Additional consultation and/or testing may be indicated and will be determined by the team physician.
- Student athlete education regarding importance of reporting all symptoms as well as increased risk for concussion, and delay in recovery, with subsequent injury.
- New baseline evaluation will take place 6 months post injury, or as determined by team physician.

ADMINISTRATIVE MANAGEMENT/EDUCATION

- Medical personnel with training in the diagnosis, treatment and initial management of acute concussion available (at minimum via telephone) for all at-risk practices (including men's and women's basketball, field hockey, women's lacrosse, pole vault and rugby)
- Medical personnel with training in the diagnosis, treatment and initial management of acute concussion on-site (on campus or at competition) for all at-risk home games (including men's and women's basketball, field hockey, women's lacrosse, pole vault and rugby)
- Host institution's medical staff utilized for away contests where no Cal sports medicine staff are available
- Emergency action plan on file for each athletics venue to respond to student athlete catastrophic injuries and illnesses, including concussion plan for all high risk sports.
- Healthcare plan on file that assures equitable access to healthcare providers for all student athletes.
- The University will adhere to independent medical care guidelines as outlined in *Interassociation Consensus: Independent Medical Care for College Student-Athletes Best Practices*. Cal sports medicine healthcare providers have the unchallengeable authority to determine management and return-to-play of any ill or injured student athlete.
- A countable coach should not serve as the primary supervisor for a Cal sports medicine healthcare provider nor should they have sole hiring or firing authority over that provider.
- All athletic programs will adhere to any NCAA or conference contact guidelines, including I*nterassociation Consensus: Year-Round Football Practice Recommendations*.
- All coaches and equipment staff are in line with best practice in terms of proper athletic technique and protective equipment.
- All student athletes must annually read and sign a statement in which they accept the responsibility for reporting their injuries and illnesses to the institutional medical staff*,* including signs and symptoms of concussions.
- All student athletes, coaches, team physicians, athletic trainers, and the directors of athletics are provided with written educational material (at minimum the NCAA concussion fact sheet) on concussion annually, including signs and symptoms of concussion, and neuropsychological testing (ImPACT). Each party will provide a signed acknowledgement of having read and understood the concussion material.
- Coaches must acknowledge understanding of concussion educational materials and the written management plan.
- Documentation will be kept regarding baseline evaluation, initial injury evaluation, continued management, and clearance of the student athlete with concussion.

ROLE OF ATHLETICS HEALTHCARE PROVIDERS

*In general, all athletics healthcare providers and consultants will practice within the standards established for their professional practice.

1) Cal Team Physicians:
    a. Authority to screen, evaluate, and treat concussion in accordance with written concussion management plan
    b. Authority to diagnose concussion
    c. Authority to make any and all management/return-to-play decisions using best practice clinical decision making and in accordance with written concussion management plan
    d. Only healthcare provider able to give final medical clearance for return-to-play
    e. Authority to provide and approve any and all educational materials to student athletes, caregivers, and coaches
    f. Authority to designate other healthcare providers to make same decisions as above when deemed necessary (e.g. during away competition)
    g. Authority to interpret ImPACT, modified BESS, and SAC testing

2) Cal Certified Athletic Trainers:
    a. Authority to screen, evaluate, and treat concussion in accordance with written concussion management plan
    b. Authority to make the assessment of concussion
    c. Does not have authority to make return-to-play decisions unless directed by Cal team physician (or team physician designee)
    d. Authority to provide any and all educational materials to student athletes, caregivers, and coaches
    e. Authority to perform and interpret modified BESS and SAC testing

3) Physicians, Physician Assistants, and Nurse Practitioners at Cal Student Health Center
    a. Authority to screen, evaluate, and treat concussion in accordance with best practice clinical decision making
    b. Authority to diagnose concussion
    c. Does not have authority to make return-to-play decisions unless directed by Cal team physician (or team physician designee)
    d. Authority to provide any and all educational materials to student athletes, caregivers, and coaches
    e. Will contact Cal team physician and/or Cal certified athletic trainer in cases of diagnosed or suspected concussion to arrange follow up care
    f. Does not have authority to interpret neuropsychological testing

4) Consultants

a. Neurology, neuropsychology, or any other consultant deemed appropriate by Cal team physicians may participate in the care of concussed student athletes in conjunction with Cal team physicians
b. Consultant recommendations (including return-to-play) will be used as part of the decision making process, but may not be the sole basis of final concussion management decisions
c. Neuropsychology will be consulted to interpret ImPACT tests as deemed necessary by Cal team physicians