Sport Science Institute Updates

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Mission: To promote and develop safety, excellence and wellness in college student-athletes, and to foster life-long physical and mental development.

Vision: To be the pre-eminent sport science voice for all student-athletes and NCAA member institutions, and to be the steward of best practices for youth and intercollegiate sport.
Strategic Priorities

• Cardiac Health.
• Concussion.
• Doping and Substance Abuse.
• Mental Health.
• Nutrition, Sleep and Performance.
Strategic Priorities

- Overuse Injuries and Periodization.
- Sexual Assault and Interpersonal Violence.
- Athletics Healthcare Administration.
- Data-Driven Decisions.
CONCUSSION
CONCUSSION: Knowledge Gaps

- We do not understand the natural history of concussion.
- We do not understand neurobiological recovery in concussion.

Solution:
- NCAA-DoD Grand Alliance.
- CARE Consortium.
- Mind Matters Educational Grand Challenge.
- Inter-Association Guidelines and Legislation.
Data Summary

- Data extracted in December 2016.
- $N = 28,421$ evaluations.
- $N = 1,628$ concussions.
  - Majority in competition or training.
  - 40% female.
Science Informing Clinical Practice

NCAA 1 (1999-2001)

- 3.4
- 3.25

RTP: 6.65 Days

- Duration of Symptoms
- SFWP

Time (Days)

Average Graded Exertion Protocol: 6.6 Days (2.9)
Translational Impact

Rate=percentage of concussed players who sustained 2\textsuperscript{nd} concussion in same season

Rate: 6.5

- 75% < 7 Days
- 92% < 10 Days

Mean Interval: 5 days

NCAA 1 (1999-2001)

NCAA-DOD
Grand Alliance
CARE Consortium
TRANSLATIONAL IMPACT:
Bringing it All Together

Premorbid “Host” Factors
Role of genetics, proteomics
Influence of pre- & comorbid factors

Biomechanics of Injury and Exposure

Acute Effects & Recovery: Brain Structure & Function
Clinical / Functional

Outcome, Intervention & Risk Prevention
Benefits of Strict Rest After Acute Concussion: A Randomized Controlled Trial
Rehabilitation
- Return to Activity
- Academic Function
- Targeted Therapies
- Prevention of PCS

Prospective, Multi-Dimensional, Longitudinal
Concussion Information: SSI Website

www.ncaa.org/ssi
Guideline Summary

- Ensure that mental health care is provided by licensed practitioners qualified to provide mental health services.

- Clarify and disseminate referral protocol.

- Consider mental health screening in PPEs.

- Create and maintain a health-promoting environment that supports mental well-being and resilience.
Mental Health Information: SSI Website

www.ncaa.org/ssi
NCAA Commission to Combat Sexual Violence

- Board of Governors appointed.
- **Charge:** To build on the work of the 2012 Think Tank and the Task Force on Sexual Assault, the charge was developed for the NCAA Board of Governor’s Commission to Combat Sexual Violence to examine issues and propose solutions related to what athletics departments, conferences and the national
NCAA Commission to Combat Sexual Violence

Association could do to address campus sexual violence to achieve positive cultural change.

1. Define role of athletics, conferences and national Association.

2. Codify Resolution.

3. Evaluate resources.

4. Develop common language.

5. Explore institutional and individual accountability for participation.
Sexual Violence Information: SSI Website

www.ncaa.org/ssi
Cardiac Information: SSI Website

www.ncaa.org/ssi
Questions About Sport Science Institute Updates
2017 Legislative Proposal
Independent Medical Care
NCAA Proposal No. 2017-1

NCAA MEMBERSHIP – CONDITIONS AND OBLIGATIONS OF MEMBERSHIP – INDEPENDENT MEDICAL CARE

• Effective Date: August 1, 2017

• Source: NCAA Division III Presidents Council [Management Council (Committee on Competitive Safeguards and Medical Aspects of Sports)].
What It Does – Proposed Rule

Part I: Administrative Structure:

Shall establish an administrative structure that provides independent medical care and affirms the unchallengeable autonomous authority of primary athletics healthcare providers (team physicians and athletic trainers) to determine medical management and return-to-play decisions related to student-athletes.
What It Does – Proposed Rule

Part II: Athletics health care administrator.

• Shall designate an athletics healthcare administrator to oversee the institution’s athletic healthcare administration and delivery (e.g., implementation of best practices and standards of care, point of contact for NCAA Sports Science Institute).

• The athletics health care administrator can be any individual in the athletic department.
Independent Medical Care Information: SSI Website

www.ncaa.org/ssi
Questions About Independent Medical Care Proposal
Thank You

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