SUPPORTING STUDENT-ATHLETE MENTAL WELLNESS

Brian Hainline, MD
NCAA Chief Medical Officer
Clinical Professor of Neurology
Indiana University School of Medicine
New York University School of Medicine

Claudia Reardon, MD
Associate Professor
University of Wisconsin School of Medicine and Public Health, Department of Psychiatry
Consulting Psychiatrist – Badger Athletics
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 sports.
STRATEGIC PRIORITIES

- Cardiac Health
- Concussion
- Doping and Substance Abuse
- Mental Health
- Nutrition, Sleep and Performance
- Overuse Injuries and Periodization
- Sexual Assault and Interpersonal Violence
- Athletics Healthcare Administration
- Data-Driven Decisions
CONCUSSION
CARE Summary to Date

- Largest prospective concussion study to date
  - >40,000 evaluations
  - >4000 concussions
- Both sexes, all sports
- “Not just football”
- Acute effect study completed
  - Now beginning intermediate and cumulative effects
- Sets the stage for long-term cohort study: “the Framingham study of concussion…”

NCAA-DOD
Grand Alliance
CARE Consortium
NEUROBIOLOGY

Pre-Injury Factors
- Genetics
- Neurologic Vulnerabilities

Trauma Burden
- Injury Severity
- Repetitive Exposure
- Polytrauma

Biomarkers
- Structural/Functional Imaging
- Blood Biomarkers

Psychosocial

Psychological Function
- Premorbid
- Post-injury Comorbidities

Environmental Factors
- Social Support
- Life Stressors
- Latrogenesis

Motivational Factors
- Expectation
- Secondary Gain

Multi-Domain Predictor Variables

Neurobiological

Neurocognitive Function

Neurobehavioral Function

Psychological Health and Wellness

Life Function & Quality

Multi-Dimensional Outcome

Advancing the Science of SRC and TBI
McCrea, McAllister & Morey, 2012
Independent Medical Care

- An active member institution shall establish an administrative structure that provides independent medical care and affirms the unchallengeable autonomous authority of primary athletics health care providers (team physicians and athletic trainers) to determine medical management and return to play decisions related to student-athletes.

- An active institution shall designate an athletics health care administrator to oversee the institution’s athletic health care administration and delivery.
  - This position may become THE key for addressing the delivery gaps at lower resource schools.
MENTAL HEALTH OCCURS ON A CONTINUUM

- Resilience and thriving
- Mental Health
- Mental health disorders
THE NCAA BELIEVES THAT...

- Mental Health is not apart from, but rather a part of athlete health.
- To promote health is to enhance performance.
- It is important to understand sport specific issues related to athlete health and safety, and engage a wide range of experts.
ATHLETE-SPECIFIC CONCERNS

- Culture of “toughness” can limit help seeking
- Perception that “looking fit” or performing well means that the athlete is healthy
- Pressure to perform
- High Visibility
- Practice/travel = missed class = academic stress
- Injury
- Time demands (and compromised sleep)
- Other concerns . .
Clinicians, researchers, advocates, educators, athletics administrators, coaches and student-athletes.

Comprehensive assessment of stressors and mental health disorders in college student-athletes.

Goal: To develop best practices and to recommend research that support member institutions in meeting their membership obligations to provide a healthy and safe environment for student-athletes.
Have you ever…..Felt so depressed that is was difficult to function (Yes, in last 12 months)

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<th>STUDENT-ATHLETES</th>
<th>NON-ATHLETES</th>
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<tr>
<td>Male</td>
<td>21% (1,623)</td>
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<tr>
<td>Female</td>
<td>28% (3,303)</td>
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<td>White</td>
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<td>Black</td>
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<td>Other</td>
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ANXIETY NCHA

Have you ever.....Felt overwhelming anxiety (Yes, in last 12 months)

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<td>Male</td>
<td>31% (2,439)</td>
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<td>Female</td>
<td>48% (5,747)</td>
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<td>White</td>
<td>42%</td>
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<td>41%</td>
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<tr>
<td>Other</td>
<td>43%</td>
<td>50%</td>
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IN THE LAST MONTH, HOW OFTEN HAVE YOU FELT DIFFICULTIES WERE PILING UP SO HIGH THAT YOU COULD NOT OVERCOME THEM? (% Responding Very Often or Fairly Often)

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<tr>
<th></th>
<th>Baseball</th>
<th>Men’s Basketball</th>
<th>Football FBS</th>
<th>FCS</th>
<th>Men’s Other</th>
<th>Women’s Basketball</th>
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*Note: Endorsement of top two scale points on a 6-point scale.*

Yellow: Up 5% or more from 2010
SUMMARY OF FINDINGS

BEST PRACTICE GUIDELINES TO PROMOTE AND DEVELOP STUDENT-ATHLETE MENTAL HEALTH

Purpose
The Best Practice Guidelines to Promote and Develop Student-Athlete Mental Health are a practical extension of the NCAA book: Mind, Body and Sport: Understanding and Supporting Student-Athlete Mental Wellness (http://www.ncaa.org/health-and-safety/sport-science-institute/introduction-mind-body-and-sport). They are designed to provide athletic departments and sports medicine departments, regardless of their size and resources, with recommendations for creating environments that promote and develop student-athlete mental health.

Background
Mental health occurs on a continuum, with resilience and thriving on one end of the spectrum and mental health disorders at the other. Approximately one in five adults experience a mental illness in a given year, and this rate tends to be highest among young adults, many of whom are college students. Prevalence estimates of mental illness among college athletes are relatively similar to their non-athlete peers. Even in the absence of a clinically diagnosable mental health disorder, student-athletes may have impaired overall well-being as a result of sub-clinical symptoms of mental health disorders such as anxiety, depression and insomnia, or the misuse of substances such as alcohol or prescription drugs.

Young adulthood is an important and sometimes difficult developmental period, and college athletes are faced with similar developmental challenges as their non-athlete peers. The sport environment has both risk and protective factors for mental health disorders. Additionally, genetic predispositions and environmental influences outside of the sport environment may impact mental health.
APPENDIX C

Best Practices Endorsing Organizations

The following organizations have provided endorsements for this document:

- American Academy of Child & Adolescent Psychiatry
- American Academy of Sleep Medicine
- American College Counseling Association
- American College Health Association
- American College Personnel Association
- American College of Sports Medicine
- American Medical Society for Sports Medicine
- American Orthopaedic Society for Sports Medicine
- American Osteopathic Academy of Sports Medicine
- American Psychiatric Association
- American Psychological Association
- Association for Applied Sport Psychology
- Association of Black Psychologists
- Association for University and College Counseling Directors
- College Athletic Trainers’ Society
- Collegiate Clinical/Counseling Sport Psychology Association
- Faculty Athletics Representatives Association
- Higher Education Mental Health Alliance
- International Society for Sport Psychiatry
- The Jed Foundation
- NASPA – Student Affairs Administrators in Higher Education
- National Alliance on Mental Illness
- National Athletic Trainers’ Association
- Society for Sport, Exercise & Performance Psychology
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.
GUIDELINE #1

- Care should be provided by*:
  - Clinical or counseling psychologists.
  - Psychiatrists.
  - Licensed clinical social workers.
  - Psychiatric mental health nurses.
  - Licensed mental health counselors.
  - Primary care physicians with core competencies to treat mental health disorders.

*Include registered dietician in multidisciplinary team for eating disorders.

- Individual providing care should have cultural competency that addresses both societal diversity and the culture of sports.
Best Practice #1

“It is important to note that issues that may initially and appropriately be viewed as related to performance may upon further engagement reveal underlying mental health concerns.”
GUIDELINE #1

Additional considerations:

- Financial support for dedicated service.
- Physical location.
- Autonomous authority, consistent with his or her professional licensure, to determine mental health management for student-athletes.
- Care should be subject to relevant laws governing patient confidentiality, including possible exemption from mandated reporting.
GUIDELINE #2

Ensure that athletic departments have clarified their procedures for referring athletes with potential mental health concerns to appropriate personnel.
GUIDELINE #2

Emergency action management plan:

- Should address emergency mental health-related situations including:
  - Managing suicidal and/or homicidal ideation.
  - Managing victims of sexual assault.
  - Managing highly agitated or threatening behavior, acute psychosis or paranoia.
  - Managing acute delirium/confusional state.
  - Managing acute intoxication or drug overdose.
GUIDELINE #2

- Routine mental health referrals
  - Provide written institutional procedures regarding appropriate referral of student-athletes to all stakeholders within the athletics department.
  - Identify a point person responsible for facilitating such referrals (e.g., AT, team physician).
GUIDELINE #3

- Consider implementing mental health screening as part of annual pre-participation exams.
- Determine screening approach in consultation with licensed mental health professional providing mental health care to student-athletes.
- Establish procedure specifying when and to whom symptomatic or at-risk student-athletes identified through this screening process will be referred.

- Screening tools are not validated as stand-alone assessments for mental health disorders.
GUIDELINE #4

Create a health promoting environment that supports mental well-being and resilience.

Student-athletes, FARs and coaches should be educated about the importance of mental health, including how to manage mental health concerns.
Coaches play a central role and should be:

- educated on signs and symptoms of mental health disorders;
- trained in empathic response;
- encouraged to create a positive team culture;
- advised of department referral protocols.
ADDITIONAL CONSIDERATIONS

Medication Management Plan

- Ensure that student-athletes with medication are being appropriately monitored.
- Require student-athletes to list all medications and supplements they are taking.
- Maintain on file documentation from personal physicians to demonstrate appropriate diagnostic evaluation and treatment protocols for medication use.
Financial Support

- Clarify institutional policies related to athletic financial awards and team engagement for student-athletes who are unable to continue sport participation, either temporarily or permanently, due to mental health considerations.

- Clarify institutional policies for financial support of student-athletes in need of extended outpatient treatment or inpatient care.
Transitional Care

- Establish a clear transition of care plan for athletes who are leaving the college sport environment.

Identify

- Who is responsible for initiating transition of care?
- Who is responsible for providing athletes with information about community mental health resources?
- Who is responsible for ensuring athletes have adequate medication, as necessary, until continuing care is established?

Establish a transition plan for returning student-athletes who have been away from campus seeking care for mental health issues.
IN SUMMARY

- Mental health is not apart from, but rather, a part of athlete health.

- Athletic environments can support help seeking and facilitate early identification, appropriate referral and care.

- Establishing protocols for care means more equitable care across sports and within institutions.

- Implementation of Best Practice is an important step towards ensuring a model of care for student-athlete mental health.
In collaboration with the NCAA Sport Science Institute, NCAA research helped to assess institutional experiences in implementing the four key components of the Mental Health Best Practices document.

Ten-minute survey administered online through QuestionPro survey software. Designed to be taken via phone, tablet or computer by all athletics health care administrators in each division.

Survey was open September 25 to October 15, 2017.
Access to Providers
Student-athletes have access to licensed mental health care providers within the campus community

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<thead>
<tr>
<th></th>
<th>Division I</th>
<th>Division II</th>
<th>Division III</th>
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<tbody>
<tr>
<td></td>
<td>98%</td>
<td>96%</td>
<td>99%</td>
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</table>
Protocols and Action Plans
Athletics department has a written protocol for routine referral for mental health concerns

- Yes: 61%
- No: 40% (Division I), 45% (Division II), 50% (Division III)
- Uncertain: 14% (Division I), 15% (Division II), 5% (Division III)
Percent of athletics departments with an emergency action plan for mental health concerns

- Division I: 75%
- Division II: 57%
- Division III: 44%
IMPLEMENTATION TOOLS

SLEEP SUMMIT HIGHLIGHTS
Student-athletes in the 2015 GOALS study reported sleeping an average of 6 hours and 16 minutes on a typical in-season weeknight. That is down 13 minutes from what student-athletes reported in 2010 (6 hours and 29 minutes).

Shifts in self-reported sleep duration are generally similar across division and gender.
Barriers to Student-Athlete Sleep

**Athletic Barriers**
- Team practice schedules (early mornings or late nights)
- TV game times/schedules
- Competition travel

**Academic Barriers**
- Class offerings/scheduling
- Time needed to study

**Social Barriers**
- Roommates/living arrangements, dorm noise
- Social life, significant other
- Technology (Phone, Netflix, TV)
- Alcohol

**Other**
- Lack of time management skills
- Energy drinks and stimulants
- Inconsistent schedules impact routine sleep and wake time.
- Ability to manage stress
- Additional commitments (job/internship)
## Student-Athlete Physical/Mental Functioning vs. Days of Restful Sleep in the Past Week

<table>
<thead>
<tr>
<th></th>
<th>0-3 Days</th>
<th>4-5 Days</th>
<th>6-7 Days</th>
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<tbody>
<tr>
<td><strong>Tired from Physical Demands of Sport</strong></td>
<td>39%</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Tired from Mental Demands of Sport</strong></td>
<td>27%</td>
<td>14%</td>
<td>14%</td>
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<tr>
<td><strong>Performing Up to My Ability</strong></td>
<td>51%</td>
<td>56%</td>
<td>63%</td>
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**Note:** Endorsement of top two scale points (Strongly Agree, Agree) on a 6-point scale.

NCAA GOALS Study
I feel so tired from the physical demands of my sport that I struggle to find energy to do other things
(% Responding Agree or Strongly Agree – NCAA GOALS Study)

|                     | Baseball | Men’s Basketball | Football FBS|FCS | Men’s Other | Women’s Basketball | Women’s Other |
|---------------------|----------|------------------|------------|    |             |                  |              |
| **Division I**       |          |                  |            |    |             |                  |              |
|                     | 40%      | 49%              | 51%        | 53%| 37%         | 47%              | 36%          |
| **Division II**      |          |                  |            |    |             |                  |              |
|                     | 40%      | 36%              | 45%        | 32%| 33%         | 33%              | 31%          |
| **Division III**     |          |                  |            |    |             |                  |              |
|                     | 27%      | 29%              | 33%        | 22%| 22%         | 22%              | 19%          |

Note: Endorsement of top two scale points on a 6-point scale.
I am exhausted by the mental demands in my sport (% Responding Agree or Strongly Agree – NCAA GOALS Study)

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<th>FCS</th>
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<td><strong>Division III</strong></td>
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<td>16%</td>
<td>19%</td>
<td>14%</td>
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Note: Endorsement of top two scale points on a 6-point scale.
What is related to sleep?

Dual Diagnoses

- 5% (N=9,931) of respondents (student-athletes and non-athletes) reported they had been diagnosed with and/or treated for either insomnia or another sleep disorder.
- There is a large proportion who reported additional diagnoses. The tables below provide the details.
- Of those diagnosed with a sleep disorder…

<table>
<thead>
<tr>
<th>% with other diagnosis</th>
<th>Substance Abuse / Addiction</th>
<th>Depression</th>
<th>Anxiety</th>
<th>Eating Disorder (Anorexia or Bulimia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All respondents (SA and non-SA)</td>
<td>8%</td>
<td>61%</td>
<td>64%</td>
<td>12%</td>
</tr>
<tr>
<td>Student-Athletes (N=668)</td>
<td>11%</td>
<td>57%</td>
<td>60%</td>
<td>16%</td>
</tr>
<tr>
<td>Non-Athletes (N=9,123)</td>
<td>7%</td>
<td>62%</td>
<td>65%</td>
<td>12%</td>
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Injury rates in high school athletes found that sleep hours were the strongest predictor of injuries, even more so than the hours of practice.

Last 12 months Injury Rate:

Non-Athlete - 11.3%
  Satisfactory Sleep - 7.1%
  Sleep Difficulties - 14.8%

Varsity Athlete - 26.3%
  Satisfactory Sleep - 18.4%
  Sleep Difficulties - 34.4%

N=103,233       NCHA-II Spring 2011 Cohort
Among NCAA varsity athletes, having sleep difficulties is associated with a 64% increase in injury rate in women and a 123% increase in men.
Last 2 weeks High Risk Drinking Among Varsity NCAA Athletes

Women - 39.2%
  Satisfactory Sleep - 36.3%
  Sleep Difficulties - 41.7%

Men - 51.3%
  Satisfactory Sleep - 47.9%
  Sleep Difficulties - 55.4%

N=7011    NCHA-II Spring 2011 Cohort
% of Varsity NCAA Athletes with Illicit Rx Drug Use last month

Women - 12.5%
Satisfactory Sleep - 9.1%
Sleep Difficulties - 15.5%

Men - 16%
Satisfactory Sleep - 12.1%
Sleep Difficulties - 20.7%

N=7011      NCHA-II Spring 2011 Cohort
Sleep is a modifiable risk factor we have a responsibility to address.
IOC CONSENSUS MEETING ON MENTAL HEALTH IN ELITE ATHLETES (November 2018)

Elite athletes: professional, Olympic and collegiate.

Systematic literature review on mental illness in elite athletes.

Identify the scope of the problem.

Establish core clinical principles and tools, including non-pharmacologic and pharmacologic interventions.

Discuss strategies for creating an environment of mental wellness and resiliency in elite sport.

Delineate future directions for practice and research in the field.
IOC TOPICS

- General prevalence.
- Sleep.
- Depression and suicide.
- Anxiety.
- PTSD.
- Eating disorders.
- ADHD.
- Bipolar and psychotic disorders.
- Neuropsychiatric aspects of concussion.
- Addiction.
  - Substance use and abuse.
  - Gambling.
- Stressors specific to elite athletes.
- Mental health concerns in Paralympic athletes.
- Treatments and interventions.
  - Non-pharmacologic.
  - Pharmacologic.
- Creating an environment that supports mental well-being and resilience.
THANK YOU

Contact info: Brian Hainline

ssi@ncaa.org
@ncaa_ssi
www.ncaa.org/ssi