

Interprofessional Team Collaboration for Routine and Emergent Mental Health Concerns Among Collegiate Student-Athletes: A Case Series from the Association for Athletic Training Education Research Network

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Collegiate student-athletes experience an increasing number of mental health concerns. To help address these concerns and provide high-quality health care for student-athletes, institutions of higher education are being encouraged to create interprofessional health care teams that are specifically dedicated to managing mental health. We interviewed 3 interprofessional health care teams who collaborate to manage routine and emergency mental health conditions in collegiate student-athletes. Teams represented all 3 National Collegiate Athletics Association (NCAA) divisions and included athletic trainers, clinical psychologists, psychiatrists, dietitians and nutritionists,

social workers, nurses, and physician assistants (associates). The interprofessional teams indicated that the existing NCAA recommendations helped to solidify members and roles of the mental health care team; however, they all believed their teams would benefit from more counselors and psychiatrists. Teams had different mechanisms for referral and accessing mental health resources on their campuses, which may make on-the-job training for new members of the team an organizational necessity.

Key Words: collaborative practice, suicidal ideation, depression, anxiety

Key Points

- The COVID-19 pandemic has changed much of the way athletic health care teams manage student-athletes with routine and emergency mental health concerns.
- Regardless of the institutional resources, athletic health care teams need more licensed mental health counselors and easier access to psychiatrists.
- Interprofessional mental health care teams operate differently across organizations. Immediately upon onboarding new personnel, the organization should provide training to ensure that new members of the team are apprised of the mental health emergency action plan, given the rising risk of mental health emergencies.

In both 2020 and 2022, the National Collegiate Athletics Association (NCAA) conducted student-athlete well-being studies that indicated elevated mental health concerns.¹ The data revealed rates of mental exhaustion, anxiety, and depression 1.5 to 2 times higher than before the pandemic.¹ Prepandemic, collegiate student-athletes faced stressors beyond those of the non-student-athlete population and experienced a significant number of mental health concerns, including drug and alcohol use, eating disorders, and suicide.² To help address these concerns and provide quality health care for student-athletes, institutions of higher education have been encouraged to create interprofessional health care teams that are specifically dedicated to managing mental health.² Since the NCAA published these recommendations, researchers³ have identified that not all programs

developed mental health policies for both emergency and routine mental health concerns. Moreover, a disconnect appears between how student-athletes experience mental health concerns and accessibility of resources and how athletic trainers (ATs) perceive student-athlete experiences.^{4,5}

The purpose of this level 2 clinical case series report was to evaluate 3 interprofessional athletic mental health care teams who collaborate to manage routine and emergency mental health conditions in collegiate student-athletes (Table 1).

CASE PRESENTATION

Case 1 (NCAA Division I)

In case 1, the primary athletic mental health care team consisted of 2 ATs, a clinical psychologist, a psychiatrist,

Table 1. Case Demographic Information

Characteristic	Case 1	Case 2	Case 3
Institution type	Private	Private	Private
Community type	Urban	Rural	Suburban
Gender demographic	Mixed gender	Mixed gender	Mixed gender
Undergraduate enrollment	16 000	1700	1100
Athletic health care model	Student health services model	Athletics model	Athletics model
Interprofessional mental health care team model	University employed	University employed	University employed

and a registered dietitian nutritionist (self-described). Approximately 10 additional members included supervisors such as the team physician and director of mental health. The team was facilitated through student health services and cared for 700 varsity athletes, about 1000 to 1200 club sport athletes, and 300 Reserve Officers' Training Corps participants. The team has existed for several years, with about 3 providers (2 ATs and the director of mental health) participating since its inception in 2006 but has evolved and expanded over time. The impetus for change was a rising number of cases and improved professional development around mental health.

The team described how each patient case requires varying involvements of different providers. For instance, if the presenting concern was related to an eating disorder, ATs, the registered dietitian nutritionist, a sport nutritionist, and a gastrointestinal specialist may be involved along with mental health providers. The team regarded the fluidity of team structure and ability to provide specialized care as a strength of their system. Another identified strength was the whole-person approach the university took to resource all students with health care, including the student-athletes.

Upon arrival to campus as new students, student-athletes were screened for mental health concerns and oriented to all student-health resources, including mental health. The phone number for campus mental health resources was available on the back of each student identification card.

Similar to many universities, need outpaced staffing, but the team indicated they could see routine patients within 2 to 3 days, and a member of the team or another member of student health services could see all emergent cases immediately. The team had a formal process, including a mental health emergency action plan, for referring patients with routine and emergent mental health situations, which incorporated support and facilitation from the AT to the mental health unit. The team used a shared electronic medical record, which facilitated real-time communication, including follow-up care and return-to-play decisions.

Case 2 (NCAA Division II)

In case 2, the primary athletic mental health care team consisted of 2 ATs, 1 social worker, and 2 licensed counselors. Five additional ATs, 2 additional counselors, and a physician assistant (associate), who served as the director of health services, were included. The providers in case 2 cared for 23 varsity sports and 3 club sports totaling 600 to 650 student-athletes. The director of counseling services had been working at the organization for 15 years and the director of athletic training for 20 years. Counseling resources have grown over the 15 years from 1 provider to 4. The impetus behind formalizing the athletic mental health care team was the development of the NCAA policy and an increase in patient needs due to the COVID-19 pandemic.

The team reported student-athletes were screened annually, which helped them identify individuals in need of routine resources. Furthermore, student-athletes received an orientation to available mental health resources each year, including substance use education and the availability of sexual assault resources. Although the team had a mental health emergency action plan in place, they indicated they relied heavily on the longstanding relationships and collegiality among team members to deliver care, even in emergent situations. The ATs described themselves as strong facilitators of care, and the counseling team relied heavily on the ATs due to their proximity to the student-athletes, both practically and relationally. The team's strength was in the trust established among providers, a desire to put the patient first, and respect and understanding from athletics personnel. The team stated that their decisions to restrict sport participation were never in question, and they consistently felt confidentiality was maintained without outside pressure from coaches.

The team indicated a need for at least 2 more licensed counselors, and they would benefit from providers who were familiar with sport-related pressures.

Case 3 (NCAA Division III)

In case 3, the primary athletic mental health care team consisted of 3 ATs, 3 counselors (1 part time), 2 nurses, and a physician assistant (associate). Although the extended team included their team physician, this person had little involvement with mental health concerns. The team facilitated care for 450 to 500 student-athletes. The team was prompted to integrate the NCAA best-practice recommendations into the system after experiencing several concerning mental-health-related events. The rising number of student-athletes with mental health concerns also prompted expansion of the team through grant funding.

The team screened student-athletes annually and reported an increase in disclosures as mental health education, normalization, and support for student-athletes improved. The team reported that each AT in the system took a slightly different approach to referral, but the mental health providers indicated that both the ATs and coaches seemed aware of student-athlete resource needs. The team had a mental health emergency action plan that included 24/7 access to a crisis call center as well as campus police, resulting in immediate referral to an on-campus counselor during normal business hours. The team also shared that many emergency mental health concerns have resulted in 911 calls, ultimately accessing resources outside the team for support. The team described a need for a registered dietitian and a psychiatrist as well as improved execution of follow-up care and communication, particularly with routine referrals. The team was anticipating an upcoming move to a shared

electronic medical record to improve communication among team members.

Comparative Outcomes

All 3 cases demonstrated forethought about mental health services before the recent increase in student-athlete and general student need. Teams that demonstrate strong communication skills and trust are well positioned to serve their student-athlete populations. Easier access to psychiatrists and other prescribing providers was an increasing requirement for their patients with mental health concerns, regardless of perceived or actual resources at the different levels of NCAA institutions. Openness and transparency through education and communication with patients and coaches regarding mental health concerns seemed to improve reporting and decreased the stigma surrounding mental health care, which should result in improved outcomes for student-athletes. Overall, communication and trust yielded the greatest collaboration for managing routine and mental health concerns among collegiate student-athletes.

DISCUSSION

Before the COVID-19 pandemic, ATs reported seeing 2 ± 3 emergency mental health situations and 19 ± 27 routine mental health situations per year.³ With mental exhaustion, anxiety, and depression at rates 1.5 to 2 times higher than before the pandemic,¹ it is reasonable to assume the rates of cases being seen by ATs are higher than previously reported. In each case, programs were able to adapt the resources they had available for the individual patient. Although student-athletes face the same stressors as the rest of the student population, additional concerns of substance use, aggression, injury, and multifactorial pressures associated with sport participation exist.² One of the most common mental health conditions among the student-athlete population is anxiety disorders,² which was reported in our cases. Anxiety disorders can be exacerbated by the same factors that regularly affect the student-athlete population. In addition, COVID-19 heightened anxiety within this population due to concerns about not being ready for sport participation, an inability to access resources, and decreased motivation.⁶ Depression risks in student-athletes include their response to injury, end of a career, and overtraining.² For some student-athletes, the end of their career came earlier than expected with the onset of the COVID-19 pandemic. Being aware of whole-person factors and adapting the interprofessional team processes to meet patient-specific needs and environmental demands was a strength noted in the cases.

Student-athlete mental health care needs are not division or geographic specific. The 3 cases represented NCAA divisions across the country, all with similar student-athlete needs. With the growing rate of death by suicide among collegiate student-athletes across NCAA divisions in the beginning of 2022,⁷ no institution should be exempt from taking mental health care seriously and promoting the development or continuation of interprofessional mental health care teams. The mental health care team should at minimum consist of the primary athletics health care providers (ATs and team physician) and a licensed practitioner

Table 2. Template for Mental Health Care Resource Card

National Resources
National Suicide and Crisis Lifeline: 988
National Crisis Text Line: Text BRAVE to 741741 (text)
Trevor Project LGBTQ Crisis Line (text): Text START to 678678 (text)
Trevor Project LGBTQ Crisis Line (call): 1 (866) 488-7386
BlackLine Crisis Line (call or text): 1 (800) 604-5841
University Resources
[University] Student Counseling Center: [insert your number]
[University] Police and/or Public Safety: [insert your number]
Local Resources
24/7 Local Crisis Line: [insert your number]
Psychology Urgent Care Clinic Walk-in Clinic: [insert your number, hours of operation]

Abbreviation: LGBTQ, lesbian, gay, bisexual, transgender, queer.

who is qualified to provide mental health services. Qualified mental health providers include clinical or counseling psychologists, psychiatrists, licensed clinical social workers, psychiatric mental health nurses, licensed mental health counselors, licensed family or marriage and family therapists, and primary care physicians with competence to treat mental health disorders.² Adding others to the interdisciplinary team, depending on the patient's presentation, only strengthens the services provided.⁸ Beyond the mental health care providers already mentioned, registered dietitians and nutritionists, campus disability services, and life skills support staff can also be supportive members of the team.¹

In addition to national resources, each team identified the importance of educating student-athletes on local resources. Resources that are in proximity and feasible can potentially encourage use of these services, with the intent to increase self-referral and early intervention.² A template with national resources as well as an opportunity to insert local resources for individual institutions, is provided in Table 2.

All teams discussed differences in procedures for routine and emergent mental health concerns. Rehearsal and previous experiences involving all members of the interdisciplinary team allowed for trust and ease of implementation. Even at institutions with fewer resources or available mental health providers, open communication promoted timely and appropriate care. Mental health education efforts should also include coaches, administrators, and other athletics personnel who interact with student-athletes and may be required to enact these procedures. Annual training for all those who provide care or promote environments that support mental well-being and resilience (eg, coaches, administrators, and other athletics personnel) fosters an environment that centers on the well-being of the student-athlete and reduces possible tension about any adverse responses for seeking mental health care.⁸

CLINICAL BOTTOM LINE

Interprofessional teams with trust, experience, and clearly communicated plans were effective in managing routine and emergency mental health situations. Although the NCAA best-practice recommendations served as an impetus for programs to enhance their interprofessional athletic mental health care teams, the COVID-19 pandemic exacerbated the needs of these organizations, placing a heavy burden on

counseling providers and services at all levels of the NCAA. Institutions should continue to support those units, as both the student-athlete and general student populations are requiring these resources at steadily growing rates.

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REFERENCES

1. NCAA student-athlete well-being study. May 2022. National Collegiate Athletic Association. Accessed November 15, 2022. https://ncaaorg.s3.amazonaws.com/research/other/2020/2022RES_NCAA-SA-Well-BeingSurvey.pdf
2. Mind, body and sport: understanding and supporting student-athlete mental wellness. Student Affairs Administrators in Higher Education.

Published 2014. Accessed November 15, 2022. https://www.naspa.org/images/uploads/events/Mind_Body_and_Sport.pdf

3. Young J, Neil ER, Granger K, Walker SE, Cadburn JL, Eberman LE. Preparedness, confidence, and best practices in preventing, recognizing, managing mental health cases in NCAA institutions. *J Athl Train*. 2020;58(2):156–162. doi:10.4085/129-20
4. Kirby JL LR, Stover RM, Eberman LE, Neil ER, Winkelmann ZK. Attitudes and barriers towards seeking behavioral health services in tandem from collegiate athletic trainers and student-athletes [abstract]. *J Athl Train*. 2022;57:6(suppl):S-246.
5. Learn RM EL, Neil ER, Kirby JL, Stover RM, Winkelmann ZK. Collegiate athletic trainers' and student-athletes' collaborative management of mental health conditions [abstract]. *J Athl Train*. 2022;57:6(suppl):S-47.
6. Chandler AJ, Arent MA, Cintineo HP, Torres-McGehee TM, Winkelmann ZK, Arent SM. The impacts of COVID-19 on collegiate student-athlete training, health, and well-being. *Trans J Am Coll Sports Med*. 2021;6(4):e000173. doi:10.1249/TJX.0000000000000173
7. Hensley-Clancy M. Reeling from suicides, college athletes press NCAA: 'This is a crisis.' *Washington Post*. May 19, 2022.
8. Interassociation consensus document: mental health best practices, understanding and supporting student-athlete mental wellness. National Collegiate Athletic Association. Revised January 2020. Accessed November 15, 2022. https://ncaaorg.s3.amazonaws.com/ssi/mental/SSI_MentalHealthBestPractices.pdf

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