

Bridging the Gap: Leveraging Point-Of-Care Data to Improve Mental Health Services for Undergraduate Performing Arts Students

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Abstract

The performing arts industry places unique pressures on individuals, often leading to higher rates of mental health issues. Minimal information exists about how to create on-site intervention strategies for undergraduate performing art students. Athletic trainers at a dedicated university performing arts campus searched their electronic medical record (EMR) for reports of mental health-related issues in the dance, musical theater, and theater undergraduate students. The data analysis revealed anxiety and overstress conditions were primarily reported among dance and musical theater students. After communicating with stakeholders, the athletic trainers implemented a multi-faceted mental health intervention strategy for academic majors across the performing arts campus. The athletic trainers worked with the stakeholders and university counseling offices to destigmatize mental health conditions, reduce barriers, and implement mental health referrals and counseling across the campus. Reviewing internal data and listening to patient concerns enhanced mental health services in this undergraduate performing arts student population.

Keywords: Counseling, destigmatization, electronic medical record

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Key Points & Take-Home Messages:

- 1) Anxiety and overstress-related mental health conditions are prevalent in women undergraduate dance and musical theater students.

- 23 2) The process of analyzing and interpreting point-of-care data can enable the development
24 of patient-centered care.
- 25 3) Athletic trainers can leverage campus resources to facilitate the delivery of mental health
26 and counseling services to particular patient populations.
- 27 4) By establishing a strategy to engage stakeholders, athletic trainers can identify and
28 overcome organizational obstacles and perceived barriers to implementing patient-
29 centered and convenient mental healthcare.
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Clinical Problem

Participants who engage in externally judged aesthetic activities are at a significantly higher risk of developing mental health conditions,¹ disordered eating,^{2,3} and low energy availability⁴ which can lead to relative energy deficiency (RED) and potentially negatively impact career development. Students in the visual and performing arts have been reported to have a higher incidence of mental health concerns compared to other student peer groups on campus.⁵ Additionally, approximately 30% of student dancers have self-reported a mental health issue as their most significant health problem, and a high proportion of these individuals expressed concerns with general anxiety, stress, and constant tiredness.¹ It has also been reported that gender-diverse students in marching band are more prone to similar mental health concerns, with a significant increase in the risk of depression.⁶

Despite the high prevalence of mental health concerns within the college-aged and performing arts populations, many of these individuals avoid seeking care or professional assistance to improve their own mental health.^{7,8} While there are many potential reasons an individual may avoid seeking care, including the societal stigma associated with seeking mental health services⁷, there are organizational initiatives that a healthcare team could take to overcome extrinsic barriers preventing college-aged students from accessing mental health services. These barriers could be mitigated by analyzing and addressing the specific needs of the population and addressing the identified concerns. Previous research has identified that marching band performers have reported a lack of knowledge of services provided, lack of time to seek services, and limited free time as primary barriers to seeking mental health care.^{6,7} While these studies specifically investigated college-aged marching band students, other students in the visual and performing arts (e.g., dance, theater, musical theater) face similar time demands honing their

skills both in class and out of class, during rehearsals and performances, which could potentially serve as similar barriers to seeking mental health care.

In response to the high prevalence of mental health concerns and previously identified barriers in performing artists, it has been recommended that this population be educated regarding the signs and symptoms related to mental health and be informed on the services available within the care team to facilitate supporting these needs.^{9,10} Despite the previous research that describes the prevalence of mental health-related conditions in performing artists,^{6,7,9-12} there are no clinically-based reports that directly describe the development of an on-site intervention strategy to address previously identified barriers in seeking mental health support in an undergraduate performing arts population. Therefore, we examined point-of-care data from the performing arts athletic training clinic's electronic medical records (EMR) to determine the prevalence of reported mental health conditions in the performing arts population. We then used this information to assess the need for an intervention strategy to address the perceived mental health needs while identifying potential barriers that could assist this specific population in obtaining mental health services.

Environment

In 2019, a regional Carnegie M1 (larger master's college and university) comprehensive 4-year public university started an on-site performing and visual arts athletic training clinic in collaboration with a regional hospital system's orthopedic and sports medicine department to provide athletic training services to the undergraduate performing and visual arts students. This athletic training clinic was staffed by one full-time athletic trainer hired through the regional hospital system, one part-time graduate assistant athletic trainer hired by the university, and an

athletic training faculty member who provides general administrative and operational oversight of the clinic.^{13,14} This clinic operates within the medical model^{15,16} and provides athletic training services during designated treatment times in the morning and afternoon. Additional evening and weekend services are provided during dress rehearsals and university-sponsored performances. This athletic training clinic is housed at the university's dedicated satellite performing arts campus and contains residential housing, dining services, classrooms, rehearsal and performance facilities, and a small recreation center. This satellite campus is uniquely designed to be an all-inclusive and self-sustained learning and living environment for the university performing and visual arts student community. This satellite campus has approximately 220 students per year enrolled in bachelor's degree programs in the visual or performing arts who are eligible to receive medical care and services from the clinic's athletic trainers. At the university level, all students enrolled in courses, regardless of location, receive access to the university's student healthcare, counseling, and mental health services. However, these services are provided on the main campus, which is approximately 2 miles away from the satellite performing arts campus.

The clinic athletic trainers identified three general areas of potential stakeholders for this initiative utilizing an adaptation of the 3-step plan for engaging stakeholders in the research process.¹⁷ The stakeholder groups were identified as: 1) performing arts students, 2) the university-associated healthcare operations, and 3) academic affairs (Table 1). The student stakeholders were identified as those who were seeking a bachelor's degree in a visual or performing arts field of study and who are actively involved in refining their skills and preparing for future success. These student stakeholders are interested in maintaining their mental health and developing safe and effective coping mechanisms that can be used during their academic and professional careers.^{1,12,18} The second category of stakeholders is the University-associated

healthcare operations team comprised of the clinic athletic trainers, the physician identified as the medical director of the clinic from the regional hospital system, and the University student healthcare and counseling services. As healthcare professionals, they have the desire to determine the prevalence of mental health conditions within the performing arts student population and establish preventative and intervention strategies to facilitate comprehensive whole-person healthcare that accounts for multiple dimensions of the patient's well-being.^{19,20}

The final stakeholders are the academic stakeholders who teach, mentor, and oversee the performing arts students enrolled in these programs. The academic affairs stakeholders are interested in seeing the students succeed academically and obtain gainful employment in the performing arts sector, contributing to their successful alumni base and future recruitment efforts. Because the stakeholders share common goals, they are all interested in understanding the incidences of mental health conditions among the performing arts population and working towards intervention strategies that would be appropriate and accessible to this patient population.

Variables

We defined a performing arts undergraduate student with a mental health condition as one in which a healthcare provider (e.g., athletic trainer or physician) noted that the mental health concern was the primary or contributing reason for the patient's interaction in the athletic training clinic. However, these mental health concerns could have been diagnosed or undiagnosed previously. The athletic trainers documented these patient healthcare interactions in the EMR. Each mental health condition was grouped according to the corresponding disease or disorder classification within the EMR.

Strategy

During regular clinic operations in the 2019-2020, 2022-2021, and 2021-2022 academic years, the on-site athletic trainer documented all patient medical encounters that included the diagnosis, treatment, therapy, interventions, and referrals in an internet-based EMR (SportsWareOnline Injury Tracking Software, Stoughton, MA). Documentation occurred in real-time when the medical services were performed. During these academic years, we extracted deidentified and HIPAA-compliant injury data devoid of protected health information²¹ from the EMR before cleaning the data relative to our mental health research question. First, we eliminated all patients who do not engage in live on-stage performance activities (e.g., directing and stage design) to focus on undergraduate students required to complete live performance-based activities in front of audiences (e.g., dance, musical theater, theater). Next, we organized the dataset according to the disease or disorder classification within the EMR and eliminated all non-mental health-related conditions. Finally, we separated the performing arts students into man and woman gender identity cohorts for grouping purposes. We used Microsoft Excel ((Microsoft Office 365, Microsoft Corporation, Redmond, WA) to analyze the data for descriptive statistics.

Findings

During the 2019-2022 academic years, 661 undergraduate performing arts students were eligible to receive medical care from the on-site athletic training clinic, averaging approximately 220 students per year (Table 2). There were no reports of mental health-related conditions among the male undergraduate performance arts students in dance, musical theater, and theater majors, and no reports of mental health-related conditions among female theater students made to the clinic athletic trainers. Among the female undergraduate performing arts students, only those who majored in dance ($n = 15$) and musical theater ($n = 6$) reported a mental health-related condition to the clinic athletic trainers (Table 3). Of the 21 reported incidents of psychological conditions, anxiety ($n = 12$) and overstress ($n = 6$) were the most common, with anorexia ($n = 1$), depression ($n = 1$), and generalized fatigue ($n = 1$) also noted. Of the 132 undergraduate female dance majors, there were 15 reports of mental health-related conditions, a prevalence rate of 11.4%. Of the 200 undergraduate female musical theater majors, there were 6 reports of mental health-related conditions, a prevalence rate of 3%.

Outcome

The findings from our EMR search indicated that dance and musical theater majors who identified as women displayed the highest prevalence rate of mental health conditions and that a majority of these conditions related to anxiety and overstress, with small amounts of depression, generalized fatigue, and anorexia also reported. After recognizing these figures, the clinic athletic trainers made appointments with the college dean, the department chair, and the faculty directors. The athletic trainers presented the information in a similar layout as Table 2 and Table 3. After introducing the information to the dean, chair, and faculty, it was further shared with the respective majors' student leaders and individual performing arts students who reported mental

health concerns previously to the clinic athletic trainers. These open discussions assisted the clinic athletic trainers and stakeholders in devising patient-centered methods and identifying barriers to addressing the high prevalence of mental health conditions in these student populations.

The first action taken by the clinic's athletic trainers was to purposefully destigmatize mental health issues, particularly anxiety, depression, and generalized fatigue. The athletic trainers developed a dedicated daily one-hour "drop-in" block designed to encourage the students to come to the clinic and discuss their mental health concerns. This allowed the athletic trainers to distribute generic handouts and pamphlet information provided by the university counseling clinic to the students regarding mental health conditions and the supportive resources available to the university students. While these drop-in times were conceived to address traditional stressors in the performing arts population (e.g., performance anxiety and stress management)¹, there were no off-limits topics, and the patients could talk to the athletic trainers about any aspect of their mental health. If a significant concern was identified outside the athletic trainer's scope of practice, the student was referred to the university counseling center for professional care and intervention. However, performing arts students whom the athletic trainers referred to the university counseling center reported they experienced excessive wait times to receive counseling and were required to undergo the standard initial screening process for all new patients. Additionally, some students discussed that external factors (e.g., transportation, class schedules, and rehearsal times) prevented them from seeking care on the main campus, and they were reluctant to travel to the main campus even if they could obtain an appointment. These unexpected barriers required a solution so that mental health intervention efforts could occur.

To address these reported issues, the athletic trainers collaborated with the college dean, the department chair, the faculty directors, and the University's mental health and counseling services to provide group counseling sessions on the satellite performing arts campus. These services were provided by a counseling clinic operated by the Department of Psychology graduate students as part of internship/practicum requirements. The services were provided free of charge to the students and designed to be an adjunct to the mental health and university counseling services. This provided a method to screen individuals needing additional referrals or advanced support. Because this service already existed, there were no additional funds required to provide the personnel; there was only a need to bring the clinic to the students at the performing arts campus.

Additionally, if a student was identified in the group session as needing additional mental health support, they were fast-tracked to obtain individualized counseling care and did not have to undergo the traditional waitlist or screening process. These changes lessened the transportation barriers, reduced the wait time, and allowed students to receive individualized care from a more patient-centered perspective. Due to the nature of the initiative, which provided limited anonymity, only those present within the group sessions were aware of the attendees. Consequently, the researchers were unable to track the attendance of individuals in these group sessions or determine who obtained more individualized care from the university counseling providers. While the objective of this project was to address and overcome an identified barrier to seeking mental health concerns within this population, we were unable to accurately assess the effectiveness of this initiative utilizing standard quality improvement processes because of patient privacy concerns. However, the overall design of this mental health initiative could

theoretically be adjusted and implemented with other interventions needed within athletic training practice.

Lessons Learned

While we acknowledge that the athletic trainers may not have identified every individual with a mental health need, it is essential to analyze the data within the patient population and seek patient-centered strategies that will directly address the identified concerns of that group. We addressed several challenges throughout our implementation efforts. The first challenge was educating the students and faculty that there was a high prevalence of reported anxiety and stress-related mental health conditions, not eating disorders, in this performing art student population, particularly among the dance majors. This contrasts with the assumptions made by the performing arts students and faculty because eating disorders are of concern in aesthetic activities like dance.²²⁻²⁴ This was accomplished by analyzing and presenting the EMR data to the stakeholders to provide an overview of the conditions and reported mental health symptoms. The second challenge was the necessity to destigmatize mental health conditions, emphasize prevention, and ensure that the outreach efforts were disseminated to all performing art undergraduate students, not specifically targeting the students who used the clinic for medical services. These destigmatization efforts and dissemination methods were meant to benefit all performing artists, regardless of their academic major or history of using the athletic training clinic services. To prevent the perception of targeting particular majors or students, all of the flyers and infographics that described the intervention efforts were non-specific to any major or type of student and utilized generic wording and inclusive imaging. These materials were posted throughout the performing arts campus, where all students attend classes. Additionally, the athletic trainers asked the faculty for all performing arts classes to share the dates and times of

the clinic drop-in mental health times and the group therapy sessions through the online learning management system (LMS), and the athletic trainers encouraged the faculty to disseminate the information verbally during class and rehearsal sessions.

The final challenge was identifying a suitable physical location to offer the group counseling sessions that provided a welcoming and non-threatening environment while protecting student anonymity. Because this performing arts campus is two miles from the main university campus where the student counseling center is located, the athletic trainers and stakeholders desired that the group sessions be held at the performing arts campus to continue the unique sense of belonging and community inherent in this population. After performing a facility analysis of available minimally used spaces during the group counseling time and getting input from all stakeholders, it was determined that the most appropriate site for the group counseling sessions was the “green room” in the performance hall, which is only utilized during shows and productions. To maximize and promote student anonymity, a staff member was charged with unlocking a private entry door separate from the main hallway to the “green room” utilized for the group therapy sessions, bypassing the common student and faculty areas. These protocols best ensured that the identity of the individuals who attended the group therapy sessions was only known to the counselors and the students in attendance.

For clinicians who have a desire to begin coordinating mental health services for their patient populations, the following strategies are recommended: 1) Analyze the distinct mental health needs of the patient population to develop inclusive patient-centered solutions that address the concerns of every current and potential patient at the clinical site, 2) Obtain input from the patients who would use the services and involve them in the intervention development, and 3)

255 Identify pre-existing services, efforts, and activities currently available and consider how to
256 adjust their function to provide the desired effects in your clinical practice setting.

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Table 1: Stakeholder Identification Categories

Performing Arts Students	Healthcare Operations	Academic Affairs
Performing Arts Students	Performing Arts Athletic Training Clinic Regional Healthcare facility Campus Counseling Clinic Clinic Coordinator On-Site Athletic Trainers Student Health Clinic	Deans Department Chair Faculty And Staff

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Table 2. Annual undergraduate student population of dance, musical theater, and theater students eligible for athletic training services through the on-campus clinic.

Performance Genre	Academic Year 2019-2020		Academic Year 2020-2021		Academic Year 2021-2022		Total by Performance Genre	
	Woman	Man	Woman	Man	Woman	Man	Woman (% of Population by Performance Genre)	Man (% of Population by Performance Genre)
Dance	42	1	42	2	48	1	132 (97%)	4 (3%)
Musical Theater	61	25	64	27	75	19	200 (74%)	71 (26%)
Theater	42	35	51	37	53	36	146 (57%)	108 (43%)
Grand Total (% of Population)							478 (72%)	183 (28%)

Table 3. The recorded women performing artists mental health conditions reported by performance genre between 2019-2022.

Rank	Types Of Injuries	Woman Dance	Woman Musical Theater	Woman Theater	Total
1	Anxiety, General Medical, Psychological	8	4	0	12
2	Overstress, General Medical, Psychological	5	1	0	6
3	Anorexia Nervosa, General Medical, Psychological	1	0	0	1
4	Depression, General Medical, Psychological	1	0	0	1
5	Fatigue, General Medical, Psychological	0	1	0	1
	Total:	15	6	0	21

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