Journal of Athletic Training 2024;59(5):438–446
doi: 10.4085/1062-6050-0329.23

www.natajournals.org

Commentary

A Roadmap for Sustainable Community-Engaged Partnerships in Athletic Training and Using a Traveling Athletic Training Camp as an Implementation Strategy

Jessica Wallace, PhD, MPH, LAT, ATC*; Mary Margaret Williamson, MS, LAT, ATC*; Danae Delfin, PhD, LAT, ATC, CSCS†; Haleigh Gray, PhD, SCAT, ATC‡; Jeri Zemke, PhD, LAT, ATC*; Shaketha Pierce, MEd, LAT, ATC§; Emily Jones, LAT, ATC*; Kysha Harriell, PhD, LAT, ATC||

*Department of Health Science, Athletic Training Program, University of Alabama, Tuscaloosa; †School of Physical Therapy and Rehabilitation Sciences, Morsani College of Medicine, University of South Florida Health, Tampa; ‡College of Health Sciences, Charleston Southern University, SC; §Newman Smith High School, Carrollton, TX; ||Department of Kinesiology & Sport Sciences, School of Education and Human Development, University of Miami, Coral Gables, FL

Improving access to athletic trainers and increasing diversity in the profession have been major goals of the Strategic Alliance, with a particular interest in the secondary school setting. Within many marginalized communities, individuals are often faced with a lack of resources, high rates of poverty, and limited access to health care. This social and economic climate often extends to inequitable athletic training services and patterns of disparate health. Widely used and recognized strategies to cultivate diversity and address health inequities include community-engaged partnerships; however, these approaches are not well implemented across the athletic training discipline. Successful community-engaged partnerships link communities and universities, and they are rooted in intentionality to address intermediate and long-term health equity outcomes. Athletic training professionals and scholars frequently encounter gaps in resources and process-oriented methods to participate in community-engaged efforts that could include a roadmap or pathway to follow. To bridge this gap, our aims were 2-fold: (1) to disseminate a roadmap for building sustainable community-engaged partnerships in athletic training with the intent of promoting diversity, equity, inclusion, and social justice across athletic training education, research, and professional service and (2) to demonstrate how the roadmap can be implemented using a community-based athletic training education camp as an example. Implementation of the athletic training camp using the roadmap took place at secondary schools where community-engaged partnerships have been established throughout a geographic region known as the Alabama Black Belt, a region burdened with poor health outcomes, limited athletic trainer presence, and lower quality of life, exacerbated by racial and socioeconomic inequalities. Implementing this roadmap as a strategy to build sustainable community-engaged partnerships offers an innovative, interactive, and effective approach to addressing community needs by exposing secondary school students to the athletic training profession, advancing equitable athletic training research practices, and upholding and promoting the principles of diversity, equity, inclusion, and social justice in athletic training education.

Key Words: health equity, community-engaged practice, diversity, social justice, secondary schools

Key Points

- Community-engaged partnerships in athletic training can be built and maintained using a strategic roadmap.
- A school-based athletic training camp in the community can be an innovative and effective approach to educating young people about the athletic training field while upholding and promoting the principles of diversity, equity, inclusion, and social justice in athletic training education.
- By bridging the health care knowledge and exposure gap in disinvested communities using processes such as the community-engaged roadmap, a new generation of health care professionals may be nurtured.

Respected health organizations such as the National Institutes of Health and the National Academy of Medicine have been supportive of promoting diversity in the health care workforce for some time, citing improved patient outcomes and reduced racial health disparities as primary motivators.[1–3] The Strategic Alliance, and specifically the National Athletic Trainers' Association (NATA), have supported the diversification of the athletic training workforce and have taken measures to promote diversity, equity, and inclusion among its members.[4]

However, recent diversity statistics regarding NATA membership demonstrate a need for increased efforts to develop a workforce representative of the patient population it serves. As of April 2021, fewer than 20% of NATA members identified as part of a minoritized racial or ethnic group, and only 12.5% of NATA leadership identified as other than White.[5] The NATA's Ethnic Diversity Advisory Committee (EDAC) was formed to identify and address issues relevant to ethnically diverse populations to better serve the needs of both members and their patient populations. The NATA's EDAC aims to advocate for cultural diversity, promote athletic trainers (ATs) as culturally competent leaders, and facilitate grants for educational institutions that seek to advance diversity within the profession.[6]

An area of particular interest and emphasis for improvement is the secondary school setting, where many patients first interact with ATs as a layer of community health. Previous researchers found that only 70% of US secondary schools had access to AT services: only 37% had full-time ATs and 30% had no AT services at all.[7] A 2019 study demonstrated that 69% of public and 55% of US private schools had some degree of access to ATs, of which 54% and 44%, respectively, employed full-time ATs.[8] Earlier investigators showed that counties of lower median household income had a larger percentage of secondary school students eligible for free or reduced-cost lunches and reported less access to ATs.[9] This suggests that the socioeconomic status of a community can also play a significant role in access to AT services.[9] Significant barriers existed to providing AT access in secondary schools, including a lack of school funding and resources, athletic directors' perceptions about their power to make decisions to hire ATs, and difficulty in acquiring AT services in rural areas.[10,11] Currently, limited evidence indicates how to determine which communities are most affected by the lack of AT access; however, it is well understood that limited or a lack of access to health care in general disproportionately affects persons who face systemic barriers and inequities, such as those in low-income, marginalized, rural, and immigrant or undocumented communities.[9,10,12,13] This lack of health care access likely also includes lack of access to an AT.

To further contextualize these inequities and barriers as social determinants of health, in Alabama, a grouping of geographically adjacent counties has been historically characterized by a lack of resources, high rates of poverty and unemployment, and limited access to health care providers.[14] This region is part of the geographic area known as the *Black Belt*. Communities within the Black Belt are burdened with worse health outcomes and lower quality of life, exacerbated by racial and socioeconomic inequalities that have plagued the region for decades.[14] Important to understanding the infrastructure shortage leading to poor health and lasting inequities within the region, the Black Belt was originally named for the black soil of the cotton farming areas, but due to this historical presence of agriculture and slavery, the region remains home to a large Black population.[15] Across the Black Belt counties, the vast majority of student enrollment at most public schools is Black/African American.[16] The Black Belt counties have worse health outcomes than most non–Black Belt counties across the region, and these poor health outcomes are also causal to social determinants that include cumulative disadvantage resulting from a history of racism and racial inequality, high poverty levels, rurality, poor infrastructure, high unemployment, and less educational attainment.[15,17] Adolescents living in these communities are not exempt from the well-established hardships in the region. Within the Black Belt, upward of 40% of children lived in poverty, with more than 80% qualifying for free or reduced-cost lunch at school.[18] This is in contrast to the national average: 16% of children lived in poverty and 52% qualified for free or reduced-cost lunch.[18] Moreover, school funding across the Black Belt is among the lowest in the country. Per-pupil spending was approximately $15 000 below the estimated amount needed to support students in achieving average US test scores.[19] These high-level policy decisions and upstream social determinants of health also affect timely assistance for patients in urgent need because of medical emergencies, including access to an AT for emergencies that take place during school-based sport practices and competitions.[15,20] Examining the social and economic climate of the region illustrates the high likelihood that access to AT services is lacking.[21]

Health education and promotion research and interventions, including providing AT access, can be used to fill the gap in racial and socioeconomic health disparities caused in part by these inequalities, in particular providing access to full-time ATs in under-resourced and economically disadvantaged communities. A well-established approach is through community-engaged partnerships. Community engagement draws on community-academic partnerships that build the capacity and commitment to achieve shared objectives and tackle social and economic challenges, including community health disparities.[22] Furthermore, community-engaged partnerships that have established trust can build pathways to connect the knowledge and research of the academy with the pressing and complex problems facing communities.[22] In the discipline of athletic training, community-engaged partnerships could be widely beneficial to the interconnected and interdependent goals of diversity, equity, inclusion, and social justice embedded in the spheres of education, research, service, and professional advancement.[22] However, at present, limited conceptual resources in athletic training are available that can facilitate these partnership practices and community involvement.

To address the lack of resources available to professionals and scholars in athletic training pertaining to community engagement and process-related methods that could include a roadmap or pathway to follow, our aims for this body of work were 2-fold: (1) provide a roadmap for building sustainable athletic training community partnerships with the intention of promoting diversity, equity, inclusion, and social justice for and within the profession and its patient populations and (2) demonstrate an example of successful implementation of the roadmap using a community-based athletic training camp. The University of Alabama's Merging Athletic Training and Community Health, Equity, and Diversity (MATCHED) Lab was the recipient of an NATA EDAC Ethnic Diversity Enhancement grant to provide outreach programming to rural communities in the Alabama Black Belt that exposes students to the profession of athletic training and skill-based activities with the goal of introducing more students from diverse and socioeconomically disadvantaged backgrounds to the profession. The MATCHED Lab intentionally sought out secondary schools within the Black Belt and other rural communities

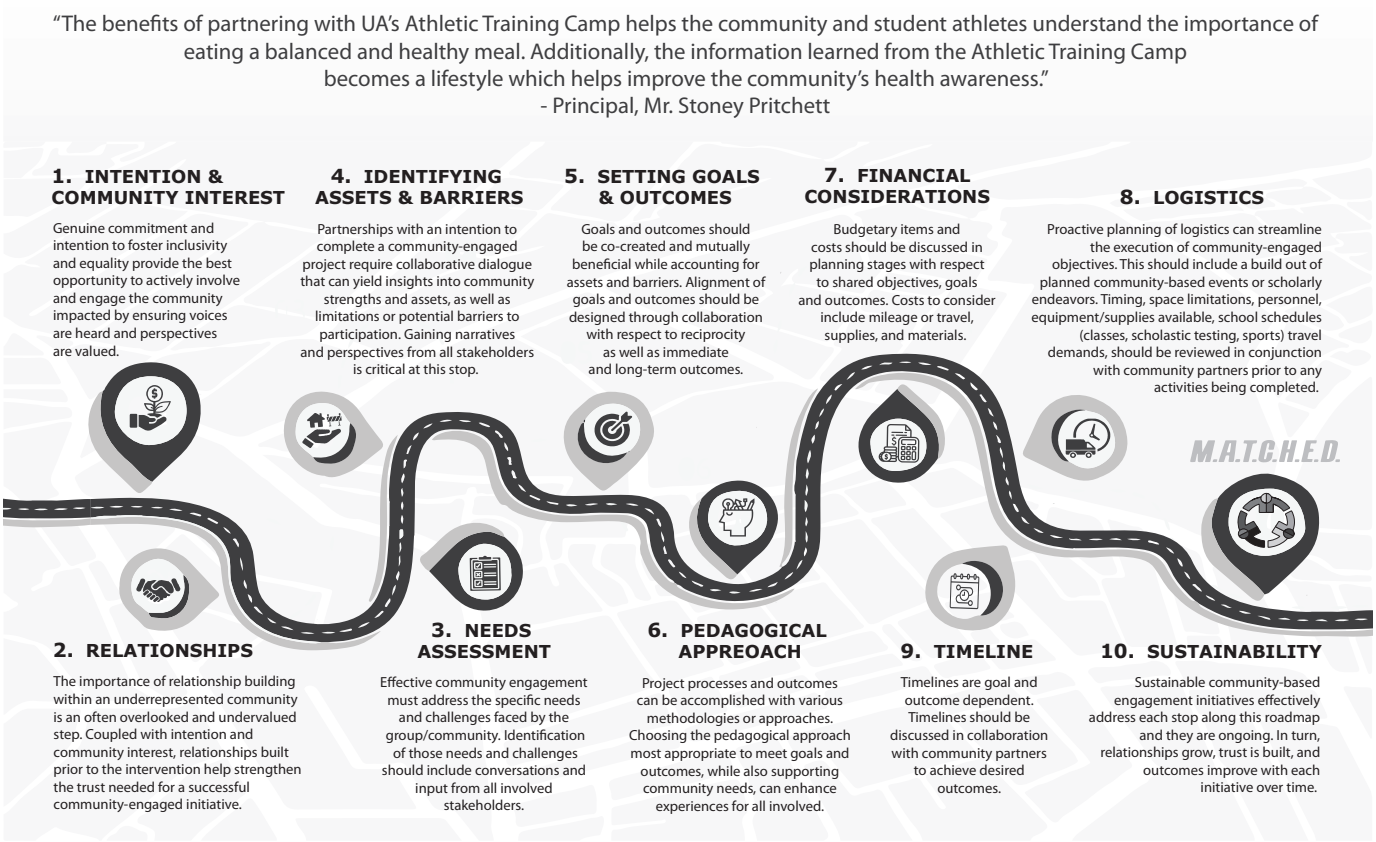

Figure. Roadmap for community-engaged partnerships in athletic training. Abbreviation: UA, University of Alabama.

that have low levels of access to ATs with the goal of building lasting community-based partnerships through athletic training. Secondary schools were offered the opportunity to host athletic training camps for their students, which were organized and run by members of the MATCHED Lab in a collaborative effort to acquaint students with the profession and meet a community need.

METHODS

Development of the Community-Engaged Roadmap

We sought to capture the effect of the MATCHED Lab program from both community participation and research lenses in the development and implementation of the roadmap. *Community engaged* was operationally defined as partnership practices built on trust and a continuum of involvement by being present.[23] A focus group was conducted to develop the community-engaged roadmap. The focus group consisted of 8 individuals who met via teleconference for a total of 70 minutes.[24] Individuals in the focus group included university faculty, graduate students, and content experts. The teleconference consisted of a facilitated interactive and discursive discussion (led by senior researcher J.W.), during which subjective perspectives were shared and major diversity, equity, inclusion, social justice, and community engagement themes were identified, sketched, and summarized. Additionally, this discussion involved a targeted focus on increasing health equity in the secondary school setting and increasing diverse representation in the athletic training profession.[25] To achieve construct validity, we developed and circulated the roadmap (Figure) to focus group members, 3 additional content experts, and 3 community leaders situated in public school settings. This community-engaged roadmap can be a model for others in athletic training to adopt or follow in other geographic regions and outlines the process of developing collaborative and mutually beneficial relationships with the goal of linking partnered goals and long-term health equity outcomes.

Key Roadmap Elements

The roadmap has 10 elements:

1. Intention and community interest. Genuine commitment and intention to foster inclusivity and equality provide the best opportunity to actively involve and engage the community affected by ensuring that voices are heard and perspectives are valued.
2. Relationships. The importance of relationship building in an underrepresented community is an often overlooked and undervalued step. Coupled with intention and community interest, relationships built before the intervention help strengthen the trust needed for a successful community-engaged initiative.
3. Needs assessment. Effective community engagement must address the specific needs and challenges faced

by the group or community. Identification of those needs and challenges should include conversations with and input from all involved stakeholders.
4. Identifying assets and barriers. Partnerships with an intention to complete a community-engaged project require collaborative dialogue that can yield insights into community strengths and assets as well as limitations or potential barriers to participation. Gaining narratives and perspectives from all stakeholders is critical at this step.
5. Setting goals and outcomes. Goals and outcomes should be cocreated and mutually beneficial while accounting for assets and barriers. Goals and outcomes should be aligned through collaboration with respect to reciprocity as well as immediate and long-term outcomes.
6. Pedagogical approach. Project processes and outcomes can be accomplished with various methods or approaches. Choosing the pedagogical approach most appropriate to meet goals and outcomes, while also supporting community needs, can enhance the experiences for all involved.
7. Financial considerations. Budgetary items and costs with respect to shared objectives, goals, and outcomes should be discussed in the planning stages. Costs to consider include mileage or travel, supplies, materials, and participant incentives.
8. Logistics. Proactive planning of logistics can streamline the execution of community-engaged objectives. This should include a buildout of planned community-based events or scholarly endeavors. Timing, space limitations, personnel, equipment and supplies available, school schedules (classes, scholastic testing, and sports), and travel demands should be reviewed in conjunction with community partners before any activities are completed.
9. Timeline. Timelines are goal and outcome dependent. Timelines should be discussed in collaboration with community partners to achieve desired outcomes.
10. Sustainability. Sustainable community-based engagement initiatives effectively address each stop along this roadmap and are ongoing. In turn, relationships grow, trust is built, and outcomes improve with each initiative over time.

Implementation Example of the Roadmap in the Community Context

Implementing the Roadmap Using the Traveling Athletic Training Camp. We implemented the roadmap using the traveling athletic training camp as a strategy to build sustainable community-based partnerships at secondary schools throughout the Alabama Black Belt. The athletic training camp was conducted after successful progress in elements 1 through 5 on the roadmap. Cross-sectional data were collected from participants to assess the implementation of the athletic training camp and support best practices for future iterations and sustainability.

Athletic Training Camp Participants. Members of the MATCHED Lab, as well as students from the professional athletic training program at the university, traveled to and conducted camps at 4 high schools in 4 Alabama counties. Participants were high school students ranging from 14 to 19 years of age who attended 1 of the partnered schools. No exclusionary criteria were applied.

Athletic Training Camp Logistics, Procedures, and Pedagogical Approach. Institutional review board approval was obtained before initiation of this program. The principal investigator and the principal at each school chosen to host a camp collectively decided to host camps during the school day to eliminate any transportation or attendance barriers for students who wanted to participate. A date, time of day, and location within the school were reserved, and parental consent forms were then distributed by school administrators or health science and career preparation teachers. Parental consent forms were required to be signed and returned for a student to be able to participate. On the date of the start of camp, participant assent was obtained before the student completed the precamp survey or engaged in the camp. After providing assent, each participant was given a "swag bag" that included supplies and materials to support successful completion of camp activities. Supplies and materials included items such as protective gloves, an elastic bandage, taping supplies, a pen or pencil, and a camp workbook.

The athletic training camp format consisted of 4 stations. The 4 stations were set up across the large space in each school (competition gymnasium or cafeteria) using school tables. Each member of the MATCHED Lab and student from the professional athletic training program were to set up and prepare a station. Materials to execute activities at each station were transported to each school from the university. The 4 stations were nutrition and hydration, taping, splinting and wrapping techniques, and acute care. The acute care station also offered a short presentation on a day in the life of an athletic training student, in which athletic training students in professional programs shared their experiences through photos or descriptions of college life. This format promoted organic conversations between camp participants and station leaders. Overall, the camp used active learning strategies such as demonstrations and think-pair-share to encourage students to make connections and gain understanding through cooperative learning based on constructivist learning theory.[26] Examples of these activities were nutrition education paired with interactive snack preparation as well as first aid, taping, and bracing stations at which students learned techniques and performed skills. Education about the roles and skills of ATs combined with exposure to practicing clinicians and students receiving athletic training education was provided in the hopes of exposing high school students to athletic training as a potential career path. Participants spent approximately 25 minutes at each station and then rotated. The entire camp programming lasted 2.5 hours and included gaining assent, material distribution, presurvey completion, camp stations, postsurvey completion, and concluding remarks.

Camp participants were asked to complete a precamp survey before the start of activities and a postsurvey once all camp activities were completed. Both the pre- and postsurveys were distributed using QR codes generated by Qualtrics, and the participants completed both instruments on their smartphones. Each survey took participants approximately 3 to 5 minutes to complete, and they were allowed to skip questions or withdraw at any time.

Table 1. Precamp Survey Responses (N = 108)

Question	No. (%)
Have you ever heard of athletic training before?	
Yes	93 (86.1)
No	15 (13.9)
Have you heard of sports medicine before?	
Yes	90 (83.3)
No	18 (16.7)
Have you seen an athletic trainer working before?	
Yes	84 (77.8)
No	24 (22.2)
Have you or anyone you know had a sports injury before?	
Yes	96 (88.9)
No	12 (11.1)
Have you ever had an athletic trainer help you or anyone you know with an injury before?	
Yes	78 (72.2)
No	30 (27.8)
Did you know that you can study athletic training in college?	
Yes	87 (80.6)
No	21 (19.4)
Does your school offer an athletic training or sports medicine class?	
Yes	24 (22.2)
No	84 (77.8)
What is the best way you learn?	
Doing things	83 (76.9)
Seeing things	23 (21.3)
Hearing things	2 (1.9)

Instruments to Assess Implementation of the Athletic Training Camp. Two surveys served as the primary instruments for outcome assessment based on established community needs, interests, and cocreated goals. The surveys were developed by the MATCHED Lab members in an effort to gain a better understanding of (1) what high school students in partnered schools knew about athletic training and quantify their exposure to the field and (2) how the athletic training camp was received by the students who participated, what they enjoyed most about the camp, and what they found useful and to gauge student interest in learning more about athletic training in the future. The pre- and postsurveys consisted of 10 items each. General descriptive statistics were completed to summarize all survey data. Analyses were completed in SPSS (version 25; IBM Corp).

RESULTS

Across the 4 schools, 140 students participated. All individuals identified as Black/African American. Overall, our response rate was 77.1%, and a response was included if a participant completed at least 1 of the 2 surveys administered. In a precamp survey, high school students were asked to report on their understanding of athletic training and sports medicine, their interactions with ATs, and their awareness of as well as access to athletic training education (Table 1). Of the respondents, 86.1% (n = 93) had heard of athletic training, and 83.3% (n = 90) had heard of sports medicine. The majority had sustained a sport injury or knew someone who had (88.9%). Moreover, 72% indicated having received help from an AT or having witnessed someone they knew interact with an AT for an injury. From an educational standpoint, most students were aware that athletic training could be studied in college. However, only 22.2% currently had access to an athletic training or sports medicine class at their high school. The students reported predominantly learning through hands-on (n = 83) or visual (n = 23) learning.

A postcamp survey was distributed to evaluate the experience and inquire about career paths (Table 2). On a scale of 1 to 10, the average rating for how much students enjoyed the camp was a 9.6, with responses ranging from 6 to 10. Of the 4 stations, nutrition and hydration (35.9%) and taping (33%) were the favored stations. However, 32.4% of the students identified splinting and wrapping as skills they could use in the future. In addition to the primary topics taught during the camp, 7 students expressed learning how to help people, and another 7 students described learning how to be healthier in a final open-response question; these were added skills that they felt would help them in the future. Participants communicated additional areas that they wished to learn more about, such as general concepts of athletic training (n = 15), anatomy (n = 3), and emergency care (n = 5).

Nearly all individuals (97.2%) expressed wanting to learn more about athletic training after the camp. In addition, 98.1% indicated that they would be interested in taking an athletic training or sports medicine class if it was offered. Approximately half of the students communicated plans to pursue some type of medical career. Many expressed interest in studying athletic training in college (86%). Overwhelmingly, 98.1% identified that their community would benefit from having an AT.

DISCUSSION

The overarching goal of our project was to share results of the traveling athletic training camp and provide a community-engaged roadmap to creating sustainable partnerships in athletic training as a means of collectively aligning with the goals of advancing diversity, equity, inclusion, and social justice across the profession. Although most of the high school students had some level of exposure to an AT before the camps, few had the opportunity to gain knowledge and skills related to athletic training in a hands-on, educational format. The purpose of the camps was to bring students of diverse and socioeconomically disadvantaged backgrounds with different amounts of athletic training exposure together and formally acquaint them with several aspects of the profession in an engaging environment. The camps were received positively by all, including the high school student participants, administrators, the MATCHED Lab, and students in the professional athletic training program at the university who helped conduct the camps. Results of the postcamp survey illuminated the students' positive experiences and the ability of the camp to not only expose students to the profession of athletic training but to also generate increased interest in learning more. The strategies to establish community-engaged partnerships using the roadmap and pedagogical approach of the camps helped to create successful outcomes that can be replicated with other groups of students.

Table 2. Postcamp Survey Responses (N = 107)

Question	No. (%)
On a scale of 1 to 10, how much did you enjoy the athletic training camp today?[a] (N = 105)	9.6 ± 0.8 (6.0 to 10.0)
What was your favorite station in the athletic training camp? (N = 106)	
Acute care	11 (10.4)
Nutrition/hydration	38 (35.9)
Splinting/wrapping	22 (20.8)
Taping	35 (33.0)
Would you be interested in learning more about athletic training after attending this camp? (N = 107)	
Yes	104 (97.2)
No	3 (2.8)
If your school offered an athletic training/sports medicine class, would you take it? (N = 107)	
Yes	105 (98.1)
No	2 (1.9)
Would you be interested in studying athletic training in college? (N = 107)	
Yes	92 (86.0)
No	15 (14.0)
Do you think it would be helpful if you had an athletic trainer in your community? (N = 107)	
Yes	105 (98.1)
No	2 (1.9)
What did you learn about athletic training that can help you in the future? (N = 102)[b]	
Athletic training education	2 (2.0)
General concepts of athletic training	15 (14.7)
Acute care	15 (14.7)
Nutrition/hydration	18 (17.6)
Splinting/wrapping	33 (32.4)
Taping	18 (17.6)
Is there anything else you would like to learn about in athletic training? (N = 99)	
Yes	59 (59.6)
Athletic training education	5 (5.1)
General concepts of athletic training	15 (15.2)
Acute care	3 (3.0)
Nutrition/hydration	4 (4.0)
Splinting/wrapping	5 (5.1)
Taping	5 (5.1)
Anatomy	3 (3.0)
CPR and emergent care	5 (5.1)
No	40 (40.4)
What kind of career do you think you want to do after high school? (N = 106)[b]	
Medical	54 (51.0)
Athletic training	16 (15.1)
Nursing	24 (22.6)
Physical therapy	6 (5.7)
Physician	13 (12.3)
Other medical field	7 (6.6)
Nonmedical	52 (49.1)
Sports and recreation	16 (15.1)

Abbreviation: CPR, cardiopulmonary resuscitation.
[a] Presented as mean ± SD (range).
[b] Some participants reported answers from more than 1 category; thus, the number of responses is not summative.

Roadmap Elements to Drive Community-Engaged Partnerships to Accomplish the Athletic Training Camps

The community-engaged approach used to develop the camps was paramount to success. First, these camps were well attended (average of 35 students per camp); this can be attributed to partnership synergy generated through ongoing dialogue and the community presence of the principal investigator and the MATCHED Lab, which built trust and merged a community or school need with professional development opportunities and research objectives. This congruence, aimed at achieving shared goals and outcomes, allowed the camps to be conducted with the community partners rather than for them.[23] Roadmap components of gaining community interest, building relationships, and identifying needs were essential because each community had different needs and constraints that could vary from the originally planned project processes and outcomes. Through the co-learning process, the camps provided a desirable product through professional hands-on athletic training skills exposure and collaborative career training while also fulfilling the commitment to the Ethnic Diversity Enhancement grant.[23] For example, in the high schools selected for the athletic training camps were established health science education programs or career preparation programming. As such, the camp was an ideal supplementary education day for students in those

programs who may have wished to learn more about athletic training as a career or health care profession.

In most instances, community-engaged methods target conditions associated with health inequities with the goal of reducing inequitable social conditions and improving health.[23] Within the Black Belt region of Alabama are geographically limited health care services, including those for sport-related emergencies and injuries.[20] This limited access to health care is compounded by a large percentage of the population being socioeconomically disadvantaged. Thus, residual consequences of upstream social determinants, such as rurality, worse social conditions, and historical racial inequality in the region, jointly exacerbate the poor health outcomes in the Black Belt.[20] More than 50% of the population was obese, had high rates of stroke or household food insecurity, or had a high prevalence of chronic diseases (or a combination of these).[27] In addition, practicing ATs are few or absent. This reduces high school students' exposure to athletic training as a health care profession, and it can be argued that inequitable access to ATs likely contributes to perpetuated health disparities and long-term morbidity from injuries and illnesses that go unrecognized or untreated. An athletic training camp alone cannot come close to reducing community-level inequity or improving poor health outcomes; however, through a mutually beneficial process that includes nonacademic community partners (ie, school administrators, teachers, coaches, and athletes), career camps such as the traveling athletic training camp can be a proactive part of the long-term solution.[23] One way in which the camp provides equitable opportunity is by traveling to each school to reduce any transportation or socioeconomic barriers that may impede interested students from attending a similar camp on the university campus. Furthermore, the camp uses active learning strategies that teach basic first aid, splinting, and basic nutrition and hydration (eg, micronutrients and macronutrients, reading food labels, and portion sizes). These stations integrate basic life skills and information that can translate to the acute care of injuries and the prevention of chronic health conditions, such as hypertension. In working backward from identifying the upstream social determinants causing poor health in the region, this camp has the potential to lead to a positive downstream effect.[13,23]

Assessing Implementation of the Athletic Training Camp With Survey Responses

Notably, more than half of the participants who completed the camp said that they wanted to pursue a career in the health professions. Of those, 15% explicitly stated that they wanted to pursue athletic training. Interestingly, of the 49% of those who indicated not wanting to pursue a career in the health professions, 31% (n = 16) described wanting a career that involved sport or recreation. Nearly all respondents commented that it would be helpful if an AT was present in their community, and nearly all conveyed that they would be interested in taking an athletic training course if it was offered at their high school. We believe that these outcomes of the traveling athletic training camp closely align with the Commission on Accreditation of Athletic Training Education Statement on Diversity, Equity, Inclusion, and Social Justice (https://caate.net/DEI) by addressing the visibility of athletic training within minoritized, rural, and socioeconomically disadvantaged communities. The introduction of the profession to those who do not consistently interact with ATs may spark an interest in some students to pursue a career in athletic training. The athletic training profession overwhelmingly consists of White scholars and clinicians, and matching of the profession with the patient population is urgently needed. One step toward accomplishing this goal is to increase opportunity, knowledge, and exposure to the profession.

Implementation of the Athletic Training Camp to Advance Community-Engaged Service Learning, Equitable Athletic Training Educational Requirements, and Research Endeavors

Although the focus of this paper has largely been on the effect of the camp on the high school participants, we must not overlook the professional athletic training students who delivered content at each station. Athletic training, as a part of public health and health care, has an important role to play in educating the future health workforce by incorporating an antiracist skillset and instructing decision-making practice aimed at reducing health inequities.[28] In a region where racial discrimination in health care has existed and contributed to distrust regarding health care, an antiracist pedagogy can create opportunities for co-learning through dialogue and skill practice and enable the future workforce to take meaningful action toward racial equity and justice.[28–31] It also better prepares future athletic training clinicians to interact with communities in ways that are ethical and respectful and do not perpetuate inequities.[3,13,28] Simultaneously, it may enable marginalized communities to feel safe engaging with athletic training students, professionals, and researchers to help reshape harmful cultural narratives about health and health care.[28] The professional athletic training students involved in the camps had the opportunity to learn and see firsthand why the Commission on Accreditation of Athletic Training Education Statement on Diversity, Equity, Inclusion, and Social Justice Standards is so important and to gain a better understanding of how community- and system-level barriers can constrain individuals' choices for health.[12,32]

When athletic training educators and professionals implement a comparable camp using this roadmap, they may be able to incorporate educational requirements for diversity, equity, inclusion, and social justice in the following manner:

1. Institutional advancement and community engagement. By actively engaging in the athletic training camp, the athletic training program promotes diversity, equity, inclusion, and social justice. This participation involves cultivating meaningful relationships with community partners, introducing high school administrators and a diverse youth group to athletic training, and showcasing the host academic institution's offerings.
2. Curriculum incorporation. The athletic training program may leverage the camp as a civic or service-learning opportunity to discuss diversity, equity, inclusion, and social justice. This engagement helps athletic training students understand the provision of these principles in health care.

3. Recruitment and retention. The aim of the camp is to recruit diverse students from participating schools by exposing them to the profession in a fun and interactive way.
4. Faculty and preceptor development. The camp could serve as a platform for faculty and preceptors to deepen their understanding of diversity, equity, inclusion, and social justice. Their direct interactions with school administrators and a diverse student group may foster greater comprehension of cultural competence and its crucial role in health care delivery.
5. Scholarly endeavors. Once the camp has established trust among schools and the broader community, it can spur scholarly pursuits, offering opportunities for research and advancement in diversity, equity, inclusion, and social justice in athletic training.
6. Program data gathering. The athletic training program can collect data such as reflection reports, participation statistics, and pre- and postcamp cultural competency assessments of athletic training students, faculty, or preceptors involved in the camp as a civic engagement or learning opportunity. These data can guide and enhance the program's future efforts in these areas.

This program of study is not without limitations. Participants may not have been truly random, as they were from schools in which the MATCHED Lab already had a presence, and those students who were most interested in athletic training were more likely to engage. Students were also required to return completed parental consent forms, so logistically, those who lost or forgot the form were unable to participate. Additionally, maintaining these relationships is time consuming and requires constant effort and communication. A challenge of community-engaged partnered work is that it is not "one-and-done" but requires maintaining that partnership. Scaling this study to a broader or larger population may pose difficulties. Survey results from the camp were also cross-sectional in nature, which limits our ability to speak of sustained interest in the athletic training profession or what students may pursue as a future career.

In closing, the traveling athletic training camp offers an innovative, interactive, and effective approach to educating young people about the athletic training field while upholding and promoting the principles of diversity, equity, inclusion, and social justice in athletic training education. By bridging the health care knowledge and exposure gap in under-resourced and disinvested communities using processes such as the community-engaged roadmap, a new generation of health care professionals may be nurtured.[23,28,33] The community-academic partnership processes used in this community-engaged roadmap can create new narratives regarding health and wellness, increase representation in the profession, and improve community-level health outcomes over time through mutually beneficial scholarship and the professional practice of athletic training.

ACKNOWLEDGMENTS

Funding for this project was supported by an NATA EDAC Diversity Enhancement Grant. We also thank community partners Mr Stoney Pritchett, Dr Teresha Jones, Mr Terrance Spencer, Mr John Hasek, Ms Jamia Coleman, Mr Barry Hill, and Mr Grady Griffin.

REFERENCES

1. Valantine HA, Collins FS. National Institutes of Health addresses the science of diversity. *Proc Natl Acad Sci USA.* 2015;112(40):12240–12242. doi:10.1073/pnas.1515612112
2. Nelson A. Unequal treatment: confronting racial and ethnic disparities in health care. *J Natl Med Assoc.* 2002;94(8):666–668.
3. Gomez LE, Bernet P. Diversity improves performance and outcomes. *J Natl Med Assoc.* 2019;111(4):383–392. doi:10.1016/j.jnma.2019.01.006.
4. NATA enters next phase of diversity, equity, inclusion and access plan. National Athletic Trainers' Association. Accessed May 1, 2023. https://www.nata.org/blog/beth-sitzler/nata-enters-next-phase-diversity-equity-inclusion-and-access-plan
5. Supporting diversity & cultural competence in athletic training. National Athletic Trainers' Association. Accessed May 1, 2023. https://www.nata.org/sites/default/files/nata_diversityhandout_2020_compressed.pdf
6. Supporting diversity & cultural competence in athletic training. National Athletic Trainers' Association. Accessed May 1, 2023. https://www.nata.org/sites/default/files/nata_diversityhandout_2021-min.pdf
7. Pryor RR, Casa DJ, Vandermark LW, et al. Athletic training services in public secondary schools: a benchmark study. *J Athl Train.* 2015;50(2):156–162. doi:10.4085/1062-6050-50.2.03
8. Huggins RA, Coleman KA, Attanasio SM, et al. Athletic trainer services in the secondary school setting: the Athletic Training Locations and Services Project. *J Athl Train.* 2019;54(11):1129–1139. doi:10.4085/1062-6050-12-19
9. Post E, Winterstein AP, Hetzel SJ, Lutes B, McGuine TA. School and community socioeconomic status and access to athletic trainer services in Wisconsin secondary schools. *J Athl Train.* 2019;54(2):177–181. doi:10.4085/1062-6050-440-17
10. Mazerolle SM, Raso SR, Pagnotta KD, Stearns RI, Casa DJ. Athletic directors' barriers to hiring athletic trainers in high schools. *J Athl Train.* 2015;50(10):1059–1068. doi:10.4085/1062-6050-50.10.01
11. Schneider K, Meeteer W, Nolan JA, Campbell HD. Health care in high school athletics in West Virginia. *Rural Remote Health.* 2017;17(1):3879. doi:10.22605/rrh3879
12. Braveman P, Gottlieb L. The social determinants of health: it's time to consider the causes of the causes. *Public Health Rep.* 2014;129(suppl 2):19–31. doi:10.1177/00333549141291S206
13. Woolf SH, Braveman P. Where health disparities begin: the role of social and economic determinants—and why current policies may make matters worse. *Health Aff (Millwood).* 2011;30(10):1852–1859. doi:10.1377/hlthaff.2011.0685
14. Black belt region in Alabama. Encyclopedia of Alabama. Accessed May 1, 2023. https://encyclopediaofalabama.org/article/black-belt-region-in-alabama/
15. Chi G, Shapley D, Yang TC, Wang D. Lost in the Black Belt South: health outcomes and transportation infrastructure. *Environ Monit Assess.* 2019;191(suppl 2):297. doi:10.1007/s10661-019-7416-1
16. Katsinas SG, Keeney NE, Jacobs E, Whann H. School enrollment in Alabama's Black Belt continues to decline. Education Policy Center at The University of Alabama. Accessed May 1, 2023. https://ir-api.ua.edu/api/core/bitstreams/a7cdc395-a223-4a8b-99a3-e57e3f732ae9/content
17. Newman SD, Moss K, Pichon M, et al. The health of rural Black communities during COVID: some affirmations, some surprises. *Front Public Health.* 2023;11:932451. doi:10.3389/fpubh.2023.932451
18. Dallas, AL. County health rankings & roadmaps. Accessed May 1, 2023. https://www.countyhealthrankings.org/explore-health-rankings/alabama/dallas?year=2022
19. Baker BD, Di Carlo M, Weber M. The adequacy of school district spending in the US research brief. Albert Shanker Institute. Accessed May 1, 2023. https://files.eric.ed.gov/fulltext/ED613513.pdf
20. Braveman P, Egerter S, Williams DR. The social determinants of health: coming of age. *Annu Rev Public Health.* 2011;32:381–398. doi:10.1146/annurev-publhealth-031210-101218

21. 2020 Alabama state health assessment. Alabama Department of Public Health. Accessed May 1, 2023. https://www.alabamapublichealth.gov/healthrankings/assets/2020_sha_health_indicator_5.pdf
22. Strum SP, Eatman T, Saltmarch J, Bush A. Full participation: building the architecture for diversity and community engagement in higher education community engagement in higher education. Imagining America. Published 2011. Accessed May 1, 2023. https://imaginingamerica.org/full-participation-building-the-architecture-for-diversity-and-community-engagement-in-higher-education/
23. Haapanen KA, Christens BD. Community-engaged research approaches: multiple pathways to health equity. *Am J Community Psychol.* 2021;67(3–4):331–337. doi:10.1002/ajcp.12529
24. Cooper CP, Jorgensen CM, Merritt TL. Report from the CDC: telephone focus groups. An emerging method in public health research. *J Womens Health (Larchmt).* 2003;12(10):945–951. doi:10.1089/154099903322643866
25. Healthy People 2030. Office of Disease Prevention and Health Promotion, US Department of Health and Human Services. Accessed May 1, 2023. https://health.gov/healthypeople
26. Active learning. Vanderbilt University Center for Teaching. Accessed May 1, 2023. https://cft.vanderbilt.edu/guides-sub-pages/active-learning/
27. Howard G, Labarthe DR, Hu J, Yoon S, Howard VJ. Regional differences in African 'Americans' high risk for stroke: the remarkable burden of stroke for Southern African Americans. *Ann Epidemiol.* 2007;17(9):689–696. doi:10.1016/j.annepidem.2007.03.019
28. Peoples WA, Fleming PJ, Creary MS. Working toward health equity requires antiracist teaching. *Am J Prev Med.* 2023;64(4):604–608. doi:10.1016/j.amepre.2022.10.023
29. Jacobs EA, Rolle I, Ferrans CE, Whitaker EE, Warnecke RB. Understanding African 'Americans' views of the trustworthiness of physicians. *J Gen Intern Med.* 2006;21(6):642–647. doi:10.1111/j.1525-1497.2006.00485.x
30. Gamble VN. Under the shadow of Tuskegee: African Americans and health care. *Am J Public Health.* 1997;87(11):1773–1778. doi:10.2105/ajph.87.11.1773
31. Williams DR, Mohammed SA. Racism and health I: pathways and scientific evidence. *Am Behav Sci.* 2013;57(8). doi:10.1177/0002764213487340
32. Krieger N, Williams D, Zierler S. "Whiting out" white privilege will not advance the study of how racism harms health. *Am J Public Health.* 1999;89(5):782–785. doi:10.2105/ajph.89.5.782
33. Williams DR. Racism and health: a research agenda. *Ethn Dis.* 1996;6(1–2):1–8.

Address correspondence to Jessica Wallace, PhD, MPH, LAT, ATC, Department of Health Science, Athletic Training Program, University of Alabama, 270 Kilgore Lane, 2106 Capital Hall, Tuscaloosa, AL 35487. Address email to jswallace1@ua.edu.