12-6-2018

The Importance of Athletic Trainers at the High School Level and Barriers to Hire

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The Importance of Hiring Athletic Trainers at the High School Level

Published by: Nathan Southerington

Undergraduate Honors Thesis

Western Michigan University

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Abstract

The goal of the study is to unveil the significance of the athletic training profession at the high school level and identify any barriers that restrict high schools from employing athletic trainers (ATs). While ATs are a commodity in collegiate and professional sports, many high schools around the nation struggle to employ these health care professionals. Surveys were sent to both superintendents and athletic directors (ADs) throughout the state of Michigan, to establish common hindrances to hiring athletic trainers in secondary schools. The survey covered topics such as common barriers to hiring ATs, reasons they prefer to hire ATs, school size and location, sponsored sports, AT employment status, and whether or not they believe ATs are valued resources.

The Korey Stringer Institute’s athletic training location and services (ATLAS) survey (NATA ATLAS, 2018) was utilized in order to identify schools with and without athletic trainers on staff. Subsequently, contact information for high school ADs were allocated from the Michigan High School Athletic Association (MHSAA) website (2018). Contact information for all superintendents in Michigan were provided by a master list from the Michigan Department of Education. To ensure privacy of the study, the anonymity of participants was preserved.

The overwhelming obstacle to hiring ATs in the high school setting was budgetary concerns, as nearly 90% of participants responded that finances and resources were lacking in order to have an AT on staff. The second largest response as a barrier to hire was location of the school, resulting in nearly 35% of all responses.
The Importance of Hiring Athletic Trainers at the High School Level and Barriers to Hire

As an allied healthcare profession, athletic training appears to be undervalued as a profession that ensures the safety, protection and well-being of athletes. Recommendations for best practice were created by the Inter-Association Task Force for Preventing Sudden Death in Secondary School Athletic Programs and urged all high schools to hire an athletic trainer (Huggins et al., 2017). However, the state of Michigan does not contain legislation requiring secondary schools to employ an athletic trainer (AT). Secondary schools across the state of Michigan encounter numerous barriers that prevent them from being able to hire ATs.

Throughout my high school athletic career, an athletic trainer had always been present to provide care, rehabilitation services, and to ensure all of the athletes were safe. As I sustained several injuries while participating in high school sports, my time in the athletic training room allowed me to build a relationship with the athletic trainer. This is the reason I pursued a career in the profession. Instead of unnecessary emergency room and doctors’ visits, my AT was able to determine the root of the injury and quickly intervene to alleviate any uncomfortable symptoms. The AT also made sure I was healthy enough to return to playing my sport.

As I progressed through my educational career in athletic training, my class studied tragic sudden death occurrences in and around the State of Michigan, including the death of Fennville basketball star, Wes Leonard. He suffered from a condition known as hypertrophic cardiomyopathy (Moisse, Cohen, & Slaman, 2011), a condition in which the heart muscle becomes unusually thick and prevents the heart from effectively pumping blood. Unfortunately, there are other causes of sudden death in athletics. In a report done by the Youth Sports Safety Alliance (2013), between 1995-2009, 31 athletes around the country suffered from exertional heat stroke. Between the years 2005-2009, there were more deaths due to heat stroke than any
five-year period in the 35 years prior. According to Bruggers (2018), since 1995 an average of three athletes have died from heat stroke each year. Michelle Crockett, the mother of a 15-year-old football player who had suffered and died of heat stroke, noted “this was preventable,” as she now advocates for safety against heat illness for the Max Gilpin Beat the Heat Fund (Korey Stringer Institute, 2018). In each instance, there was one commonality; these high schools did not have an athletic trainer. While some coaches and athletics staff are certified in first aid and/or CPR/AED, they lack the training and knowledge for the emergency situations listed above. This begged the question “why doesn’t every high school hire an athletic trainer?” This led me to ask high school superintendents and athletic directors (ADs) in Michigan about the barriers preventing them from securing an athletic training position.

In order to better understand these barriers, I collected data through the survey application, Qualtrics. The survey was geared towards establishing common hindrances to hiring athletic trainers at the high school level. According to Mazerolle, Raso, Pagnotta, Stearns, and Casa (2015), ADs preferred to hire athletic trainers, but lacked the power in hiring decisions. Hiring decisions at the secondary level were often made by the superintendent (Mazerolle et al., 2015). Other obstacles to hiring an athletic trainer included budgetary concerns and non-budgetary concerns (Mazerolle et al., 2015). Non-budgetary concerns refer to the location of the school, misconceptions about the role of athletic trainers, and pushback from the community.

Collectively, this study aims to increase the awareness of the athletic training profession and why it remains vital that secondary schools employ an athletic trainer. The following delves into the value of ATs and how they can manage medical emergencies and sudden death episodes, effectively communicate with coaches, athletes, parents, school districts and other medical professionals, build positive rapport with student athletes, and successfully treat and rehabilitate
injuries sustained on and off the field of play. As advocates for their patients, ATs promote best practices and assist in the prevention of sudden medical emergencies and appropriately manage emergencies when they do happen.

As allied healthcare professionals and members of the National Athletic Trainers’ Association (NATA), ATs pledge to put their patients and athletes’ care first in order to provide the best medical care and ensure safety for all patients. (NATA Code of Ethics, 2018).

**Literature Review**

The athletic training profession has continued to expand its practice since 1950 (NATA About, 2018). ATs can be seen working at high schools, colleges/universities, professional sports, inpatient/outpatient clinics, and hospitals (NATA About, 2018). Recently, ATs have emerged in settings such as corporate wellness programs, the military, fine arts companies, and industrial environments (Prentice, 2014, pp. 7-12). A study completed by Robinson (2015), in association with the Korey Stringer Institute, concluded that nearly 70% of secondary schools across the country employ a certified athletic trainer. The other 30% may not necessarily oppose hiring an athletic trainer, but do not due to the current educational economic climate or lack the appropriate resources. Athletic directors, principals, school boards, coaches, teachers, parents, and the student athletes, must evaluate the “return on investment” that an AT brings to the table when evaluating resources for students (Robinson, 2015).

**Medical Emergencies/Sudden Death Episodes**

Sudden death incidents in adolescents has recently sparked discussion regarding athlete safety; how to effectively manage incidents, appropriate training for future clinicians, recognition of symptoms in athletes, and preventative measures to be taken to avoid such from occurring (Casa et al., 2012). As part of the prevention process, ATs work closely with the sports
medicine team and supervising physician to develop emergency action plans (EAPs). EAPs outline all roles and steps to be taken in the event of an emergency situation. A documented and well-rehearsed EAP will result in efficient and effective care during emergency situations.

**Heat Illness**

Unlike other states in the United States (US), living in Michigan means that residents experience all four seasons and all the extremes that come with it. This means August temperatures could be in the 70s with a breeze, or high 90s with exceedingly high humidity. For the fall sports that begin their season in this time period (football, soccer, cross-country, tennis, volleyball), exertional heat stroke looms heavily in the mind of athletes, coaches, parents, administrators, and especially, athletic trainers providing coverage for all of those sports at once.

For instances of heat stroke, ATs are specifically qualified to recognize and manage these emergency situations. In cases where coaches may attribute ‘weak mental toughness’ to a collapsing athlete, ATs take immediate action in deescalating the situation. According to Casa et al. (2012), ATs recognize common symptoms such as delirium, vomiting, diarrhea, loss of balance, unusual or aggressive behavior, and/or hallucinations. By recognizing the symptoms early, ATs can follow the proper steps to save the athlete’s life such as taking the athlete’s internal core temperature, via rectal thermometer, and cooling them to the proper temperature (Casa et al., 2012).

A temperature of 104 degrees Fahrenheit or higher will begin the shutdown of internal organs (Casa et al., 2012). An athlete’s core temperature must be cooled to at least 102 degrees Fahrenheit before being transferred to the emergency department. Without receiving specific education and training, coaches and staff lack the ability to prevent, assess, and manage the symptoms of heat stroke and can put their athletes at severe risk of death or permanent disability.
Concussions

Concussions also pose threats to all athletes, especially those in contact or collision sports. As research develops on concussions and their consequences, athletic trainers and doctors are increasingly aware of their duty to educate patients on the dangers of concussions. The Centers for Disease Control and Prevention (2017) defines a traumatic brain injury (i.e. concussion), as “a disruption in the normal function of the brain that can be caused by a bump, blow, or jolt to the head, or penetrating head injury.” Most ATs utilize a multifaceted approach to concussion management, including a clinical examination, symptom checklist, postural control assessment, neuropsychological testing, pre-participation baseline testing, and return to play protocol (Rigby, Vela, & Housman, 2013).

The 2016 international consensus statement on sport concussions developed the SCAT-5 tool which is used to assist in evaluating and disqualifying athletes after sustaining a head injury (McCrory et al., 2017). Evidence that points to diseases such as chronic traumatic encephalopathy (CTE), a degenerative brain disease in which the Tau protein forms clumps that slowly destroy brain cells (Boston University Research CTE Center, 2018), athletes continue to attempt to hide their concussion symptoms to continue playing. When a thorough evaluation is performed, athletes are unable to mask symptoms from ATs.

Pupillary reaction to light, balance, pulse changes, confusion/dazed appearances, mood changes, and slurred words are all physical and neurological indicators that present with concussions. The ability of athletic trainers to identify concussive tendencies further advances a culture of safety in athletics as well as assist in the prevention of degenerative brain diseases like CTE or post-concussion syndrome in post-athletic endeavors. The monitoring of symptoms allows the AT to progress the student back into school and their daily routine. Abiding by a
return to play protocol after sustaining a concussion also allows for the athlete to rate symptoms as the AT critically evaluates his or her progression through stages of light aerobic exercise, moderate conditioning, and sport specific activity.

**Sudden Cardiac Death**

Heart-related deaths have also been a significant contributor in the sudden death incidents of student athletes. While coaches and administrators often carry a First Aid and cardiopulmonary resuscitation (CPR) certification, specific steps must be followed if an athlete experiences cardiac arrest or suffers from hypertrophic cardiomyopathy. Athletic trainers not only have this certification, but follow best practice guidelines presented by the NATA to access early defibrillation of the affected athlete within three to five minutes upon collapsing (Casa et. al., 2012). Every minute after the three to five minute period, decreases the chance of patient survival by 10% (Casa et al., 2012)

Although cardiovascular screening is not a specific requirement for pre-participation testing, the NATA recommends that every adolescent athlete undergo heart auscultations and an electrocardiography (ECG), to go along with a detailed family history evaluation performed by the AT (Conley, Bolin, Carek, Konin, Neal, & Viollette, 2014). Receiving a yearly cardiovascular screen can detect problems such as heart murmurs, arrhythmias, and abnormal heart disorders (Conley et al., 2014). This process would streamline disqualification procedures and inform ATs of an athlete’s condition to hold them from play before sudden death incidents occur (Casa et al. 2012).

**Communication**

High school athletic trainers require excellent communication skills, as they are simultaneously responding to the concerns of athletes, parents, coaches, ADs, colleagues, and
other medical professionals. Communication remains an essential skill for an athletic trainer to successfully perform their job. High school ATs with strong interpersonal skills can educate their student athletes about the need and benefit for treatment. Patient education can provide motivation during rehabilitation as the athlete notices their body healing in real time and understands the significance behind the treatment (Prentice, 2014). Additionally, the time that athletes spend in the athletic training room contributes to the positive rapport between the AT and student athlete. This relationship is important in fostering trust when providing and receiving care.

When delivering care to minors in the secondary setting, communication must involve parents and athletes. Although initial evaluation and treatment are provided by the AT, all parents need to be updated on the status of their child. Being an effective communicator with parents leads to effective care of the athlete. Similar to building rapport with your student athlete, the same can be said for their parents. Robinson (2015) presented the idea of ‘cost containment’ and explained that services provided by ATs result in saving families hundreds to thousands of dollars per year, instead of making frequent doctor visits.

The high school setting also requires the AT to communicate with coaches for all sports. Coaches rely on ATs to act as liaisons for an athlete regarding any changes in treatments, progress, or clearance for returning to play, as well as scheduling for practices, competitions, and pre-participation services (Prentice, 2014). However, it is vital to remember that an AT works with the coach, not for the coach, to make the best decision for the athlete and their safety (Prentice, 2014, p. 28).

Communication with ATs from other schools or settings is common to establish trust in one another, understand the school’s EAP, and provide the highest quality medical care for all
athletes competing. The safety and well-being of student athletes are always the top priority for ATs (NATA Code of Ethics, 2018). Strong relationships amongst the sports medicine team and other medical professionals streamlines the referral process for their athletes (Prentice, 2014). Overall, ATs and other professionals work together to provide practical and effective care through evidence-based practice guidelines.

Methods

The data collection for this study utilized a survey to discover common barriers to hiring athletic trainers at the secondary school level. Upon contacting superintendents and ADs, it was crucial to survey all of the high schools to observe any regional trends that attributes to lower AT employment rates. Thus, I gathered lists of athletic directors and superintendents alike, with the assistance of the Michigan High School Athletic Association (MHSAA) website and the Michigan Department of Education. The Qualtrics survey application, through Western Michigan University, allowed me to compile all the collected email addresses and create a contact list. Then, I created a survey link that was added to the email explaining who I was and why they should participate in the study. I sent out emails to 1,590 total participants, 1,060 athletic directors and 530 superintendents. The survey consisted of 19 questions (see Appendix) that my thesis chair, Kristen Smith, and I developed. The survey intended to gather size, location, number of students, and sponsored sports of each school along with discovering potential barriers to hiring ATs, valuable traits seen in ATs, and possible solutions for schools/districts without AT services.

Results

Out of the 1,590 surveys sent out, 344 participants responded; a response percentage of 21%. Schools in West Michigan led the way with nearly 27% of responding participants,
followed by schools in Northern Michigan at 21.80%, Southern Michigan at 19.50%, Eastern Michigan at 16.70%, and Central Michigan as the least responsive, at 15%. Participants answered with budget, location, and availability of a qualified AT as the top three barriers to employing an AT.

The availability and budget coincided with high schools located in Northern Michigan. Schools located in more rural communities struggled to budget a yearly salary for an AT, on top of paying current staff salary, school maintenance, and supplying classrooms with adequate materials. These same schools also had trouble recruiting qualified ATs willing to move to their location or school district, where in some cases the AT would provide medical coverage for multiple high schools. Schools located in West Michigan and Eastern Michigan typically had few limitations. Representatives for these schools selected the ‘Other’ choice when asked about the top three barriers to hire, and noted that obstacles had been overcome by hiring ATs in their districts. Some high schools in Southern and Central Michigan reported that they have little use for an AT because local hospitals or Physical Therapy (PT) clinics offered volunteer medical professionals during home sporting events that required little to no compensation for their services. These professionals included both licensed physical therapists and certified athletic trainers. As a whole, 69.74% of ATs were outreach ATs contracted through hospitals or PT clinics that worked at least part-time at the high school, 17.11% of respondents had part-time ATs and 13.15% employed full-time ATs.

Budgeting issues or lack of financial resources were cited by nearly 90% of participants as the leading obstacle to hiring a full-time athletic trainer. The MHSAA classifies Class B and C schools as lower to middle enrollment levels (MHSAA Press Releases, 2018). Class A is considered high enrollment and Class D is very low enrollment (MHSAA Press Releases, 2018).
With 63% of survey participants coming from Class B or Class C schools, this may indicate that a significant number of high schools in Michigan experience budgeting or resource complications preventing them from hiring ATs.

Some secondary school expenses are considered ‘non-negotiable’, including school safety, special education services, technology resources, transportation, and food services. Along with mandatory expenses, most superintendents responded that education remains the main priority for all students. In the same way an AT’s first priority is the safety of student-athletes, the school’s main concern is educating its students.

Other participants noted that athletic trainers contribute critically to the experience of high school athletics. It is not that schools dislike the idea of hiring ATs, but simply lack the resources in order to achieve this goal. When asked if every high school should employ an AT, only 13% responded that there should not be an AT at the school.

As far as employment statuses were concerned for high schools with ATs, most athletic trainers were contracted through a PT clinic or hospital system, splitting time between morning clinic hours and afternoons at the high school. Superintendents at schools without employed ATs provided possible solutions in order to create a position at their school. While numerous answers were provided, recurrent themes included: increased funding from the state, grants for yearly salaries, and ATs willing to relocate to rural locations. With current tight salary budgets, superintendents and ADs alike suggested a grant program be available in order to hire ATs.

**Discussion**

Although my responses provided me with a deeper understanding of the obstacles to hiring ATs, it is imperative to note that these results may not be generalizable due to a low response rate. Unfortunately, this also resulted in an incomplete list of specific barriers that
ATHLETIC TRAINERS AT THE HIGH SCHOOL LEVEL

schools may report to hiring an athletic trainer. With a larger response rate, associated trends would have been clearer within different regions in Michigan.

Limitations of the study include the number of responses to the survey. The response rate after emailing all local athletic directors and superintendents was about 21% (344 participants out of a population of 1,590). The lack of responses provided me with less data to analyze trends specific to regions in Michigan and the state as a whole. Another limitation was superintendent and AD experiences working with athletic trainers. Perceived need is relative to past experiences, which could include being used to not having athletic trainers at the high school level. For future reference, surveys could have been dispersed to certain regions at one time (i.e. Southern, Northern, Eastern, Western, or Central Michigan) to establish any solid trends.

Furthermore, time was a limiting factor when sending the survey to constituents. I only sent the survey one time to the population, instead of possibly sending it multiple times. If the survey was sent out more than once, it may have affected the number of responses I received and provided more data to analyze. A couple of the questions could have been re-worded for better understanding. Question 6 (see Appendix), could have asked “What expenses must be made before hiring an AT?,” instead of “What expenses are more important before hiring an AT?.” The same can be said for Question 7 (see Appendix). Instead of “Can you justify hiring/keeping an AT on staff if it meant other staff members had to be laid off?” it could have said “Can you justify hiring/keeping an AT on staff if it meant other staff members may be laid off?” Question 9 (see Appendix) could have had the option to select more than one answer, instead of just one. Question 19 (see Appendix) could have been re-worded from “If you do not have an AT on staff, what needs to happen to be able to hire an AT on staff?” to “If you do not have an AT on staff, what ideas do you have to make it possible to hire an AT?”
However, the recorded data provided a better understanding of the hurdles school boards encounter when discussing the need for an athletic trainer. After completing my literature review, the responses confirmed common barriers such as the lack of resources and tight budgets. An unexpected obstacle was the mandatory expenses to keep a high school running. I believe as employers become more aware of the benefits of hiring athletic trainers in secondary schools, the country as a whole will become more aware of the need for athletic trainers in the secondary school setting.

Although I do agree that education is the foundation of a high school and its students, I also believe that high school sports will always be a staple in the high school setting. No matter what sport, there will always be risk of injury. By investing in an athletic trainer, there will be a reduced liability in the instance of sudden death episodes and management of sport injury.

Throughout the process, I noticed that a small budget heavily coincided with the regional location of the school. The densely populated schools in or around major cities typically had no trouble maintaining an AT. However, schools in districts that struggle with the essentials, such as adequate teaching staff or educational fees, experienced extreme difficulty establishing a position in the athletic department for an athletic trainer. Often, the rural communities expressed that ATs in their area, notably in Northern Michigan, were simply not available to hire.

It was important to recognize that the majority of participants desired to have an AT on staff, but stressed the difficulty with balancing the budget. Most expenses are considered ‘non-negotiable’, leaving little room to add luxuries, such as an athletic trainer. The superintendents made it clear that a school’s main priority is educating their students and preparing them for the future; clubs, sports, and other extracurricular activities are supplementary privileges available to students. This is significant to understand that while athletic trainers provide essential medical
duties to safeguard student athletes, some schools cannot justify cutting a program or position to allow room for an AT.

**Conclusion**

Athletic training in the high school setting is essential to safeguard all student athletes during practice and competition as well as, prevent and manage sudden death emergencies. Although athletic trainers are not required by the state of Michigan, ATs provide vital medical services that affect the daily well-being of student athletes. Benefits from employing ATs at the high school level include: decreased risk of injury, effective treatment and rehabilitation strategies, positive rapport with student athletes, strong communication skills with coaches, administrators, parents, and students, and skilled emergency situation training (Robinson, 2015).

By gaining knowledge from school systems across the state, common barriers to hiring high school ATs can be made aware to state legislature. While unique ideas such as grant programs show initiative, it may take many years for similar programs to come to fruition. Discussions like these exemplify critical thinking needed to advance the athletic training field in the secondary school setting and make others aware of the benefits of the athletic training profession. By advocating for legislation to help promote the benefits of ATs, schools can push to make their services available to all athletes nationwide.
References


concussion in sport held in Berlin, October 2016. doi: 10.1136/bjsports-2017-097699


Appendix

HSIRB Approval:

WESTERN MICHIGAN UNIVERSITY
Institutional Review Board
FWA00007042
IRB00000254

Date: August 2, 2018

To: Kristen Smith, Principal Investigator
   Nathan Southerington, Student Investigator for Honors Thesis

From: Amy Naugle, Ph.D., Chair

Re: Approval not needed for IRB Project Number 18-07-33

This letter will serve as confirmation that your project titled “The Importance of Athletic Trainers Hired at the High School Level and Barriers to Hire” has been reviewed by the Western Michigan University Institutional Review Board (IRB). Based on that review, the IRB has determined that approval is not required for you to conduct this project because you are not collecting personal identifiable (private) information about individuals and your scope of work does not meet the Federal definition of human subject.

45 CFR 46.102 (f) Human Subject

(f) Human subject means a living individual about whom an investigator (whether professional or student) conducting research obtains:

(1) Data through intervention or interaction with the individual, or
(2) Identifiable private information.

Intervention includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. Interaction includes communication or interpersonal contact between investigator and subject. Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

“About whom” – a human subject research project requires the data received from the living individual to be about the person.

Thank you for your concerns about protecting the rights and welfare of human subjects.

A copy of your protocol and a copy of this letter will be maintained in the IRB file.
Email with Survey link:

Good Morning,

My name is Nathan Southerington and I am a senior at Western Michigan University this Fall semester. Currently, I am in the process of completing my Honor’s Thesis that I will defend before graduation this December. My topic is The Importance of Athletic Trainers Hired at the High School Level and Barriers to Hire.

Along with the literature of my thesis, I am sending a survey to all superintendents and athletic directors in the state of Michigan regarding some of the barriers to hiring athletic trainers at the high school level. This information will be used only as data for my thesis and will in no way use personal identifying information. It will take you 5-10 minutes to complete and submit back to me in the Western Michigan University Qualtrics application. This survey is crucial to the completion of my thesis and getting awareness of the athletic training profession out there. The link provided in the email will take you directly to the survey to complete and submit. Thank you so much for your participation in advance! Have a wonderful day!

Best,
Nathan Southerington

Follow this link to the Survey:
${l://SurveyLink?d=Take the Survey}

Or copy and paste the URL below into your internet browser:
${l://SurveyURL}

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}
Survey Questions:

1. I am a:
   - Superintendent
   - Athletic Director

2. Are you aware of the duties of an athletic trainer?
   - Yes
   - No

3. From the list of skills and competencies, what were you aware that athletic trainers (ATs) could do? (Check all that apply)
   - Taping
   - First Aid/ CPR certified
   - Mouthguard fitting
   - Helmet fitting
   - Shoulder pad fitting
   - Protective padding taping
   - Shoulder pad/helmet removal
   - Airway management techniques
   - Pulse oximetry evaluation
   - Emergency oxygen
   - Abdominal percussion and evaluation
   - Crutch and cane fitting
   - Splinting
   - Urinalysis
4. What are your top three barriers that prevent/make it difficult to hire an AT?
   - Budgetary concerns/lack of resources
   - Location
   - Misconception about what an AT does
   - Community pushback
   - Other (please specify)

5. Do you believe every high school should have an AT on staff?
   - Yes
   - No

6. In your current institution, what expenses are more important before hiring an AT? (check all that apply)
   - Educational fees/tuition
7. Can you justify hiring/keeping an AT on staff if it meant other staff members had to be laid off?
   - Yes
   - No
   - Maybe

8. If you answered ‘No’ to the previous question, why not?

9. Sports are considered extracurricular activities and the safety of all student athletes is crucial. If an AT is not hired, who do you believe is qualified to oversee medical coverage and respond to injuries/medical emergencies?
   - Coaches
   - School administrators
   - Parents/Bystanders
   - EMT/First responders
   - An AT should be on site
10. What class size is your school?
   - Class A
   - Class B
   - Class C
   - Class D

11. How many students attend your high school?
   - <200
   - 200-400
   - 400-600
   - 600-800
   - >800

12. Where is your school/schools located?
   - West Michigan
   - East Michigan
   - Southern Michigan
   - Northern Michigan/UP
   - Central Michigan

13. Of the sports listed below, which are sponsored by your high school? (check all that apply)
   - Football
   - Basketball
   - Baseball
   - Softball
   - Volleyball
o Men’s tennis
o Women’s tennis
o Men’s soccer
o Women’s soccer
o Hockey
o Lacrosse
o Golf
o Bowling
o Swim and Dive
o Alpine skiing
o Cross Country
o Track and Field
o Wrestling
o Competitive Cheer
o Gymnastics
o Rugby

14. Of the following collision sports, which are sponsored by your school? (check all that apply)

o Football
o Hockey
o Lacrosse
o Wrestling
o Rugby
o None
15. If you are a superintendent, how many schools do you oversee?
   - 1
   - 2
   - 3
   - >3

16. If you have an AT on staff, what is their employment status?
   - Full-time
   - Part-time
   - Part-time contracted through a physical therapy clinic or hospital

17. If you have an AT on staff, what makes it possible to keep them employed?

18. If you have an AT on staff, what do you find most valuable about what they provide to your school and your student athletes?

19. If you do not have an AT on staff, what needs to happen to be able to hire an AT on staff?
Data Charts:

Top Three Barriers for Hiring AT's

- Other: 20.86%
- Community pushback: 3%
- Miconception of AT duties: 13.91%
- Location: 34.78%
- Budgetary/lack of resources: 86.90%

% of Responses by Region

- West Michigan: 15.00%
- Northern Michigan: 19.50%
- Southern Michigan: 21.80%
- Eastern Michigan: 27%
- Central Michigan: 16.70%
% of Responses for Class Size of School

- Class A: 33%
- Class B: 30%
- Class C: 20%
- Class D: 17%