

Analysis of Gunn's Athletic Training Room

Sharat Bodduluri¹, Chris Kolar²
Gunn High School¹, Palo Alto Unified School District²



INTRODUCTION

There are approximately 7.8 million high school students participating in athletics for their respective schools¹. It is not uncommon to find athletic trainers supporting high school athletes. Athletic trainers are licensed allied health professionals who, under a physician's directions, carry out the prevention, evaluation, treatment and rehabilitation of sports injuries³. The number of athletic trainers in schools become part of a trend which stretches across 25 years of increased participation in athletics, however in 2014 only 55% of athletes in a public secondary school and only 40% of all schools had access to an Athletic Trainer³.

In 2012, the American Academy of Physicians conducted a study in which they discovered schools with athletic trainers have more diagnosed concussions but fewer overall injuries. The schools that did not have an athletic trainer on staff had a fewer rate of diagnosed concussions, however this could lead the athletes still participating with a concussion which can lead the severe medical problems later in life.

While having one athletic trainer on staff is better than no athletic trainers, even having just one can pose problems depending on the number of athletes. Diana Miller, an athletic trainer at Robert E. Lee High School in Virginia, takes care of 700 students and Christina Romero, Head Athletic Trainer at Henry M. Gunn high school) in 2014 had 1115 athletes in her care. This project is to examine the impact athletic trainers have on student athletes and examine the issue of understaffed athletic trainers, specifically how many athletic trainers schools need.

*National Federation of State High Schools Association¹
Gunn High School²
HuffingtonPost³*

Background Information

There are two indices that the NATA uses to determine the need for a health care provider during games.

- Injury Rate Index: is calculated by taking the amount of injuries per 1,000 exposures(athletes) and dividing it by the amount of treatments per injury and multiply the product by 100
- Catastrophic Index: the measure of the possibility of a fatal injury occurring during play . Using a 4-point scale, football received highest score for one sport at 4 with a rate of 10 per 100,000 injuries

NATA guidelines state any sport with a combined IR and CI of a 4 or a CI of 3 should have an Athletic Trainer on present at field of play., such as these sports: Football, Wrestling, Basketball(boys and girls), etc.⁴

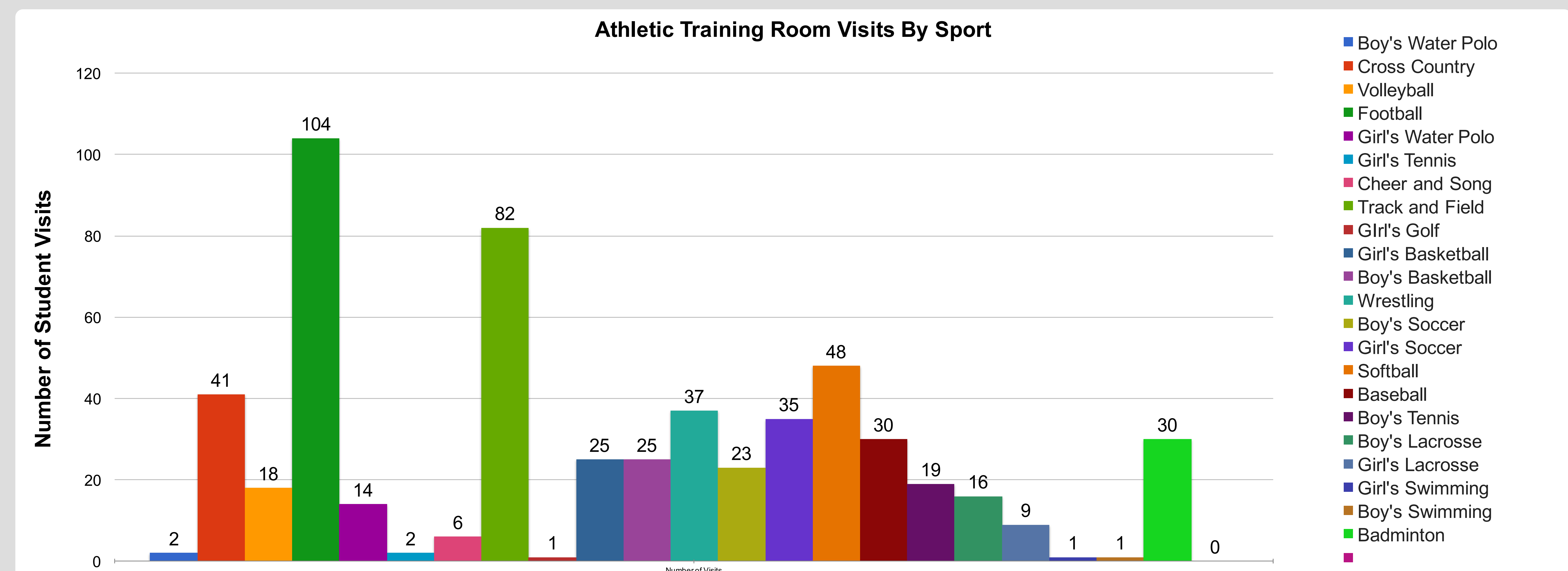
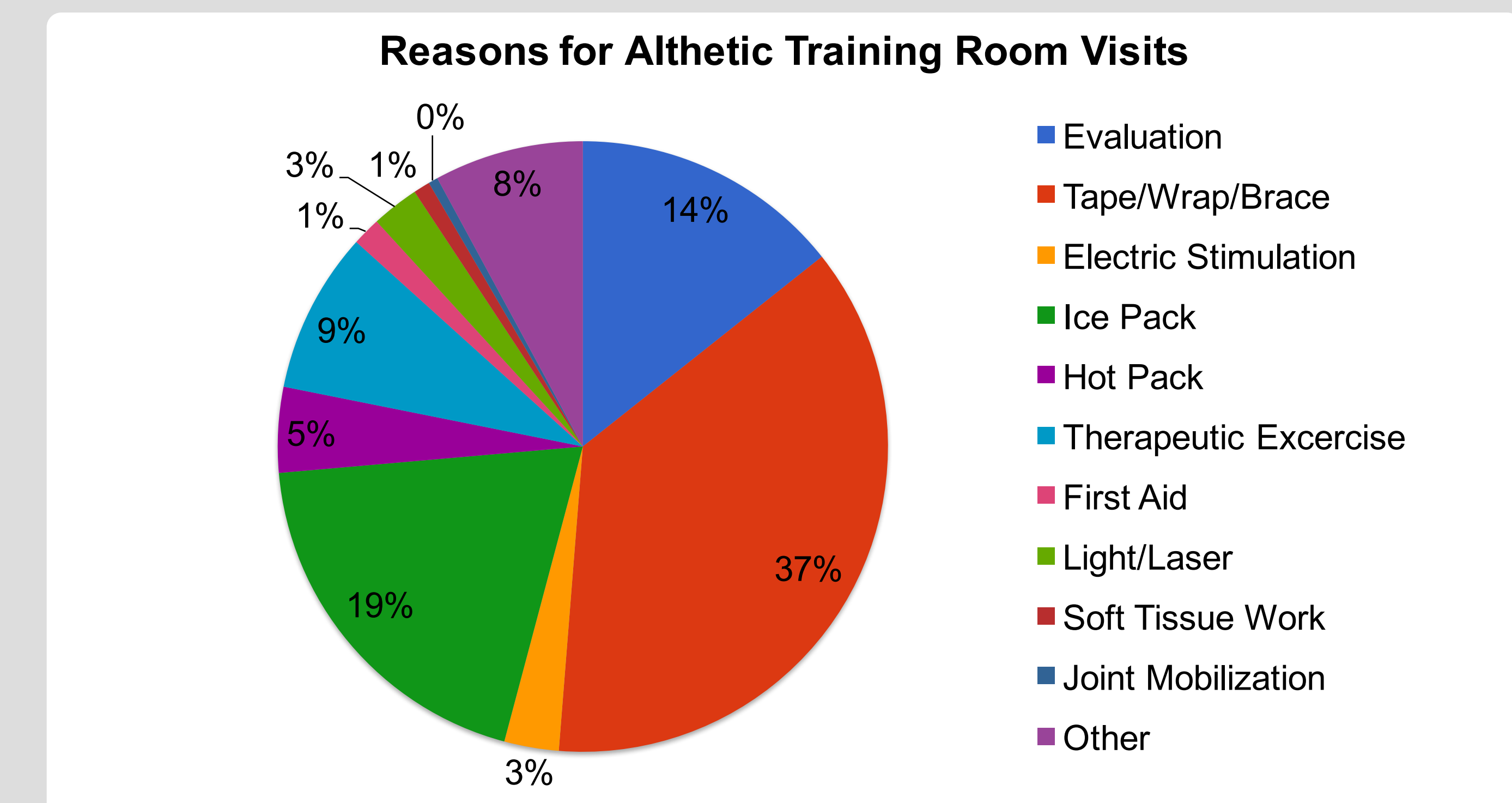
National Athletic Trainers Association(NATA)⁴

MATERIALS, METHODS & RESULTS

The data depicting the number of injuries and visits to the athletic training room was collected in the Gunn Athletic Training Room over the course of the 2015-2016 academic year. Some of the data was provided by the athletic department at Gunn High School. Traffic to and from the athletic training room for injuries and the like was examined based on this data. This data indicates whether additional athletic trainers are needed.

Below, are the numbers of visits to the athletic training room for injuries per sport for this 2015-2016 academic year (see graph: Athletic Training Room Visits by Sport)..

Note: this data does not reflect the injuries obtained during games and is limited, as some students were not surveyed.



SUMMARY / CONCLUSIONS

Based on the data it is shown that approximately 600 people come in to the athletic training room in a school year. This is approximately 60% of the athletes who take part in Gunn High School's athletic programs.

There are 600 athletes visiting the athletic training room; approximately two games per day based on averaging the total game over the academic calendar days. The number of games range from 0 to 6 per day. Based on the available athletic trainers at Gunn, there may a need be to increase the number of athletic trainers who can assist in developing preventive conditioning program, provide appropriate acute care for athletic injuries, arrange for appropriate physician evaluation and diagnosis, and provide or coordinate follow-up treatment and rehabilitation as need.

ACKNOWLEDGEMENTS

Thank you to Christina Romero, Head Athletic Trainer at Gunn High School, for allowing me to help and take data in the athletic trainer room at Henry M. Gunn High School. Additionally, I would like thank my mentor, Mr. Chris Kolar, for supporting my project.