# WHEN THE COLLECTION OF BIOMETRIC AND PERFORMANCE DATA ON COLLEGE ATHLETES GOES TOO FAR

The collection of biometric and performance data on athletes has transformed the way athletes approach training and nutrition. As the technology becomes more affordable, the majority of college sports teams are using wearable device technology to collect biometric and performance data on college athletes both on and off the field. Due to gaps in the regulatory framework, the collection, storage, and use of biometric and performance data is not governed by federal statutes, nor any federal regulations. Although this raises significant privacy concerns for college athletes, this Comment believes the collection and analysis of biometric and performance data should be encouraged in college sports, so universities can continue to research various ways to make sports safer. As such, this Comment proposes a regulatory framework that seeks to balance the privacy of student athletes with the research conducted by universities using the student athletes' data.

#### TABLE OF CONTENTS

I.	INTRODUCTION	280
II.	WHAT IS PERFORMANCE DATA?	282
	A. History of Performance Data	282
	B. Performance Data and the Collection Devices	283
	C. Current Uses of Performance Data in NCAA	
	Athletics	286
III.	THE UNSPOKEN GAP: LACK OF REGULATION FOR THE	
	COLLEGIATE PERFORMANCE DATA	289
IV.	COMPETING INTERESTS: BALANCING PRIVACY AND	
	BENEFITS	294
	A. Privacy Concerns for College Athletes	294
	B. Benefits of Performance Data in College Sports	296
V.	REFORMING COLLEGIATE PERFORMANCE DATA	
	COLLECTION	298
	A. Federal Oversight Through HIPAA and HHS	298
	B. NCAA Oversight Committee for Collection of	
	Performance Data	300
VI.	CONCLUSION	300

## WAKE FOREST LAW REVIEW

#### I. INTRODUCTION

In modern society, technological breakthroughs are becoming a new norm. These technological breakthroughs have not only changed societal standards and business practices, but they have also transformed the way athletes approach training and nutrition.<sup>1</sup> Notably, advances in medical technology have facilitated studies on how sports impact the human body. For example, advances in brain imaging have helped demonstrate football's impact on the brain, as a recent report found that 110 out of the 111 former National Football League ("NFL") players included in the study suffered from chronic traumatic encephalopathy ("CTE").<sup>2</sup> However, the benefit of these advances extends beyond post-game health.

There is a rapidly growing market of wearable smart devices which can collect data on all aspects of an athlete's life.<sup>3</sup> By 2020, it is estimated that more than four hundred million wearable smart devices will be sold, valued at more than thirty-four billion dollars.<sup>4</sup> This technology has caught the attention of professional sports teams and is now widely used by all major professional sports leagues in the United States.<sup>5</sup> Teams believe the wearable smart devices can help manage training, prevent injuries, and even modify athletes' behavior by providing objective feedback.<sup>6</sup> However, professional sports teams are not the only institutions using wearable smart devices to collect athletes' information.

Collegiate sports are similarly beginning to incorporate wearable smart devices into their athletic programs.<sup>7</sup> The data collected by wearable smart devices can be defined as performance data or

4. Jason F. Arnold & Robert M. Sade, *Wearable Technologies in Collegiate* Sports: The Ethics of Collecting Biometric Data from Student-Athletes, 17 AM. J. BIOETHICS 67, 67 (2017).

<sup>1.</sup> Erica R. Hendry, *How Technology is Changing the Way Athletes Train*, SMITHSONIAN, (Feb. 10, 2014), https://www.smithsonianmag.com/innovation /how-technology-is-changing-the-way-athletes-train-180949633/.

<sup>2.</sup> Daniel Rapaport, *Timeline: Six Studies of Head Trauma in Football That Helped Establish a Link to CTE*, SPORTS ILLUSTRATED (July 26, 2017), https://www.si.com/nfl/2017/07/26/nfl-concussion-head-trauma-studies-football-timeline.

<sup>3.</sup> Brian Hughes, *The New Wave of Sports Wearables*, HUFFPOST, (Dec. 6, 2017), https://www.huffingtonpost.com/brian-hughes/the-new-wave-of-sports-we\_b\_12449566.html.

<sup>5.</sup> Katrina Karkazis & Jennifer R. Fishman, *Tracking U.S. Professional Athletes: The Ethics of Biometric Technologies*, 17 AM. J. BIOETHICS 45, 45 (2017).

<sup>6.</sup> *Id.* at 46 (stating further that "[t]eams are also exploring the potential of these technologies for longer term applications, such as assessing the career longevity of current players and potential draft picks").

<sup>7.</sup> See, e.g., Marc Tracy, With Wearable Tech Deals, New Player Data Is Up for Grabs, N.Y. TIMES (Sept. 9, 2016), https://www.nytimes.com/2016/09/11/sports /ncaafootball/wearable-technology-nike-privacy-college-football.html (stating that the University of Michigan collects performance data on its "athletes through the use of wearable technology like heart-rate monitors, GPS trackers and other devices that log myriad biological activities").

biometric data (collectively "performance data").<sup>8</sup> In other words, performance data is "the measurement and statistical analysis of physical and physiological characteristics" of athletes on and off their respective playing fields.<sup>9</sup> Notably, whether athletes' performance data is protected by medical privacy laws, particularly federal medical privacy laws, is questionable.<sup>10</sup> Thus, athletes' performance data may be at risk of exposure to third parties, and athletes may not have control over how their data is used. For example, the University of Michigan and Nike recently agreed to a \$170 million apparel contract that included a clause allowing Nike to "harvest personal data from Michigan athletes" collected using wearable smart devices.<sup>11</sup> While this may seem shocking, one health care lawyer noted federal law may not protect this data, making contracts such as Michigan's and Nike's permissible.<sup>12</sup>

Under the Health Insurance Portability and Accountability Act ("HIPAA"), performance data may not be classified as protected health information and is thus outside the purview of HIPAA.<sup>13</sup> As a result, the performance data collected on National College Athletic Association ("NCAA") student athletes may be shared unknowingly with a variety of entities, such as Nike, or subject to security breaches due to the lack of regulation. This not only creates security risks for colleges but also creates security and privacy risks for the individual athletes. Because college sports in the United States are increasingly becoming a mainstay in everyday life,<sup>14</sup> NCAA athletes' privacy is a growing concern.

While other articles have explored the ethical concerns regarding performance data,<sup>15</sup> this Comment will explore the legal landscape surrounding the collection of performance data in the NCAA. This Comment argues that NCAA student athletes do not have any regulatory protection by federal law or by the NCAA, creating a plurality of privacy and security risks for NCAA student athletes. However, the collection of collegiate performance data has vast benefits for the health of current and future athletes. Thus, this Comment's proposed solutions seek to balance protecting the privacy of student athletes with furthering medical research conducted with

<sup>8.</sup> Arnold & Sade, *supra* note 4, at 67–68.

<sup>9.</sup> Karkazis & Fishman, *supra* note 5, at 46.

<sup>10.</sup> See *id.* at 52-53.

<sup>11.</sup> Tracy, *supra* note 7.

<sup>12.</sup> Id. (noting that "[t]here's not a lot of protections for players").

<sup>13.</sup> Karkazis & Fishman, supra note 5, at 53.

<sup>14.</sup> College Sports (NCAA) – Facts and Statistics, STATISTA, https://www.statista.com/topics/1436/college-sports-ncaa/ (last visited Feb. 5, 2019) (noting that almost thirty-one million people physically attended a college sporting event in 2016 alone).

<sup>15.</sup> See, e.g., Karkazis & Fishman, supra note 5, at 46. See also Arnold & Sade, supra note 4, at 67–70; Ariela Lazan & Dov Greenbaum, Collegiate Sports: Professionals All but in Name Raise Unique Bioethics Concerns in the Collection of Biometric Data, 17 AM. J. BIOETHICS 70, 70–72 (2017).

## WAKE FOREST LAW REVIEW [Vol. 54

collegiate performance data. Part II defines performance data and discusses its current uses in collegiate sports. Part III discusses the current state of the law and how the current gaps create privacy concerns for players. Part IV explores the benefits of the collection of performance data at NCAA academic institutions. Finally, Part V proposes a regulatory framework that balances the competing interests.

## II. WHAT IS PERFORMANCE DATA?

Performance data is a broad term used to describe the data collected by various devices that can be continuously worn by athletes on and off the field.<sup>16</sup> The history of performance data demonstrates technology's rapid advancement and development of current devices. However, while advances in technology have arguably helped athletes, this intrusion into collegiate athletes' everyday lives is concerning.

## A. History of Performance Data

Wearable technology can be traced back to the seventeenth century, when a small ring with beads helped Chinese mathematicians perform various calculations without writing instruments.<sup>17</sup> Up until 1961, wearable devices only existed in mechanical form and were primarily mechanical watches.<sup>18</sup> However, in 1961, the first wearable electronics device was created to help mathematicians cheat at roulette.<sup>19</sup> Although the device never actually made it to the roulette tables, the Massachusetts Institute of Technology professors responsible for creating the device reported a forty-four percent increase of winning bets, showing the potential usefulness for wearable devices.<sup>20</sup>

Wearable technology saw further advances in the 1980s when mass production of the microchip began.<sup>21</sup> With this new technology, individuals began experimenting with various designs for computerized glasses, and one mountain bike fanatic created the first wearable video recorder by attaching a VHS cassette recorder to helmets.<sup>22</sup> Interestingly, in July 1996, the Defense Advanced Research Project Agency, hosted a conference titled "Wearables in

<sup>16.</sup> Arnold & Sade, *supra* note 4, at 67–68.

<sup>17.</sup> See Henry Winchester, A Brief History of Wearable Tech, WAREABLE (May 6, 2015), https://www.wareable.com/wearable-tech/a-brief-history-of-wearables.

<sup>18.</sup> *Id.* 19. *Id.* 

<sup>19.</sup> *Id*.

<sup>20.</sup> See Jimmy Soni & Rob Goodman, Claude Shannon, the Law Vegas Shark, NAUTILUS (July 27, 2017), http://nautil.us/issue/50/emergence/claude -shannon-the-las-vegas-cheat; Winchester, supra note 17.

<sup>21.</sup> Winchester, supra note 17.

<sup>22.</sup> Id.

2005.<sup>23</sup> The conference's "predictions included [computerized] gloves which could read RFID tags, flower brooches which react to emotions and body mounted cameras.<sup>24</sup> However, as "mobile phones became the consumer gadget of choice" in the late 1990s and early 2000s, "wearables took a back seat.<sup>25</sup> Even though society clearly had an aggressive vision for wearable technology, laws and regulations surrounding wearable devices remained nonexistent.

The modern era of wearable technology and the drive to collect biometric and performance data began with Nike+, Nike and Apple's fitness tracking device.<sup>26</sup> Nike+ launched out of a venture between Nike and Apple after Nike engineers noticed most of the runners on the company's campus ran with Apple iPods.<sup>27</sup> The companies joined forces to create Nike+, which initially contained only three components—an accelerometer, a transmitter, and a battery.<sup>28</sup> The device was shockingly simple and was placed in a small cutout in the sole of a Nike running shoe.<sup>29</sup> While Nike+ was not the most accurate or precise device,<sup>30</sup> it initiated an important trend in the athletic community—real time data collection by a wearable device.

Notably, the Nike+ product showed the impact data collection can have on consumers. Nike discovered that if a consumer used the device five times, the user was more likely to continue to use the product and upload data.<sup>31</sup> This showed that athletes were more willing to use data to help modify their behavior to become healthier and stronger.<sup>32</sup> Consequently, the market for wearable devices was created.

#### B. Performance Data and the Collection Devices

After Nike+ entered the market, technology rapidly advanced and wearable devices exploded on the market, leading to an ever-increasing collection of performance data.<sup>33</sup> Performance data is a collective term "to refer to the measurement and tracking of physical and physiological characteristics for the purpose of assessing performance and recovery."<sup>34</sup>

<sup>23.</sup> Id.

<sup>24.</sup> Id.

<sup>25.</sup> Id.

<sup>26.</sup> Id.

<sup>27.</sup> Mark McClusky, *The Nike Experiment: How the Shoe Giant Unleased the Power of Personal Metrics*, WIRED (June 22, 2009), https://www.wired.com/2009/06/lbnp-nike/.

<sup>28.</sup> Id.

<sup>29.</sup> Id.

<sup>30.</sup> Id.

<sup>31.</sup> *Id*.

<sup>32.</sup> Id.

<sup>33.</sup> Bernard Marr, 15 Noteworthy Facts About Wearables in 2016, FORBES (Mar. 18, 2016), https://forbes.com/sites/bernardmarr/2016/03/18/15-mind-boggling-facts-about-wearables-in-2016/#32eb6d4f2732.

<sup>34.</sup> Karkazis & Fishman, *supra* note 5, at 46.

#### WAKE FOREST LAW REVIEW

[Vol. 54

Performance data consists of numerous different metrics collected by a variety of devices worn on and off the playing fields.<sup>35</sup> One device "is worn around the torso and tracks heart rate and heart-rate variability (HRV), breathing rate, and movement."<sup>36</sup> Another is a wristband device that "tracks similar biovariables and is marketed as a 'performance optimization system' that gives scores for strain, recovery, and 'sleep performance,' as well as to predict performance."<sup>37</sup> Other devices use sensors that are attached to an athlete's body using adhesive bandage-like patches.<sup>38</sup> These devices collect a variety of data, including "heart rate, respiration, motion, blood oxygenation, brain activity, muscle function, body temperature, and changes in blood pressure."<sup>39</sup> Some even "track a 'whole library' of chemicals present in sweat, including electrolytes, proteins, and heavy metals," effectively creating a moving lab that can track an athlete's data for an extended period of time.<sup>40</sup>

While the above-mentioned devices were designed and created specifically for sports, other medical technologies have been adapted to provide "assessments of [an] athlete's cardiac health, metabolism, central nervous system, gas exchange, detoxification status, and hormonal system."<sup>41</sup> Accordingly, performance data can be collected in endless formats, and the mentioned examples are only a small sample of what is actually in use. Sports trainers and coaches at the collegiate level can collect any of this performance data, which puts athletes at risk of unnecessary intrusions.<sup>42</sup>

One of the leading performance data collection companies for college and professional sports is Catapult Sports.<sup>43</sup> Catapult Sports is an Australian company described as a "wearable data juggernaut."<sup>44</sup> Catapult Sports devices are capable of collecting up to one hundred different data metrics on athletes while the tracking device is being worn.<sup>45</sup> Subsequently, the data is analyzed using

44. See A Buyer's Guide to Athlete Tracking Systems for Coaches, SIMPLIFASTER, https://simplifaster.com/articles/athlete-tracking-systems/ (last visited Feb. 5, 2019) [hereinafter Guide to Tracking Systems].

45. See 7 Professional Sports Wearables Used by Major Teams and Leagues, SPORTS WEARABLE (Apr. 30, 2016), http://www.sportswearable.net/7-professional-sports-wearables-used-by-major-teams-and-leagues/4/.

<sup>35.</sup> Id.

<sup>36.</sup> *Id*.

<sup>37.</sup> Id.

<sup>38.</sup> Id.

<sup>39.</sup> *Id*.

<sup>40.</sup> *Id*.

<sup>41.</sup> Id. at 47.

<sup>42.</sup> See infra Subpart IV.A.

<sup>43.</sup> This Comment does not seek to criticize Catapult Sports for its technology or data collection methods, and merely uses Catapult Sports and its products as an example. The author believes Catapult Sports and other similar companies are exceptionally beneficial for athletes and hopes that these companies continue to grow in an impactful manner that continues to serve athletes in a meaningful way.

sophisticated algorithms to determine the "load" an athlete is exerting.<sup>46</sup> Loading is a summary metric of performance data that measures "the demand on the body for managing adaptation and injury risk."<sup>47</sup> While loading is different than tracking, the underlying data must be collected in real time to determine this metric.<sup>48</sup> For example, the data can be collected using accelerometers, gyros, magnometers, and GPS.<sup>49</sup>

Catapult Sports' analytic platform is called OpenField, which, as the company describes, is a cloud-based analytics platform that allows a team's training staff to report and present data in the style that best suits the needs of the team using the wearable devices.<sup>50</sup> Generally, a cloud-based platform is a cloud computing model that describes how a service provider runs their operation.<sup>51</sup> In essence, a cloud computer gives a company "the ability to apply abstracted compute, storage, and network resources to workloads as needed and tap into an abundance of prebuilt services."52 For consumers, this means the public cloud offers a way to "gain new capabilities without investing in new hardware or software."53 Customers merely pay a subscription fee to gain access to the cloud and are able to pay only for the resources they will use.<sup>54</sup> Additionally, to gain access, customers simply need to fill out a form and set up an account, which allows companies to add users and increase analytic capabilities on the fly.<sup>55</sup> Overall, this means that companies, like Catapult Sports, can continually update their software platforms and teams can immediately get the updated platforms on all the devices.

For example, Catapult Sports' cloud-based analytics platform can be used by coaches on a variety of devices ranging from standard computers to iPads and iPhones.<sup>56</sup> Catapult Sports advertises that its platform "gives you the ability to create activities and periods on your mobile in real-time."<sup>57</sup> The company says its cloud-based platform allows teams to "spend more time with [its] athletes and avoid post-session maintenance by conducting analysis on the go."<sup>58</sup> However, a private cloud-based platform, while beneficial, means

<sup>46.</sup> See Guide to Tracking Systems, supra note 44.

<sup>47.</sup> Id.

<sup>49.</sup> Id.

<sup>49.</sup> Id.

<sup>50.</sup> See Software, CATAPULT, https://www.catapultsports.com/products /openfield (last visited Feb. 5, 2019).

<sup>51.</sup> See Eric Knorr, What Is Cloud Computing? Everything You Need to Know Now, INFOWORLD (Oct. 2, 2018), https://www.infoworld.com/article/2683784 /cloud-computing/what-is-cloud-computing.html.

<sup>52.</sup> Id.

<sup>53.</sup> *Id*.

<sup>54.</sup> *Id.* 

<sup>55.</sup> *Id*.

<sup>56.</sup> See Software, supra note 50.

<sup>57.</sup> Id.

<sup>58.</sup> Id.

## WAKE FOREST LAW REVIEW

[Vol. 54

that the data and programs are being filtered through a "central software control point."<sup>59</sup> As a result, this means that all teams using Catapult Sports' analytics technology may have their athletes' data stored in a centralized location. Because it appears most college teams use Catapult Sports, a large amount of player data is presumably stored by this single company, likely at either a single location or a small number of locations.

One criticism of Catapult Sports is due to the cost of the device it is only affordable<sup>60</sup> for major sports programs.<sup>61</sup> However, Catapult Sports recently released a more cost-effective version of its wearable technology that is catered to "sub-elite and amateur teams and athletes."<sup>62</sup> The device collects a variety of physical performance data metrics such as "distance, top speed, sprint distance, number of sprints, impacts, player's power output, intensity, calories burned, and work load."<sup>63</sup> The collected data is synced wirelessly to a platform on a user's mobile device that can be analyzed on a web-based platform, presumably Catapult Sports' cloud-based analytics platform.<sup>64</sup> Thus, at least one company, Catapult Sports, has the capability of collecting performance data on college athletes at all levels.

While Catapult Sports is only one company with sophisticated performance data collection devices, other companies utilize technology in similar ways. For example, other companies use technology which is "packaged into wearable devices that upload data (via Bluetooth or another wireless technology) for storage and analysis in a cloud-based system or on a computer, tablet, or mobile phone."<sup>65</sup> Overall, performance data covers a broad range of metrics and is collected by highly sophisticated devices which utilize cloud-based platforms to analyze and store athletes' data.

#### C. Current Uses of Performance Data in NCAA Athletics

Currently, performance data is collected by a majority of prominent college athletic programs,<sup>66</sup> and presumably, as the

286

<sup>59.</sup> Eric Knorr, *Build Your Own Private Cloud*, INFOWORLD (Aug. 4, 2014), https://www.infoworld.com/article/2608305/cloud-computing/build-your-own-private-cloud.html.

<sup>60.</sup> See Guide to Tracking Systems, supra note 44.

<sup>61.</sup> *See infra* Subpart II.C (discussing wide use of Catapult Sports devices at major college football programs).

<sup>62.</sup> See Catapult Sports Launches Playertek Targeted Toward Amateur Clubs, and Aspiring Professional Sports Players, BUS. WIRE (May 17, 2017), https://www.businesswire.com/news/home/20170517005545/en/Catapult-Sports-Launches-PLAYERTEK-Targeted-Amateur-Clubs.

 <sup>63.</sup> Id.
64. Id.

<sup>65.</sup> Karkazis & Fishman, *supra* note 5, at 46.

<sup>66.</sup> See Marc Tracy, Technology Used to Track Players' Steps Now Charts Their Sleep, Too, N.Y. TIMES (Sept. 22, 2017), https://www.nytimes.com/2017/09 /22/sports/ncaafootball/clemson-alabama-wearable-technology.html.

technology continues to become more affordable, will be widely adopted and implemented across all levels of collegiate sports. For example, Marquette University's men's and women's basketball teams implemented Catapult Sports monitors to track performance data during practice and games.<sup>67</sup> In 2017, the university spent twenty-five thousand dollars per team on the technology that was worn by the athletes in a bra or harness while playing.<sup>68</sup> Marquette used the devices to calculate athletes' loads and notably helped the training staff build specific programs for its athletes.<sup>69</sup> Not only was the performance data used by the staff, but the coaches also used the data to know when to push athletes harder or when to back off.<sup>70</sup> The ability to help training staff and coaches arises from the real time tracking capabilities of Catapult Sports devices. Thus, by utilizing performance data, Marquette could better train athletes and consistently monitor athletes' overall health.

The University of Alabama's football team has also implemented Catapult Sports technology, but has additionally monitored players' sleeping habits using performance data.<sup>71</sup> Prior to 2017, Alabama's football team used FitBit watches to monitor players' sleep and recovery after practice.<sup>72</sup> After losing to Clemson University in the college football's 2016 National Championship game, Alabama partnered with Rise Science to increase collection on players' sleeping habits.<sup>73</sup> The data is collected through sensors placed below a player's mattress that measure sleeping patterns and monitor players' heart rates while sleeping.74 Rise Science states "the most important component of its program is the empowerment of athletes to understand why they are not getting enough sleep and create a plan to change habits."<sup>75</sup> Alabama's players were not only assigned a sleep coach with access to all of their data, but the data was sent to a program that recommends personal sleep plans.<sup>76</sup> Oklahoma State also uses this technology.77 Oklahoma State's assistant athletic director for athlete performance noted that the university starts collecting data during fall camp, meaning that data is collected on

<sup>67.</sup> Lori Nickel, Sophisticated Data Strengthens Marquette's Chances in NCAA Tournament, J. SENTINEL, USA TODAY (Mar. 15, 2017), https://www.jsonline.com/story/sports/college/marquette/2017/03/15/sophisticate d-data-strengthens-marquettes-chances-ncaa-tournament/99020384/.

<sup>68.</sup> *Id*.

<sup>69.</sup> See id.

<sup>70.</sup> Id.

<sup>71.</sup> Joe Lemire, *Rise Science Adds Alabama Football to Growing Sleep Coaching List*, SPORTTECHIE (Aug. 10, 2017), https://www.sporttechie.com/rise-science-adds-alabama-football-growing-sleep-coaching-list/.

<sup>72.</sup> Id.

<sup>73.</sup> Id.

<sup>74.</sup> Id.

<sup>75.</sup> Id.

<sup>76.</sup> Id.

<sup>77.</sup> Id.

WAKE FOREST LAW REVIEW

[Vol. 54

players prior to the start of the season.<sup>78</sup> Rise Science's technology is also used by the University of West Virginia, University of Tennessee, and Clemson University.<sup>79</sup>

The University of California's football team also implemented Catapult Sports technology to track its players, with the head coach noting that wearable technology that collects performance data is "just another way to train our players."80 Rutgers University's assistant strength and conditioning coach for football said the technology helps determine how players are feeling and helps coaches have conversations with their players about their physical condition.<sup>81</sup> Moreover, Clemson University's football team's head football coach said the wearable technology makes it "cool" to talk to the nutritionist.<sup>82</sup> For example, using the technology, a Clemson defensive tackle checked his sleeping statistics on an application every morning and changed his sleeping habits based on his performance data.<sup>83</sup> Clemson football is also using a holistic approach to player performance data. It has an entire group, the Clemson Data Analytics Team, "studying players' on-field physiological data and sleep data in connection with each other."84 As a result, Clemson is able to collect data on its players using a variety of technologies to track a player's health and performance on and off the field.

In all, nearly half of the teams in college football's Power 5 conferences are using Catapult technology.<sup>85</sup> The technology has even made its way into the lower ranks of college sports. For instance, Grand Valley State, a Division II school in Michigan, began using Catapult Sports technology in 2016.<sup>86</sup> Clearly, performance data is widely collected and analyzed among college athletics, particularly in football.<sup>87</sup> As the technology continues to develop, it will inevitably be applied to more sports, particularly as the technology becomes cheaper and more accessible. Likewise, due to the noninvasive aspect of the technology, data can be continuously collected for an extended period of time.<sup>88</sup> Hence, performance data can be collected while

79. Id.

81. *Id*.

86. Id.

87. See also Adam Jude, Washington Football: Huskies Getting Even Faster Thanks to High-Tech Satellite Tracking System, NCAA (Aug. 30, 2017), https://www.ncaa.com/news/football/article/2017-08-30/washington-footballhuskies-getting-even-faster-thanks-high-tech (discussing how the Washington Huskies, a Pac-12 team, have embraced the sports science culture and have also implemented Catapult Sports tracking technology to collect performance data on its players).

88. Karkazis & Fishman, *supra* note 5, at 46.

<sup>78.</sup> Id.

<sup>80.</sup> Tracy, *supra* note 66.

<sup>82.</sup> Id.

<sup>83.</sup> *Id.* 

<sup>84.</sup> *Id*.

<sup>85.</sup> Id.

athletes are on and off the field, which may raise data security risks for the athletes.

# III. THE UNSPOKEN GAP: LACK OF REGULATION FOR THE COLLEGIATE PERFORMANCE DATA

As discussed in Subpart II.C, college athletic teams, and in particular college football teams, collect a vast amount of performance data on their respective players.<sup>89</sup> Yet, even though this data is often used for player safety and to increase player performance, the collected and stored performance data is arguably not protected by HIPAA. Moreover, the NCAA does not currently address the use or collection of performance data in its bylaws. As such, college athletes likely have no regulatory protection for their collected performance data.

Congress enacted HIPAA in 1996.<sup>90</sup> Generally, HIPAA changed standards in the health care insurance market and "guaranteed the availability and renewability of health insurance coverage for certain employees and individuals, and limited the use of preexisting condition restrictions."<sup>91</sup> HIPAA created federal standards for various aspects of the healthcare industry and included tax provisions specific to health insurance.<sup>92</sup> Importantly, HIPAA included "privacy provisions instructing the Secretary of [the U.S. Department of Health and Human Services ("HHS")] to issue standards addressing the electronic transmission of health information and the privacy of personally identifiable medical information."<sup>93</sup>

Four years after HIPAA was enacted, HHS published rules addressing the transmission of electronic health information.<sup>94</sup> In December 2000, the final rules were published by HHS.<sup>95</sup> Specifically, the promulgated regulations "apply only to organizations known as covered entities and their business associates,"<sup>96</sup> and these covered entities and business associates had two years from the regulation's effective date to come into compliance.<sup>97</sup>

<sup>89.</sup> Id.

<sup>90.</sup> U.S. DEP'T OF HEALTH AND HUMAN SERVS., EXAMINING OVERSIGHT OF THE PRIVACY & SECURITY OF HEALTH DATA COLLECTED BY ENTITLES NOT REGULATED BY HIPAA 1 (2016), https://www.healthit.gov/sites/default/files/non-covered \_entities\_report\_june\_17\_2016.pdf [hereinafter "HHS 2016 Report"].

<sup>91.</sup> CONG. RESEARCH SERV., RL31634, THE HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA) OF 1996: OVERVIEW AND GUIDANCE ON FREQUENTLY ASKED QUESTIONS ii (2005).

<sup>92.</sup> Id.

<sup>93.</sup> Id.

<sup>94.</sup> C. STEPHEN REDHEAD, CONG. RESEARCH SERV., RL30620, HEALTH INFORMATION STANDARDS, PRIVACY, AND SECURITY: HIPAA'S ADMINISTRATIVE SIMPLIFICATION REGULATIONS ii (2001).

<sup>95.</sup> Id.

<sup>96.</sup> HHS 2016 Report, *supra* note 90, at 13.

<sup>97.</sup> REDHEAD, *supra* note 94, at 15.

#### WAKE FOREST LAW REVIEW

[Vol. 54

Under HIPAA, there are only three types of covered entities.<sup>98</sup> First, health plans are a covered entity under HIPAA.<sup>99</sup> As noted by HHS: "Health plans include health, dental, vision, health maintenance organizations (HMOs), Medicare, Medicaid, and longterm care insurers (excluding nursing home fixed-indemnity policies). Health plans also include employer-sponsored group health plans, government and church-sponsored health plans, and multi-employer health plans."<sup>100</sup> Second, health care clearinghouses are covered entities.<sup>101</sup> HHS summarizes that "[h]ealth care clearinghouses are entities that process nonstandard information they receive from another entity (usually a health plan or health care provider) into standard data elements or a standard transaction, or vice versa."<sup>102</sup> Third, "[h]ealth care providers who electronically conduct certain transactions, such as claims submissions and prior authorizations," are covered entities.<sup>103</sup>

HIPAA also applies to business associates of covered entities.<sup>104</sup> Under HIPAA, a business associate is "a person or organization that uses [protected health information] to perform covered functions or activities on behalf of a covered entity."<sup>105</sup> The business associates' functions or activities can range from "claims processing, data analysis, utilization review, and billing functions and services."<sup>106</sup> The term "services" is not construed narrowly, and can include services such as "legal, actuarial, accounting, consulting, data aggregation, management, administrative, accreditation, or financial functions or activities."<sup>107</sup> While a business associate is broadly defined, if the business associate is not performing the work on behalf of a covered entity, HIPAA does not apply.

Ultimately, if the entity does not fall into one of the three covered entity categories or is not a business associate, HHS has no regulatory control over the entity.<sup>108</sup> Hence, HHS cannot regulate the actions of noncovered entities "that collect and maintain health information, such as life insurers, researchers, and employers (unless they are acting as providers or plans)."<sup>109</sup>

If the entity falls within the purview of HHS's control, the entity must adhere to various guidelines, specifically with regard to

100. *Id*.

<sup>98.</sup> HHS 2016 Report, supra note 90, at 13–14; REDHEAD, supra note 94, at 15.

<sup>99.</sup> HHS 2016 Report, *supra* note 90, at 13–14.

<sup>101.</sup> Id. at 14. See also REDHEAD, supra note 94, at 15.

<sup>102.</sup> HHS 2016 Report, *supra* note 90, at 14.

<sup>103.</sup> *Id*.

<sup>104.</sup> See id. at 13.

<sup>105.</sup> *Id.* at 14.

<sup>106.</sup> *Id*.

<sup>107.</sup> *Id*.

<sup>108.</sup> *Id.* at 13.

<sup>109.</sup> REDHEAD, *supra* note 94, at 15–16.

protecting the privacy of protected health information.<sup>110</sup> To define protected health information, the definition of *health information* and *individually identifiable health information* is first needed. *Health information* is defined as follows:

[A]ny information, whether oral or record in any form or medium, that– (A) is created or received by a health care provider, health plan, public health authority, employer, life insurer, school or university, or health care clearinghouse; and (B) relates to past, present, or future physical or mental health or condition of an individual, the provision of heath care to an individual, or the past, present, or future payment of health care to an individual.<sup>111</sup>

Thus, any *health information* identifying the patient and created by the covered entity is considered *individually identifiable health information*.<sup>112</sup>

Applying these definitions, protected health information is individually identifiable health information "that is: (i) Transmitted by electronic media; (ii) Maintained in electronic media; or (iii) Transmitted or maintained in any other form or medium."<sup>113</sup> Accordingly, if college teams are covered entities or business associates and performance data is protected health information, the player's performance data must be protected in adherence with the regulations set forth by HHS.

Specifically, under HHS's regulations, protected health information can only be used and disclosed to other entities in extremely limited scenarios without patient consent.<sup>114</sup> These situations are expressly permitted by HIPAA, and for all other circumstances, the entity must get written consent from the patient for disclosure.<sup>115</sup> Importantly, a covered entity may only use or disclose protected health information for the purpose of "research, public health, or health care operations."<sup>116</sup> Moreover, protected health information stored electronically is subject to HIPAA's security rule, which has certain security requirements to ensure the confidentiality of patient records.<sup>117</sup> The security requirements state that covered entities must:

(1) Ensure the confidentiality, integrity, and availability of all electronic protected health information the covered entity or

<sup>110.</sup> See HHS 2016 Report, supra note 90, at 13.

<sup>111.</sup> Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191, § 1171(4), 110 Stat. 1936, 2022 (1996).

<sup>112.</sup> See id. § 1171(6).

<sup>113. 45</sup> C.F.R. § 160.103 (2014).

<sup>114.</sup> HHS 2016 Report, supra note 90, at 15.

<sup>115.</sup> *Id*.

<sup>116. 45</sup> C.F.R. § 164.514(e)(3)(i) (2013).

<sup>117.</sup> HHS 2016 Report, supra note 90, at 16.

WAKE FOREST LAW REVIEW

[Vol. 54

business associate creates, receives, maintains, or transmits. (2) Protect against any reasonably anticipated threats or hazards to the security or integrity of such information. (3) Protect against any reasonably anticipated uses or disclosures of such information that are not permitted or required under subpart E of this part. (4) Ensure compliance with this subpart by its workforce.<sup>118</sup>

However, the security standards and consent standards under HIPAA likely do not extend to the performance data currently collected on college athletes. When applying the three categories of covered entities, college teams arguably do not qualify. First, a college team is evidently not a health plan.<sup>119</sup> While college teams provide health insurance and athletes have access to doctors and trainers, the college team itself is not an insurance plan.<sup>120</sup> Second, a college team is not a health care clearinghouse because college teams do not process information received from a health plan.<sup>121</sup> While college teams process the performance data for training and conditioning purposes, college teams are collecting the data themselves rather than receiving the data from a health plan. Third, a college team is not a health care provider that processes claim submissions or provides health care authorizations.<sup>122</sup> As such, a college team is not a covered entity. Moreover, a college team is not a business associate since the college team does not perform any functions or activities on behalf of a covered entity.<sup>123</sup> Rather, a college team collects performance data for itself. Ultimately, HIPAA does not apply to college teams.

The fact that a college team is not a covered entity or business associate is concerning because performance data is likely protected health information. Applying the definition of health information, performance data is information that is (1) collected and received by a university that (2) relates to the physical condition of the individual.<sup>124</sup> Because performance data is collected by individual sensors worn by athletes and can individually identify a student athlete, performance data is individually identifiable health information under HIPAA.<sup>125</sup> Since performance data is individually identifiable health information, it qualifies as protected health information if it is transmitted by electronic media or maintained in

<sup>118. 45</sup> C.F.R. § 164.306(a) (2013).

<sup>119.</sup> *See* HHS 2016 Report, *supra* note 90, at 13–14 (defining covered entities under HIPAA).

<sup>120.</sup> See id.

<sup>121.</sup> See id. at 14.

<sup>122.</sup> See id.

<sup>123.</sup> See id. (defining business associates under HIPAA).

<sup>124.</sup> Health Insurance Portability and Accountability Act of 1996, supra note 111.

<sup>125.</sup> See Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191, § 1171(6), 110 Stat. 1936, 2023 (1996).

electronic media.<sup>126</sup> Here, because performance data is electronically connected and stored in electronic media,<sup>127</sup> performance data qualifies as protected health information.

As a result, if a college team was a covered entity, HIPAA's protections would apply to performance data. As noted by one sports attorney when discussing performance data in college sports, "[t]here's not a lot of protections for players" since HIPAA does not apply to performance data.<sup>128</sup> The security protocols mentioned above do not apply to the cloud-based storage of this data. Therefore, when an athlete's performance data is transferred and stored electronically on cloud-based platforms, there are no security standards mandated by any governing entity. If HIPAA did apply, the regulations would, for example, require colleges to "hire a compliance officer and institute new practices, including ones preventing the disclosure of medical information to reporters." <sup>129</sup> However, as noted, HIPAA likely does not apply, and even HHS is in agreement. For example, in 2016, HHS noted that new and emerging health technologies, such as those capturing performance data, are not covered by HIPAA.<sup>130</sup>

In addition, the NCAA does not have any institutional protections in place for athlete performance data. The 2017–2018 version of the NCAA Division I Manual, the governing bylaws of NCAA athletic institutions, includes no provisions that relate to the collection, storage, and security of performance data.<sup>131</sup> There are only two provisions that relate specifically to HIPAA consent forms, but rather than stating security measures, the provisions merely state athletes should have the opportunity to sign a HIPAA consent form that permits the schools to release an athlete's health care data to the NCAA for injury purposes.<sup>132</sup>

Ultimately, even if the current body of medical privacy law applies to college teams, the laws permit athletes to contract around these provisions. For example, a player "can be compelled to consent to disclosure of information about their medical condition without violating privacy principles under federal law."<sup>133</sup> As a result, when players come to college as freshmen, they could feel compelled to sign a waiver releasing the college team from HIPAA's scrutiny and lose any protections that currently exist. Especially since universities have a vast amount of bargaining power over incoming players, even if HIPAA applied, almost all players would likely sign such a waiver

<sup>126. 45</sup> C.F.R. § 160.103 (2014).

<sup>127.</sup> Health Insurance Portability and Accountability Act of 1996, supra note 111.

<sup>128.</sup> Tracy, supra note 7.

<sup>129.</sup> Karkazis & Fishman, *supra* note 5, at 52.

<sup>130.</sup> HHS 2016 Report, *supra* note 90, at 1; *see also* Karkazis & Fishman, *supra* note 5, at 52.

<sup>131.</sup> See generally NCAA, 2017-18 NCAA DIVISION I MANUAL (2017).

<sup>132.</sup> Id. at 79.

<sup>133.</sup> Karkazis & Fishman, *supra* note 5, at 52.

294 WAKE FOREST LAW REVIEW [Vol. 54

that would permit the college to deviate from HIPAA's privacy regulations. Unfortunately, college athletes have no security standards protecting their performance data collected by their respective college teams.

#### IV. COMPETING INTERESTS: BALANCING PRIVACY AND BENEFITS

Because there are no regulations or security standards protecting college athletes' performance data, a variety of privacy concerns are raised. However, professional sports leagues have historically suppressed negative data,<sup>134</sup> which arguably prohibits important player safety advancements. As a result, there is a competing interest of privacy for college athletes with advancements for player safety.

## A. Privacy Concerns for College Athletes

The lack of regulation of college athletes' performance data poses security risks for individual athletes. For example, "[p]layers have an interest in protecting this information because it can affect their position when negotiating contracts."135 For example, the NFL is extremely competitive for coveted roster decisions,<sup>136</sup> and teams may seek a college athlete's performance data to determine whether there are any underlying health risks. Possessing an athlete's performance data may give the team more bargaining power and has the potential to end a college player's professional career before it even begins. One writer noted the "most important single factor in a team's strategy is who they have on their roster."137 Thus, when difficult draft situations arise, teams may pursue avenues to access a player's performance data. Since there are no regulations or protections surrounding the data, so long as the player is not contractually protected with the school or the data collection service, the NFL could theoretically obtain their performance data.

Notably, as of at least November 7, 2018, Catapult Sports touts at least thirteen NFL teams as clients.<sup>138</sup> Thus, NFL teams would not have to look far to potentially access college athletes' performance data. The teams could easily contact their wearable device service provider, Catapult Sports, and ask them to send over the data or allow them access over its cloud-based service. As noted, because colleges possess great bargaining power over these athletes, young college players may sign away their rights and ultimately lose the

<sup>134.</sup> See Arnold & Sade, supra note 4, at 68–69.

<sup>135.</sup> Karkazis & Fishman, *supra* note 5, at 52.

<sup>136.</sup> See id. at 55.

<sup>137.</sup> Jeremy Venook, *The Upcoming Privacy Battle Over Wearables in the NBA*, ATLANTIC (Apr. 10, 2017), https://www.theatlantic.com/business/archive /2017/04/biometric-tracking-sports/522222/.

<sup>138.</sup> *Clients*, CATAPULT, https://www.catapultsports.com/clients (last visited Feb. 5, 2019).

opportunity of a professional career because their loads may not be sufficient for an NFL team's standards.

Likewise, if a player's performance data is released to the player's professional league prior to the draft, there is a chance teams could misinterpret the player's performance data to believe he or she is at risk of injury or may be on the verge of injury.<sup>139</sup> Moreover, resting to prevent a future injury could ultimately cost the player millions of dollars on his or her contract, especially if the performance data turned out to be misleading.<sup>140</sup> Similarly, if the team interprets the data incorrectly, a healthy player may never have the opportunity to play professionally because teams do not necessarily want to invest in injury-prone players. Thus, security standards are needed to ensure college players do not lose opportunities to play professional sports merely due to their performance data.

Not only could NFL teams potentially access players' data through Catapult Sports, but security risks also arise with having a single platform controlling the analytics for most college athletes, at least regarding on-the-field data. While Catapult Sports certainly has a strong security system to protect its algorithms and trade secrets, it nevertheless remains free from regulatory authority regarding security measures. Thus, a single hacking instance at Catapult Sports could expose thousands of college athletes' performance data. Although this is an exceptionally small risk, standards should be established to ensure the college athletes' performance data is protected across all companies storing the performance data electronically and more specifically on cloud-based platforms.

Moreover, there is a concern that an athlete's performance data can easily be shared without the athlete's knowledge. A recent example is the University of Michigan's apparel contract with Nike.<sup>141</sup> The contract, worth approximately \$170 million, grants broad rights that allows Nike to utilize Michigan players' performance data.<sup>142</sup> A health care attorney noted that there is a lack of player protection for the Michigan athletes since HIPAA does not apply.<sup>143</sup> Thus, neither Nike nor Michigan is bound by any regulatory standards, and both have the freedom to contractually agree for Michigan to hand over player data whenever Nike desires. Even if HIPAA did apply, so long as the player signs a release allowing Michigan to use the data for any purpose, Michigan can enter an enforceable agreement with Nike to allow the company access to the data.

Additionally, the collection of performance data significantly intrudes on an athlete's personal life. For instance, coaches can now

<sup>139.</sup> See Venook, supra note 137.

<sup>140.</sup> See id.

<sup>141.</sup> Tracy, *supra* note 7.

<sup>142.</sup> Id.

<sup>143.</sup> Id.

### WAKE FOREST LAW REVIEW [

[Vol. 54

reprimand players for staying up too late since coaches can track exactly how many hours a player sleeps.<sup>144</sup> Similarly, coaches can track players' diets and how they recover from injury and can further reprimand players for poor nutrition or for poor recovery routines.<sup>145</sup> While this type of tracking may certainly be beneficial, standards should be in place for how much a coaching or training staff can intrude into a player's life, or at the minimum, set standards where a player fully knows his or her rights before wearing any performance data collection devices.

Furthermore, most college athletes do not have the opportunity to play professional sports. A 2018 study found only 1.6% of all college football players, 9.5% of college baseball players, 1.2% of men's college basketball players, and 0.9% of women's college basketball players have an opportunity to play in their respective professional leagues.<sup>146</sup> As a result, a clear majority of college athletes will graduate and begin their careers, but their respective colleges will retain their performance data. Because the data is not covered by HIPAA and the athlete likely released any protective rights,<sup>147</sup> the athlete has no control how the university uses their performance data in the future.

The concerns mentioned are not exhaustive, and there are likely many other intrusions and privacy concerns for college athletes' performance data. Because the universities hold such a bargaining disparity over the athletes, the college players likely fail to comprehend how college teams are intruding into their personal lives and how performance data can remain with the school even after their graduation. Therefore, standards need to be established to protect the players' privacy, particularly as the technology inevitably continues to advance in the coming years.

#### B. Benefits of Performance Data in College Sports

Although there are certainly concerns about the collection, storage, and use of performance data in college sports, the collegiate level may be ideal for performance data collection as universities are, in theory, nonbiased entities immune to the pressures of profitability. Historically, professional sports leagues have suppressed research showing negative consequences of playing the sport.<sup>148</sup> The most infamous example of suppressing research is the NFL's suppression

296

<sup>144.</sup> See Venook, supra note 137.

<sup>145.</sup> See id.

<sup>146.</sup> Estimated Probability of Competing in Professional Athletics, NCAA, http://www.ncaa.org/about/resources/research/estimated-probability-competing-professional-athletics (last updated Apr. 20, 2018).

<sup>147.</sup> See, e.g., Tracy, supra note 7 (noting that "college athletes might lack say over how their [performance] data [is] used" by Nike under its apparel contract with the University of Michigan); see also discussion supra Part III.

<sup>148.</sup> See Arnold & Sade, supra note 4, at 68–69.

of concussion research.<sup>149</sup> The NFL once published a report, which it stated "was based on a full accounting of all concussions diagnosed by team physicians from 1996 through 2001."<sup>150</sup> However, an investigation into the reports showed "more than 100 diagnosed concussions were omitted from the studies—including some severe injuries to stars like quarterbacks Steve Young and Troy Aikman."<sup>151</sup> Through the omission of data, the NFL made it appear that concussions occurred on a less frequent basis.<sup>152</sup> While the NFL continued to stand by its research, others argued the data the NFL used was flawed.<sup>153</sup> Notably, one article argued that "more than a dozen pages of anonymous back-and-forth between reviewers and the [NFL's] committee show some reviewers almost desperate to stop the papers' publication while the authors brushed aside criticism."<sup>154</sup>

Even if the NFL did not manipulate the data, the fact that criticism surrounds the report's validity demonstrates that professional sports leagues cannot be unconditionally trusted with athletic research, as there is always a risk the players' health may be compromised to sustain profits. Interestingly, "[i]n 2013, the [NFL] agreed to a \$765 million settlement of a lawsuit in which retired players accused league officials of covering up the risks of concussion."<sup>155</sup> This settlement prevented the suit from reaching trial, and such a large settlement begs the question of whether the NFL was afraid that its efforts to suppress evidence would become public.

Allegations against the NFL continued through 2016, as a congressional committee in May 2016 found that the NFL tried to privately steer research in a favorable direction for the league as recent as 2012.<sup>156</sup> The study stated: "[O]ur investigation has shown that while the NFL had been publicly proclaiming its role as funder and accelerator of important research, it was privately attempting to influence that research. The NFL attempted to use its "unrestricted gift" as leverage to steer funding away from one of its critics."<sup>157</sup>

<sup>149.</sup> See id. at 68.

<sup>150.</sup> Alan Schwarz, Walt Bogdanich & Jacqueline Williams, *N.F.L's Flawed Concussion Research and Ties to Tobacco Industry*, N.Y. TIMES (Mar. 24, 2016), https://www.nytimes.com/2016/03/25/sports/football/nfl-concussion-research-tobacco.html.

<sup>151.</sup> *Id*.

<sup>151.</sup> *Id.* 152. *Id.* 

<sup>152. 10.</sup> 

<sup>153.</sup> *Id.* 

<sup>154.</sup> *Id.* 

<sup>155.</sup> *Id*.

<sup>156.</sup> John Branch, N.F.L. Tried to Influence Concussion Research, Congressional Study Finds, N.Y. TIMES (May 23, 2016), https://www.nytimes.com /2016/05/24/sports/football/nfl-tried-to-influence-concussion-researchcongressional-study-finds.html.

<sup>157.</sup> U.S. HOUSE OF REPRESENTATIVES COMM. ON ENERGY & COMMERCE DEMOCRATIC COMMITTEE, THE NATIONAL FOOTBALL LEAGUE'S ATTEMPT TO INFLUENCE FUNDING DECISIONS AT THE NATIONAL INSTITUTES OF HEALTH 32 (2016).

WAKE FOREST LAW REVIEW

[Vol. 54

Consequently, there is a strong argument that professional sports leagues cannot be trusted with using performance data to help make sports safer for all athletes.

On the contrary, at the collegiate level, "universities incorporate elements of peer review, disclosure of conflicts of interest, freedom to publish, and public disclosure of research findings."<sup>158</sup> Notably, the concept of peer review that takes place at universities helps establish the credibility of studies. Peer review "functions to encourage authors to meet the accepted high standards of their discipline and to control the dissemination of research data to ensure that unwarranted claims, unacceptable interpretations or personal views are not published without prior expert review."159 Hence, the collection and analysis of performance data at the collegiate level is not necessarily bad for athletic safety research. Partnerships between universities could make sports safer and facilitate the advancement of sports science in general.<sup>160</sup> As a result, while some form of regulations and standards are needed to protect college athletes, these protections must be balanced with the interest of providing a research platform to help increase player safety for all level of sports.

## V. REFORMING COLLEGIATE PERFORMANCE DATA COLLECTION

While there are security and privacy concerns regarding the collection of performance data, collecting and sharing NCAA athletes' performance data has the benefit of making sports safer for all levels of participants. Although oversight and reform are needed, the reform must strike a balance between protecting the performance data of individual athletes while not inhibiting medical advances. To accomplish this, HIPAA should be amended to include athletic teams and performance data as covered entities to allow HHS to promulgate regulations that govern the collection and use of performance data at the collegiate level.

## A. Federal Oversight Through HIPAA and HHS

The federal government should grant HHS the authority to promulgate federal regulations to govern the collection of performance data for college athletes. Federal agencies such as HHS may only create regulations pursuant to their statutory grant.<sup>161</sup> HIPAA is the source of HHS's authority to promulgate regulations for electronic health care data.<sup>162</sup> Thus, HIPAA should be amended to

<sup>158.</sup> Arnold & Sade, supra note 4, at 68.

<sup>159.</sup> Jacalyn Kelly et al., Peer Review in Scientific Publications: Benefits, Critiques, & A Survival Guide, 25 J. INT'L FED'N CLINICAL CHEMISTRY & LABORATORY MED. 227, 227 (2014).

<sup>160.</sup> See Arnold & Sade, supra note 4, at 68.

<sup>161.</sup> See Administrative Agencies, USLEGAL (last visited Feb. 5, 2019), https://system.uslegal.com/administrative-agencies.

<sup>162.</sup> See supra Part III.

give HHS the power to promulgate regulations for performance data in college sports.

Using HIPAA standards as a guideline, HHS should apply similar standards to the collection of performance data in college sports. Baseline security standards should be adopted that all teams and service providers must follow to help eliminate potential risks of data breaches. While there is always an inherent risk of data breaches, baseline standards help ensure certain protocols are always in place to help protect the data. Moreover, each university should be required to have a specific compliance officer responsible for ensuring regulatory compliance. The compliance officers should be subjected to random inspections by HHS officials to confirm compliance. If a university is found to be noncompliant, a financial penalty structure should be created specifically for college teams. To ensure that academic funds are never compromised when imposing penalties, the financial penalty structure should focus only on athletic profits and be applied on a case-by-case basis.

Moreover, HHS's regulations should explicitly state that college athletes cannot fully release their performance data. Thus, unlike the current structure where a release could move a covered entity outside the purview of HIPAA,<sup>163</sup> a signed release would permit universities to (1) use performance data only for player health and safety purposes and (2) share data only for research purposes. The regulations should make clear that releases will be strictly construed, and teams must fully explain the releases to every athlete before he or she signs the release. For research purposes, all identifying information should be removed outside of position, age, height, and weight data. If this standard needs to be changed for research purposes, HHS can alter the regulations, but a strict baseline should be originally set to maximize player security while still permitting use of the data for research purposes. Notably, defining the scope of permitted use for a college athlete's performance data helps minimize the risk that universities will pressure athletes to sign broad releases, and will help ensure the baseline protections will always be in place.

The peer review process at universities helps ensure the accuracy of published reports.<sup>164</sup> However, to maintain the athlete's privacy, all research should be conducted under a strict nondisclosure policy until publication. Players should have the ability to choose whether their data gets published, and permission should be granted only on a case-by-case basis.

While this is certainly a drastic change to the industry, because the regulations are promulgated by HHS, they can be altered as needed. However, HHS should always strive to strike the balance between athlete protection and furthering academic research. Likewise, federal reform is ideal to ensure all college athletes receive

<sup>163.</sup> See supra Part III.

<sup>164.</sup> See supra notes 158-60 and accompanying text.

## 300 WAKE FOREST LAW REVIEW [Vol. 54

the same protection. This ensures that each college abides by the same rules and that there are no recruiting advantages for teams in states with strict privacy rules, or vice versa. Moreover, the federal government is not worried about the NCAA's bottom line and is instead worried about athlete's safety.<sup>165</sup> The proposed legislation and regulation would ensure the protection of college athletes while still utilizing universities as research institutions to help improve player safety in athletics.

## B. NCAA Oversight Committee for Collection of Performance Data

Unfortunately, the legislative and administrative process takes time, and until the federal government takes action, college athletes remain unprotected. At a minimum, the NCAA should create an oversight committee that can promulgate internal regulations and guidelines for NCAA institutions. Ideally, the internal regulations should follow the proposed regulations discussed in Subpart IV.A. While the standards will not be mandated by the government, using contractual relationships, the NCAA can bind institutions to the standards and impose penalties for noncompliance. However, the drawback with this solution is that the NCAA may not be as concerned with player privacy and security as the federal government. The NCAA may seek to monetize performance data in the future and as a result may not seek as strict of guidelines as discussed above. Although this option is far from ideal, it should be pursued immediately to ensure that college athletes' performance data has at least some level of protection.

#### VI. CONCLUSION

As wearable devices continue to advance, performance data is rapidly becoming easier to collect both on and off the field. The industry continues to expand, and more than four hundred million wearable devices are expected to be sold by 2020.<sup>166</sup> Because wearable devices can collect data real in time, professional and collegiate teams have implemented the technology to measure a variety of metrics on their respective athletes.<sup>167</sup> Notably, at the collegiate level, the performance data collected on athletes remains unregulated and is currently outside the purview of HIPAA.<sup>168</sup> Even if college teams were protected entities and the performance data was considered protected health information, college teams could have their players sign releases that allow teams and universities to use

<sup>165.</sup> Jake New, *Presidential Panel on College Sports?*, INSIDE HIGHER ED (Jan. 13, 2015), https://www.insidehighered.com/news/2015/01/13/ncaa-discuss-federal-oversight-college-athletics-white-house (discussing how player safety was a legislative priority during Congressional and White House meetings).

<sup>166.</sup> Arnold & Sade, supra note 4, at 67.

<sup>167.</sup> See supra Subparts II.B, II.C.

<sup>168.</sup> See supra Part III.

the players' performance data however the respective team and university desire.<sup>169</sup>

Consequently, this raises a plurality of privacy and security concerns for players, ranging from who can access the data to how the data is stored by the wearable technology service providers.<sup>170</sup> While regulations and standards are needed to address these concerns, any action to protect the college athletes must be balanced with allowing universities to use the data for athletic research purposes.<sup>171</sup> Professional sports leagues have historically suppressed safety research, and due to peer review standards at universities, the universities provide an optimal platform to analyze performance data to improve safety in sports.<sup>172</sup>

To balance these competing concerns, HIPAA should be amended to permit HHS to promulgate regulations governing college athletes' performance data.<sup>173</sup> While the initial regulations may not be perfect, HHS can amend the regulations as needed, while striving to maintain the delicate balance between privacy and security with advancement of research.<sup>174</sup> At the minimum, the NCAA should adopt the proposed standards to immediately provide institutional protection until the federal government can implement the proposed standards.<sup>175</sup> As the technology continues to develop, it will be harder to impose regulations as the wearable devices become more and more common in athletics. Therefore, action should be taken before it is too late and college athletes lose any possibility of privacy and security protection for their collected performance data.

Gilbert Smolenski<sup>\*</sup>

<sup>169.</sup> See supra Part III.

<sup>170.</sup> See supra Part IV.

<sup>171.</sup> See supra Subpart IV.B.

<sup>172.</sup> See supra Subpart IV.B.

<sup>173.</sup> See supra Subpart V.A.

<sup>174.</sup> See supra Subpart V.A.

<sup>175.</sup> See supra Subpart V.B.

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