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# The NCAA Needs Smelling Salts When It Comes to Concussion Regulation in Major College Athletics

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*Despite the now commonplace concern surrounding concussions, the widely-recognized long-term cognitive damage caused by on-field head injuries, the preventative steps that youth and professional sports leagues have taken to mitigate these effects, and the plain words of caution spoken by professional athletes themselves, the NCAA has been lethargic, at best, in reacting to the alarm that athletes, doctors, and lawmakers have been sounding about the danger of head injuries from playing contact sports. Congress, state legislatures, sports leagues, and NCAA-member conferences have rallied to the cause, applying themselves to the task of establishing concussion management protocols and funding studies to evaluate how concussions are caused and what can be done to prevent them.*

*Yet, the NCAA has failed to apply its resources with similar energy, or take independent action to protect its student-athletes from being plagued by cognitive decline in their post-collegiate professional lives. This Article explains the science of a concussion, and presents the reasons why it is imperative that concussions be prevented. This Article evaluates the efforts of other sports leagues – from the NFL to youth leagues to the Ivy League – to implement concussion management plans and devote funds to studying the cognitive effects of multiple head injuries. This Article argues that the NCAA, which purports to prepare student-athletes for success off the field, has*

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*enjoyed great autonomy since its inception – shielded from government regulation and from student-athlete demands. This Article argues that the NCAA’s independence has allowed it to fail its student-athletes by not providing proper education, guidelines, and prevention techniques. Furthermore, this Article suggests that the NCAA create an education plan to prepare student-athletes for timely returns-to-play, and urges the NCAA to direct its funds towards research and collaborative opportunities with existing concussion research efforts. Ultimately, this Article concludes that the NCAA has failed to provide proper regulation in this area of collegiate athletics, and urges the federal courts to mandate change.*

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It is our hope that through this [concussion] research questions that go beyond our interests may be answered . . . . Questions that lead to a safer game of football, from professional to Pop Warner; questions that lead to better diagnostic tests for those alive; and questions that lead to a cure; will all hopefully be answered.<sup>1</sup>

## I. INTRODUCTION

In the spring of 2010, Catherine Varner, a lacrosse midfielder, suffered a stick check to the head.<sup>2</sup> After the hit, she rose to her feet slowly, stunned and visibly shaking.<sup>3</sup> Varner was a student-athlete at Agnes Scott College,<sup>4</sup> a National Collegiate Athletic Association (NCAA) Division-III institution. Checks to the head are illegal in NCAA women's lacrosse, but since this hit was not especially egregious, Varner simply took possession of the ball and play resumed.<sup>5</sup> She finished the rest of the first half, and played the entire second half, though she continued to experience nausea and sensitivity to light.<sup>6</sup>

The lacrosse player had suffered a Grade 2 concussion, which is characterized by transient confusion and mental status abnormalities that last for more than fifteen seconds.<sup>7</sup> Varner's coach was concerned, but, like many student-athletes, Varner brushed herself off and readied

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<sup>1</sup> Duerson family statement after the death of former Chicago Bears and New York Giants safety Dave Duerson. Duerson committed suicide on February 17, 2011, at the age of 50, following months of headaches, blurred vision, and deteriorating memory. He shot himself in the heart, not the head, because, as he revealed in his final note, he wanted his brain to be given to the NFL brain bank for evaluation. See Alan Schwartz, *Duerson's Brain Trauma Diagnosed*, N.Y. TIMES (May 2, 2011), <http://www.nytimes.com/2011/05/03/sports/football/03-duerson.html>.

<sup>2</sup> Catherine Varner, *Letting Go of Lacrosse: Catherine Varner's Story*, THE CONCUSSION BLOG (May 3, 2011), <http://theconcussionblog.com/2011/05/03/letting-go-of-lacrosse-catherine-varners-story/> (recounting details of the game in which the student-athlete suffered the concussion). Unlike in men's lacrosse, women's lacrosse players wear goggles, which protect against eye injury, but they do not wear helmets. See *About the Sport*, USLACROSSE.ORG, <http://www.uslacrosse.org/UtilityNav/AboutTheSport/SportsScienceandSafety/ApprovedEyewearList.aspx> (last updated June 29, 2011).

<sup>3</sup> See Varner, *supra* note 2 (characterizing player's recollection of post-hit impressions).

<sup>4</sup> Agnes Scott College is a Division III NCAA member institution. See AGNES SCOTT ATHLETICS, <http://www.agnesscott.edu/athletics> (last visited June 16, 2012).

<sup>5</sup> See Varner, *supra* note 2 (explaining how the head check appeared to be a "normal" foul, requiring only that the offending player be removed from the field).

<sup>6</sup> See Varner, *supra* note 2 (describing player's symptoms).

<sup>7</sup> See AM. ACAD. OF NEUROLOGY QUALITY STANDARD SUBCOMM., *Practice Parameter: The Management of Concussion in Sports (Summary Statement)*, 48 NEUROLOGY 581, 582 (1997), available at <http://www.neurology.org/content/48/3/581.full.html> (last updated Sept. 16, 2011) (describing Grade 2 concussion) [hereinafter *AAN Statement*]. For a further discussion of how concussions are graded, see *infra* notes 42-46 and accompanying text.

herself to return to the game, dazed, with slower processing speed and susceptibility to additional head trauma.<sup>8</sup> Following the game, Varner continued to experience nausea and moodiness.<sup>9</sup> The next day, she went to her school's Health Center and described her symptoms. She complained of a splitting headache, nausea, and tremors, but no one considered the possibility that she had a concussion.<sup>10</sup> She proceeded to attend class and participate in the last practice of the season, but her teammates noted her "extremely serious and focused" demeanor at the light, upbeat practice.<sup>11</sup> Varner even played in the last game of the season the following day, though she had no recollection of playing after the fact.<sup>12</sup>

In the weeks following the hit, Varner struggled to complete her remaining coursework for the semester.<sup>13</sup> She experienced difficulty in retaining information, focusing, reasoning, following directions, balancing, exercising, and recognizing her surroundings.<sup>14</sup> In the months that followed, as her symptoms worsened, she spent her time searching for ways to relax and lift her mood, and let her body heal.<sup>15</sup> Finally, three months after her symptoms started, Varner's mother suggested that she might have suffered a concussion from the hit.<sup>16</sup> Varner saw a concussion specialist and took an ImPACT test, which confirmed and officially diagnosed the concussion.<sup>17</sup>

Today, more than a year after the incident, the student-athlete is still struggling to continue her education and graduate.<sup>18</sup> Despite the

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<sup>8</sup> See Varner, *supra* note 2 (recalling player's criticism of herself for shaking, brushing off coach's concerns: "I just wanted to be left alone and to be able to block out what I was feeling so that we could finish the game and go home.").

<sup>9</sup> See *id.* (reciting player's strange behaviors, such as crying to her mother, snapping at her teammates and trainers).

<sup>10</sup> See *id.* (noting Health Center's suggestion that player might have been experiencing an allergic reaction to medication).

<sup>11</sup> See *id.* (describing player's recollection of uncharacteristic behavior while team joked with each other at last practice of season).

<sup>12</sup> *Id.*

<sup>13</sup> See *id.* (describing how papers took "much longer than usual" and "all had a slightly incoherent element").

<sup>14</sup> See *id.* (indicating student-athlete's difficulty expressing herself coherently in papers, following sequences of driving directions, and exiting a three-story parking garage).

<sup>15</sup> See *id.* (listing Varner's attempts to improve her "foul mood").

<sup>16</sup> *Id.*

<sup>17</sup> See *id.* (relaying doctor's diagnosis and prediction that Varner should feel better "sometime after three to six months" with rest).

<sup>18</sup> See *id.* ("I had serious talks with my parents and my doctor about whether . . . I should return to school for the fall semester. I was eager to return . . . normalcy in my life so I decided that with some academic accommodations and a much lighter course load, it would be possible.").

four months of mental and physical rest she gave her body, lingering signs of her concussion persist, and it is evident that she still has not recovered fully.<sup>19</sup> She is searching for answers, frustrated by the lack of support she has received from her school's athletic department, disappointed that she will never again play lacrosse, and devastated at how little the entire athletic community has learned from her experience.<sup>20</sup>

It is imperative to prevent concussions to protect athletes from concussions' long-term ramifications and to preserve contact sports as they are played today.<sup>21</sup> Fortunately, today, team doctors and trainers at the highest levels of athletics are beginning to conduct sideline tests and are becoming aware of the necessity of withholding players from games after obvious violent hits.<sup>22</sup> These are steps in the right direction, but there is much work to do to avoid the incidence of early dementia, depression, and other mental illnesses that appear in former athletes.<sup>23</sup> Helmets avert most skull fractures during athletic activity, but, even with today's redesigned, safer helmets, the brain can still hit the skull with violent impact, and most mild concussions remain

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<sup>19</sup> See *id.* (describing student-athlete's difficulties upon her return to school). Varner described how her life had changed:

Back at school in the fall, I began seeing a vestibular therapist for the vertigo, dizziness, and balance problems that were making my daily life difficult. I was also trying various medications to help with the migraines, as well as the depression that had emerged after the promised six month mark had come and gone. I was struggling in school and the team had started to work out and prepare for the season. While they were running miles in practice, I could barely walk to class without feeling sick. Some days the fatigue was so bad it would take me almost two hours to be able to get out of bed and I would spend the day in a brain fog.

*Id.*

<sup>20</sup> See *id.* (“[I]t’s heartbreaking to watch teammates . . . in a game, and clearly suffer a concussion, only to be allowed to play in the next game two days later . . . It’s disappointing to know that others could suffer the same fate I did because [of] a lack of education and awareness . . . [E]ducation is crucial. Better to miss a few games, than to miss a few months of your life.”).

<sup>21</sup> See, e.g., Jesse Ventura, *Introduction* to CHRISTOPHER NOWINSKI, *HEAD GAMES: FOOTBALL’S CONCUSSION CRISIS* at ix (2006) (“It is obvious, given the potential serious consequences of especially multiple cerebral concussions, that prevention is paramount.”).

<sup>22</sup> See, e.g., Emily Aronson, *Concussion Research Aims to Help Athletes, Study of the Brain*, PRINCETON U. NEWS (Oct. 17, 2011, 12:00 PM), <http://www.princeton.edu/main/news/archive/S31/80/06C59/index.xml?section=topstories#top> (noting the growing practice of precautions and testing in sports medicine).

<sup>23</sup> See Malcolm Gladwell, *Offensive Play: How Different Are Dogfighting and Football?*, NEW YORKER, Oct. 19, 2009, at 50, available at [http://www.newyorker.com/reporting/2009/10/19/091019fa\\_fact\\_gladwell](http://www.newyorker.com/reporting/2009/10/19/091019fa_fact_gladwell). For a further discussion of the mental illnesses that have befallen former professional athletes, see *infra* Part II.

undetected.<sup>24</sup> Regulations to mitigate the effects of head injuries are important, and an effective standard protocol must be established to stop suspected and concussed athletes from discretionarily returning themselves to play and risking more damage, longer recovery time, and debilitating side effects.

This Article analyzes the legal and practical problems associated with the dearth of concussion regulation in collegiate contact sports. Every major United States professional contact sports league has implemented a formal concussion policy and management protocol.<sup>25</sup> However, NCAA has failed to implement a specific, step-by-step uniform concussion policy and management system.<sup>26</sup>

Part II of this Article explains what a concussion is, how concussions are caused, and the physiological effects of multiple head injuries. It also discusses the long-term behavioral, neurological, and psychological effects of concussions.

Part III describes the steps that many state governments and professional sports leagues have taken to regulate concussions in contact sports.

Part IV explains the structure of the NCAA and its process of making rules. It contrasts the NCAA approach with the micro-managing approach developed by the NFL, and suggests that the NCAA would benefit from applying the NFL research and regulations to collegiate contact sports.

Part V explores the NCAA's legal duty to its athletes, and the conflict of interest that exists in the self-monitoring and reporting system currently in place.

Finally, Part VI summarizes and proposes alternatives to the current concussion-related NCAA rules, and calls for the immediate

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<sup>24</sup> See Ventura, *supra* note 21, at x (discussing how concussions are inherent risks in contact sports). Indeed, even when played with proper technique “most mild concussions go unrecognized by sideline medical personnel” in helmeted sports. *Id.*

<sup>25</sup> See, e.g., Erik Brady and J. Michael Falgoust, *Concussions Now a Hot Issue as Leagues Toughen Policies*, USA TODAY (Oct. 25, 2011), [http://www.usatoday.com/sports/2011-04-12-nba-concussions\\_N.htm#](http://www.usatoday.com/sports/2011-04-12-nba-concussions_N.htm#) (providing chart of “How Sports Organizations Handle Concussion Policy and Testing,” and describing policies in NFL, MLB, NHL, NBA, MLS, and NASCAR). Professional leagues have updated their policies as recently as 2011, in response to recent research and newer technologies. See, e.g., *id.*; Jose de Jesus Ortiz, *Dynamo Learn About MLS Concussion Rules First Hand*, HOUS. CHRONICLE (July 7, 2011), <http://www.chron.com/sports/dynamo/article/Dynamo-learn-about-MLS-concussion-rulesfirst-hand-2079715.php> (describing new MLS concussion protocol).

<sup>26</sup> See DAVID KLOSSNER, *2011-12 NCAA Sports Medicine Handbook* 54 (22 ed. 2011), available at <http://www.ncaapublications.com/DownloadPublication.aspx?download=MD11.pdf> [hereinafter *Handbook*] (describing mandatory “Concussion Management Plan” to be implemented and supplemented by member institutions).

implementation of a standard, more effective means of regulating concussions in intercollegiate athletics.

## II. THE PROBLEM WITH THE LACK OF REGULATION

### A. *What Is a Concussion?*

A concussion is a traumatic brain injury, caused by a hit to the head or body, and is often suffered in contact sports.<sup>27</sup> When the brain crashes against the skull, an event known as a “metabolic cascade” occurs, which slows the flow of blood to the brain.<sup>28</sup> As the cells heal, the brain recovers its regular function, but remains vulnerable to additional injury.<sup>29</sup> During this period of vulnerability, it is imperative that athletes refrain from competition, or risk further damage to the brain.<sup>30</sup>

While concussions can cause very serious long-term brain damage, they are difficult to diagnose and treat because they do not cause a detectable structural change in the brain.<sup>31</sup> Moreover, until recently, little was known about concussions and their effects.<sup>32</sup> However, contemporary medicine has begun to focus on head injuries, revealing the serious implications of head trauma, and raising awareness among

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<sup>27</sup> See *What is a Concussion?*, ESPN, [http://espn.go.com/nfl/topics/\\_/page/concussions](http://espn.go.com/nfl/topics/_/page/concussions) (last updated Jan. 31, 2012) [hereinafter *ESPN Concussions*] (providing definition of concussions); see also *Handbook*, *supra* note 26 (providing technical definition of concussion as “a complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces”).

<sup>28</sup> Jordan Conn, *Learn the Anatomy of a Concussion and How Doctors are Able to Diagnose It*, ESPN (Aug. 31, 2011), <http://rise.espn.go.com/all-sports-girls/articles/2011/08/31-concussion-side.aspx>.

<sup>29</sup> See *id.* (indicating danger of second impact).

<sup>30</sup> See *Handbook*, *supra* note 26, at 53 (warning of “potentially catastrophic consequences” that may occur before full recovery after a first impact, including “severe cognitive compromise and death”).

<sup>31</sup> *Handbook*, *supra* note 26, at 54 (“The acute symptoms of concussion . . . reflect a functional disturbance in cognitive function instead of structural abnormalities, which is why diagnostic tests such as magnetic resonance imaging (MRI) and computerized tomography (CT) scans are most often normal.”); but see Aronson, *supra* note 22 (suggesting new advanced imaging techniques, such as functional magnetic imaging (fMRI) and diffusion tensor imaging (DTI), may produce scans that suggest concussive injuries also involve structural changes).

<sup>32</sup> See Leslie Leuke, Comment, *High School Athletes and Concussions: More Than a Game at Stake*, 32 J. LEGAL MED. 483, 485 (2011) (describing new studies that rebut long-held presumption that “because athletes seem to recover from concussions so rapidly, concussions’ long-term effects are minimal”); Alan Schwarz, *As Injuries Rise, Scant Oversight of Helmet Safety*, N.Y. TIMES (Oct. 20, 2010), <http://www.nytimes.com/2010/10/21/sports/football/21helmets.html?pagewanted=all> (reporting biochemists are still “unsure of how to prevent concussions” in football).

athletes who play contact sports, league management (including the NFL and NHL), and even members of Congress.<sup>33</sup>

The Brain Injury Association of America and the Centers for Disease Control and Prevention estimate that up to 3.8 million sports- and recreation-related concussions occur in the United States each year.<sup>34</sup> That makes concussions the most common type of brain injury.<sup>35</sup> The reason for the frequency is due to the brain's somewhat precarious placement within the skull. Surrounded by fluid, it is normally suspended within the skull's bony structure. In everyday activity, this fluid is sufficient to protect the brain from clashing against the skull, but there is a low threshold of impact necessary to cause damage, and athletes, in particular, frequently induce this threshold.<sup>36</sup> For example, when an athlete sustains a sudden blow to the head, or if the head whips around too quickly, the brain is jolted within the surrounding fluid, and knocked against the inside of the skull.<sup>37</sup>

Some experts have described the impact of a concussion with more vivid analogies.<sup>38</sup> Kevin Guskiewics, of the University of North Carolina's Sports Concussion Research Program, compared the impacts sustained in a routine college football practice to crashing a car: "If you drove your car into a wall at twenty-five miles per hour and you weren't wearing your seat belt, the force of your head hitting the windshield would be around 100 gs: in effect, the player [who sustained two hits above 80-gs,] had two car accidents that morning."<sup>39</sup>

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<sup>33</sup> See, e.g., *Youth Laws*, *infra* note 81 (applauding nation-wide support of state-regulated youth concussion laws); Aronson, *infra* note 22 (describing national concern over the concussion problem and reporting on Ivy League concussion policy); *2009 NFL Rule Changes*, *infra* note 85 (demonstrating NFL efforts to manage concussions); see also *Handbook*, *supra* note 26, at 53 (reporting higher incidence of concussions in "helmeted sports . . . [a]t the college level," including "football, ice hockey, men's and women's soccer, and men's lacrosse").

<sup>34</sup> See *Youth Laws*, *infra* note 81 (reporting annual concussion estimates); see also Aronson, *supra* note 22 (reporting same).

<sup>35</sup> Interview: Concussions, An Overlooked Epidemic, Interview by Diane Rehm with Dr. Gerard Gioia, Children's National Medical Center, in Washington, DC (Sept. 12, 2011), transcript available at <http://thedianerehmshow.org/shows/2011-09-12/concussions-overlooked-epidemic/transcript>.

<sup>36</sup> See *id.* (describing how the brain is "floating around in fluid and it's not anchored" in the skull).

<sup>37</sup> See Conn, *supra* note 31 (detailing the brain's reaction to sudden impact).

<sup>38</sup> For a further discussion of expert findings, see *infra* notes 39-41 and accompanying text.

<sup>39</sup> Gladwell, *supra* note 23; see also John Mangels, *Technology May Help Detect a Concussion, but the Methods are Still Evolving*, THE PLAIN DEALER (Jan. 16, 2012, 5:19 PM), [http://www.cleveland.com/science/index.ssf/2012/01/technology\\_may\\_help\\_detect\\_a\\_c.html](http://www.cleveland.com/science/index.ssf/2012/01/technology_may_help_detect_a_c.html) (explaining "G Forces," which measure head impacts: "[A]cceleration is measured in Gs, a

The Institute for Preventative Sports Medicine likens the effect to mashing up Jell-O:

Put a piece of saran wrap over a bowl of jello [sic]. . . That jello [sic] is your brain. Now shake the bowl pretty vigorously. You see the bits of jello [sic] stuck to the sides of the bowl and the saran wrap? That's the bruising that occurs, the tearing of the nerve tissue. That's how folks get injured.<sup>40</sup>

Both analogies emphasize the severity of the impact on the brain. As Dr. Bennet Omalu, co-founder of the Brain Injury Research Institute at West Virginia University notes, "there is no such thing as a mild concussion."<sup>41</sup>

There are three well-established grades of concussion, which are used to determine the severity of the injury.<sup>42</sup> The severity is generally measured by the duration of the symptoms and whether the sufferer loses consciousness.<sup>43</sup> Although concussions do not always manifest themselves physically, when they do, symptoms may include physiological consequences such as light-headedness, fainting, nausea,

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comparison with Earth's gravitational pull. Concussion-causing football hits produce surprisingly higher G forces than do other activities.").

<sup>40</sup> Alexander Hecht, Article, *Legal and Ethical Aspects of Sports-Related Concussions: The Merrill Hoge Story*, 12 SETON HALL J. SPORTS & ENT. L. 17, 23 (2002).

<sup>41</sup> Associated Press, *Expert: Bench Youths After Concussions*, ESPN (Feb. 1, 2010, 9:29 PM), <http://sports.espn.go.com/nfl/news/story?id=4877480> [hereinafter *Bench Youths*]. Dr. Benet Omalu, a major neuropathologist, who is researching athletes and chronic traumatic encephalopathy (CTE) has testified before the House Judiciary Committee in hearings on head injuries in sports. *Id.*

<sup>42</sup> See *AAN Statement*, *supra* note 7, at 582 (illustrating concussion grades). Grade 1 concussions are the most common, but also the most difficult to recognize because of the subtlety of its associated symptoms. *Id.* Grade 1 concussions are characterized by: (1) momentary confusion (e.g. inattention or poor concentration); (2) no loss of consciousness; (3) concussion symptoms or mental status abnormalities (as determined by a doctor's examination), that "resolve in less than 15 minutes". *Id.* Athletes who have suffered from a Grade 1 concussion will often describe it as "having been 'dinged' or having their 'bell rung.'" *Id.* Grade 2 concussions are characterized by: (1) transient confusion (e.g. poor concentration or difficulty recalling the incident and the period of time that followed); (2) no loss of consciousness; (3) concussion symptoms or mental status abnormalities that "last more than 15 minutes". *Id.* Grade 2 symptoms that last for more than an hour "warrant medical observation". *Id.* Grade 3 concussions are characterized by: "Any loss of consciousness, either brief (seconds) or prolonged (minutes). Grade 3 concussion is usually easy to recognize – the athlete is unconscious for any period of time." *Id.*; but see *Handbook*, *supra* note 26, at 55 (noting potential limitations of traditional grading system, which presumes loss of consciousness in most severe Grades 2 and 3 concussions, and observing that "it has been demonstrated that [loss of consciousness] does not correlate with severity of injury . . . in athletes with concussion"). The Handbook further notes that "retrograde amnesia, post-traumatic amnesia, and the duration of confusion and mental status changes are more sensitive indicators of injury severity." *Id.*

<sup>43</sup> *AAN Statement*, *supra* note 7, at 582.

sensitivity to light, and slurred speech.<sup>44</sup> Symptoms may also include behavioral consequences including memory loss, abusiveness, confusion or inability to concentrate, and rage.<sup>45</sup> Psychological consequences such as depression and dementia may also indicate that a concussion has occurred.<sup>46</sup>

Concussion symptoms manifest themselves differently in different people; therefore, there is not a single standard treatment.<sup>47</sup> Moreover, symptoms may disappear without treatment, or they may not appear until much later, which compounds the difficulty of diagnosis; thus, evaluations and treatments are performed on an individual basis.<sup>48</sup> Typically, however, the prescribed treatment is rest.<sup>49</sup> This includes physical and cognitive rest, often with direction to limit television, texting, reading, and, in some severe cases, conversation.<sup>50</sup> Doctors also recommend the consumption of Omega 3 fatty acids, which “may help to prevent and cure the inflammation of a traumatic brain injury,” when consumed regularly.<sup>51</sup>

While concussions are harmful to anyone, they are especially damaging to athletes under the age of eighteen, whose brains have not reached developmental maturity.<sup>52</sup> Athletes should never return to

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<sup>44</sup> See *ESPN Concussions*, *supra* note 27 (listing some of the physiological side effects, but noting that concussions can “go rather unnoticed” in practice).

<sup>45</sup> See Gladwell, *supra* note 23 (quoting Dr. Omalu’s description of football players’ physiological and behavioral digression); see also *ESPN Concussions*, *supra* note 27 (noting some of the physiological and behavioral symptoms of concussions).

<sup>46</sup> Chuck Finder, *Brain Experts Develop Game Plan for Football Concussions*, PITT. POST-GAZETTE (Mar. 13, 2010), <http://www.post-gazette.com/pg/10072/1042511-66.stm> (“[W]ith repeated concussions, NFL retirees are found to develop depression and dementia at rates three times more than the general population.”).

<sup>47</sup> See *ESPN Concussions*, *supra* note 27 (reporting that “[t]here is [currently] no set treatment for a concussion”); *Handbook*, *supra* note 26, at 55 (“[I]t is important to remember that many of these injuries are best treated in an individual fashion.”) (quoting Dr. Robert Cantu).

<sup>48</sup> See *ESPN Concussions*, *supra* note 27 (reporting variance in concussion symptom manifestations); see also *Return to Play*, SPORTSCONCUSSIONS.ORG, <http://www.sportsconcussions.org/ReturntoPlay.html> (“Concussions must be treated individually, and there is no set schedule for recovery.”); cf. Interview with Gioia, *supra* note 35 (explaining difficulty of diagnosing concussions in cases of phantom symptoms).

<sup>49</sup> See *ESPN Concussions*, *supra* note 27 (“Most sufferers are told to get plenty of sleep at night and rest during the day until they can return to normal activities without experiencing any symptoms.”).

<sup>50</sup> See *Return to Play*, *supra* note 48 (recommending cognitive and physical rest “until symptom-free”); see also *Handbook*, *supra* note 26, at 55 (“The duration of time that an athlete should be kept out of physical activity is unclear, and in most instances, individualized return-to-play decisions should be made.”).

<sup>51</sup> Finder, *supra* note 46.

<sup>52</sup> See, e.g., Associated Press, *Athletes Donating Brains for Injury Study*, ESPN (Oct. 12,

competition before they are symptom-free and can pass basic sideline tests.<sup>53</sup> In particular, youths who return to play prematurely risk irreversible brain damage and developmental problems.<sup>54</sup> Moreover, youths are highly susceptible to Second-Impact Syndrome, “a rapid, uncontrolled swelling of the brain,” which can cause death or irreparable brain damage if an athlete returns to play before symptoms have subsided.<sup>55</sup>

### B. *Second-Impact Syndrome*

When athletes who have sustained a concussion return to competition too early, they risk the occurrence of Second-Impact Syndrome (SIS), a condition that can be instantly fatal.<sup>56</sup> SIS occurs when an athlete sustains a second blow to the head before the symptoms from the first concussion have subsided, or before the brain has fully recovered.<sup>57</sup> The second injury may occur within minutes, days,

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2010, 1:44 PM), <http://sports.espn.go.com/espn/news/story?id=5677532> (warning of irreversible damage for children who return to play too early); *Bench Youths*, *supra* note 41 (recommending that “children under 18 should be held out for three months” post-concussion).

<sup>53</sup> See *Return to Play*, *supra* note 48 (noting some of the complications associated with premature return to play); see also Gladwell, *supra* note 23 (noting treatment is complicated because athletes may not recognize concussion symptoms). According to Ron Courson, the director of sports medicine at the University of Georgia, a typical return-to-play sideline test for suspected concussions includes exerting athletes by having them perform sport-specific movements, to “simulate some contact.” Associated Press, *Panel Recommends Stricter Rules*, ESPN (Dec. 15, 2009), <http://sports.espn.go.com/ncaa/news/story?id=4746679> [hereinafter *NCAA 2009 Recommendations*].

<sup>54</sup> See Leander Schaeerlaeckens, *Soccer’s Concussion Problem*, ESPN (Aug. 31, 2011), <http://m.espn.go.com/soccer/story?storyId=6912840&leagueTag=usa.1&lang=EN> (last updated Sept. 7, 2011) (“A growing brain is more predisposed to concussion and recovers more slowly because it isn’t fully coated yet . . . [a]nd youngsters have a bigger head relative to the body than adults, [which, when] coupled with a weaker neck, [means] the brain can be much more easily accelerated [because of their] big head and weak neck.”); see also *Youth Laws*, *infra* note 81 (announcing Washington State law named after “Zackery Lystedt, who suffered a life-threatening brain injury after her returned to his middle school football game in 2006 following a concussion”).

<sup>55</sup> See *Return to Play*, *supra* note 48 (defining SIS and referring to early return to play as akin to “playing Russian Roulette” with the player’s life).

<sup>56</sup> See *AAN Statement*, *supra* note 7, at 581 (recognizing cumulative damage of multiple concussions); *Handbook*, *supra* note 26, at 53 (“There are potentially serious complications of multiple or severe concussions, including second impact syndrome, postconcussive syndrome, or post-traumatic encephalopathy.”); see also Sean Gregory, *Study: Kids Competing Too Soon After Concussions*, TIME (Jan. 21, 2009), <http://www.time.com/time/magazine/article/0,9171,1873131,00.html> (reporting on concussion study by the Center for Injury Research and Policy at Nationwide Children’s Hospital that found half of concussed student-players returned too soon to play).

<sup>57</sup> See Finder, *supra* note 46 (describing evidence of fatalities in second-impact concussions); David Cifu, *Repetitive Head Injury Syndrome*, MEDSCAPE REF. (Nov. 16, 2010),

or even weeks after the first, and still have a devastating effect.<sup>58</sup>

Even a relatively light hit, if sustained during this vulnerable post-concussion period, may spark the onset of SIS.<sup>59</sup> The second impact causes rapid swelling of the brain, resulting in cerebral edema.<sup>60</sup> When the brain swells, the pressure inside the skull increases, preventing blood flow to the brain and decreasing the brain's essential oxygen levels.<sup>61</sup> Dr. Robert Cantu, a neurosurgeon and co-founder of the Sports Legacy Institute, has studied the SIS phenomenon extensively.<sup>62</sup> At a 2010 seminar held at Duquesne University, Dr. Cantu reported that SIS is to blame for the deaths of many high school football players.<sup>63</sup>

Unlike typical concussions, however, SIS is detectable in imaging.<sup>64</sup> The visibility of SIS damage indicates the vulnerability of the brain following a concussion and the extent of the damage that a second impact causes.<sup>65</sup> While SIS is a rare occurrence, it is shocking that the mere *possibility* of such a fatal event has not inspired severe, ubiquitous, non-discretionary restrictions on when an athlete of any age or skill-level may return to play.

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<http://emedicine.medscape.com/article/92189-overview#a0107> (summarizing second-impact syndrome); *Handbook*, *supra* note 26, at 53 (“Though there is some controversy as to the existence of second impact syndrome, in which a second impact with potentially catastrophic consequences occurs before the full recovery after a first insult, the risks include severe cognitive compromise and death.”).

<sup>58</sup> See Cifu, *supra* note 57 (projecting timeline of vulnerability to SIS).

<sup>59</sup> See *id.* (“Loss of consciousness is not a requirement of this condition, the impact may seem relatively mild, and the athlete may appear only dazed initially.”); see also Gladwell, *supra* note 23 (“[The] real issue isn’t simply with repetitive concussive trauma. It is . . . with repetitive *subconcussive* trauma [because] [p]eople with [chronic traumatic encephalopathy] aren’t necessarily people with a high, recognized concussion history. But they are individuals who collided heads on every play – repetitively doing this, year after year, under levels that were tolerable for them to continue to play.”).

<sup>60</sup> See Cifu, *supra* note 57 (explaining cerebral edema).

<sup>61</sup> See *Brain and Nervous System Health Center: Brain Swelling*, WEBMD, <http://www.webmd.com/brain/brain-swelling-brain-edema-intracranial-pressure?print=true> (last updated Mar. 2, 2010) (describing brain swelling).

<sup>62</sup> See Finder, *supra* note 46.

<sup>63</sup> See *id.* (reporting Dr. Cantu’s research, which found that SIS kills three to four high school players every year); *but see* Cifu, *supra* note 57 (“Only 17 cases of confirmed SIS have been reported in the medical literature.”).

<sup>64</sup> See Finder, *supra* note 46 (finding indications of SIS visible in CAT scan imaging).

<sup>65</sup> See Gladwell, *supra* note 23 (characterizing brain damage that is visible with brain imaging as impacts from repetitive and repeated collisions over an extended period of time).

### C. Long-Term Effects

Concussions are often defined as “a head injury with a temporary loss of brain function,” but recent studies and testimonies show that the loss of brain function is far from temporary.<sup>66</sup> Although the precise long-term effects of concussions are unknown, recent research has revealed a significant correlation between generally decreased cognitive function and participation in contact sports.<sup>67</sup> This revelation has led to a proactive response from many current and former athletes who believe in the profound significance of what the studies have revealed, because they have experienced it themselves: “repeated concussions can, some twenty years after the fact, have devastating consequences if left unrecognized and untreated.”<sup>68</sup>

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<sup>66</sup> See *ESPN Concussions*, *supra* note 27 (defining concussions in light of recently reported research); see also Alan Schwarz, *Pro Football: Expert Ties Ex-Player’s Suicide To Brain Damage From Football*, N.Y. TIMES (Jan. 18, 2007), <http://query.nytimes.com/gst/fullpage.html?res=9B06EFD81130F93BA25752C0A9619C8B63&pagewanted=print> (“In a survey of more than 2,500 former players, the Center for the Study of Retired Athletes found that those who had sustained three or more concussions were three times more likely to experience significant memory problems and five times more likely to develop earlier onset of Alzheimer’s disease.”); Gladwell, *supra* note 23 (quoting Omalu’s description of football players’ physiological and behavioral deterioration).

<sup>67</sup> See, e.g., Cifu *supra* note 57 (“Numerous studies . . . have shown that repeated brain injury can lead to chronic encephalopathy, termed *dementia pugilistica*.”); Associated Press, *Athletes Donating Brains for Injury Study*, ESPN (Oct. 12, 2010), <http://sports.espn.go.com/espn/news/story?id=5677532> (“We have no idea how much head trauma is necessary to produce CTE. We just know those who play sports and who have higher amounts of head trauma have a higher incident of it.”) (quoting Dr. Robert Cantu) [hereinafter *Brain Injury Study*]; see also Les Carpenter, *‘Brain Chaser’ Tackles Effects of NFL Hits*, WASH. POST (Apr. 25, 2007), [http://www.washingtonpost.com/wp-dyn/content/article/2007/04/24/AR2007042402480\\_pf.html](http://www.washingtonpost.com/wp-dyn/content/article/2007/04/24/AR2007042402480_pf.html) (reporting Dr. Omalu’s discovery that the brains of three former NFL players showed signs of cognitive degeneration).

<sup>68</sup> Schwarz, *supra* note 66 (echoing desire of Waters family to “sound an alarm” to athletes and their families). The Waters family lost Andre Waters, a forty-four year old former NFL player, to suicide in 2006. *Id.* Dr. Omalu attributed the suicide to the head trauma inflicted by Waters’ football career. *Id.* See also Ventura, *supra* note 21, at x (turning Nowinski’s “personal struggle into a quest to educate others” on concussions); Aronson, *supra* note 22 (describing student-athlete’s participation in Princeton University concussion study in hopes that “research will . . . spare somebody some of the challenges that faced my brother” who suffered from a series of concussions); Varner, *supra* note 2 (“It has become my on-going passion; to spread awareness about concussions and to emphasize that education is crucial”); see generally BENNET OMALU, MD, *PLAY HARD, DIE YOUNG: FOOTBALL DEMENTIA, DEPRESSION, AND DEATH* (2008) (publishing information on brain damage caused by football collisions in support of “national effort to alert players, parents, coaches, and school administrators to the dangers of repeated concussions”); *Bench Youths*, *supra* note 41 (reporting on father’s efforts which led to “the Texas law known as Will’s Bill after his son who died following a football head injury in 2002”).

The two major contemporary studies of the long-term effects of concussions have been conducted by Boston University's Center for the Study of Traumatic Encephalopathy and the Brain Injury Research Institute.<sup>69</sup> These studies have revealed the "devastating consequences" of repeated concussions, including an increased risk of depression, dementia, and suicide.<sup>70</sup> Further, the studies have demonstrated the physiological effect of multiple hits on the brain, manifested by red flecks of protein deposits on the brain called chronic traumatic encephalopathy (CTE).<sup>71</sup> Generally, these proteins appear when the brain is hit, and disappear as healthy brain cells devour them, leading to recovery.<sup>72</sup> Yet, when the brain suffers too many blows, the brain cells cannot keep up with the protein and eventually give up and die, leaving just the red flecks associated with CTE.<sup>73</sup>

Between 2002 and 2007, Dr. Omalu, of the Brain Injury Research Institute, examined the brains of five former NFL players: Andre Waters, Mike Webster, Terry Long, Justin Strzelcyyk, and Damien Nash.<sup>74</sup> Waters and Long killed themselves; Webster, "homeless and cognitively impaired, died of heart failure;<sup>75</sup> Strzelcyyk died driving the wrong way down a highway at ninety miles per hour.<sup>76</sup> Four of the five brains showed "the telltale red flecks of abnormal protein" characteristic of CTE.<sup>77</sup> Dr. McKee, of the Boston University Center,

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<sup>69</sup> See *Brain Injury Study*, *supra* note 67 (describing BU Medical School and Sports Legacy Institute collaborative brain research program). The other major concussion study is operated by Dr. Bennet Omalu of the Brain Injury Research Institute. See Gladwell, *supra* note 23 (crediting Dr. Omalu with first discovery of CTE in brain of former NFL player in 2002).

<sup>70</sup> Compare Schwarz, *supra* note 66 (claiming findings are debatable), with Carpenter, *supra* note 67 (denying alleged "chance occurrence" of link between former football players and emotional and cognitive deterioration).

<sup>71</sup> Carpenter, *supra* note 67; see also Schwarz, *supra* note 67 (likening appearance of structural damage in forty-four year old brain of deceased former athlete to that of eighty-year old Alzheimer's patient brain).

<sup>72</sup> Schwarz, *supra* note 67.

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*

<sup>75</sup> See *id.* (discussing the effects of "postconcussive brain dysfunction" that Dr. Omalu believes led to Webster's death).

<sup>76</sup> See Chuck Finder, *What Drove Justin Strzelczyk To His Death?*, PITT. POST-GAZETTE (Oct. 31, 2001), <http://www.post-gazette.com/pg/04305/404469-66.stm> (describing the circumstances surrounding Strzelczyk's death).

<sup>77</sup> See Carpenter, *supra* note 67 ("In medicine, three cases make a series. You can report that. When they published the findings about Mike Webster, a skeptic could say, 'This is a chance occurrence.' Then Terry Long died and was brought, serendipitously, to the same medical examiner's office, but people could say 'maybe that was a coincidence.' But a third case makes a series.") (quoting Dr. Omalu). The protein was not present in Nash's brain; Dr. Omalu attributes that to that fact that Nash was a running back, and therefore sustained fewer successive head injuries than a line position, and had only played in the NFL for two years.

has examined the brains of sixteen former athletes, and found CTE in all of them.<sup>78</sup> Their research demonstrates how devastating multiple concussions are to the brain and to human function, and reiterates the need for concussion awareness, management, and prevention.<sup>79</sup>

### III. BELLS ARE RINGING: WAKING UP TO THE NEED FOR REGULATION

Formal standards for the regulation of head injuries are crucial – both to the continuation of contact sports and for the health of the athletes who play them. The American Academy of Neurology justifies this necessity in its guidelines for The Management of Concussion Sports:

Frequently, the loss of objectivity on the part of the athlete, coaches, sports media, and spectators is an unfortunate and potentially harmful bias. In that setting, the health professional's role is to provide an objective assessment of the injured athlete and guidance about the safety of an athlete's return to competition.<sup>80</sup>

As research has exposed the dangers of brain injury from a concussion in contact sports, many commentators have recognized the loss of objectivity that surrounds modern sport,<sup>81</sup> and they are on a crusade to force everyone to understand the danger of this injury.<sup>82</sup>

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*See Gladwell, supra note 23* (hypothesizing reason for single non-finding of CTE in brain of former NFL player).

<sup>78</sup> *See Gladwell, supra note 23* (adding credence to Dr. Omalu's theory that contact sports lead to brain damage).

<sup>79</sup> *See id.* (commenting on Institute's findings: "all players . . . need better education about the risks of brain trauma") (quoting Merrill Hoge).

<sup>80</sup> *AAN Statement, supra note 7*, at 581. For a further discussion of the AAN Summary Statement, see *supra* notes 7, 42-43, and accompanying text.

<sup>81</sup> *See, e.g., Associated Press, States Consider Youth Concussion Laws*, ESPN (Jan. 28, 2010, 10:14 AM), <http://sports.espn.go.com/espn/news/story?id=4865622> [hereinafter *Youth Laws*] (expanding on the concern: "You'll want coaches and parents and athletic trainers to take this seriously. There might be a lot of pressure on a kid to brush it off and ignore the symptoms.").

<sup>82</sup> *See, e.g., Ventura, supra note 21* (commenting on how former athlete has turned personal struggles with concussions into "a quest to educate others on an injury that still seems to be . . . a mystery . . ."); Terry Zeigler, *Former NFL Players Call for Concussion Education: Congressional Hearing Reveals Education Needed At All Levels*, SUITE101.COM (Jan. 5, 2010), <http://www.suite101.com/content/former-nfl-players-call-for-concussion-education-a185834/print> [hereinafter *Zeigler 1/5/10*] ("Former NFL players ask Congress to continue to apply pressure towards educating athletes, parents, and coaches about the possible lifelong side effects of concussions."); Associated Press, *More Retired Players Sue NFL*, ESPN (Aug. 29, 2011), [http://espn.go.com/nfl/story/\\_/id/6908019/new-group-retirees-sue-nfl-concussions](http://espn.go.com/nfl/story/_/id/6908019/new-group-retirees-sue-nfl-concussions) (claiming NFL "knew the long-term effects of brain injury" and failed to warn players). For a further discussion of how professional leagues have responded, see *infra* notes 95-130 and accompanying text.

Professional sports leagues and Congress have responded with legislation and new mandatory rules.<sup>83</sup> In some cases, college leagues have independently instituted policies aimed at preventing and treating concussions.<sup>84</sup> While this undoubtedly demonstrates an acknowledgment of the severity of concussions, independent, bilateral actions are not nearly as effective as unilateral, standardized regulations from the NCAA would be.<sup>85</sup>

#### A. Concussion Concerns in Professional Athletics

Existing professional sports leagues' policies have been revised, modified, and criticized in response to astounding revelations from contemporary research and heightened attention from the media, lawmakers, and professional athletes about the dangers of concussions.<sup>86</sup>

Today, concussion concerns are unquestionably present in the mainstream sports dialogue.<sup>87</sup> Nearly all of the major United States professional sports leagues have enacted some sort of concussion management policy.<sup>88</sup> The National Football League, the National Hockey League, and Major League Baseball have had formal policies in place for at least the last four years.<sup>89</sup> To date, the National

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<sup>83</sup> See Mike Wise, *Super Bowl 2012: Football Coaches and Players Need to Get Health Issues Through Their Heads*, WASH. POST (Feb. 1, 2012), [http://www.washingtonpost.com/sports/redskins/super-bowl-2012-football-coaches-and-players-need-to-get-health-issues-through-their-heads/2012/01/31/gIQAbnPziQ\\_story.html](http://www.washingtonpost.com/sports/redskins/super-bowl-2012-football-coaches-and-players-need-to-get-health-issues-through-their-heads/2012/01/31/gIQAbnPziQ_story.html) ("Perhaps in the ultimate nod toward the [concussion] issue, players in the Madden '12 video game sometimes suffer concussions. Unlike [real NFL players who suffer concussions], concussed players in the video game are unable to return to the field.").

<sup>84</sup> See, e.g., Ken Belson, *Ivy League to Limit Full-Contact Football Practice*, N.Y. TIMES (Jul. 19, 2011), [http://www.nytimes.com/2011/07/20/sports/ncaaf-football/college-football-to-protect-players-ivy-league-to-reduce-contact.html?\\_r=1](http://www.nytimes.com/2011/07/20/sports/ncaaf-football/college-football-to-protect-players-ivy-league-to-reduce-contact.html?_r=1) (detailing Ivy League football rule changes).

<sup>85</sup> See, e.g., Associated Press, *NFL Changes Return-To-Play Rules*, ESPN (Dec. 2, 2009), <http://sports.espn.go.com/nfl/news/story?id=4707604> [hereinafter *2009 NFL Rule Changes*] (discussing importance of impartial, objective checks in NFL concussion management program, including mandating that each team nominate and retain, subject to NFL approval, one designated, independent neurologist to be consulted in event of concussion).

<sup>86</sup> See Brady, *supra* note 25 (listing changes leagues have made to concussion policies).

<sup>87</sup> See Wise, *supra* note 83 (discussing John Madden's new approach to discussing concussions when broadcasting).

<sup>88</sup> See *id.* (assessing "How Sports Organizations Handle Concussion Policy and Testing").

<sup>89</sup> See *id.* (providing dates of first concussion policy implementations by league). The NFL instituted its first concussion policy in 2007, and updated it again in February 2011. *Id.* The NHL has had a formal concussion policy in place since 1997. *Id.* Major League Soccer (MLS) introduced an inaugural concussion policy in 2011. See Schaerlaeckens, *supra* note 54. Major League Baseball (MLB) first implemented its concussion policy in 2007. See Brady, *supra* note 25. MLB recently updated its policy to include a mandatory seven-day rest period

Basketball Association is the only major professional sports league without a formal league-wide concussion policy.<sup>90</sup> Although it is not a helmeted sport, the NBA has been studying the issue for several years and has discussed the possibility of a formal rule change.<sup>91</sup>

Although the professional leagues' concussion policies are still developing, the existence of such policies at the professional level is important because it demonstrates an acknowledgement that concussions have a disconcerting presence in contact sports.<sup>92</sup> Moreover, in the realm of brain injury, the differences in the levels of physicality between professional, collegiate, and even youth athletics are insignificant because the relative impact on the brain is equally harmful across all contact sports.<sup>93</sup> A recent study of collisions in youth football, which revealed that football players as young as seven years old sustain collisions "as severe as those at the college level," prompted Pop Warner officials to alter contact practice rules for youth football.<sup>94</sup> With that in mind, the NCAA should consider the existing policies and craft a suitable, Association-wide policy of its own.

### 1. The National Football League

The National Football League has led the way by calling for the most recent wave of concussion policy reforms after considerable lobbying by retired players.<sup>95</sup> Two major components of the latest

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for players that have been diagnosed with a concussion. *Id.* Note also that while MLB's attention to concussions in the sport of baseball is outstanding and commendable, the focus of this Article is on contact sports. Therefore, there will be no formal analysis of MLB concussion policy.

<sup>90</sup> See Brady, *supra* note 25 (explaining the NBA's concussion management policies and practices). Currently, the NBA permits each team to establish its own concussion management system. *See id.*

<sup>91</sup> See *id.* (hinting at the prospect of NBA rule change). Although head impacts are not as common in basketball as they are in sports such as football or hockey, the NBA has spent several years studying the effect of concussions in basketball, and a formal rule change may be forthcoming. *See id.* ("[T]he league is working with a consulting neurologist concerning the possible adoption of a league-wide protocol.").

<sup>92</sup> See, e.g., Paul Domowitch, *Time to Think: Injuries to High-Profile Players Bring Concussion Issue to Head*, HOUS. CHRON. (Jun. 11, 2000), available at 2000 WLNR 9365698.

<sup>93</sup> See Ventura, *supra* note 21, at xi (noting concussions are inherent risks in all contact sports, especially in helmeted sports, even when played with proper technique).

<sup>94</sup> Anahad O'Connor, *Trying to Reduce Head Injuries, Youth Football Limits Practices*, N.Y. TIMES (June 13, 2012), <http://www.nytimes.com/2012/06/14/sports/pop-warner-football-limits-contact-in-practices.html?ref=sports> ("Pop Warner officials said they were persuaded to alter their rules by research earlier this year showing that players as young as 7 are exposed to collisions as severe as those at the college level.").

<sup>95</sup> See, e.g., Bernie Parrish, *Statement Before the Congressional Judiciary Committee* (Jan.

phase of NFL concussion management have been educating and encouraging athletes and coaches at all levels to review their policies on head injuries.<sup>96</sup> In particular, the NFL has publicly noted that the NCAA needs to revise and strengthen its current policy.<sup>97</sup>

In 2007, the NFL produced its first set of guidelines for returning to play, which prohibited a player from returning to a game or practice in which he had lost consciousness.<sup>98</sup> In August 2009, the House Judiciary Committee held its first hearing on the effect of head injuries in the NFL.<sup>99</sup> The NFL responded to the Committee's concerns a mere four months later, announcing a revision of the 2007 concussion guidelines, which included the implementation of new, stricter guidelines for returning to play.<sup>100</sup>

The 2009 new concussion plan required players to pass neurological tests and be "completely asymptomatic" before returning to play.<sup>101</sup> The plan mandated further neurological screening tests for all of its players throughout the year following the injury, as well as regular neurological testing for those who suffered a concussion during the season.<sup>102</sup> The NFL also reiterated its commitment to enforcing rules and penalties against dangerous play; indeed, the 2010 season saw increased regulation in these areas.<sup>103</sup> Moreover, the NFL resolved

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4, 2010), available at [judiciary.house.gov/hearings/pdf/Parrish100104.pdf](http://judiciary.house.gov/hearings/pdf/Parrish100104.pdf) (enumerating attempts to bargain with NFL for more concussion protection for current and former players).

<sup>96</sup> Zeigler 1/5/10, *supra* note 82 (noting testimony at NFL congressional hearing that NCAA coaches need to revise and strengthen their policies on head injuries).

<sup>97</sup> *Id.*

<sup>98</sup> See *Concussions in the NFL*, ESPN, [http://espn.go.com/nfl/topics/\\_/page/concussions](http://espn.go.com/nfl/topics/_/page/concussions) (last updated Sept. 7, 2011) [hereinafter *NFL Concussions*] (recalling details of 2007 NFL return-to-play guidelines); see also Brady, *supra* note 25 (recording enactment of first NFL concussion policy in 2007).

<sup>99</sup> See, e.g., *NFL Concussions*, *supra* note 98 (recounting NFL executives' reception at House Judiciary Committee hearing, "at which they were roundly criticized for not taking more action against concussions").

<sup>100</sup> See *2009 NFL Rule Changes*, *supra* note 85 (announcing December 2009 NFL return-to-play instructions); see also *NCAA 2009 Recommendations*, *supra* note 53 ("[In December 2009] the NFL sent a memo to its teams outlining stricter guidelines for when players should be allowed to return to games or practices after head injuries.").

<sup>101</sup> See *NFL Concussions*, *supra* note 98 (expanding upon 2007 guidelines after August 2009 House Judiciary Committee hearing on effects of head injuries in football).

<sup>102</sup> *Id.*

<sup>103</sup> See *NFL Concussions*, *supra* note 98 (discussing NFL "crack down" on dangerous contact). The NFL began regulating helmet-to-helmet contact more strictly during the 2010 season, as part of its continuing effort to reduce the incidence of concussions. See *id.* (instituting NFL policy of "large fines" for helmet-to-helmet contact). Additionally, the NFL has said it would consider suspending players who "continued to commit illegal hits." *Id.* And, in fact, just a few months into the 2011 season, the NFL announced the suspension and fining of Pittsburgh Steelers' linebacker James Harrison for making helmet-to-helmet contact

to educate the public and encourage other sports leagues to develop effective policies on head injuries.<sup>104</sup> Accordingly, the NFL released its first public service announcement on national television in January 2010.<sup>105</sup>

Most recently, just before the 2011 season, the NFL announced a further modification to its concussion policy.<sup>106</sup> This was part of the NFL's effort to standardize and enforce the objectivity with which team physicians and trainers handle sideline concussion evaluations in the face of the pressure a team physician may feel to return a player to the game.<sup>107</sup> It included a mandate for a "Neutral Physician," and instituted a new standard for concussion evaluations: "the new protocol combines a symptom checklist, a balance assessment and a limited neurological exam that includes a cognitive evaluation."<sup>108</sup> The NFL also acknowledged how devastating a concussion could be in its 2011 Collective Bargaining Agreement, allowing players to be compensated for cognitive issues suffered as a result of their participation in professional football.<sup>109</sup>

## 2. Major League Soccer

Major League Soccer has recognized a serious problem with concussions among its athletes, and has emerged as another leader in raising awareness and controlling the risk that soccer poses to its players.<sup>110</sup> Falling in step with the NFL, MLS has similarly revealed an

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against an opposing quarterback. Jamison Hensley, *James Harrison Suspended One Game*, ESPN (Dec. 13, 2011), [http://espn.go.com/blog/afcnorth/post/\\_/id/37906/james-harrison-suspended-one-game](http://espn.go.com/blog/afcnorth/post/_/id/37906/james-harrison-suspended-one-game).

<sup>104</sup> See Zeigler 1/5/10, *supra* note 82 (stating NFL efforts).

<sup>105</sup> See *id.* (reporting on NFL efforts to make youth sports safer).

<sup>106</sup> See Brady, *supra* note 25.

<sup>107</sup> See Jay Hermacinski, *NFL Changes Concussion Policy*, WISH TV (Feb. 25, 2011, 5:47 PM), [http://www.wishtv.com/dpp/sports/colts\\_and\\_nfl/nfl-changes-concussion-policy](http://www.wishtv.com/dpp/sports/colts_and_nfl/nfl-changes-concussion-policy) (describing 2011 NFL sideline concussion evaluation tool); see also Brady, *supra* note 25 (elaborating upon goal of new NFL concussion standard: "[I]n the heat of the game, 68,000 fans screaming, the player pushing you to go back in, this provides a consistency that did not exist.").

<sup>108</sup> Brady, *supra* note 25.

<sup>109</sup> NFL Collective Bargaining Agreement (2011-2020), at 193-95 (mandating appointment of "Neutral Physician" for concussion-related evaluations and separately acknowledging that players might also be permitted to file for "Injury Grievance" if terminated when "physically unable to perform the services required of him" due to, for example, "concussion with resulting cognitive deficit").

<sup>110</sup> See Schaerlaeckens, *supra* note 54 (describing MLS efforts to protect players without changing sport of soccer).

inaugural concussion plan, which went into effect during the 2011 season.<sup>111</sup>

The nine-member MLS Concussion Protocol Committee is responsible for creating the new plan, a set of “key guidelines” that now govern suspected and confirmed cases of concussion injuries.<sup>112</sup> The goals of MLS’ efforts are three-fold: (1) to raise concussion awareness; (2) to shield its players from the risk of concussions; and (3) to accomplish this while preserving the game of soccer.<sup>113</sup> The first step in any suspected concussion case is evaluation by the team’s medical staff. Next, MLS physicians have several options for how to proceed, according to the individual player’s condition.<sup>114</sup>

MLS has made significant progress toward accomplishing these goals. In addition to implementing new guidelines for sideline concussion management, MLS has also focused on educating its athletes<sup>115</sup> and mandating more stringent refereeing, which includes awarding red cards for intentional head contact and a policy of immediately ceasing play when a head or neck injury is suspected on the field.<sup>116</sup> In an effort not to penalize the examination of suspected concussions, MLS is also considering a rule change that would permit players to substitute themselves back into a game after coming out for the evaluation of a suspected concussion.<sup>117</sup>

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<sup>111</sup> See Ortiz, *supra* note 25 (unveiling new MLS concussion protocol).

<sup>112</sup> See *id.* (“The starting point is any player that is suspected of a concussion injury and any suspicion of a concussion must be evaluated immediately.”). The MLS guidelines provide:

Any player *suspected* of having sustained a concussion shall be removed from play immediately and evaluated by team medical staff. If the initial evaluation results in a concussion diagnosis, he will not be returned to play in the same game or practice. Every MLS club has a designated Team Consulting Neuropsychologist, one of whom will conduct the post-concussion neuropsychological evaluation when an injured player is symptom-free at rest, prior to his return to play. Any player diagnosed with a concussion will be free of somatic and cognitive symptoms for at least 24 hours before starting an individualized, graded return-to-play progression under the supervision of the team physician.

*Id.* (emphasis added).

<sup>113</sup> See Schaerlaeckens, *supra* note 54 (describing MLS goals of “raising concussion awareness”; shielding its players from [concussion] risk; and refraining from “tampering with the game”).

<sup>114</sup> See Brady, *supra* note 25 (providing MLS “first step after an injury” protocol).

<sup>115</sup> See Schaerlaeckens, *supra* note 54 (“Affixed to every MLS locker room wall is a poster designed by [Taylor] Twellman outlining the symptoms and risk of concussions.”). Taylor Twellman is a former MLS player who retired after suffering six concussions, deep depression, and alcohol and drug abuse. Twellman is now the “unofficial spokesman” for concussed soccer players, and the founder of ThinkTaylor, a foundation committed to educating people about concussions. *Id.*

<sup>116</sup> *Id.* (describing MLS efforts to protect players from risk of concussions).

<sup>117</sup> See Brady, *supra* note 25 (discussing further potential changes to encourage concussion

### 3. National Hockey League

The NHL has the longest-standing concussion policy of American professional leagues.<sup>118</sup> Until recently, the NHL policy regarding concussions was also the most ineffective, “grossly inadequate” farce a professional league has ever seen.<sup>119</sup> Although the NHL has practiced baseline testing on all of its players since 1997, further concussion management efforts have been sporadic and largely ineffective because of an apparent reluctance to diagnose and treat concussions effectively.<sup>120</sup> For example, during home games, team physicians would evaluate players suspected of having concussions in the bench area.<sup>121</sup> On the road, however, because NHL team physicians did not travel with their teams, players who suffered head injuries might not be examined for a week.<sup>122</sup> This inconsistent approach was largely ineffective and there was little effort to prevent the actual occurrence of head injuries within the sport.<sup>123</sup>

After decades of laissez-faire concussion management, the league was finally forced to change its policies and implementation strategies in 2011 following the deaths of Derek Boogaard, Rick Rypien, and Wade Belak, three NHL “enforcers,” within a four-month period.<sup>124</sup>

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precaution and assessment).

<sup>118</sup> See *id.* (noting NHL concussion treatment policy has been in place since 1997).

<sup>119</sup> See Bobby Brooke, *2011 NHL Playoffs: Are the New NHL Concussion Protocols Really Working?* BLEACHERREPORT.COM (Apr. 18, 2011), <http://bleacherreport.com/articles/669655-head-cases-are-the-new-concussion-protocols-really-working> (describing old NHL concussion evaluation system as “grossly inadequate”); see also Hecht, *supra* note 40, at 63 (characterizing the NHL as “being in a state of denial” regarding concussion management).

<sup>120</sup> See Brooke, *supra* note 119 (listing NHL concussion policy as longest-standing policy of U.S. professional leagues); see also Hecht, *supra* note 40, at 63 (illustrating the NHL’s stubborn reluctance to diagnose concussions).

<sup>121</sup> See Dan Rosen, *New Concussion Protocol Goes into Effect Tonight*, NHL.COM (Mar. 16, 2011), <http://www.nhl.com/ice/news.htm?id=556289> (describing NHL historical concussion management).

<sup>122</sup> See Hecht, *supra* note 40, at 63 (displaying historically inconsistent NHL approach to concussion management).

<sup>123</sup> See Brooke, *supra* note 119 (concluding former NHL concussion evaluation system was largely inadequate and “grossly inadequate as players [could] easily wave the trainer away and shrug off the immediate effects of a head shot” and demonstrating system did little system affected head injury prevention: “How [were] they supposed to compare results with a baseline test on the bench in the chaos of a live game?”).

<sup>124</sup> See Hecht, *supra* note 40, at 63 (announcing new, proactive approach to preventing and managing concussions in NHL); Jordan I. Kobritz, Jeffrey F. Levine, and Steven C. Palmer, *Don Fehr Trades His Ball for a Puck: Will He Continue To Score?*, 19 VILL. SPORTS & ENT. L.J. (forthcoming 2012) (“[E]ach player’s death was presumably linked to the physical and mental impact fighting had on the player over his career.”); see also John Branch, *Hockey Players’ Deaths Pose a Tragic Riddle*, N.Y. TIMES (Sept. 1, 2011), <http://www.nytimes.com>

The league announced a more proactive approach to the prevention of concussions, and the regulation of fighting in the league.<sup>125</sup> Now, in addition to a “more rigorous protocol” for examining suspected concussions, the league has committed itself to enforcing rules against illegal checks to the head.<sup>126</sup> NHL discussions have gone so far as to include ways to decrease the speed of the game.<sup>127</sup> Already, NHL efforts to create a safer sport are taking shape.<sup>128</sup> Perhaps this is because of the increased awareness of the causes of concussions and their long-term effects; it may also be at least partly due to the fear of being disciplined for an aggressive hit, or respect for fellow players.<sup>129</sup> Whatever the reason, players have responded, and the game—ever so slightly—has begun to change.<sup>130</sup>

### B. Concussion Concerns in Congress

State and federal congressional representatives, galvanized by their constituents and the attention that concussions have received from

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/2011/09/02/sports/hockey/deaths-of-three-nhl-players-raises-a-deadly-riddle.html?pagewanted=all (describing “enforcer” role as that of “designated fighter, used as a weapon of retribution against perceived cheap shots or simply to charge the crowd or teammate”).

<sup>125</sup> See Hecht, *supra* note 40, at 63 (announcing new proactive NHL concussion policy).

<sup>126</sup> See Jeff Klein, *Though Not Ready to Play, Crosby Shapes the Game*, N.Y. TIMES (Oct. 2, 2011), <http://www.nytimes.com/2011/10/03/sports/hockey/a-changed-nhl-guards-against-shots-to-the-head.html> (describing NHL “new, rigorously applied rules” prohibiting head checks); see also Rosen, *supra* note 121 (introducing revised Protocol for Concussion Evaluation and Management in NHL). The revised protocol provides:

Starting [March 16, 2011], players suspected of having a concussion will be removed from the game and sent to a quiet place free from distraction so they can be examined by the on-site team physician. The physician will use the Sports Concussion Assessment Tool test to evaluate the player.

*Id.* The revised NHL protocol was implemented, accordingly, on March 16, 2011. *Id.*

<sup>127</sup> See Associated Press, *Concussions: New Rules for Treating NHL Players*, NHL.COM (Mar. 14, 2011, 4:51 PM), <http://www.nhl.com/ice/news.htm?id=556034> (noting speed at which hockey is played may cause concussions); but see *id.* (acknowledging other factors are to blame for concussions in hockey).

<sup>128</sup> See, e.g., Gregory, *supra* note 56 (affecting player safety through “heavier fines and suspensions for blatant head hits while the puck is in play); but see *id.* (reiterating need for taking more “logical steps and measured steps to reduce exposure to brain trauma,” through, for example, [h]arsher penalties and suspensions for fighting . . . and a directive to refs to play immediate peacemaker”).

<sup>129</sup> See Klein, *supra* note 126 (describing one player’s conscious restraint from hitting teammate who had previously suffered concussion).

<sup>130</sup> See, e.g., Klein, *supra* note 126 (highlighting Matt Cooke’s on-ice adjustments to game and rule changes). Cooke, a Pittsburgh Penguins player who was suspended five times in two seasons for illegal checks to the head, described the effect of the more stringent enforcement: “I never, ever thought of things that I think of now when I’m going to make a hit. . . . My thought process is completely different. Now there’s just too much risk . . . I’ve made a lot of changes.” *Id.*

professional league management, have enacted legislative measures that affect how concussions are handled at public secondary and elementary schools.<sup>131</sup> Youth recreation departments have also begun to mandate concussion protocols for young athletes who participate in contact sports.<sup>132</sup>

### 1. State Regulation

Washington State pioneered the first state law aimed at regulating when a youth may return to play after suffering a concussion.<sup>133</sup> Twenty-two states have followed suit.<sup>134</sup> Several other states, including California, Hawaii, Maine, New Hampshire, New York, and Pennsylvania, have also proposed concussion bills, which are now pending before their legislative bodies.<sup>135</sup>

The majority of concussion-related laws and proposed bills have two common elements: (1) the establishment of a standard protocol for testing students suspected of having sustained a concussion; and (2) an education component for coaches and trainers.<sup>136</sup> Some bills push the education component further, mandating education for student-athletes and their parents in addition to coaches and trainers.<sup>137</sup>

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<sup>131</sup> See, e.g., *Youth Laws*, *supra* note 81 (acknowledging legislative efforts by lawmakers in Washington, California, Connecticut, Maine, Massachusetts, Missouri, New Jersey, Pennsylvania, and Rhode Island).

<sup>132</sup> See Joe Bush, *Recreation Department is First to Require Concussion Testing*, ATHLETIC BUSINESS.COM (Aug. 2011), <http://athleticbusiness.com/articles/article.aspx?articleid=3768&zoneid=10> (announcing nation's first recreation department policy, requiring baseline cognitive tests prior to participation in contact sports).

<sup>133</sup> See WASH. REV. CODE ANN. § 28A.225.190 (West 2012) (providing Washington State concussion and head injury guidelines); see also *Youth Laws*, *supra* note 81 (announcing Washington State statute, "considered the nation's strongest" concussion-prevention law).

<sup>134</sup> See *Youth Laws*, *supra* note 81 (listing states with youth concussion laws as of January 28, 2010, which include: Alaska, Arizona, Colorado, Connecticut, Idaho, Illinois, Indiana, Iowa, Maryland, Massachusetts, New Jersey, North Carolina, Minnesota, Missouri, North Dakota, Nebraska, Oklahoma, Oregon, Rhode Island, South Dakota, Texas, Utah, and Virginia); see also Tim Miller, *Sports Concussion: State Legislatures Taking Note*, AM. ACAD. OF NEUROLOGY (Apr. 21, 2011), [http://www.aan.com/news/?event=read&article\\_id=9714](http://www.aan.com/news/?event=read&article_id=9714) (providing list of states with sports concussion laws as of July 7, 2011); Bush, *supra* note 132 (commending North Carolina's concussion law as the "best in the country" due to its "strong educational" requirements).

<sup>135</sup> See Miller, *supra* note 134 (tracking pending concussion bills).

<sup>136</sup> See *id.* (displaying component parts of state concussion laws and bills); see also Bush, *supra* note 132 (emphasizing importance of educational component in state laws).

<sup>137</sup> See, e.g., VA. CODE ANN. § 22.1-271.5 (West 2012); see also Andre Taylor, *New Virginia Law: Mandatory Concussion Training for Parents, Student-Athletes*, MCLEANPATCH.COM (Aug. 9, 2011), <http://mclean.patch.com/articles/new-virginia-law-mandatory-concussion-training-for-parents-student-athletes> (detailing law requiring parents and students to complete

However, these laws cannot eliminate every danger of playing a contact sport, nor can they control every situation in which an athlete returns to play too early, and many remain dissatisfied with the minimal protection that most of these laws provide.<sup>138</sup> On the other hand, these laws do demonstrate an acknowledgement of a serious problem and an active effort to change the way concussions are treated.<sup>139</sup> Additionally, the state laws that mandate concussion education for all parties involved in contact sports put the onus on trainers, coaches, parents, and even the students themselves to take responsibility for their own future interests.<sup>140</sup>

## 2. Federal Regulation

In response to national concerns and recent publicity on the detrimental long-term effects of concussions in student-athletes, the federal government is investigating how best to protect America's youth.<sup>141</sup> For decades, little was known about concussions or their effects on any athlete, but recent research has indicated that concussions are particularly harmful to youths, whose weaker necks and greater head-to-body-size ratio allow for greater acceleration of the brain against the skull.<sup>142</sup> Between October 2009 and February 2010, the House Judiciary Committee held three hearings to help determine how youth protection may be achieved.<sup>143</sup> An additional eight hearings have been held by other congressional committees between October 2009 and September 2010.<sup>144</sup>

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requisite twenty-five minute concussion course before registering for team tryouts).

<sup>138</sup> See, e.g., *Youth Laws*, *supra* note 81 (describing death of Washington State high school student in fall 2009, shortly after Washington legislature passed § 600.190); *Bench Youths*, *supra* note 41 (citing Dick Benson's advice to parents to simply "not let their children play football" because "you're just playing roulette with the lives and the future of these kids").

<sup>139</sup> See *Youth Laws*, *supra* note 81 (rationalizing need for new and more comprehensive concussion laws).

<sup>140</sup> See *id.* (placing "greater responsibility" on coaches and trainers to determine whether and when an athlete returns to play by forcing them to acknowledge potential repercussions through education).

<sup>141</sup> See Associated Press, *House Committee Hears Testimony*, ESPN (Sept. 23, 2010), <http://sports.espn.go.com/espn/news/story?id=5608373> (reporting on congressional hearing discussing youth concussion safety and management plans).

<sup>142</sup> See Schaerlaeckens, *supra* note 54 (revealing danger of concussion on developing youth brains, which are "more predisposed" and recover less quickly than adult brains).

<sup>143</sup> Zeigler 1/5/10, *supra* note 82. The House Judiciary Committee held hearings on concussions in contact sports in October 2009, January 2010, and February 2010. The first two hearings focused on concussions in the NFL, and the third focused on head injuries in college and youth football. *Bench Youths*, *supra* note 41

<sup>144</sup> See Alan Schwarz, *Penn Player's Mother to Testify About Concussions in Congressional Hearing*, N.Y. TIMES (Sept. 17, 2010), <http://www.nytimes.com/2010/09/18/sports/18con>

On September 29, 2010, the U.S. House of Representatives affirmatively acknowledged the need for standardized regulation of head injuries when it voted for House Bill 1347, a bill that would establish federal guidelines for managing student-athlete concussions.<sup>145</sup> The bill, known as the ConTACT Act of 2010, was introduced in late 2008, and proposed that federal funds be set aside for “computerized preseason baseline and post injury neurocognitive testing for student athletes.”<sup>146</sup> ConTACT would have required the federal government “to convene a conference of medical, athletic, and education experts to come up with guidelines that address the prevention, identification, treatment, and management of concussions in school-aged children.”<sup>147</sup> Finally, the bill would have standardized the protocol for permitting children to return to play post-concussion.<sup>148</sup> Although H.R. 1347 never became law, a similar bill, H.R. 469, was introduced only four months later and is still being considered by the House Subcommittee on Early Childhood, Elementary, and Secondary Education.<sup>149</sup>

H.R. 469, or the “Protecting Student Athletes from Concussions Act of 2011,” was introduced on January 26, 2011.<sup>150</sup> Recognizing states’ efforts to protect against and treat youth concussions, H.R. 469 was proposed, in part, to “promote minimum State requirements for the prevention and treatment of concussions caused by participation in school sports . . . .”<sup>151</sup> The bill would require every school district in

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concussions.html [hereinafter *Schwarz September Hearing*] (explaining September 2010 hearing “is the eighth hearing on the issue of brain injuries among athletes of all ages since October [2009]”). The September 2010 hearing was held by the House Education and Labor Committee, and focused on concussions in youth sports. *Id.*

<sup>145</sup> See Associated Press, *House Approves Concussions Bills*, ESPN (Sept. 29, 2010), <http://sports.espn.go.com/espn/news/story?id=5632009> (last updated Sept. 30, 2010) [hereinafter *House Concussions Bills*] (announcing House approval of bill to set standards for allowing youths to return to play after suffering concussion). ConTACT, was introduced by Representative Bill Pascrell of New Jersey in late 2008. Gregory, *supra* note 56.

<sup>146</sup> Gregory, *supra* note 56; see also Concussion Treatment and Care Tools Act of 2010, H.R. Res. 1347, 111th Cong. (2010), <http://thomas.loc.gov/cgi-bin/bdquery/z?d111:H.R.1347>: [hereinafter *House Concussions Bill*].

<sup>147</sup> See *House Concussions Bills*, *supra* note 145.

<sup>148</sup> *Id.*

<sup>149</sup> See *Protecting Student Athletes from Concussions Act of 2011*, H.R. Res. 469, 112th Cong. (2011), <http://thomas.loc.gov/cgi-bin/bdquery/z?d112:h469> [hereinafter *Concussions Act of 2011*].

<sup>150</sup> CONG. RES. SERV., SUMMARY OF H.R. 469: PROTECTING STUDENT ATHLETES FROM CONCUSSIONS ACT OF 2011, <http://thomas.loc.gov/cgi-bin/bdquery/z?d112:HR00469:@@D&summ2=m&>. [hereinafter *SUMMARY OF H.R. 469*].

<sup>151</sup> *Concussions Act of 2011*, *supra* note 149.

each state to establish “a standard plan for concussion safety and management,” which must include: (1) education for parents, students, and school personnel; (2) support for post-concussion recovery; and (3) a standard safety protocol for the treatment and management of concussions.<sup>152</sup> H.R. 469 is more specific than ConTACT in terms of its prevention and education requirements, yet broader in terms of treatment and management, encompassing suspected concussions and requiring return-to-play approval from an outside health care professional.<sup>153</sup>

While federal bills represent a step toward standardizing concussion prevention and management across the nation, it is a small step, and many of the concerns of funding and enforcement persist at the federal level.<sup>154</sup> Notwithstanding administrative concerns, federal legislation has the advantage of strong support from persuasive and influential constituents—namely, the parent voters whose children would be affected by the proposed law.<sup>155</sup>

#### IV. THE NCAA’S POWER TO MAKE A DIFFERENCE

##### A. *The Development of the NCAA*

Football has been played at colleges and universities for over a century, but it was a dangerous game when it was introduced in the late nineteenth century; injuries and death were common, and the early-twentieth century American public began to call for the abolishment of the sport.<sup>156</sup> In 1905, President Theodore Roosevelt responded to this sentiment by convening college athletics leaders at the White

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<sup>152</sup> See SUMMARY OF H.R. 469, *supra* note 150.

<sup>153</sup> See Concussions Act of 2011, *supra* note 149 (requiring public elementary and secondary schools to post “information on risks, responses, symptoms, and effects” on school grounds and on school’s website and prohibiting students who have sustained confirmed concussions from returning to play without written permission from health care professional).

<sup>154</sup> See Erika Diehl, Note, *What’s All the Headache?: Reform to Cope with the Effects of Concussions in Football*, 23 J.L. HEALTH 83, 108 (2010) (“[O]nly forty-two percent of high schools in the United States have certified athletic trainers. Bob Colgate, the assistant director of the National Federation of State High School Associations, admitted the main culprit was lack of funding.”).

<sup>155</sup> See, e.g., *Youth Laws*, *supra* note 81 (illustrating advocacy of parents of Zackery Lystedt, who lobbied Washington State legislators after son’s collapse on field and subsequent brain damage, which led to state concussion legislation); Diehl, *supra* note 154, at 105 (describing how Dick Benson approached Texas State Senate with concerns after his son’s death on sidelines following helmet-to-helmet impact).

<sup>156</sup> See e.g., *Who We Are: History*, NCAA <http://ncaa.org/wps/wcm/connect/public/ncaa/about+the+ncaa/who+we+are/about+the+ncaa+history> (last updated Nov. 8, 2010) [hereinafter NCAA History].

House, where he encouraged them to develop a solution to quell the public's concerns.<sup>157</sup> The result was the birth of the Intercollegiate Athletic Association of the United States (IAAUS), now known as the National Collegiate Athletic Association (NCAA).<sup>158</sup>

The NCAA is a private, unincorporated association that was formed with the basic purpose of “maintain[ing] intercollegiate athletics as an integral part of the educational program and the athlete as an integral part of the student body and, by so doing, retain[ing] a clear line of demarcation between intercollegiate athletics and professional sports.”<sup>159</sup> Initially, the Association operated exclusively as a rule-making body, but in 1921 it held its first national championship.<sup>160</sup> Although the NCAA then embarked on an epic expansion into the administration of intercollegiate athletics, the NCAA was born out of a need to regulate injuries; thus, rulemaking with respect to athlete welfare was, and should remain, its primary objective.<sup>161</sup>

In 1973, the NCAA established a more structured governing body and three separate competitive divisions among its member schools.<sup>162</sup> Perhaps foreshadowing the rate at which the NCAA would accomplish governance and legislative reform in the future, the restructuring of its governing committees was a much slower process. It was not complete until 1984, when the NCAA established the Presidents Commission, which invited college and university presidents to contribute to the Association in a rule-making capacity.<sup>163</sup> Since then, the NCAA has undergone two other major restructuring efforts.<sup>164</sup> Today, Division I is led by a Board of Directors, and Divisions II and III are led by Presidents Councils.<sup>165</sup>

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<sup>157</sup> *Id.*

<sup>158</sup> *Id.*

<sup>159</sup> NCAA CONST., art. 1.3.1, reprinted in Nat'l Collegiate Athletic Ass'n, 2011-12 NCAA Division I Manual I (2011) [hereinafter NCAA Manual], available at <http://www.ncaapublications.com/p-4224-2011-2012-ncaa-division-i-manual-august-2011.aspx>; see also *Bowers v. NCAA*, 974 F.Supp. 459, 461 (D.N.J. 1997) (providing background on NCAA history). See generally NCAA History, *supra* note 156 (reciting NCAA interest in “protect[ing] young people from the dangerous and exploitive athletics practices of the time”).

<sup>160</sup> See NCAA History, *supra* note 156 (describing initial NCAA function).

<sup>161</sup> See *id.*

<sup>162</sup> See *id.*

<sup>163</sup> See *id.*

<sup>164</sup> See *id.* (illustrating the restructuring effort in 1997); see also *Who We Are: Division I Committees*, <http://ncaa.org/wps/wcm/connect/public/ncaa/about+the+ncaa/who+we+are/committees/division+i+committees> (last updated Nov. 2, 2010) [hereinafter *Committees*] (describing second reorganization of NCAA governance in 2008).

<sup>165</sup> See *How We Work: Rules and Committees*, <http://ncaa.org/wps/wcm/connect/public/>

The NCAA maintains that since 2009, its new governing structure has been “effective,” leading to the accomplishment of “major restructuring.”<sup>166</sup> Indeed, the NCAA underwent extensive reform in its governance; however, the entire organization has been highly criticized by sports fans, athletes, and professional commentators for its misplaced concern for the preservation of the amateur, and its overzealousness to “retain a clear line of demarcation between intercollegiate athletics and professional sports.”<sup>167</sup> While worthwhile goals, critics claim that in practice, they are affected by ensuring that NCAA student-athletes do not get anything for free.<sup>168</sup>

### B. *The Regulation Process in the NCAA*

While the NCAA has meticulously regulated issues such as the compensation of student-athletes, the number of athletic scholarships member institutions may award, the recruitment process, eligibility to participate in competition, the permissible number of football and basketball coaches a member institution may hire, and “many other aspects of intercollegiate athletics,” it has put relatively little effort into regulating and managing concussions in intercollegiate contact sports.<sup>169</sup> Moreover, what effort the NCAA has made to regulate concussions has proven problematic because NCAA regulations have allowed ample room for interpretation and varied applications by complying member institutions.<sup>170</sup>

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NCAA/About+the+NCAA/How+We+Work/About+the+NCAA+Rules+and+Committees (last updated: Feb. 17, 2010) (describing current NCAA governance system). Representatives from each division council form the NCAA Executive Committee, which oversees issues that apply across all member-schools. *Id.*

<sup>166</sup> See *Committees*, *supra* note 164 (announcing major accomplishments in NCAA governance due to presidential involvement).

<sup>167</sup> See NCAA Manual, *supra* note 159 (reciting NCAA fundamental policy); see also Kerry King, *Jay Bilas: Time to Reform the NCAA*, WAKE FOREST U. NEWS CENTER (Oct. 7, 2010), <http://news.wfu.edu/2010/10/07/jay-bilas-time-to-reform-the-ncaa/> (“The NCAA has got to change . . . . The NCAA must start over by giving up two of its guiding principles – fairness and the sanctity of amateur athletics.”) (quoting Jay Bilas).

<sup>168</sup> See Rick Reilly, *Corrupting Our Utes*, SPORTS ILLUSTRATED (Aug. 6, 2003, 9:51 AM), [http://sportsillustrated.cnn.com/inside\\_game/rick\\_reilly/news/2003/08/05/reilly0811/](http://sportsillustrated.cnn.com/inside_game/rick_reilly/news/2003/08/05/reilly0811/) (criticizing notorious NCAA nit-picking through anecdote of coach being penalized for buying bagel for player who sought condolence after brother’s recent suicide: “It’s not an easy job, picking nits this tiny, but nobody is up to the task like the NCAA.”).

<sup>169</sup> See, e.g., *NCAA v. Bd. of Regents Univ. of Okla.*, 468 U.S. 85, 123 (commending NCAA for promulgating and enforcing rules governing “many . . . aspects of intercollegiate athletics”).

<sup>170</sup> See Diehl, *supra* note 154, at 109-12 (exposing problems with NCAA changes to on-field rules, injury and athletic scholarship rules, and sideline assessment rules).

The NCAA exists “to keep university athletics from becoming professionalized to the extent that profit making objectives would overshadow educational objectives.”<sup>171</sup> Historically, the NCAA has regulated on the basis of public perception.<sup>172</sup> However, as the popularity of college athletics increased, the NCAA began to focus its attention on preserving amateurism and creating rules to promote that goal.<sup>173</sup> Today, the NCAA is comprised of over 1,000 colleges and universities and more than 400,000 student-athletes, for whom the NCAA acts as the governing body in competitive intercollegiate play.<sup>174</sup>

The NCAA produces rules and policies that regulate administrative issues, playing rules, and sports medicine in several documents. Its Constitution, Bylaws, and other legislative policies are contained within the NCAA Manual, which is updated as needed at an annual conference and published annually for member schools.<sup>175</sup> The NCAA promulgates sport-specific standards through its Playing-Rules Committees, which write the rules for fifteen of the twenty-three men’s and women’s sports that it regulates.<sup>176</sup> The playing-rules committees are

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<sup>171</sup> *NCAA v. Bd. of Regents*, 468 U.S. at 123 (1984).

<sup>172</sup> See, e.g., *Cureton v. NCAA*, 198 F.3d 107, 110 (3d Cir. 1999) (implementing notorious student-athlete academic standards, including minimum GPA, number of core courses, and SAT score, for student-athlete eligibility “in response to the public’s perception” that it was needed); see also NCAA History, *supra* note 156 (creating NCAA to quell public’s concerns over violence in intercollegiate athletics).

<sup>173</sup> In doing so, the NCAA has become almost “an extra-judicial entity, a society unto itself, answerable to no one . . . .” Mitchell Nathanson, *The Sovereign Nation of Baseball: Why Federal Law Does Not Apply to “America’s Game” and How It Got That Way*, 16 VILL. SPORTS & ENT. L.J. 49, 52-3 (2009) (referring to MLB, which has been given “wide latitude” by federal courts and describing MLB as largely “free to govern itself pursuant to its own definition of what is in the best interests of baseball”). Similarly, federal courts been deferential to NCAA rules because of the Association’s unique position of authority in intercollegiate athletics, and its worthy goal of preserving amateurism:

The NCAA plays a critical role in the maintenance of a revered tradition of amateurism in college sports. There can be no question but that it needs ample latitude to play that role, or that the preservation of the student-athlete in higher education adds richness and diversity to intercollegiate athletics and is entirely consistent with the goals of the Sherman Act.

*NCAA v. Bd. of Regents*, 468 U.S. at 120.

<sup>174</sup> See NCAA, *Who We Are*, <http://ncaa.org/wps/wcm/connect/public/NCAA/About+the+NCAA/Who+We+Are/> (providing statistics on current NCAA composition).

<sup>175</sup> See *Bowers v. NCAA*, 974 F.Supp. 459, 461 (D.N.J. 1997) (explaining NCAA governing legislation).

<sup>176</sup> See NCAA, *Playing Rules*, <http://www.ncaa.org/wps/wcm/connect/public/Test/Issues/Issues+Landing+Page> (last visited June 17, 2012) (defining “playing rules” as “regulations governing recruiting, eligibility, financial aid, amateurism, and other such categories”).

comprised primarily of coaches, who act as consultants to the Association in the event that any “major changes” to the rules are considered.<sup>177</sup> However, the primary responsibility for developing and interpreting the rules falls to the secretary-rules editor.<sup>178</sup>

Finally, the NCAA publishes a Sports Medicine Handbook (the “Handbook”), which includes policies and guidelines for the treatment and prevention of injury, as well as return-to-play instruction.<sup>179</sup> The Handbook is also produced annually and sent directly to head athletic trainers, as well as various individuals at NCAA member institutions.<sup>180</sup> It is not sent directly to the entire athletic trainer staff or to student-athletes, but it is made available online to athletics directors, senior administrators, faculty athletics representatives, other athletic trainers, student-athlete advisory committees at each member institution, and conference commissioners.<sup>181</sup>

### C. Concussion Management in the NCAA and Its Inefficiencies

Despite the results of contemporary research, congressional investigation, activism, and general demands to change the way sports are played and concussions are handled in the United States, the NCAA has been slow to implement a comprehensive concussion policy and prevention plan within its member institutions, adopting only the periphery of a plan for concussion management.<sup>182</sup> In August 2010, the NCAA Concussion Management Plan, Rule 3.2.4.17, went into effect, mandating that each member institution create a concussion management plan with four requirements: (1) an education component, (2) evaluations of student-athletes who show signs of a concussion, (3) a policy preventing student-athletes diagnosed with concussions from returning to play the same day, and (4) a policy preventing student-athletes diagnosed with concussions from returning until they have been cleared by a doctor.<sup>183</sup> Additionally, the plan required that each

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<sup>177</sup> See *id.*

<sup>178</sup> See *id.* (defining secretary-rules editor as “someone with extensive knowledge of the rules of the sport” who plays a “major role” in developing rules).

<sup>179</sup> See generally *Handbook*, *supra* note 26, at 2.

<sup>180</sup> *Id.*

<sup>181</sup> *Id.*

<sup>182</sup> See, e.g., *NCAA 2009 Recommendations*, *supra* note 53 (showing it took NCAA eight months to implement concussion plan); NCAA RULE 3.2.4.17, 2010-11 NCAA D-1 MANUAL at 12 (providing concussion policy which merely required institutions to “have a concussion management plan on file”).

<sup>183</sup> See RULE 3.2.4.17, *supra* note 182 (providing NCAA Concussion Management Plan Rule).

student-athlete sign an agreement to self-report signs and symptoms of concussions to the institution's medical staff.<sup>184</sup>

The NCAA Concussion Management Plan is simply “too little, too late.”<sup>185</sup> First, the NCAA policy is too easy to satisfy without attending to the underlying concern of preventing concussions and minimizing head trauma.<sup>186</sup> Specifically, the policy requires that a student-athlete diagnosed with a concussion not return “for at least the remainder of that calendar day,” and not without the permission of “a physician or the physician's designee.”<sup>187</sup> Therefore, to comply with the NCAA standard, a concussed student-athlete could sit out of team activities for one day, see a physician's “designee,” receive permission to return to play, and return to competition before recovery, provided one calendar day had passed.<sup>188</sup>

Second, the NCAA Plan assumes that NCAA conferences and member institutions will supplement and enforce the Plan.<sup>189</sup> However, since the Plan's inception, few member institutions have accepted the NCAA's invitation to do so.<sup>190</sup> In fact, no NCAA conference has enacted a conference-wide plan for all contact sports that supplements the NCAA minimum requirements.<sup>191</sup>

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<sup>184</sup> *Id.*

<sup>185</sup> See Nikki Wilson Cary, *NCAA Hit with Class Action Concussion Lawsuit*, COLLEGIATE & PROF. SPORTS L. BLOG (Sept. 15, 2011), <http://www.collegeprosportslaw.com/collegiate-sports/ncaa-hit-with-class-action-concussion-lawsuit/>.

<sup>186</sup> See Diehl, *supra* note 154, at 112 (reasoning compliance with NCAA Plan is possible, even when student-athlete returns to competition before recovery).

<sup>187</sup> RULE 3.2.4.17, *supra* note 182.

<sup>188</sup> See Diehl, *supra* note 154, at 112 (concluding that, under NCAA policy, “a coach, trainer, or athlete could comply with the NCAA sports medicine standards and choose to return to competition before recovery, as long as it is not within the same day”); Complaint at 6, *Arrington v. NCAA*, No. 11CV06356, 2011 WL 4374451 (N.D. Ill. Sept. 12, 2011) (“In practice, this means that a student athlete [sic] can be back on the field less than 24 [sic] hours after sustaining a serious brain injury – thereby placing the student-athlete in serious medical jeopardy.”). Moreover, the policy does not define “a physician's designee.” See RULE 3.2.4.17, *supra* note 182 (failing to list definition of “physician's designee”). Conceivably, therefore, an athletic trainer, if deemed a physician's designee, could return a student-athlete to competition, which would be problematic. See Domowitch, *supra* note 93 (“[I]t's hard enough for a physician to pick up the subtleties of a brain injury, let alone a trainer.”).

<sup>189</sup> See RULE 3.2.4.17, *supra* note 182 (implying that Plan is non-exhaustive list, to which member institutions should add, through non-limiting language: “the plan shall include, but is not limited to, the following . . .”).

<sup>190</sup> See *Bench Youths*, *supra* note 41 (reporting NCAA's “biggest conferences,” such as the Southeastern Conference and the Big 12, have failed to adopt policies that go beyond the minimum required by the NCAA concussion policy). *But cf.* Belson *supra* note 84 (presenting Ivy League football rule changes that “go well beyond the rules set by the NCAA”).

<sup>191</sup> See *Bench Youths*, *supra* note 41.

Finally, within each member institution, the NCAA Plan places the burden to report an injury on the student-athlete, requiring that they “acknowledge . . . that they have a responsibility to report concussion-related injuries and illnesses to a medical staff member.”<sup>192</sup> The current self-reporting policy is difficult to enforce because a student-athlete may not recognize that a concussion has occurred, or, moreover, may not possess the wherewithal to make the responsible, rational decision to report an injury and abstain from further participation after a significant head trauma.<sup>193</sup> Additionally, there is no penalty for failing to adhere to the NCAA concussion policy that would compel headstrong athletes to comply with it.<sup>194</sup> This is particularly problematic for the policy because placing the burden of reporting a concussion on the student-athlete creates a conflict of interest between the duty to report an injury and the student-athlete’s desire to play and maintain financial aid awards.<sup>195</sup>

#### D. *NFL vs. NCAA Concussion Management*

Although congressional interest in concussion management was initially sparked by NFL players calling attention to the issue in professional football, Congress quickly expanded the scope of its inquiry to include contact sports at the amateur level.<sup>196</sup> In January 2010, at the second House Judiciary Committee hearing on concussions in contact sports, House leaders expanded their questioning beyond the NFL to other leagues’ efforts to address concussions.<sup>197</sup> In

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<sup>192</sup> RULE 3.2.4.17, *supra* note 182, sec. (a).

<sup>193</sup> See Class Action Complaint, *supra* note 188, at \*8 (arguing NCAA concussion management plan is inadequate). Arrington argues that the NCAA concussion management policy is an attempt to remove the burden of policing and enforcing the policy from the NCAA:

[T]he plan rejects any measure of responsibility for the NCAA, its member schools, and the coaching staff of individual teams; and instead, puts the burden squarely on the shoulders of the student-athletes – *the same student-athletes who have just sustained fresh head trauma* – to seek out medical attention, or decide whether to seek it in the first place.

*Id.* For a further discussion of the student-athlete’s conflict of interest, see *infra* notes 247, 259-72, and accompanying text.

<sup>194</sup> See *Handbook*, *supra* note 26 (providing violations of Concussion Management Plan “shall be considered an institutional violation” with the caveat that “the violation shall not affect the student-athlete’s eligibility” to participate in four years of intercollegiate play).

<sup>195</sup> See Diehl, *supra* note 154, at 111 (theorizing student-athlete may have conflict between maintaining personal health and safety and maintaining athletic scholarship).

<sup>196</sup> See Zeigler 1/5/10, *supra* note 82 (describing Congress’s concern with concussions in other leagues and at youth level).

<sup>197</sup> See *id.* (asserting that NCAA coaches need to revise and strengthen their policies on

particular, NCAA member institutions were implicated: “[I]t is evident that NCAA colleges need to also review their policies on head injuries and provide training to their coaches, staff, and athletes.”<sup>198</sup> While congressional attention was effective in spurring the NFL to ostensibly reform its concussion management system, it did not have the same effect on the NCAA, and there are stark differences between the NCAA and NFL efforts to create an effective concussion management policy.<sup>199</sup>

First, the NFL recognized the severity of the problem—albeit with some strong urging from Congress, former players, and other parties—and pooled several parties to discuss and develop a new standard.<sup>200</sup> The outcome was a standard grounded in education and enforced by outside, objective parties.<sup>201</sup> Additionally, the NFL was able to develop and implement its new policy within four months of the first Congressional hearing on head injuries.<sup>202</sup> Moreover, the NFL plan provided for some objectivity by requiring each team to retain an independent neurological team doctor to consult before players are returned to play.<sup>203</sup>

In contrast, the NCAA has been largely immune to direct congressional reprimands due to the inability of players to make demands through a union or a collaborative bargaining agreement. However, “as sports officials everywhere [were beginning to] pay[] increased attention to concussions,” the NCAA was forced to do something.<sup>204</sup> Its response included convening the twenty-person Committee on Competitive Safeguards and Medical Aspects of Sports, which spent three days developing a recommendation, eventually proposing a rule change that amounted to a strong suggestion that NCAA member institutions adopt a policy by which their teams would

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head injuries).

<sup>198</sup> *Id.* (referring to dismissal of NCAA coach after alleged mistreatment of concussed player).

<sup>199</sup> *See 2009 NFL Rule Changes*, *supra* note 85 (announcing December 2009 NFL concussion rule changes, enacted merely four months after Congress called for new policy); *cf.* RULE 3.2.4.17, *supra* note 182, at 12 (implementing NCAA Concussion Management Plan in August 2010, eight months after NCAA Committee first proposed it and seven months after congressional hearing first stated NCAA needed to reform policy).

<sup>200</sup> *See 2009 NFL Rule Changes*, *supra* note 85 (listing NFL reform efforts).

<sup>201</sup> *See id.*

<sup>202</sup> *See Zeigler 1/5/10*, *supra* note 82 (describing October 2009 congressional hearing about NFL concussions at which NFL was implored to develop new concussion policy).

<sup>203</sup> *See 2009 NFL Rule Changes*, *supra* note 85.

<sup>204</sup> *See NCAA 2009 Recommendations*, *supra* note 53 (describing NCAA panel’s efforts).

promise to sideline athletes suspected of head injury.<sup>205</sup> Eight months later, twice as long as it took the NFL, the NCAA implemented a rule based on the Committee proposal.<sup>206</sup>

Another difference between the NCAA and NFL plans is their scope and specificity. Unlike the comprehensive NFL plan, which provided for specific baseline testing and mandated objective evaluations for athletes, the NCAA plan was skeletal.<sup>207</sup> Rather than directing member institutions to comply with particular procedures, the NCAA plan places the onus of developing the particular means of prevention and management upon NCAA member institutions, none of which have stepped forward with a comprehensive, compliant plan.<sup>208</sup> Moreover, the NCAA plan burdens member institutions with the nearly impossible task of identifying when an athlete might have suffered a concussion, and should therefore be removed from play.<sup>209</sup>

#### E. Concussion Management Within NCAA Member Conferences

Independent of the NCAA, the Ivy League has pioneered concussion reform among NCAA member institutions. In the fall of 2011, the Ivy League implemented certain rule changes designed to minimize head injuries in football before they happened.<sup>210</sup> The rule changes focused on eliminating the amount of dangerous head-to-head contact, making small adjustments to practice drills, more diligent rules enforcement, and decreasing the number of in-season full-contact practices to two per week.<sup>211</sup> The NCAA limits full-contact, in-season practices to five per week.<sup>212</sup> The Ivy League's changes represent proactive measures to eliminate the amount of dangerous head-to-head

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<sup>205</sup> See *id.* (recommending that the NCAA adopt a rule to "sideline an athlete for at least the rest of the day if he or she loses consciousness or shows other worrisome symptoms during competition," and analogizing new rule to "rules preventing players from playing while bleeding," which referees would enforce under 2009 recommendation).

<sup>206</sup> See RULE 3.2.4.17, *supra* note 182, at 12 (providing NCAA Concussion Management Plan Rule).

<sup>207</sup> See *Bench Youths*, *supra* note 41 (characterizing NCAA policy requirements as "minimalism").

<sup>208</sup> See *id.* (reporting no conferences had tougher, more comprehensive policies that exceeded NCAA minimum concussion policy requirements as of February 2010).

<sup>209</sup> See, e.g., Interview with Gioia, *supra* note 36 (explaining difficulty of diagnosing concussions in cases of phantom symptoms).

<sup>210</sup> See Belson, *supra* note 84 (announcing Ivy League football rule changes, effective Fall 2011).

<sup>211</sup> *Id.*

<sup>212</sup> Ben Schpigel, *Football Faces 'Turning Point' on Safety*, N.Y. TIMES (June 20, 2012), <http://www.nytimes.com/2012/06/21/sports/football/with-fears-about-safety-football-faces-uncertain-evolution.html?pagewanted=all>.

contact through small adjustments to practices and existing rule enforcement.<sup>213</sup> In contrast, the NCAA has promoted a post-hoc concussion treatment method that fails to address the cause of the problem.<sup>214</sup>

These measures far exceed the *de minimus* concussion management standard set by the NCAA.<sup>215</sup> The rule changes affected the 2011 season and included a limit on the number of full-contact practices, the enforcement of rules regarding illegal hits, and increasing the education that the league provides its football athletes and coaches about concussions.<sup>216</sup> When the Ivy League announced the rule changes, it also announced plans to review the rules of other concussion-prone sports, including men's and women's hockey, lacrosse, and soccer, in hopes of reducing the amount of head-to-head contact and concussions in those sports as well.<sup>217</sup> Just a year later, in July 2012, the league announced rule changes to decrease concussions in lacrosse and soccer by limiting contact during practice and placing an emphasis on teaching safer playing techniques.<sup>218</sup> Further efforts took shape in the spring of 2012, when the Ivy League announced a collaborative initiative with the Big Ten.<sup>219</sup> In June of 2012, the NCAA member conferences announced the launch of a study "aimed at improving head injury assessment and prevention."<sup>220</sup> Both the Ivy League and the Big Ten had been independently researching and addressing head injuries in collegiate athletics before they joined forces.<sup>221</sup> Currently, the Ivy League and the Big Ten are the only NCAA leagues to formally commission research studies on brain damage.<sup>222</sup>

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<sup>213</sup> Belson, *supra* note 84.

<sup>214</sup> See Diehl, *supra* note 154, at 112 (listing problems and loopholes within NCAA concussion management plan).

<sup>215</sup> See *id.* (presenting Ivy League football rule changes that "go well beyond the rules set by the NCAA").

<sup>216</sup> Aronson, *supra* note 22.

<sup>217</sup> See Belson, *supra* note 84.

<sup>218</sup> Eben Novy-Williams, *Ivy League Adopts Changes to Limit Lacrosse, Soccer Concussions*, BLOOMBERG (July 16, 2012), <http://www.bloomberg.com/news/2012-07-16/ivy-league-adopts-changes-to-limit-lacrosse-soccer-concussions.html>.

<sup>219</sup> Eben Novy-Williams, *Ivy League, Big Ten to Combine Resources on Head-Injury Study*, BLOOMBERG BUSINESSWEEK (June 19, 2012), <http://www.businessweek.com/news/2012-06-19/ivy-league-big-ten-to-combine-resources-on-head-injury-study>.

<sup>220</sup> *Id.*

<sup>221</sup> *Id.*

<sup>222</sup> See Diehl, *supra* note 154, at 112. (describing new Ivy League rules as "more stringent than those of any other conference"); see also *Bench Youths*, *supra* note 41 (criticizing "the biggest conferences in college athletics . . . for failing to adopt policies on handling athlete

These efforts make for a valid, outcome-oriented model that the NCAA and its member institutions should promote and standardize in sports where head-to-head contact is a concern.<sup>223</sup> The Ivy League and the Big Ten introduced its rules and research efforts as prompt and direct responses to what ample and ongoing research has suggested about a correlation between contact sports and brain trauma: “The new rules will be introduced as a growing amount of research suggests that limiting full-contact practice may be among the most practical ways of reducing brain trauma among football players.”<sup>224</sup> In other words, it would be difficult to justify not responding as these conferences have responded.

## V. THE NCAA’S LEGAL ISSUES

### A. *Does the NCAA Owe Its Athletes a Duty of Care?*

The NCAA’s 2010 Concussion Management Plan required that all member institutions implement a policy for concussion management that includes an education component.<sup>225</sup> This was likely an effort by the NCAA to bolster its legal defense to any potential negligence suits by ensuring that student-athletes were given notice of the harmful effects of concussions and the dangers associated with premature return to play.<sup>226</sup> However, by instituting this policy, the NCAA might have invited litigation by assuming a duty to ensure that the Plan is adequate and properly followed by its member institutions.<sup>227</sup>

Indeed, in *Arrington v. NCAA*, a class action lawsuit pending in the Northern District of Illinois, the class alleges that the NCAA had a

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concussions that go beyond what’s required” by NCAA).

<sup>223</sup> Cf. Hecht, *supra* note 40, at 63 (announcing new “proactive” NHL concussion policy that prohibits head checks, which are known to cause concussions).

<sup>224</sup> *Id.*

<sup>225</sup> See RULE 3.2.4.17, *supra* note 182, at 12.

<sup>226</sup> See Carrabis, *infra* note 237, at 383 (“Legally, by giving student athletes notice of concussions’ harmful effects through the new guidelines in the Handbook, the NCAA may have afforded itself strong assumption of risk and waiver defenses, if an injured athlete decided to file a lawsuit.”); see also Bush, *supra* note 132 (implying that the NCAA may be refraining from regulating the Plan more vigorously and from establishing detailed, uniform testing due to fear of exposure to potential litigation, and analyzing legal duty to perform non-negligently once concussion testing is undertaken).

<sup>227</sup> See Class Action Complaint, *supra* note 188, at \*14 (asserting that NCAA maintains, “at all relevant times, . . . a duty toward [student-athletes] . . . to supervise, regulate, monitor and provide *reasonable* and *appropriate* rules to minimize the risk of injury to the players”) (emphasis added). In other words, this lawsuit seeks to impute liability for failure to provide reasonable and appropriate care; “even if a Concussion Management Plan is in place, it is important to monitor whether or not the Plan is effective.” Cary, *supra* note 185.

duty toward its student-athletes which it failed to perform.<sup>228</sup> The class contends that the NCAA is a “regulatory body,” and therefore has a duty to “supervise, regulate, monitor and provide reasonable and appropriate rules to minimize the risk of injury” to its student-athletes.<sup>229</sup> By failing to disclose the risks of harm, long-term complications, and cognitive decline associated with concussions, the NCAA breached its duty.<sup>230</sup> The class asserts that the NCAA was negligent for many reasons, including, failure to: (1) promulgate rules that adequately addressed the long-term and cognitive risks associated with concussions; (2) promulgate rules that adequately defined a return-to-play policy that would minimize these risks; and (3) “reasonably enforce” rules that would minimize these risks.<sup>231</sup>

The class requests a court mandate requiring the NCAA to create specific means for implementing the policies included in its Concussion Management Plan, including rules that adequately address the risks associated with concussions and also provide for when, objectively, student-athletes may safely return to play.<sup>232</sup> Moreover, the class requests an injunction requiring the NCAA to implement: (1) “system-wide” return-to-play guidelines for student-athletes; (2) “system-wide” guidelines for screening and detecting head injuries; and (3) rules that address “the treatment and eligibility of student-athletes who have sustained multiple concussions in the course of play.”<sup>233</sup> These regulations would create uniform standards throughout NCAA member institutions and sports. Moreover, they would acknowledge that multiple concussions are more dangerous than a single concussive episode, and should be handled accordingly.<sup>234</sup>

*Arrington v. NCAA* is the first lawsuit to name the NCAA, rather than a particular member institution, as the defendant.<sup>235</sup> Already, a second class action lawsuit has been filed against the NCAA for failure to properly protect its student-athletes from concussions and their long-

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<sup>228</sup> See *id.* at \*14 (detailing class action suit brought on behalf of former NCAA football student-athletes who “sustained a concussion(s)” while playing in college).

<sup>229</sup> *Id.*

<sup>230</sup> *Id.*

<sup>231</sup> See *id.* at \*14-\*15 (listing additional complaints).

<sup>232</sup> See *id.* at \*14, \*16 (describing demands).

<sup>233</sup> See *id.* at \*15-\*16.

<sup>234</sup> See *AAN Statement, supra* note 7, at 581 (recognizing cumulative damage of multiple concussions); *Handbook, supra* note 26, at 53 (listing potential serious complications of multiple concussions, including second impact syndrome, postconcussive syndrome, and post-traumatic encephalopathy).

<sup>235</sup> See *Cary, supra* note 185.

term effects.<sup>236</sup> Ironically, the NCAA first enacted its allegedly inadequate Concussion Management Plan in the wake of a lawsuit brought against La Salle University for allegedly returning a player to competition too soon after a concussion.<sup>237</sup> The suit never made it to court because La Salle settled with the student-athlete for \$7.5 million.<sup>238</sup> In an effort to shield itself from liability, the NCAA enacted the Plan, “arguably putting student athletes on notice not only of the symptoms of concussions, but also of their potential damaging and long lasting effects when a student athlete returns to the playing field too soon.”<sup>239</sup>

However, the NCAA Plan, which is published in the NCAA Sports Medicine Handbook, does not put student-athletes on notice because the Handbook is not distributed to student-athletes.<sup>240</sup> Likewise, the NCAA Manual, which contains the Plan at Rule 3.2.4.17, is not distributed directly to student-athletes.<sup>241</sup> The NCAA has assumed the responsibility for regulating and preserving the amateurism of collegiate student-athletes; therefore, it is in a position of power and authority, or a fiduciary relationship.<sup>242</sup> As such, the NCAA owes a duty to its student-athletes, and is “held to something stricter than the morals of the marketplace. Not honesty alone, but the punctilio of an honor the most sensitive, is then the standard of behavior.”<sup>243</sup>

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<sup>236</sup> See Bryan Toporek, *Second Youth-Concussion Lawsuit Filed Against NCAA*, EDUC. WEEK (Sept. 29, 2011, 5:39 PM), [http://blogs.edweek.org/edweek/schooled\\_in\\_sports/2011/09/second\\_youth-concussion\\_lawsuit\\_filed\\_against\\_ncaa.html](http://blogs.edweek.org/edweek/schooled_in_sports/2011/09/second_youth-concussion_lawsuit_filed_against_ncaa.html) (alleging NCAA “doesn’t do enough to prevent dangerous tackling techniques, failed to set up an organization-wide system for screening head shots, and doesn’t provide sufficient post-college support to student-athletes injured while at school”).

<sup>237</sup> See Andrew Carrabis, Note, *Head Hunters: The Rise of Neurological Concussions in American Football and Its Legal Implications*, 2 HARV. J. SPORTS & ENT. L. 371, 382 (2011) (describing previous concussion lawsuit settlement brought against La Salle University for allegedly returning football student-athlete to field too soon and describing NCAA’s “drastic measures to adopt concussion policies” in wake of \$7.5 million settlement).

<sup>238</sup> *Id.*

<sup>239</sup> *Id.* at 383.

<sup>240</sup> See *Handbook*, *supra* note 26, at 2 (describing distribution of handbook; notably, distribution list does not include student-athletes).

<sup>241</sup> See *Bowers v. NCAA*, 974 F.Supp. 459, 461 (D.N.J. 1997) (explaining NCAA governing legislation, included in NCAA Manual, which is distributed annually to member institutions). See generally NCAA 2010-11 NCAA D-1 MANUAL (containing NCAA Constitution, Bylaws and legislative policies).

<sup>242</sup> See Sara Young, Comment, *Does a Coach Owe Players a Fiduciary Duty? Examining the Relationship Between Coach and Team*, 35 J.C. & U.L. 475, 478 (2009) (“Fiduciary law applies when one places special confidence in another and the latter accepts that duty.”); see also *id.* at 479 (explaining that fiduciary relationships are expanding and currently include “relationships between educator, educational institutions, and their students”).

<sup>243</sup> *Id.* (citing *Meinhard v. Salmon*, 164 N.E. 545 (N.Y. 1928)).

In terms of concussion management and prevention, the NCAA has not properly disclosed to its student-athletes the symptoms of concussions and their potential long-term effects. Accordingly, the District Court should find that the NCAA has breached its duty of care in failing to properly disclose this imperative information to its student-athletes. Furthermore, the Northern District of Illinois should find for the class, and mandate that the NCAA implement the class's requests for relief; adequate regulation and disclosure of the risks of concussions is imperative to protect the health of student-athletes.<sup>244</sup>

### B. *Conflict of Interest*

Currently, the duty of policing concussions and establishing management protocols falls on the individual coaches, athletic trainers, and medical personnel that comprise each NCAA member institutions.<sup>245</sup> This is problematic, however, for two reasons. First, it presents a conflict of interest for the athletic trainers and team physicians.<sup>246</sup> Second, it presents a conflict of interest between the student-athletes' duty to self-report injuries and their interest in maintaining athletic scholarships.<sup>247</sup>

The NCAA Plan creates a conflict of interest for athletic trainers and team physicians because of the symbiotic relationship between

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<sup>244</sup> See, e.g., Hecht, *supra* note 40, at 61 (emphasizing need for more concussion education and disclosure of risks); Aronson, *supra* note 22 (calling for more concussion education for student-athletes); Varner, *supra* note 2 (proposing more concussion education for student-athletes); see also Ventura, *supra* note 21, at x ("Awareness is so poor that more than half of athletes at the college level have no knowledge of the possible consequences following a head injury.").

<sup>245</sup> RULE 3.2.4.17, *supra* note 182; see also Charlie Kingdollar, *Insurance Issues: School Liability – Student Athlete Concussions*, GEN RE RESEARCH (Apr. 2010), [www.genre.com/sharedfile/pdf/InsuranceIssues201004-en.pdf](http://www.genre.com/sharedfile/pdf/InsuranceIssues201004-en.pdf) ("The NCAA . . . notes that "[u]ltimately, it is the school's responsibility to protect the health of its student-athletes.").

<sup>246</sup> See Carrabis, *supra* note 237, at 386 (acknowledging that staff and doctors may pressure players to return to play); Hecht, *supra* note 40, at 61 (noting need to alter dynamic between physicians and teams to ensure objectivity).

<sup>247</sup> See Diehl, *supra* note 154, at 111 ("Once an athlete has been injured, the colleges and universities have full latitude to determine whether or not to continue to extend an athletic scholarship."); but see *id.* ("Although it is unlikely that this rule will have an actual impact on student-athletes because scholarships may be extended to these individuals and not counted toward the institutional maximums, it remains a possibility."); Associated Press, *Tre' Newton Giving Up Football*, ESPN (Nov. 15, 2010) [hereinafter *Newton*], <http://sports.espn.go.com/nfl/news/story?id=5809324> (reporting University of Texas sophomore running back's decision to stop playing football after sustaining several concussions, and declaring that Newton will remain at the University on scholarship).

teams and university medical staff.<sup>248</sup> College and university athletic trainers are employed by the schools and have a significant interest in maintaining their positions at colleges and universities; their livelihood depends on their ability to rehabilitate injured athletes and return them to the field as quickly as possible.<sup>249</sup>

Further, athletic trainers and medical staff are under tremendous pressure from coaches, athletes, parents, alumni, and boosters to return key players to the field as quickly as possible.<sup>250</sup> By placing these interested parties in the discretionary position of determining when an athlete should return to play, the imperative objectivity of the decision is lost, and concern for the athlete's health becomes subject to an athletic trainer's primary concern of maintaining employment.<sup>251</sup> On the other hand, this pressure also poses a significant conflict of interest on athletic trainers, who risk being fired for negligently returning a player to the field too soon. To resolve this conflict, the NCAA should institute a "neutral physician" policy.<sup>252</sup>

This is a conflict that the NCAA must resolve by restructuring the medical staff's relationship with the team, much like the NFL has done.<sup>253</sup> The NFL resolved this conflict by mandating that each team nominate and retain, subject to NFL approval, one designated, independent neurologist who would be consulted in the event of a concussion.<sup>254</sup> Several ways of easing the burden the Plan places on medical

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<sup>248</sup> See Josh Luchs, *Luchs: The NCAA System is Broken; Here's How to Fix It*, SPORTS ILLUSTRATED (Aug. 18, 2011), <http://sportsillustrated.cnn.com/2011/football/ncaa/08/18/luchs.change/index.html> ("[I]t's a loss of power and an admission of failure – but it's time that the NCAA member institutions acknowledge that the NCAA enforcement model reliant on athletic department self-monitoring has failed."); see also Hecht, *supra* note 40, at 61 (admitting that developing objectivity among team physicians "is probably not a realistic solution, as team owners [or athletics departments] will simply replace rogue doctors who do not act according to established, but unwritten team policy").

<sup>249</sup> See Hecht, *supra* note 40, at 61-2 (urging team physicians to "rigidly place each athlete's personal health before wins and losses," and acknowledging that this will "keep star players out of key games," but warning physicians that "under the current concussion treatment models that encourage unsafe, too rapid return to athletic participation, physicians are spurring on a wave of litigation against themselves"); cf. Luchs, *supra* note 253 (applying similar rationale to conflict of interest between college and university compliance staff and enforcement of NCAA rules).

<sup>250</sup> See Luchs, *supra* note 248 ("[I]n a big sports school, the most powerful people in the athletic department are the head coaches . . ."). In other words, the head coaches control the retention and release of athletic department staff; if staff interferes with a coach's management of a team, by withholding a player from competition, employment may conceivably be jeopardized. *Id.*

<sup>251</sup> See *id.* (elucidating conflict of interest concept).

<sup>252</sup> See Hecht, *supra* note 40 (suggesting ways to ease conflict).

<sup>253</sup> See *id.*

<sup>254</sup> See *2009 NFL Rule Changes*, *supra* note 85 (discussing December 2009 NFL rule

staff have been suggested, including “prohibiting the team doctor from acting as part of the team; controlling the doctor’s economic incentives; eliminating the position of team doctor so that team management has no contact with or control over the physician; and requiring official league certification of all team doctors.”<sup>255</sup>

Alternatively, simply changing the system of payroll disbursement, so medical staff would not be employed by the university, could help ensure impartial enforcement of the Plan.<sup>256</sup> The NCAA has previously faced an analogous situation before, with compliance officers, who are employed by NCAA member institutions but are required to penalize their employers for violations of NCAA compliance rules.<sup>257</sup> The simple solution to resolving the compliance officers’ conflict was to force the NCAA, rather than its member institutions, to pay officers’ salaries. Similarly, concussion conflict could be solved by forcing the NCAA to pay the salaries of the medical staff it employs to enforce the NCAA Plan against member institutions.<sup>258</sup> If the livelihood of an NCAA athletic trainer or medical professional were guaranteed by a salary paid by the NCAA, which ostensibly has an interest in preventing concussions among its student-athletes and in promoting appropriate concussion management, the burden on the trainer to return an athlete to practice would be significantly alleviated. In other words, the requisite objectivity sought in determining readiness to play would be achieved.

The current NCAA Concussion Management Plan is problematic for a second reason: it creates a conflict of interest for the student-athlete.<sup>259</sup> The Plan enacts a policy whereby student-athletes, who have just suffered brain trauma, are bound to assume the responsibility of reporting those injuries and removing themselves from further participation.<sup>260</sup> The student-athlete cannot possibly make an informed deci-

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changes, which eliminated subjectivity in NFL concussion policy).

<sup>255</sup> *Id.*

<sup>256</sup> *See* Luchs, *supra* note 248 (suggesting alternative to solving conflict of interest issue).

<sup>257</sup> *Id.* (analogizing conflict of interest with medical staff to conflict of interest with compliance officers).

<sup>258</sup> *See id.* (“Take Compliance Departments off the school payroll and put them on an autonomous payroll of the NCAA.”).

<sup>259</sup> *See* RULE 3.2.4.17, *supra* note 182, sec. (a) (requiring that student-athletes “acknowledge . . . that they have a responsibility to report concussion-related injuries and illnesses to a medical staff member” and shifting burden of reporting head injury to student-athlete).

<sup>260</sup> *See* Class Action Complaint, *supra* note 188, at \*8 (arguing NCAA concussion management plan is inadequate). While many argue that burdening student-athletes with the responsibility of recognizing that a concussion has occurred is the best way to manage concussions, student-athletes cannot properly accept this burden without the means to

sion at this point because the information on how to detect a brain injury was never provided to them.<sup>261</sup> It is irresponsible to expect that student-athletes in the daze of serious head trauma should be able to make this assessment. Additionally, it is unrealistic because student-athletes (aged roughly eighteen to twenty-three) are vulnerable, impressionable, and are generally unlikely to consider the future health consequences of a concussion.<sup>262</sup> Finally, placing the burden of reporting a concussion on student-athletes creates a conflict of interest between the duty to report an injury and their desire to play and maintain financial aid awards.<sup>263</sup>

## VI. THE NCAA'S OPTIONS FOR REFORM

### A. *The NFL Approach*

Fortunately for the NCAA, the NFL is a comprehensive resource, brimming with research and model regulations and policies for managing concussions.<sup>264</sup> Moreover, the NFL has an interest in ensuring that proper protocol for concussion management exists in the NCAA.<sup>265</sup> Sharing the NFL research would eliminate the financial commitment the NCAA would have to devote to an independent concussion study, and it would also eliminate the significant time delay that researching the issue and developing a standardized management

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understand what concussions are, and what their long-term risks are. *See, e.g.*, Hecht, *supra* note 40, at 61-2 (emphasizing need for *more* concussion education to “empower the athlete’s medical autonomy”).

<sup>261</sup> *See Handbook, supra* note 26, at 2 (noting Handbook is published directly to head athletic trainers, but not to student athletes, to whom it is “made available” online).

<sup>262</sup> *See, e.g.*, Class Action Complaint, *supra* note 188, at \*2 (noting age range and particular vulnerability of young adult student-athletes); Hecht, *supra* note 40 at 61 (explaining that “athletes . . . will play through aches and pains”); Domowitch, *supra* note 93 (“The problem is, where they’re concussed, they’re not thinking well. And when they’re not thinking well, they’ll make bad decisions in terms of what’s safe and what’s not safe.”).

<sup>263</sup> *See Diehl, supra* note 154, at 111.

<sup>264</sup> *See* Domowitch, *supra* note 93, at 2 (remarking upon value of NFL concussion research, fueled by League’s money and supporting companies). Moreover, the NFL is willing to share its information. *See id.* at 4 (claiming NFL approached NHL and “offered to share all of its concussion information and research data”).

<sup>265</sup> *See, e.g.*, *National Football League Draft Eligibility*, WIKIPEDIA (Apr. 6, 2012), [http://en.wikipedia.org/wiki/National\\_Football\\_League\\_Draft#Eligibility](http://en.wikipedia.org/wiki/National_Football_League_Draft#Eligibility) (“[V]irtually all of the players selected in the NFL draft played college football.”); *see also* Domowitch, *supra* note 93, at 4 (recalling NFL willingness to share concussion research with other sports leagues); Carrabis, *supra* note 237, at 385 (recalling how “NFL Commissioner Roger Goodell sent a letter to over forty governors across the United States urging them to follow New Jersey and Washington’s lead to enact legislation” on concussion treatment and prevention in youth contact sports).

system would take.<sup>266</sup> The NFL system can be implemented across NCAA athletics because the cause of a concussion, which develops from head impact, is not sport-specific.

The NFL has made an effort to provide impartial, objective checks on its concussion policy through retention of designated, independent team neurologists.<sup>267</sup> If the NCAA were to institute a more immediate, on-field, independent evaluation for suspected and mild concussions across all of its sports, it would more effectively treat concussions and may prevent further damage from occurring. The objective check is important to diagnose concussions which athletes may not even recognize themselves, but that a trained specialist would note in the athlete's symptoms, and it could prevent symptoms from progressing to the point where athletes are forced to seek outside treatment.<sup>268</sup> It would also prevent situations in which an athlete sustains a mild concussion, plays through it, and shortly thereafter sustains a more severe concussion upon a second impact because the athlete was more vulnerable.<sup>269</sup> A trained "concussion referee" would note the first mild concussion and remove the athlete, eliminating the possibility of the second impact.

While the existing professional sports associations' concussion management systems are not perfect, they provide the most comprehensive, objective means of proactive concussion management. When it comes to concussion management, the NFL is under intense scrutiny.<sup>270</sup> This means that the NFL is perpetually pushed to develop newer, better solutions to the concussion problem, from which everyone stands to benefit, especially the NCAA.<sup>271</sup>

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<sup>266</sup> See, e.g., Alan Schwarz, *States Taking the Lead Addressing Concussions*, N.Y. TIMES (Jan. 30, 2010), <http://www.nytimes.com/2010/01/31/sports/31concussions.html> (noting Washington State's precise concussion protocol took two years to develop and pass the State Senate, and implying that other states should piggy-back on Washington's efforts). The article emphasizes that "Washington's law is a work of art, [taking] almost two years" to pass. And because "they've already done the hard work" legislators need not "take two years in every state" to pass similar legislation. *Id.*

<sup>267</sup> See *2009 NFL Rule Changes*, *supra* note 85 (mandating each team appoint an outside neurologist for consultation in the event of a suspected concussion).

<sup>268</sup> See Domowitch, *supra* note 92 (explaining that physicians and trained medical personnel can pick up on subtle concussion symptoms that untrained individuals cannot).

<sup>269</sup> See Gregory, *supra* note 56 (describing instance of death caused by SIS where "neither impact would have been sufficient to cause death in the absence of other impact").

<sup>270</sup> See, e.g., NFL Concussions, *supra* note 98 (recounting congressional criticism of NFL's sub-optimal 2007 concussion policy).

<sup>271</sup> See Zeigler 1/5/10, *supra* note 82 (reporting former NFL players' efforts to urge League to educate public); Domowitch, *supra* note 93 (recognizing NFL's willingness to share concussion research and policies).

B. *The “Concussion Referee”*

Another option is for the NCAA to consider emulating the Ivy League’s football rule changes—and develop them further.<sup>272</sup> The Ivy League’s plan is simple, but it is a *proactive* attempt to correct the long-term consequences of head injuries that studies suggest are caused by multiple concussions.<sup>273</sup> These proactive measures focus on preventing concussions before they occur. The NCAA should also consider implementing more effective means of identifying concussions after they have occurred by instituting a “concussion referee.”

The full-time “concussion referee” would be responsible for identifying potential concussions as they occur on the field at practices, so that athletes be treated and diagnosed immediately, before more harm is done. The NCAA has proposed that on-field, game-day referees police suspected concussions.<sup>274</sup> While this would grant some objectivity to a generally coercive situation, it is impractical because referees are only present at games, which represent a small percentage of the times when concussions are likely to occur.<sup>275</sup> Further, placing such an important, nuanced duty on referees, whose primary job is to ensure compliance with the general rules of play, may cause one or more other duties to slip, thereby risking further chaos and an increased risk of injury during gameplay.<sup>276</sup>

Alternatively, the NCAA might consider hiring sports doctors or medical personnel to act as independent, on-field evaluators and observers of the types of impacts likely to cause concussions.<sup>277</sup> These

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<sup>272</sup> See Belson, *supra* note 84.

<sup>273</sup> See Associated Press, *Ivy Leagues Sets New Standard in NCAA by Adopting Rules to Limit Football Players’ Exposure to Concussions* (July 20, 2011, 2:57 PM), NJ.COM, [http://www.nj.com/princeton/index.ssf/2011/07/ivy\\_league\\_sets\\_new\\_standard\\_i.html](http://www.nj.com/princeton/index.ssf/2011/07/ivy_league_sets_new_standard_i.html) (concluding that “it is important to minimize the likelihood and severity of hits to the head” in a concussion policy because no other means of prevention is currently known).

<sup>274</sup> See *NCAA 2009 Recommendations*, *supra* note 53.

<sup>275</sup> See Belson, *supra* note 84 (noting college football players sustain most head impacts in practices, not games).

<sup>276</sup> Cf. Chris Mortensen, *Trainer Will Oversee In-Game Testing*, ESPN (Dec. 21, 2011, 6:25PM), [http://espn.go.com/nfl/story/\\_/id/7373562/nfl-adds-concussion-specific-trainers-team-games](http://espn.go.com/nfl/story/_/id/7373562/nfl-adds-concussion-specific-trainers-team-games) (explaining need for a concussion-only trainer is due to potential of on-field trainers to miss concussive hits and potential injuries: the trainer’s “role will be to provide information to team medical staffs that might have been missed due to a lack of a clear view of the play or because they were attending to other players or duties”).

<sup>277</sup> Cf. Sean Gregory, *Why The NFL Needs a Concussion Ref*, TIME (Dec. 23, 2011), <http://keepingscore.blogs.time.com/2011/12/23/why-the-nfl-needs-a-concussion-ref/> [hereinafter Gregory 12/23/11] (announcing new NFL policy that places athletic trainers in the press box in order to spot concussions and suggesting these trainers should be given as much power as a referee).

“concussion referees” should be present at every competition and full-contact practice because most head injuries occur during practice rather than games.<sup>278</sup> Like referees, these monitors would be neutral personnel, with the ability to intervene and stop play, if necessary, to substitute players suspected of sustaining concussions.<sup>279</sup> The NCAA might also consider subtracting a concussion referee’s intervention time from the allotted practice time, so that practice time would not be affected by compliance with this policy.

### C. Education

By increasing student-athletes’ understanding of the risks associated with multiple concussions, they gain the ability to judge when, if ever, they are able to return to competition.<sup>280</sup> Harmful contact is inherent in contact sports, and the risk of concussions cannot be completely eliminated.<sup>281</sup> Proper education, however, can help student-athletes not only recognize when a concussion has occurred, and thereby seek proper treatment, but it can also make them aware of the risks of prematurely returning to play.<sup>282</sup>

The current NCAA Concussion Management Plan implies that education is important.<sup>283</sup> However, it falls grossly short of the aggressive inundation and drilling that is required for student-athletes and college coaches to fully comprehend the risk of returning to play after suffering a concussion.<sup>284</sup> This understanding is also paramount in the decision of when to return to play, if ever, after multiple concus-

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<sup>278</sup> Belson, *supra* note 84.

<sup>279</sup> See Gregory 12/23/11, *supra* note 277 (asserting concussion trainer policy implemented in NFL is “commendable,” but “the NFL should give these new trainers a referees shirt and let them make the calls that save a player down the road”).

<sup>280</sup> Hecht, *supra* note 40, at 61-62 (emphasizing that “increased concussion awareness will empower the athlete’s medical autonomy”). When he testified in his successful lawsuit against the NFL, Merrill Hoge suggested that athletes, who routinely play through pain, will continue to do so unless they understand the consequences of doing so. *Id.* at 61 (quoting Merrill Hoge).

<sup>281</sup> See Ventura, *supra* note 21, at ix (admitting in contact sports, “cerebral concussion is an inherent risk”).

<sup>282</sup> See Aronson, *supra* note 22 (describing researchers’ efforts to simply engage in concussion research, as it “helps reinforce growing awareness about the seriousness of concussions and the importance of early intervention”).

<sup>283</sup> See NCAA RULE 3.2.4.17, *supra* note 182, sec. (a) (adopting Rule 3.2.4.17 on Aug. 12, 2010). The rule requires education as one of four mandatory facets of member institutions’ concussion plans. *Id.*

<sup>284</sup> See, e.g., Hecht, *supra* note 40, at 61 (emphasizing need for *more* concussion education); see also Ventura, *supra* note 21, at x (“Awareness is so poor that more than half of athletes at the college level have no knowledge of the possible consequences following a head injury.”).

sions.<sup>285</sup>

A comprehensive and effective concussion education plan is not beyond the NCAA's capabilities.<sup>286</sup> To accomplish this, however, the NCAA must enact a constant, thorough, and ubiquitous system of education upon its student-athletes, coaches, and athletic departments, making them inexcusably aware of the risks of returning to play after suffering a concussion, and forcing them to "assume greater responsibility" for their health.<sup>287</sup> Ultimately, with an invisible injury, the only way to prevent further injury is to exercise caution and rational protocol, which student-athletes have been unable to provide for themselves.<sup>288</sup> Therefore, the NCAA must not only give its student-athletes the exhaustive education necessary to do that, it must also provide them with objective guidance and resources from their coaching and medical staff to hold them accountable to what they must understand as a life-altering decision to return to play.<sup>289</sup>

## VII. CONCLUSION

By failing to properly address the dangers of concussions in contact sports, the NCAA has revealed itself to be an inefficient and obtuse

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<sup>285</sup> See *Handbook*, *supra* note 26, at 56 (providing NCAA Concussion Management Plan § (a), mandating that "student-athletes [must be] educated about . . . concussions").

<sup>286</sup> See Jeff Zillgitt, *TV Ads for NCAA Will Get Plenty of Playing Time*, USA Today (Mar. 13, 2007, 7:14 PM), [http://www.usatoday.com/sports/college/mensbasketball/tourney07/2007-03-11-ncaa-ads\\_N.htm](http://www.usatoday.com/sports/college/mensbasketball/tourney07/2007-03-11-ncaa-ads_N.htm) (proclaiming NCAA "is about higher *education*") (quoting Dennis Cryder, NCAA Senior Vice President for Branding and Communications) (emphasis added); see also Carrabis, *supra* note 237, at 382 (demonstrating NCAA's ability to implement measures to protect itself from litigation after La Salle University was sued by former football player who suffered concussion during practice).

<sup>287</sup> See Hecht, *supra* note 40, at 61 (quoting Merrill Hoge's suggestion that student-athletes "must assume greater responsibility" for their health).

<sup>288</sup> See Aronson, *supra* note 22 ("Athletes should be more aware of concussions so they can receive proper treatment and stand a better chance of recovery, especially from more concussions that might occur in the future.").

<sup>289</sup> Another commonly-proposed solution is to focus on equipment redesign. However, the NCAA is not in the best position to conduct the necessary research and development to invent new, safer equipment. See Belson, *supra* note 84 (comparing NFL's resources to NHL's, and finding NFL in better position to continue research). The NCAA simply does not have the personnel resources, and the tortoise-pace at which it moves would make research and development efforts futile in the rapidly-changing world of science and technology. At worst, adding another administrative project to the NCAA's agenda would reduce the pace at which the NCAA attends to its current responsibilities. Compare *2009 NFL Rule Changes*, *supra* note 85 (announcing December 2009 NFL concussion rule proposal), with NCAA RULE 3.2.4.17, 2010-11 NCAA D-I MANUAL at 12 (implementing NCAA Concussion Management Plan eight months after Committee's proposal). Alternatively, the NCAA could focus on raising money and donations to increase its education efforts, or help fund, on its own or in conjunction with the NFL, research and development for better equipment.

organization, yet it remains in the unique position of being able to provide for the safety of its student-athletes, particularly those who participate in contact sports, through its powerful regulatory capacity over its member institutions.<sup>290</sup> At a time when every other major U.S. professional league and a majority of state governments have some sort of concussion policy in place, the NCAA's reluctance to take similar action is both confounding and inexcusable.<sup>291</sup>

As regulation of concussions and head injuries has become increasingly commonplace, Congress and other knowledgeable individuals and institutions have emphasized the need for standardized concussion management policies.<sup>292</sup> Such policies would streamline the standard of care athletes receive and would limit the potential for discretionary, premature return-to-play. Moreover, standardized education for student-athletes would help them recognize when they have sustained a concussion, inform them of the risks of continued competition, and help them to seek treatment.<sup>293</sup> Compliance with such a policy would help student-athletes to determine their capacity to return to play, with full knowledge of the risks of doing so.<sup>294</sup>

The NCAA must devote significantly more funds and efforts toward establishing a standard, enforceable, and explicit protocol for managing and preventing concussions.<sup>295</sup> Failure to do so would not only violate industry standards, it would demonstrate an inability to

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<sup>290</sup> See generally Class Action Complaint at 4-8, *Arrington v. NCAA*, 2011 WL 4374451 (N.D. Ill. 2011) (No. 1:11-cv-06356) (listing NCAA failure to promulgate concussion prevention rules, tendency to ignore studies revealing dangers of concussions, failure to implement educational programs for athletes with history of concussions, and inefficient Concussion Management Plan).

<sup>291</sup> See, e.g., *Youth Laws*, *supra* note 81 (indicating nation-wide support of state-regulated youth concussion laws); Aronson, *supra* note 22 (describing national concern over concussion problem and reporting on Ivy League concussion policy); *2009 NFL Rule Changes*, *supra* note 85 (demonstrating NFL efforts to manage concussions).

<sup>292</sup> See, e.g., *Youth Laws*, *supra* note 81 (describing mandatory concussion policies that have been enacted in most states); Aronson, *supra* note 22 (recognizing Princeton University research on concussions, which “comes at a time when the national media have cast a spotlight on the short- and long-term ramifications of concussions, as well as the Ivy League’s recent adoption of stringent measures for football”); *NCAA 2009 Recommendations*, *supra* note 53 (“[In December 2009] the NFL sent a memo to its teams outlining stricter guidelines for when players should be allowed to return to games or practices after head injuries.”).

<sup>293</sup> See Hecht, *supra* note 40 (suggesting that athletes routinely play through pain, “unless they are aware of [the pain’s] significance,” which will come through “increased concussion awareness”).

<sup>294</sup> See *Youth Laws*, *supra* note 81 (illustrating idea behind mandatory education: to impress upon athletic community severity of concussions, demonstrate need “to take this seriously,” and to determine return-to-play with potential consequences in mind).

<sup>295</sup> See Ventura, *supra* note 21, at x (declaring “prevention is paramount”).

regulate the hundreds of thousands of student-athletes over whom the NCAA purports to have authority.<sup>296</sup> Should the NCAA fail to properly govern its student-athletes, by failing to impose a structured and specific Concussion Management Plan, the federal courts need to intervene and mandate change.<sup>297</sup>

College athletes have four years of eligibility, and “just about all of them will be going pro in something other than sports.”<sup>298</sup> Naturally, then, Catherine Varner had the right idea: tell student-athletes about the devastating consequences of concussions. It would be better for those who have suffered concussions to miss a few college games than to sacrifice decades of lifetime eligibility thereafter.<sup>299</sup>

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<sup>296</sup> See *Who We Are*, *supra* note 174 (presenting NCAA as governing body of college sports).

<sup>297</sup> See *NFL Concussions*, *supra* note 98 (describing congressional investigation into NFL concussion practices and subsequent league response four months later). This worked for the NFL. See *id.* (noting prompt response).

<sup>298</sup> Zillgitt, *supra* note 286 (quoting NCAA television advertising campaign).

<sup>299</sup> See Varner, *supra* note 2 (“Better to miss a few games, than to miss a few months of your life.”).