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Rules Limiting Athletic Performance or Prohibiting Athletic Participation for Health Reasons: Legal and Ethical Considerations

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This article analyzes the paradox between: 1) intercollegiate sport's objectives of maximizing athletic performance and providing athletic participation opportunities to those possessing the requisite physical ability and skills to compete successfully; and 2) National Collegiate Athletic Association rules that limit athletic performance by all student-athletes, or university requirements that prohibit individual student-athletes from participating in intercollegiate sports, for health reasons. Some student-athletes seek to maximize athletic performance by taking performance-enhancing substances, even if doing so creates potential future adverse health effects. Others may want to participate in intercollegiate sports with a physical abnormality and are willing to assume an increased risk or severity of injury beyond that inherent in the sport. However, the NCAA and its member universities, as producers and regulators of intercollegiate sports, have valid legal authority and ethical grounds to promulgate and enforce health, safety, and competition rules that limit the autonomy interests of adult student-athletes.

The theme of this year's scholarly colloquium on intercollegiate athletics is whether excellence in sport is compatible with good health. I will explore the converse of this theme by considering whether student-athlete eligibility rules to promote good health justify limits and restrictions on the pursuit of excellence in intercollegiate sport. My presentation will analyze whether, based on legal and ethical considerations, eligibility rules that limit athletic performance or prohibit athletic participation for health reasons despite medical uncertainty strike an appropriate balance between providing opportunities for student-athletes to participate and excel in intercollegiate athletics and maintaining their good health.

The National Collegiate Athletic Association's (NCAA) mission (National Collegiate Athletic Association [NCAA], 2009) includes the "pursuit of excellence in both academics and athletics" by student-athletes and "an inclusive culture that fosters equitable participation for student-athletes" in athletics among its

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core values (i.e., "essential and enduring principles"). Guideline 3a of the NCAA Sports Medicine Handbook (2008c) provides that "the NCAA encourages participation by student-athletes with physical or mental impairments in intercollegiate athletics and physical activities to the full extent of their interest and abilities" and that a student-athlete should be given an opportunity to participate if "he or she has the requisite abilities and skills in spite of his or her impairment" (p. 78).

The NCAA's core purpose (i.e., "reason for being") is "to govern [intercollegiate athletics] competition in a fair, safe, equitable and sportsmanlike manner." In fact, the NCAA was founded in 1905 to promote health and safety in intercollegiate sports, specifically football.¹ Article 2.2 of the NCAA Constitution expressly states that "[i]ntercollegiate athletics programs shall be conducted in a manner designed to protect and enhance the physical and educational well-being of student-athletes" and "[i]t is the responsibility of each member institution to protect the health of and provide a safe environment for each of its participating student-athletes" (NCAA, 2008a, p. 3).

There is an inherent conflict between: 1) intercollegiate sport's objectives of achieving athletics excellence and providing athletic participation opportunities to those possessing the requisite physical ability and skills; and 2) eligibility rules established by the NCAA's drug-testing program that limit the bounds of athletic performance by all student-athletes, or those of a university that medically disqualify certain individual student-athletes from participating in intercollegiate sports for health reasons. Some student-athletes seek to maximize their athletic performance and are willing to assume the risks of potential adverse health effects, by taking performance-enhancing substances such as anabolic androgenic steroids or steroid precursors. The former are synthetic variations of testosterone (the primary male hormone) that mimic its effects by having both muscle-building and masculinizing characteristics The latter are synthetic substances that after ingestion metabolize into the functional equivalent of anabolic steroids (hereafter both substances will be referred to as "anabolic steroids"). Others with the requisite physical capabilities have sought an opportunity to participate in intercollegiate athletics with a known physical abnormality such as a missing or nonfunctioning paired organ (e.g., an eye or kidney), spinal stenosis, or a cardiovascular condition that creates a potential for increased risk or severity of injury to oneself in addition to the inherent risks of playing a sport.

I will focus on two specific issues that raise important legal and ethical questions about health-related eligibility rules that seemingly conflict with some of the objectives of intercollegiate athletics and/or the autonomy interests of adult student-athletes: 1) limiting athletic performance and the pursuit of excellence in intercollegiate sports by prohibiting all student-athletes from using anabolic steroids and requiring compliance with the NCAA's drug-testing program; and 2) excluding an individual student-athlete with the requisite physical capability and skills from participating in intercollegiate athletics based on the team physician's medical judgment that a his or her physical abnormality creates an unacceptable risk of personal injury.

Limiting Athletic Performance by Banning the Use of Anabolic Steroids

NCAA rules have prohibited drug use by student-athletes since 1973. In a nationwide survey of NCAA student-athletes conducted by Michigan State University in the early 1980s, 4% of all respondents and 9% of football players reported using anabolic steroids. The NCAA's drug testing program was initiated in 1986 "[s]o that no one participant might have an artificially induced advantage, so that no one participant might be pressured to use chemical substances in order to remain competitive, and to safeguard the health and safety of participants" (NCAA, 2008b, p. 2). The list of banned substances "consists of substances generally purported to be performance enhancing and/or potentially harmful to the health and safety of the student-athlete," including anabolic steroids and steroid precursors (NCAA, 2008b, p. 2). Stimulants (e.g., amphetamines) and illegal recreational drugs (e.g., marijuana), as well as substances that can be used to mask prohibited substances, are also banned. Guideline 1g of the 2008-09 NCAA Sports Medicine Handbook (2008) states that the NCAA "denounce(s)" studentathletes' use of nontherapeutic drugs, which is "contrary to the rules and ethical principles of athletics competition" (p. 21). As a condition of being eligible to participate in intercollegiate athletics, each student-athlete must consent to submit to random, suspicionless drug testing during all NCAA championships, Division I FBS games, and during the off season (Divisions I and II only).

A student-athlete does not have a legal right to participate in intercollegiate athletics. Rather, a student-athlete's eligibility to participate in intercollegiate sports is based on a consensual relationship that requires compliance with the terms of a contract with his or her university, including the NCAA's drug testing program. However, to prevent violation of a student-athlete's constitutional or civil rights protected by federal or state law, a rule conditioning his or her athletic eligibility on not using prohibited performance-enhancing substances such as anabolic steroids must further legitimate and important NCAA objectives.

In Vernonia School Dist. 47J v. Acton (1995), the U.S. Supreme Court ruled that a public school district's requirement that all students choosing to participate in interscholastic athletics must agree to submit to random, suspicionless testing for illegal recreational drugs does not violate the United States Constitution. Although student-athletes have legally recognized privacy interests, they have a lessened expectation of privacy and voluntarily subject themselves to greater regulation by choosing to participate in high school sports. Moreover, as unemancipated minors, they are entrusted by their parents or guardian to the custodial care of school officials who have a legal duty to protect their health and safety while engaged in interscholastic athletics. The Court held that the high school's legitimate interests in deterring illegal drug use, preventing disruption of the educational process, and protecting minor student-athletes' health outweighed the "not significant" infringement of their privacy, thereby justifying its mandatory random drug testing program. However, the Court "caution[ed] against the assumption that suspicionless drug testing will readily pass constitutional muster in other contexts"² such as intercollegiate athletics.

The NCAA is a private association rather than a governmental entity. Therefore, it is not subject to the requirements of the U.S. Constitution prohibiting all units of government (including public universities that are members of the NCAA) from subjecting individuals to unreasonable searches (which includes the collection and analysis of bodily fluids to determine the presence of prohibited substances) or otherwise infringing their privacy rights. However, the NCAA's drug testing program has been challenged on the ground it violates certain state constitutions.

Before discussing state constitutional law issues, I will first consider whether it is appropriate (i.e., ethical) for the NCAA to limit an adult student-athlete's ability to maximize his or her athletic performance in competitive sports by prohibiting the use of anabolic steroids. Athletes take anabolic steroids because they work. When combined with vigorous training, they enhance sports performance by making athletes bigger, stronger, and faster, and also increase their recovery time after strenuous physical activity. By enhancing human performance capabilities, anabolic steroids further the ultimate objective of adult elite competitive sport, which is winning an athletic event by performing the best.

Elite sports competition, including intercollegiate sports, is based on a model of athletic Darwinism because the best athletes are permitted to exploit their respective "natural" genetic advantages without regulation or limitation by sports governing bodies. Michael Phelps, who has several unique physical characteristics such as exceptionally large feet and flexibility in his ankles, won 8 gold medals in swimming during the 2008 Beijing Olympics. Usain Bolt, an unusually tall 6' 5" Jamaican sprinter, set world records in the 100 m and 200 m dash during the Beijing Olympics. (It is interesting to note that Bolt's father has claimed his son's sprinting prowess is attributable to a life-long appetite for Jamaican yams.) Eero Maentyranta, a Finnish cross country skier who won three gold medals during the 1964 Olympics subsequently was found to have a genetic mutation that caused his blood to have 40–50% more red blood cells than average. Because all athletes are not created equal in terms of their natural abilities, a completely level playing field does not exist. Moreover, some athletes have access to better nutrition, coaching, and training equipment and facilities, which provides a further unregulated competitive advantage.

Athletes have always sought to enhance their performance through the use of "artificial means," which today is fueled by the substantial economic and intangible rewards for extraordinary athletic achievements. It is very difficult, if not impossible, to find a principled basis to distinguish permissible athletic performance enhancement by "artificial" means from those that provide a prohibited "unfair" competitive advantage. Although they are not universally available to all athletes because of their differing economic resources, some dietary supplements (e.g., creatine) and training techniques (such as artificially created low-oxygen living environments in low altitude training areas) currently may be used to enhance athletic performance. It would be unnecessary to attempt to distinguish between permissible vs. prohibited "artificial" means of athletic performance enhancement if consenting adult student-adults were permitted to use anabolic steroids.³

The NCAA is committed to the "pursuit of excellence in both academics and athletics" by student-athletes, so what is wrong with permitting student-athletes to reap the benefits of 21st century pharmacology, especially those less naturally gifted? NCAA rules seek to create an educational environment that facilitates, rather than limits, each student-athlete's individual academic performance. For example, the NCAA does not prohibit the use of No Doze or other products with high amounts of stimulants such as caffeine by student-athletes during late night study for an exam,⁴ but a positive test for a stimulant above a certain threshold violates the NCAA's drug testing program.

One of the reasons the NCAA bans anabolic steroids is because of their actual and potential harmful effects on student-athletes. Some of the short-term adverse health effects of anabolic steroid use by males include reduced sperm production, testicular atrophy, and acne— which are largely reversible after usage is stopped. Clinical data suggests some anabolic steroid users will subject themselves to an increased risk of cardiovascular or liver disease. However, currently there are no definitive scientific or epidemiological studies evidencing that a healthy adult's usage of anabolic steroids in appropriate dosages necessarily will have lifethreatening or long-term serious health effects. It also is presently unknown whether abuse of anabolic steroids contributes to violence and other behavioral disorders.

Anabolic steroids are controlled substances regulated by federal and state laws, which prohibit a physician from prescribing, or the usage or possession of, anabolic steroids for the purpose of enhancing athletic performance.⁵ Many experts believe the available medical case reports justify prohibiting the use of anabolic steroids solely to enhance athletic performance. But some medical and scientific experts argue in favor of allowing fully informed, consenting adult athletes to use anabolic steroids with proper medical supervision, notably Dr. Norman Fost, professor of pediatric medicine and director of the Program in Bioethics at the University of Wisconsin—Madison. He asserts it is hypocritical to prohibit the use of anabolic steroids (which cause less documented harm than legal substances such as alcohol and tobacco) while permitting the use of other artificial means of athletic performance enhancement such as high-technology sports equipment. For many years he has advocated that adult amateur and professional athletes should be permitted to take anabolic steroids under a physician's supervision.⁶

Conducting scientific studies on humans to determine whether the use of anabolic steroids solely to enhance athletic performance has serious adverse health effects would be illegal and raises important ethical issues, so what is the right thing to do in the face of this medical uncertainty?

The accounting profession requires that a conservative approach be taken when the economic value of an asset is uncertain. Given that the health and welfare of young athletes (perhaps life itself) is at stake, it is entirely appropriate for the NCAA to apply this same principle and to adopt a conservative position regarding whether student-athletes are permitted to assume uncertain health risks that are potentially dangerous—particularly given today's "win at all costs" philosophy in elite competitive sport. It has been reported more than one-half of the 198 respondents to a 1995 informal survey of U.S. Olympic athletes (many of whom were weightlifters) that was conducted by Chicago physician and author Bob Goldman said "yes" to following question: "You are offered a banned performanceenhancing substance that comes with two guarantees: 1) You will not be caught. 2) You will win every competition you enter for the next five years, and then you will die from the side effects of the substance. Would you take it?" (Bamberger & Yeager, 1997, ¶ 3) In his January 2004 State of the Union speech President George Bush stated: "The use of performance-enhancing drugs like steroids in baseball, football and other sports is dangerous. It sends the wrong message that there are shortcuts to accomplishment and that performance is more important than character."

Dr. Thomas H. Murray, president of The Hastings Center, astutely frames the issue as:

When performance-enhancing drugs have the power to overcome differences in natural talents and the willingness to sacrifice and persevere in the quest to perfect those talents, we cannot avoid confronting the question, "What do we value in sport?" (Murray, \P 20)

The unregulated use of anabolic steroids as a means of enhancing athletic performance threatens to undermine the essential nature and integrity of competitive sport and transform it into merely a spectacle or an exhibition of an athletic accomplishment. As Dr. Arthur L. Caplan, Emanuel and Robert Hart Professor of Bioethics, Chair, Department of Medical Ethics, and Director, Center for Bioethics, University of Pennsylvania observes:

"Sport is only sport if it is measuring human abilities, as varied as those may be. Sport also links the results achieved to training, will, and effort. Outcomes don't define sport—the process leading to outcomes does. . . . So at least in sports, if not . . . in the classroom, it is how the performance is achieved and not just the performance that is valued. (Caplan, 2008)

Professor M. Andrew Holowchak explains that this concept/definition of competitive sport, which he calls "aretism," originated in ancient Greece where "it is not victory itself that [was] prized most, but the manner in which it is attained." (Holowchak, 2000)

Professor Michael Sandel, a Harvard political philosopher, agrees with this view, but posits a "deeper danger" is the resulting corruption of "athletic competition as a human activity that honors the cultivation and display of natural talents," which may "erode the part of athletic performance that celebrates natural talents and gifts." Recognizing that some forms of technological enhancement should be universally permitted to cultivate natural athletic talent (e.g., wearing running shoes in a race), he notes that the purpose of the specific athletic competition and its relevant virtues must be considered to evaluate the ethics of a particular means of performance enhancement. Therefore, maintaining the integrity of a specific type or brand of sports competition and furthering its objectives "means writing the rules in a way that honors excellences central to the game and rewards the skills of those who play it best." (Sandel, 2007)

The sport's governing body is in the best position to establish appropriate athlete eligibility rules consistent with the particular brand of athletic competition it has chosen to produce or sponsor.⁷ Article 1.3.1 of the NCAA Constitution states that the NCAA's core purpose is "to govern [intercollegiate athletics] competition in a fair, safe, equitable and sportsmanlike manner" and its fundamental policy is "to maintain intercollegiate athletics as an integral part of the educational program" (NCAA, 2008a, p. 1) To further these objectives and values, the NCAA has chosen to define its brand of athletic competition as "drug-free" sport by establishing student-athlete eligibility rules that prohibit the use of steroids. Thus,

it is proper and ethical for the NCAA to prohibit the use of anabolic steroids by adult student-athletes even if doing so effectively limits the maximization of their individual athletic performances.

Because eligibility rules banning anabolic steroids and a system of policing compliance, which includes the collection and analysis of a urine sample to determine the presence of steroids in a student-athlete's body, are necessary to further legitimate and important objectives of the NCAA, the California Supreme Court upheld their legal validity in *Hill v. NCAA* (1994). The court initially recognized that sports competition requires a "special set of social norms" and that student-athletes "normally and reasonably forgo a measure of their privacy in exchange for the personal and professional benefits of extracurricular activities." For example, they submit to regular physical examinations and reveal information about their medical condition to team physicians, coaches, and athletic trainers as well as undress in same-sex locker rooms.

The Hill court held:

A student athlete's already diminished expectation of privacy is outweighed by the NCAA's legitimate regulatory objectives in conducting testing for proscribed drugs. As a sponsor and regulator of sporting events, the NCAA has self-evident interests in ensuring fair and vigorous competition, as well as protecting the health and safety of student athletes. These interests justify a set of drug testing rules reasonably calculated to achieve drug-free athletic competition. (*Hill v. NCAA*, 1994)

In Brennan v. Bd. of Trustees for Univ. of Louisiana Systems (1997), a Louisiana appellate court adopted the Hill court's reasoning and held that the NCAA's drug testing program does not violate the Louisiana constitution. However, in York v Wahkiakum School Dist. No. 200 (2008), the Washington Supreme Court recently ruled that a public high school's student-athlete drug testing program violated the Washington state constitution. This program was modeled after the one in Oregon that, in the Vernonia case (1995), the U.S. Supreme Court found in compliance with the federal constitution. As one of the Washington Supreme Court's justices acknowledged, this ruling makes NCAA drug testing of adult student-athletes in the state of Washington "problematic."

The *York* case threatens to prevent the equal treatment of all NCAA studentathletes that is created by a uniform drug testing program and athletic eligibility rules that apply nationally. A necessary hallmark of competitive athletics is that the sports governing body's rules must apply equally to all athletes. For example, the NCAA's drug testing program requires uniform national application for the NCAA to govern intercollegiate athletics in a fair and equitable manner and to achieve its legitimate and important objective of drug-free sport.⁸

The NCAA's drug testing program is modeled after similar programs originally adopted by the International Olympic Committee and United States Olympic Committee. The sanction imposed on a student-athlete for a first positive test for anabolic steroid usage is a 1 year suspension from competition in all NCAA sports (NCAA Bylaw 18.4.1.5 in NCAA, 2008b, p. 4) rather than the 2 year suspension that the World Antidoping Code provides for the first doping offense by an Olympic sport athlete.⁹However, NCAA Bylaw 18.4.1.5.3 states that "[a] studentathlete under a drug-testing suspension from a national or international sports governing body that has adopted the World Anti-doping Agency (WADA) Code shall not participate in NCAA intercollegiate competition for the duration of the suspension," which may exceed 1 year. But his or her NCAA eligibility is not otherwise affected.

The NCAA's drug testing program is effectively reducing the use of anabolic steroids by student-athletes. NCAA survey results indicate that anabolic steroid usage has declined from 4.9% in 1989 to 1.2% in 2005.¹⁰ More than 60% of the student-athletes responding to a 2005 NCAA survey believe the NCAA should drug test and that this deters anabolic steroid usage (Hosick, 2005).

The NCAA's drug testing program has some important procedural safeguards that consider a student-athlete's individual circumstances. There is a therapeutic use exception procedure that permits a student-athlete to participate in intercollegiate athletics while using anabolic steroids for a legitimate medical reason (e.g., treatment of hormonal problems) with the prior approval of the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports (CSMAS). Although a positive test for anabolic steroids is a strict liability offense, a student-athlete has the right to require his or her educational institution to appeal a positive test result to the CSMAS. It is authorized to eliminate the standard 1 year suspension from intercollegiate athletics competition or reduce the suspension to one-half year based on the specific circumstances giving rise to a student-athlete's positive test.¹¹

Exclusion From Athletic Participation Because of a Physical Abnormality

Let us assume the following: An adult student-athlete has the required physical capabilities and skills to play an intercollegiate sport with a missing or nonfunctioning paired organ (e.g., an eye, kidney, or testicle) or a spinal or cardiovascular abnormality and that his or her participation does not increase the risk of injury to others.¹² In addition, there is no definitive scientific evidence, only limited clinical data, and sports medicine experts disagree whether an increased risk or severity of harm to the student-athlete justifies medical disqualification from an intercollegiate sport. The student-athlete is fully informed that playing an intercollegiate sport with his medical condition may expose him to a potential enhanced risk of serious injury or possibly even death, but nevertheless wants to assume this risk and agrees not to hold his educational institution legally liable for any adverse health consequences if he is permitted to participate. The legal validity and enforceability of this waiver of liability is uncertain, but for purposes of this discussion assume it would be judicially upheld.¹³

This scenario, which is based on real life examples over the past 30 years, raises at least two important legal and ethical issues: 1) if an adult student-athlete has a physical abnormality that increases the risk of personal injury beyond the inherent risks of an intercollegiate sport, is there a legitimate reason to exclude him or her from participation; and 2) if so, whose evaluation of the medically acceptable nature and severity of an enhanced risk should be controlling?

The *Hill* and *Brennan* courts, when considering the legal validity of eligibility rules prohibiting the use of steroids, ruled that the NCAA has a legitimate and important interest in protecting the health and safety of adult student-athletes. Guideline 3a of the NCAA Sports Medicine Handbook (2008c, p. 78) provides that a member university should medically disqualify a student-athlete from participation in intercollegiate athletics only if his or her "physical impairment presents a significant risk of substantial harm to the health or safety of the student-athlete and/or other participants that cannot be eliminated or reduced by reasonable accommodations." This guideline is consistent with the legal standard developed by courts in resolving lawsuits brought by a student-athlete claiming that the federal Rehabilitation Act of 1973 (which the Americans With Disabilities Act of 1990 [ADA] is patterned after) provides a legal right to participate in intercollegiate athletics if he or she has the capability and skills to do so in spite of a physical impairment or medical condition.

Although there is no independent legal right to participate in intercollegiate athletics, the NCAA and its member universities must comply with the Rehabilitation Act and ADA, which prohibit discrimination based on an actual or perceived disability and require that qualified student-athletes be given an equal opportunity to participate in intercollegiate athletics.¹⁴ An adult student-athlete does not, however, have an absolute right to choose to participate in intercollegiate athletics with a physical abnormality that creates a medically unreasonable increased risk of injury to oneself. A university may require that a student-athlete have reasonable physical qualifications to be eligible to participate in intercollegiate athletics, but the federal disability discrimination laws require an individualized medical evaluation of his or her condition to determine whether there is a significant risk of substantial harm to oneself.¹⁵ If so, he or she may be excluded from the sport.

NCAA Guideline 3a (NCAA, 2008c, p. 78) recommends that a university "require joint approval from the physician most familiar with the student-athlete's condition, the team physician, and an appropriate official of the institution as well as his or her parent(s) or guardian." This recommendation generally is reasonable and workable in most instances, although its requirement that a parent or guardian consent to an adult student-athlete's participation in intercollegiate athletics with a physical abnormality appears too paternalistic. It is, however, problematic when medical experts disagree regarding whether his or her participation would create a significant risk of substantial harm to oneself.

In the face of medically uncertain risks, whose evaluation of the risks should govern and who should make the athletic participation decision?

Initially, as a novice legal scholar in the early 1990s, I took a strong libertarian position on this issue. I argued that a fully informed adult student-athlete should have the legal right under the federal disability discrimination laws to choose to participate in intercollegiate athletics with a physical abnormality if there are differing credible medical opinions regarding whether doing so would create a significant risk of substantial personal harm. For example, if the studentathlete's personal physician or consulting specialists provided medical clearance, he or she would be permitted to participate in intercollegiate athletics despite the university team physician's judgment that participation with a physical abnormality creates a medically unreasonable risk of harm. However, as I matured as a scholar and had the opportunity to participate in several sports medicine conferences as a law professor with sports medicine legal expertise (experiences that significantly increased my understanding of the underlying medical issues), I began to question my earlier libertarian conclusions. I came full circle as a result of my involvement in a 1996 landmark case, *Knapp v. Northwestern University* (1996), in which I filed a *pro bono* amicus brief (i.e., friend of the court legal brief) on behalf of two sports medicine physician organizations arguing that, under the Rehabilitation Act, "the appropriate scope of judicial inquiry should be limited to determining whether there is a reasonable basis for the team physician's medical disqualification of an athlete." (Brief and Appendix of Amicus Curiae American Medical Society for Sports Medicine and American Osteopathic Academy of Sports Medicine in Support of Defendants-Appellants Northwestern University and Rick Taylor, filed in the United States Court of Appeals for the Seventh Circuit, October 21, 1996 at p. 14)

The facts of this case are as follows. As a high school senior, Nicholas Knapp accepted a scholarship to play basketball at Northwestern University. The summer before entering college, he suffered sudden cardiac arrest while playing recreational basketball, which required cardiopulmonary resuscitation and defibrillation to restart his heart. Thereafter, he had an internal cardioverter-defibrillator implanted in his abdomen. He subsequently played competitive recreational basketball without any incidents of cardiac arrest and received medical clearance to play college basketball from three cardiologists who examined him.

Although other cardiologists were willing to provide medical clearance, Northwestern's team physician did not medically clear Knapp to play intercollegiate basketball. His medical judgment was based on an individualized evaluation of his medical records and history, the 26th Bethesda Conference consensus medical guidelines for athletic participation with cardiovascular abnormalities (a conference that I participated in), and opinions of two consulting cardiologists who concluded that Knapp would expose himself to a significant risk of ventricular fibrillation or cardiac arrest during competitive athletics.

All medical experts agreed on the following facts: Knapp had suffered sudden cardiac death due to ventricular fibrillation; even with the internal defibrillator, playing college basketball places Knapp at a higher risk for suffering another event of sudden cardiac death compared with other male college basketball players; the internal defibrillator has never been tested under the conditions of intercollegiate basketball; and no person currently plays or has ever played college or professional basketball after suffering sudden cardiac death and having a defibrillator implanted. But they sharply disagreed whether the risks were substantial enough to justify Knapp's exclusion from participation in intercollegiate basketball.

Despite the willingness of Knapp and his parents to sign a liability waiver, Northwestern accepted its team physician's medical recommendation not to allow Knapp to play intercollegiate basketball, but agreed to honor his athletic scholarship. Knapp claimed that Northwestern's decision violated the Rehabilitation Act because his medical condition did not in fact expose him to a significant risk of substantial harm while playing competitive basketball. At trial, after weighing the experts' conflicting testimony, the district court concluded that Knapp's enhanced medical risks are not substantial and that the implanted defibrillator most likely would restore his heart rhythm to normal if it became irregular during strenuous physical exertion.

Reversing this decision, the United States Court of Appeals for the Seventh Circuit held that Knapp's exclusion from Northwestern's intercollegiate basketball team was legally justified:

We disagree with the district court's legal determination that such decisions are to be made by the courts and believe instead that medical determinations of this sort are best left to team doctors and universities as long as they are made with reason and rationality and with full regard to possible and reasonable accommodations. In cases such as ours, where Northwestern has examined both Knapp and his medical records, has considered his medical history and the relation between his prior sudden cardiac death and the possibility of future occurrences, has considered the severity of the potential injury, and has rationally and reasonably reviewed consensus medical opinions or recommendations in the pertinent field-regardless whether conflicting medical opinions exist—the university has the right to determine that an individual is not otherwise medically qualified to play without violating the Rehabilitation Act. The place of the court in such cases is to make sure that the decisionmaker has reasonably considered and relied upon sufficient evidence specific to the individual and the potential injury, not to determine on its own which evidence it believes is more persuasive. (Knapp, 1997)

The NCAA's core values include "[r]espect for institutional autonomy and philosophical differences" (NCAA, 2009). Consistent with this view, the Seventh Circuit observed,

we wish to make clear that we are *not* saying Northwestern's decision necessarily is the right decision. We say only that it is not an illegal one under the Rehabilitation Act. On the same facts, another team physician at another university, reviewing the same medical history, physical evaluation, and medical recommendations, might reasonably decide that Knapp met the physical qualifications for playing on an intercollegiate basketball team. Simply put, all universities need not evaluate risk the same way. What we say in this case is that if substantial evidence supports the decision-maker—here Northwestern—that decision must be respected. (*Knapp*, 1997)¹⁶

Two other NCAA universities, Northeastern Illinois and Ashland University, subsequently permitted Knapp to play intercollegiate basketball. Knapp played basketball for both schools even though his defibrillator malfunctioned three times during "on-court" experiences—fortunately without any adverse personal health effects.

As a more mature legal scholar, my current opinion is that:

All things considered, the team physician medical judgment model places legitimate communitarian health and safety concerns above an athlete's libertarian personal autonomy interests. If all concerned parties—the athlete, team physician, and school—cannot agree on the acceptability of assuming an enhanced but medically uncertain risk on the playing field, it is better to err on the side of caution. (Mitten, 1998, p. 215)¹⁷

Conclusion

The NCAA and its member universities, as producers and internal regulators of intercollegiate sports, have valid legal and ethical authority to establish and enforce student-athlete eligibility rules that limit athletic performance or prohibit athletic participation for legitimate and important health reasons despite medical uncertainty. Student-athlete eligibility rules requiring compliance with the NCAA's drug testing program and medical clearance by the university's team physician establish appropriate limits and restrictions on the pursuit of excellence in intercollegiate sport to ensure good health. Before denying a student-athlete an opportunity to participate in intercollegiate athletics, both rules provide significant procedural due process protections (i.e., a hearing before the CSMAS regarding a positive drug test, or an individualized medical evaluation of a physical abnormality) that protect his or her legal rights and legitimate interests.

Notes

1. In 1905 President Theodore Roosevelt, concerned that 18 participants died and several were seriously injured while playing college football that year, summoned a group of college athletics leaders to the White House and directed them to implement reforms to make the sport safer, or he would push for federal legislation to ban football. On December 28, 1905 the Intercollegiate Athletic Association of the United States was founded in New York City. It was renamed the National Collegiate Athletics Association in 1910.

2. Before the Supreme Court's *Vernonia* decision, some courts held that random, suspicionless drug testing of college athletes by a public university violates the federal constitution. *Univ. of Colorado v. Derdeyn*, 863 P.2d 929 (Colo. 1993). Other courts ruled that the NCAA's thenexisting drug testing program did not violate the federal constitution. *O'Halloran v. Univ. of Washington*, 679 F.Supp. 997 (W.D. Wash.), *rev'd on other grounds*, 856 F.2d 1375 (9th Cir. 1988).

3. Other performers such as musicians take beta blockers, a prescription medication, to calm their nerves and enhance their ability to produce high quality music.

4. Some college students take prescription drugs such as Aderall, a stimulant, or Provigil, which promotes wakefulness, as a means of improving their academic performance. Benedict Carey, Brain Enhancement Is Wrong, Right?, NY Times (Mar. 9, 2008)

5. In *United States v. Zahorian*, No. 92–7003, 1992 U.S. App. LEXIS 18933 (3d Cir. July 17, 1992), a federal appellate court upheld the conviction of a physician for prescribing anabolic steroids for a purpose other than disease treatment. In *State Medical Board of Ohio v. Murray*, 613 N.E.2d 636 (Ohio 1993), the Ohio Supreme Court upheld the revocation of a physician's medical license for prescribing steroids to approximately two-hundred patients solely to enhance their athletic ability in violation of an Ohio statute.

6. However, Dr. Fost adamantly opposes steroid use by adolescents because it can stunt their growth (Leroux, 2008).

7. Public interest in sports competition among elite "human" athletes may wane if science becomes or is perceived to be the most significant factor influencing athletic achievement (e.g.,

professional cycling in the wake of doping scandals involving Floyd Landis and others). See generally Mitten, 2006, p. 806: "The primary harm that results from athletes' usage of banned performance-enhancing substances is to the sport's integrity.").

8. For this reason, a future attempt to use state law to invalidate NCAA drug testing of student-athletes in Washington (or any other state) may violate the Dormant Commerce Clause of the U.S. Constitution, which prohibits states from directly regulating interstate commerce such as intercollegiate athletics. In *NCAA v. Miller*, 10 F.3d 633 (9th Cir. 1993), the Ninth Circuit ruled that a Nevada statute requiring the NCAA to provide certain procedural safeguards to Nevada universities, employees, and student-athletes in connection with its internal rules enforcement process violated the Dormant Commerce Clause because it would impermissibly regulate conduct occurring outside Nevada. To maintain nationally uniform rules enforcement procedures the NCAA would have been forced to conduct all proceedings in accordance with Nevada law, which may conflict with similar laws in other states.

9. On August 4, 2008 the United States ratified the International Convention Against Doping in Sport, a treaty under the auspices of the United Nations Educational, Scientific, and Cultural Organization, pursuant to which the signatory countries undertake to adopt national measures consistent with the principles of the WADA Code. The NCAA, however, is not required to modify its drug testing program to conform to the WADA Code unless Congress enacts a federal law mandating that it do so.

10. Factors causing this decline include the removal of steroid precursors from the open market, increased year-round drug testing, and more education programs for student-athletes.

11. From August 1, 2006 to July 31, 2007, the CSMAS denied six appeals, reduced one suspension to one-half year, and determined that no suspension was appropriate in one case (National Center for Drug-Free Sport, 2006, 2007).

12. Courts have held it is legally permissible to exclude an athlete from participating in competitive sports with an infectious disease if no reasonable accommodation will prevent a direct threat to the health and safety of other participants. *Montalvo v. Radcliffe*, 167 F.3d 873 (4th Cir.), *cert. denied*, 528 U.S. 813 (1999).

13. One court has suggested that an educational institution's only legal duty is to ensure that the student-athlete and his family are fully informed of the risks and make a rational decision regarding whether to play a sport with a physical abnormality. *Poole v. South Plainfield Bd. of Educ.*, 490 F. Supp. 948, 954 (D. N.J. 1980).

14. Universities that receive federal funds are covered by the Rehabilitation Act, and courts have held the NCAA is subject to the ADA based on its control of its members' athletics programs through its student-athlete eligibility requirements. *Matthews v. NCAA*, 179 F. Supp.2d 1209 (E.D. Wash. 2001); *Bowers v. NCAA*, 118 F. Supp.2d 494 (D. N.J. 2000); *Tatum v. NCAA*, 992 F. Supp.2d 1114 (E.D. Mo. 1998).

15. To be protected by the federal disability discrimination laws, a student-athlete's physical impairment must substantially limit a major life activity. Some courts have held that playing an intercollegiate sport is not itself a major life activity, so it may be necessary to show that his or her physical impairment affects a recognized major life activity such as seeing, hearing, walking, or breathing. *Knapp v. Northwestern Univ.*, 101 F.3d 473 (7th Cir. 1996), *cert. denied*, 520 U.S. 1274 (1997).

16. Similarly, in *Pahulu v University of Kansas*, 897 F. Supp. 1387 (D. Kan. 1995) a federal district court upheld the team physician's "conservative" medical disqualification of a college football player with an abnormally narrow cervical canal after an episode of transient quadriplegia during a scrimmage. After consulting with a neurosurgeon, the team physician concluded that the athlete was at extremely high risk for sustaining permanent, severe neurologic injury, including permanent quadriplegia, if he continued playing football. The athlete wanted to resume playing because three other medical specialists concluded that he was at no greater

risk of permanent paralysis than any other player. The university agreed to honor the athlete's scholarship, although he was not allowed to play football despite his willingness to sign a waiver absolving the university of legal liability if he were injured. The court held that university officials' adherence to the team physician's recommendation against playing does not violate the Rehabilitation Act, concluding that the university's medical disqualification decision "has a rational and reasonable basis and is supported by substantial competent evidence for which the court is unwilling to substitute its judgment."

17. I favor adoption of an athlete informed consent model for professional athletes, which would permit an athlete to choose to participate in a professional sport, despite medical disqualification by the team physician, if another qualified and well-respected physician (preferably a specialist) provides medical clearance (see Mitten, 1998, pp. 221–223).

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Appendix

The following provided background material for this article.

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