

Original Article

A legal perspective on athlete screening and disqualification

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Abstract Physicians participate in the screening, routine medical supervision, and disqualification of student-athletes. In doing so, they should understand that eligibility/disqualification decisions inevitably have associated liability issues. It is the responsibility of physicians to take the lead role in the student-athlete medical assessment process to allow for optimum safety in sports programmes. The first duty of the physician is to protect the health and well-being of the student-athlete. However, because there is potential liability associated with the screening/disqualification process, physicians are wise to develop sound and reasonable strategies that are in strict compliance with the standard of care. This article focusses on cardiac screening and disqualification for participation in sports.

Keywords: Negligence; duty; fiduciary responsibility; systematic medical and legal approach; due diligence

MEDICAL AND LEGAL ISSUES CONFRONTING PHYSICIANS involved in the cardiovascular screening of competitive athletes have been explored.¹ Physicians are the critical piece to the appropriate medical evaluation ensuring safe sports programmes for student-athletes. Understanding this role allows physicians to provide effective medical advice to student-athletes and assists school officials and their employees in avoiding allegations of negligence and potential liability. Physicians who understand the evolving judicial framework and case law will limit their risk of negligence when participating in the screening/disqualification process for student-athletes.

This article will explore the current state of law regarding negligence liability for student-athlete injuries and the role of physicians in satisfying the duty of care owed to student-athletes. Physicians must understand the expectations of athletes, parents, and schools inherent in the medical evaluation decisions. The overall focus of the process is to reduce injury,

unexpected death, and potential physician and school liability.

We will explore the role of physicians in cardiac screening/disqualification of student-athletes. Physicians must understand the clinical, electrocardiographic, and echocardiographic features of the diseases that are believed to be the aetiology of symptoms, disability, and possibly sudden cardiac death. Then we will highlight negligence law and the duties that physicians owe student-athletes during the screening process before competition.

Most schools require medical screening to identify an athlete's general health and fitness for competition in sporting activities and evidence of insurance that covers sports-related injuries. Athletic training or athletic competition should not commence until it is verified that the student athlete's evaluation process has been completed and the athlete has been judged capable of competing in competitive sports.

Physician's duty to student-athletes

Physicians involved in eligibility/disqualification decisions must understand the clinical symptoms,

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morphologic features, and clinical examination findings linked with cardiovascular disease in student-athletes.^{1,2} Physical appearance, symptoms, and physical examination findings may suggest a lurking source of sudden cardiac death. In this case, a comprehensive medical evaluation should be performed. Triggers include a family history of premature or unexpected sudden cardiac death, abnormal blood pressure, unusual body appearance, heart murmurs, and exercise-related symptoms. It is important to understand that intense athletic competition and abnormal morphology and pathophysiology are the triggers that increase the risk for sudden cardiac death on the athletic field. The incidence of sudden cardiac death in National Collegiate Athletic Association activities appears to be greater than previously thought,³ heightening the need for improved understanding and enriched strategies to identify those athletes at risk.

The duty of physicians is to develop a clearance process that creates a true partnership with the student-athletes, coaches, trainers, and school officials. The goal of this partnership is to yield medical decisions that are in the best interest of the student-athlete and comply with the families' and schools' desire for safe sports programmes. There must be verification of each student-athlete's health status before any athletic activity. There should be an investigation of any anomalous historical or physical examination findings. Physicians must document in writing limitations, restrictions, and recommendations for participation and provide a copy to the student-athlete and the school. This process allows schools to maintain a safe sports programme and allows athletes and their families to make decisions that are prudent, hopefully preventing the competitive activity from causing any adverse events.

Golden rules for pre-participation screening

Physicians involved in screening of student-athletes assume an important responsibility. They must understand the magnitude of the role and prepare to have the necessary skills to perform the duty effectively, including compliance with the customary pre-participation screening process by gathering a comprehensive personal and family medical history and conducting a physical examination in accordance with specific American Heart Association recommendations.⁴ It is imperative that physicians complete the screening examination and diagnostic assessment before signing the official medical clearance form or allowing formal training and competition to commence, thus preserving full control over the screening process. When screening raises a suspicion of cardiovascular disease, the standard practice

requires speciality consultation and non-invasive testing.

Golden rules for eligibility/disqualification decisions

The disqualification of student-athletes is a time-consuming process that can be emotionally draining for the student-athlete, family, and the physician. Student-athletes' identities revolve around their athletic prowess. The process is emotionally charged and very time-consuming. Physicians must be willing to assume the responsibility and time commitment to be effective. It is mandatory to withdraw an athlete from training and competition when the possibility of heart disease is suspected and further evaluation is being pursued. It is prudent to rely on the Bethesda Conference guidelines⁵ when determining whether a detected cardiovascular abnormality justifies temporary or permanent withdrawal from competitive sports to reduce the risk for sudden cardiac death. Often athletes, parents/family members, coaching staff, administration, alumni, and the public will exert pressure on the physician to approve participation when it is contraindicated. Beware: signed waivers may not immunise physicians from liability.

Physician's duty to disclose risk information

The standard of disclosure has two dominant approaches: the "professional" standard and the "materiality" standard.⁶ These two approaches define the standard for disclosure of information by which a physician's duty to the patient is measured. The professional standard requires a physician to disclose information that other physicians possessing the same skill and practising in the same or similar community disclose in a similar situation.⁷ The second approach by courts is the materiality or "prudent patient" approach, allowing the jury to decide whether non-disclosed information would have been considered important by a reasonable patient making a decision, and therefore requiring disclosure.⁸ Materiality jurisdiction courts have attempted to provide some guidance for physicians by suggesting that the physician's duty to disclose risk increases as the magnitude of the risk increases. All significant risks (risks associated with hypertrophic cardiomyopathy, coronary anomalies, myocarditis, arrhythmogenic right ventricular dysplasia, bicuspid aortic valve with aortopathy, Marfan syndrome, cardiomyopathy, valvular heart disease, ion channelopathies, and CHD) should always be disclosed, even if the probability of occurrence is low. Further, lesser risks should be disclosed if they occur frequently. Courts do not place emphasis solely on consequences,

recognising frequency as an important component of risk.⁹ Risk disclosure remains an enigma. The California Supreme Court articulated this uncertainty: “One cannot know with certainty which medical consent is valid until a lawsuit is filed and resolves”.¹⁰ There does not appear to be a standard of disclosure to which physicians can adhere to avoid liability with certitude. It appears physicians would be prudent to disclose any perceived risk and its potential likelihood.

Negligence law and duty

To establish negligence, four elements must be proven:

- the duty of the physician to meet a particular standard of care;
- the physician’s failure to use reasonable care to perform that duty;
- a causal connection (proximate cause) between the physician’s failure and the patient’s injury; and
- an injury for which monetary compensation is adequate.

In order to impose a duty, courts typically and rightfully require that student-athletes have a sufficient relationship with the screening physician and the educational institution, when it employs the physician. Student-athletes trust their physicians to advise them of their risk for untoward events during competitive sports. Indeed, physicians have a fiduciary responsibility to the student-athlete, meaning they must act in the student-athlete’s best medical interest. The law relies on the collective judgement of the medical profession to establish the appropriate nature and scope of medical evaluations to detect cardiovascular anomalies and other life-threatening conditions in athletes partaking in organised sports.^{11–14}

Litigation in the competitive sports world appears to be increasing, and physicians are frequently involved. Lawsuits for medical negligence and malpractice may arise when a breach of the physician’s duty has occurred – that is, the medical conduct has failed to meet the standard of care – directly causing injury or death.^{15–24} Because most claims are settled or resolved without appellate decision, there is a paucity of judicial guidelines to establish a comprehensive medical-legal framework for physicians and educational institutions. However, the allegations of the settled cases allow for measured inferences that create insights for avoiding potential liability.

Lessons learnt from available case law

Programmatic risk

The lessons learnt from the available case law apply to physicians and institutions, often addressing the

overlap of the duties of physicians and schools acting in concert to screen student-athletes and provide safe sports programmes.

A seminal case, *Kleinknecht v. Gettysburg College* (1993), concluded that colleges owe their student-athletes a duty in the scope of their athletic programmes.²⁵ The circuit court decided that the college must use reasonable care to take precautions against reasonably foreseeable harms in the context of a college-sponsored programme. However, the reasonable care standard is not specific and could vary depending on the specific facts. College athlete safety law is state specific and outcomes in specific cases can vary from state to state. The take-home point is that the college should take precautions against reasonably foreseeable harms in the context of a college-sponsored programme.

The North Carolina Court of Appeals in *Davidson v. University of North Carolina at Chapel Hill* (2001)²⁶ clarified that a duty to a student-athlete is not limited to recruited athletes. The Davidson court ruled that the college owed a cheerleader a duty, and, by extension, all student-athletes.

To illustrate that liability requires more than the existence of a duty, the court in *Kennedy v. Syracuse University* (1995)²⁷ identified the existence of a duty to the student-athlete but ruled in favour of the university because Kennedy was not able to demonstrate a “proximate cause” between the identified injury and the absence of a trainer. Lack of causation can end a plaintiff’s cause of action even if a duty is owed and reasonable care was not present at the time of the injury.

Kleinknecht and *Kennedy* affirm that there are programmatic duties owed by a college to student-athletes. Although exceptions exist, the strong national trend is to recognise a legal duty in the context of programmatic risk.

Physicians and pre-participation screening

*Izidor v. Knight*¹⁶ (2003) underscores the importance of strict adherence to the American Heart Association screening guidelines. A community college basketball player sought sports clearance examination using a form provided by his institution. A physician assistant noted two episodes of syncope in the history and a heart murmur on the physical examination and referred the patient for an echocardiogram. The sport authorisation clearance form was signed before the performance of the echocardiogram. The echocardiogram identified hypertrophic cardiomyopathy. After 6 weeks of playing basketball, the student-athlete died suddenly. The treating physician testified that after the results of the echocardiogram were known the student-athlete was notified to stop competitive athletics, including basketball.

The student-athlete refused to follow this recommendation. The case was settled. Prudent adherence to the American Heart Association screening guidelines, taking into account diagnostic test findings before providing official medical clearance, would have prevented this unfortunate outcome.

In *Ivey v. Providence Hospital*²¹ (1993) the estate of a student-athlete who died from status asthmaticus after football practice sued Catholic University and a physician for negligence, alleging failure to perform a proper screening examination. The estate argued that the physician failed to adequately gauge the potential consequences of vigorous exercise on the student's medically labile pulmonary condition and cardiovascular system. The medical record was silent on risk disclosure of competitive sports and the student-athlete's health condition. The case was settled before judicial resolution.

Malpractice liability may arise when screening diagnostic tests are misinterpreted. In *Gardner v. Holifield*¹⁸, the mother of a college basketball player alleged that a cardiologist who performed her son's screening examination misread the echocardiogram, failing to identify aortic root dilation, which is a risk factor for Marfan syndrome. The student-athlete continued to play basketball and died 6 months later of aortic root dissection. The physician was protected by sovereign immunity. However, absent such unique legal immunity the judgement would most likely have been medical negligence for failure to identify Marfan syndrome with characteristic physical features and aortic root dilation.

*Ramirez v. Muroc Joint United School District et al*¹⁵ involved a lawsuit against a high-school coach, an athletic director, and the school district for failure to require a screening examination. This case underscores the importance of proper pre-participation screening examination. The student-athlete was obese and deconditioned and had no prior experience in competitive sports. He had an abnormal electrocardiogram and a heart murmur. The pre-participation screening examination was deferred and on the 2nd day of practice he collapsed and died; the autopsy revealed evidence of hypertrophic cardiomyopathy. This case represents the quintessential importance of pre-participation screening before competition. The resolution of the case was settlement.

Physicians and failure to disqualify from sports

Identification of cardiovascular abnormalities in student-athletes often leads to medical-legal controversies regarding eligibility/disqualification decisions. Such medical decision-making processes should be conservative and in harmony with available guidelines but should avoid disqualification of student-athletes without probable or definitive evidence of cardiovascular disease. The American

College of Cardiology's Bethesda Conference expert consensus panel⁵ has advanced eligibility and disqualification recommendations for competitive student-athletes with established cardiovascular anomalies. Judicial precedent now provides a role for the Bethesda Conference in resolving legal disputes relating to athletic participation.^{7,8}

There have been several lawsuits alleging failure to diagnose, treat appropriately, and/or disqualify athletes from competitive sports, thereby providing insights into potential dangers inherent in these medical decisions. In *Gathers v. Loyola – Marymount University*,²³ it was alleged that the sudden death due to Gathers' inflammatory cardiomyopathy was related to negligent reduction of his beta blocker, administered for ventricular arrhythmias, so that he could continue his playing career. He died on national television shortly after his medication regimen was altered. Gathers' heirs filed a \$32.5 million lawsuit²⁸ against the physician and the University for alleged negligent interference with Gathers' medical care for cardiovascular disease and failure to remove him from college basketball as advised by the Bethesda Conference recommendations.⁵ The case was settled before judicial resolutions. The failure to temporarily disqualify the student-athlete when experiencing myocarditis would typically be considered outside the standard of care. Similarly, *Lillard v. State of Oregon*²⁰ involved a college basketball player with myocarditis who died of a massive stroke after anticoagulation medication was reduced to allow his athletic career to continue. The physician was found not negligent at trial.

Reggie Lewis was a professional basketball player for the Boston Celtics. He fainted during a game. He subsequently underwent extensive cardiac testing, and a panel of cardiologists diagnosed a life-threatening condition. After being informed of this opinion, Lewis left the hospital against medical advice and sought a second opinion where he was diagnosed with a "benign fainting disorder". After 11 weeks he died during an informal basketball workout. The autopsy revealed healed myocarditis. Lewis's wife filed a lawsuit alleging failure to properly diagnose the cardiovascular condition that led to his death. The jury decision ruled against negligence. The *Harris-Lewis v. Mudge*¹⁹ case suggests physicians should proceed with extreme caution when athletes seek multiple opinions to get the answer they want to continue playing.

Lawsuits against physicians for disqualification from sports: college and high school

Ironically, lawsuits have been brought because physicians restricted student-athletes with identified

heart disease from playing sports. A lawsuit was brought by a college basketball player alleging physician negligence for withholding medical clearance to play because of a life-threatening diagnosis of hypertrophic cardiomyopathy. In the case of *Penny v. Sands*,²⁴ the student-athlete claimed economic harm to his anticipated professional career by virtue of his involuntary prohibition from intercollegiate basketball. The screening cardiologist who diagnosed Penny's potentially life-threatening heart condition recommended against competitive sports. Penny sought other opinions and was medically cleared to participate in competitive sports in the United Kingdom. He subsequently died playing in a professional game in England. The malpractice suit was voluntarily dismissed after Penny's death. It is unlikely that a court would have awarded Penny's survivors economic compensation after team officials accepted a physician's prudent recommendation to restrict an athlete with established cardiovascular disease from competitive sport to reduce the risk for sudden cardiac death. The chilling impact of *Penny* for physicians is that even doing the right thing can result in a lawsuit because of the athlete's strong desire to remain competitive despite the knowledge of a life-threatening condition.

In *Larkin v. Archdiocese of Cincinnati*²² a federal court held that a high school could dismiss a student-athlete with hypertrophic cardiomyopathy from its sports programme because student-athletes do not have an inherent right to participate in competitive sports and extracurricular activities without medical clearance. Larkin's cardiologists had made a medical decision that he was at an unacceptable risk for sudden death. The court held that the physician and school's decision did not violate the Rehabilitation Act, and therefore Larkin was not allowed to play high-school football. The school maintained its stance despite the student-athlete and family's willingness to sign a waiver releasing the physician and the school from any future claims. Physicians and schools must understand that signed waivers may not immunise them from liability in the event of a student-athlete's death during competition. Courts may view these waivers as unenforceable and a violation of public policy for high-school and college athletes.

In *Knapp v. Northwestern University*,¹⁷ a student-athlete who survived a cardiac arrest – that is, sudden cardiac death – due to unknown cardiovascular disease attempted to use the Rehabilitation Act to gain entry into the Northwestern intercollegiate basketball programme. Knapp had signed a scholarship with the Northwestern basketball programme during his high-school senior year. Subsequent to the signing, the episode of sudden death occurred because of ventricular fibrillation, and Knapp

received an automatic implantable cardioverter-defibrillator to prevent sudden death. Upon enrolment at Northwestern University the team physician declared Knapp disqualified from competitive basketball on the basis of his medical history, consultation with cardiologists, and the Bethesda Conference guidelines.

Knapp filed a malpractice claim against Northwestern University in federal court for violating the Rehabilitation Act. Knapp alleged that Northwestern discriminated on the basis of his physical impairment.¹⁷ The United States District Court judge granted an injunction permitting Knapp to be part of the basketball team. The appellate court reversed the United States District Court decision, prohibiting Knapp from the team. The appellate court held that Northwestern had a legal right to establish physical qualification standards to maintain a safe intercollegiate sports programme. The court held that such medical decisions regarding eligibility are the proper realm of physicians and institutions as long as the process is based upon consistent scientific evidence and expert consensus guidelines. Thus, Knapp establishes the legal precedent that college athletes may be medically disqualified from competitive sports to avoid enhanced risk of serious injury or sudden death that cannot be abolished by using medications or protective equipment.

Conclusions

Physicians and educational institutions with sports programmes making eligibility/disqualification decisions for student-athletes with cardiovascular disease assume risk of liability. Reducing this liability risk requires an understanding of the standard of medical care and available guidelines, including the American Heart Association recommendations regarding pre-participation screening and the American College of Cardiology's Bethesda Conference disqualification recommendations. In addition, physicians and educational institutions must appreciate the nuances of the evolving judicial framework in case law.

The law requires physicians to use customary skill and care consistent with good medical practice in evaluating student-athletes' fitness to participate in competitive sports. The physician's fiduciary duty is to protect the student-athlete's well-being while avoiding unnecessary exclusion from competition. The developing medical-legal construct indicates that a high-school or college student-athlete with a serious cardiovascular disease may prudently be withheld from competitive sports programmes to prevent exposure to medically unacceptable risks.

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Conflicts of Interest

None.

Ethical Standards

The authors assert that all referenced work contributing to this review complies with the ethical standards of biomedical or medicolegal investigation.

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