In 1994, when the 26th Bethesda Conference recommendations were formulated, no court had yet considered whether an athlete with a cardiovascular abnormality could be involuntarily excluded from a competitive sport if physicians disagreed in their participation recommendations (1–3). However, new data have subsequently become available, and several highly visible cases involving the sudden deaths of elite competitive athletes (4,5) have brought medical-legal and liability considerations into prominent focus. A 1996 lawsuit brought by a student-athlete claiming the legal right to play intercollegiate basketball contrary to a university team physician's medical recommendation has established a developing legal framework for medical decisions regarding the eligibility or disqualification of trained athletes with cardiovascular disease to participate in competitive sports. In this case, Knapp vs. Northwestern University (6,7), a federal appellate court recognized the appropriateness of a physician's reliance on current consensus medical guidelines when making a participation recommendation for an athlete with a cardiovascular abnormality. Consequently, judicial precedent now provides some guidance regarding the role of the present 36th Bethesda Conference recommendations in resolving legal issues relating to athletic participation disputes.

In the Knapp case, the court upheld Northwestern University's legal right to accept its team physician's recommendation, which was consistent with the then-current 26th Bethesda Conference guidelines, to medically disqualify a student-athlete from playing college basketball (6). As a high school senior, Nicholas Knapp suffered sudden cardiac arrest while playing in an informal basketball game, which required cardiopulmonary resuscitation and defibrillation to restore sinus rhythm. Thereafter, he had a cardioverter-defibrillator (ICD) implanted. He resumed playing recreational basketball without any subsequent cardiovascular events, and three cardiologists medically cleared him to play college basketball.

Knapp had received a full athletic scholarship at Northwestern University to play intercollegiate basketball. While Northwestern honored Knapp's scholarship, it barred him...
from playing on its basketball team based on the team physician’s medical recommendation. The team physician considered Knapp’s medical records and history, the 26th Bethesda Conference recommendations (1), and the opinions of two consulting cardiologists who concluded that Knapp would expose himself to a medically unacceptable risk for ventricular fibrillation during competitive athletics.

All medical experts agreed on the following facts: 1) Knapp had suffered a cardiac arrest; 2) even with the ICD, playing college basketball placed Knapp at a higher risk of sudden cardiac death as compared to other male college basketball players; 3) the ICD had never been tested under the conditions of intercollegiate basketball; and 4) no person currently played or had ever played college or professional basketball after having an ICD implanted. However, the experts disagreed whether Knapp should be medically disqualified from playing intercollegiate basketball.

The trial court ruled that Northwestern should restore Knapp’s eligibility to play on its basketball team and mandated a courtside defibrillator and cardiologist to be present at all games and practices. However, the appeals court overruled that decision and held that a university has a legal right to establish legitimate physical qualifications for its intercollegiate athletes. Northwestern did not violate the Rehabilitation Act of 1973, a federal law prohibiting discrimination against persons with disabilities, by following its team physician’s reasonable medical advice. An athlete may be medically disqualified and excluded from a sport if necessary to avoid an enhanced risk of death or serious injury during competitive athletics that cannot be eliminated through the use of medication, monitoring, or protective equipment. The court explained that Northwestern’s decision to exclude Knapp from its basketball team was legally justified:

“We do not believe that, in cases where medical experts disagree in their assessment of the extent of a real risk of serious harm or death, Congress intended that the court’s neutral arbiters but generally less skilled in medicine than the experts involved—should make the final medical decision. Instead, in the midst of conflicting expert testimony regarding the degree of serious risk of harm or death, the court’s place is to ensure that the exclusion or disqualification of an individual was individualized, reasonably made, and based upon competent medical evidence. . . . [W]e wish to make clear that we are not saying Northwestern’s decision is necessarily the right decision. We say only that it is not an illegal one under the Rehabilitation Act” (6).

Knapp eventually left Northwestern and pursued collegiate basketball at another university where the team physician cleared him to play. Shortly thereafter, his ICD delivered an apparently appropriate shock during a basketball game.

The present 36th Bethesda Conference recommendations update the 26th Bethesda Conference guidelines of 1994 (1) (which modified the 16th Bethesda Conference guidelines of 1984), taking into account the most recent and relevant developments in the diagnosis and management of cardiovascular disease. These new guidelines represent the most current consensus opinion of a distinguished group of cardiologists regarding the medical risks of participation in competitive sports by athletes with cardiovascular abnormalities. Thus, we anticipate that the 36th Bethesda Conference recommendations will be recognized and accepted by physicians but also by the legal community and courts, as the most contemporary consensus opinion of a distinguished expert panel of cardiologists regarding medical eligibility and disqualification recommendations for competitive athletes with cardiovascular disease.

The Knapp case recognized the appropriateness of physician reliance on current consensus guidelines in making medical clearance recommendations. However, the court did not rule that the 26th Bethesda Conference guidelines would always be legally determinative in resolving athletic participation disputes involving athletes with cardiovascular abnormalities. Therefore, consistent with legal precedent established by Knapp vs. Northwestern University, a physician may justifiably consider and rely upon the updated 36th Bethesda Conference recommendations in making medical eligibility recommendations for competitive athletes with cardiovascular disease. Nevertheless, the law continues to require that these recommendations be applied on an individualized basis rather than used to exclude categorically all competitive athletes who have a particular cardiovascular abnormality.

The Knapp case establishes an important precedent regarding the medical exclusion of college and high school athletes with cardiovascular disease from intercollegiate and interscholastic athletics, for whom sports is an avocation or extracurricular activity incidental to one’s education (6,7). It is presently uncertain whether this same legal framework will be applied to resolve future participation disputes that involve professional athletes (for whom sports is an income-generating livelihood) (8). However, it is notable that the U.S. Supreme Court recently held that an enhanced risk of significant harm to personal health is a legitimate ground for exclusion from employment (9), which suggests that the legal framework developed in the Knapp case may be applied to professional sports.

Currently there is no well-defined legal precedent regarding a physician’s potential malpractice liability for medically clearing an athlete with a cardiovascular abnormality to participate in a competitive sport contrary to consensus recommendations (10). The law generally requires a physician to have and use the current knowledge, skill, and care ordinarily possessed and employed by members of the medical profession in good standing. The applicable legal standard of physician conduct is “good medical practice” within the physician’s area of specialty practice, which depending on the jurisdiction means either “reasonable,” “customary,” or “accepted” medical care under the circumstances (10). This general standard applies to physicians who provide cardiovascular medical treatment to a competitive athlete, including evaluation of his or her medical fitness to participate in a sport.
Courts generally have recognized “guidelines” established by national medical associations as evidence of good medical practice, but they are not conclusive evidence of the standard of care (11–13). Indeed, consistent with the requirements of the federal disability discrimination laws as interpreted in the Knapp case, it is important to emphasize that the Bethesda Conference recommendations permit the exercise of a physician’s medical judgment in individual cases. The recommendations do not, per se, rigidly restrict clinical practice or medical decision making. A clinician has the flexibility to deviate from the recommendations if he or she believes it is in the best interests of a patient-athlete to reach an alternative decision and strategy.

The controlling legal issue is whether adherence to (or deviation from) consensus recommendations is consistent with reasonable, customary, or accepted medical practice in an individual patient’s case. Although the recommendations of the 36th Bethesda Conference do not represent formal guidelines endorsed by the American College of Cardiology, they are well-considered views of a group of experts convened to address the medical risks imposed by competition on an athlete with a cardiovascular abnormality. Therefore, deviations from the 36th Bethesda Conference recommendations that are nevertheless consistent with good medical practice and are protective of an athlete’s health may be appropriate in particular cases and do not necessarily create physician liability for medical malpractice. Conversely, compliance with the 36th Bethesda Conference recommendations is some evidence that a physician has satisfied this legal requirement, and in future legal disputes may form the basis of a successful defense against allegations of malpractice (14).


**TASK FORCE 12 REFERENCES**


**Appendix 1. Author Relationships With Industry and Others**

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<thead>
<tr>
<th>Name</th>
<th>Consultant</th>
<th>Research Grant</th>
<th>Scientific Advisory Board</th>
<th>Stock Holder</th>
<th>Expert Witness Testimony</th>
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<td>Dr. Barry J. Maron</td>
<td>None</td>
<td>● Medtronic</td>
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<td>Mr. Matthew J. Mitten</td>
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<tr>
<td>Dr. Douglas P. Zipes</td>
<td>● Cardiofocus</td>
<td>● Medtronic</td>
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