

## “Patient-Centered” Athletic Training Issues in Clinical Practice, Research, and Education

Gary Wilkerson, EdD, ATC  
Marisa Colston, PhD, ATC

THE UNIVERSITY OF TENNESSEE  
CHATTANOOGA

## Prelude

*What happens when a coach is telling you to get the players ready to play as quickly as possible, the athlete is telling you to get him/her back into the play as quickly as possible, and the media and the fans want the athlete to play as quickly as possible?*

**Impaired ability to make clear judgments and to act in the best interest of the athlete!**

## What is “Patient-Centered?”

- Doing what is best for the patient despite outside pressures
- Recognition of responsibilities not only to one's self and one's patient, but also to the profession itself



Stovitz SD, Satin DJ. Professionalism and the ethics of the sideline physician. *Curr Sports Med Rep.* 2006;5:120-124.  
[www.adstorial.com/commercial/2664/sprint-unlimited-plans-sport-injury;1/1/13](http://www.adstorial.com/commercial/2664/sprint-unlimited-plans-sport-injury;1/1/13)

## Institute of Medicine

Health Professions Education: A Bridge to Quality (2003)

- Competencies:
  - The habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice
- 1. Provision of patient-centered care
- 2. Ability to work in interdisciplinary teams
- 3. Employ evidence-based practice
- 4. Application of quality improvement
- 5. Utilization of information technology

Institute of Medicine. *Health Professions Education: A Bridge to Quality*. Greiner AC, Knebel E, eds. Washington, DC: National Academy Press. 2003.

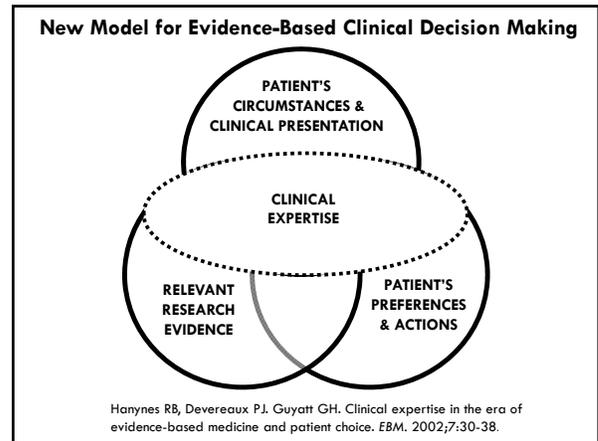
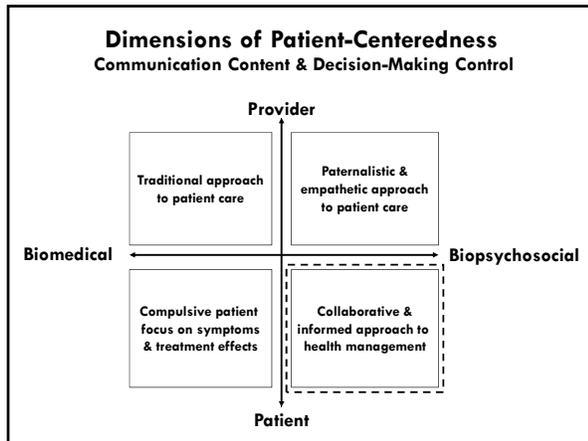
## Evidence-Based Medicine (1996)

- The conscientious, explicit, and judicious use of current best evidence in making clinical decisions about the care of individual patients
  - Integrated with individual clinical expertise
  - Includes thoughtful consideration of patient preferences and values

Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB, Richardson WS. Evidence-based medicine: what it is and what it isn't. *BMJ.* 1996;312:71-71.

## Traditional Biomedical Paradigm

- Decision-making tends to be more “disease-focused” & “clinician-centered” than “patient-centered”
  - Focus on “the disease of the patient” rather than “the patient who has the disease”
  - The patient's right to decide what will be done or will not be done is often deemphasized



### Institute of Medicine

Health Professions Education: A Bridge to Quality (2003)

- Patient-Centered Care:
  - ▣ To identify, respect, and care about patients' differences, **values, preferences, and expressed needs**; relieve pain and suffering; coordinate continuous care.
  - ▣ Characterized by efforts to listen to, clearly inform, communicate with, and **educate patients; share decision making and management**;

and continuously advocate **disease prevention, wellness, and promotion of healthy lifestyles**, including a focus on **population health**.

### How "Patient-Centered" is AT?

10

- **Highly responsive** to an injured athlete's desire to return to participation as soon as possible!

BUT,

- What about the injured athlete who is not anxious to return until normal capabilities are fully restored?
- Are we really as good as we think we are with regard to rapid restoration of functional capabilities?

OR,

- Are we just really good at helping athletes to adopt compensatory strategies that facilitate rapid return?

Chris Ingersoll, PhD, ATC, FNATA

### How "Patient-Centered" is AT?

11

- How should RTP decisions be made?
  - ▣ Avoidance of re-injury and/or chronic disability
- What are the respective roles and responsibilities of the team physician and the athletic trainer?
  - ▣ Ethical – Legal – Administrative Hierarchy
- How influential (i.e. intimidating) are coaches?
  - ▣ Conflict of interests: team success vs. athlete-patient?

Creighton DW, Shrier I, Shultz R, Meeuwisse WH, Matheson GO. Return-to-play in sport: a decision-based model. *Clin J Sport Med*. 2010;20:379-385.

### How "Patient-Centered" is AT?

12

- Eastern Athletic Trainers' Association Annual Meeting
  - ▣ Timothy Sensor, January 7, 2012 –

Are we afraid of doing something to upset a coach?

What are we doing to protect ourselves from burnout?

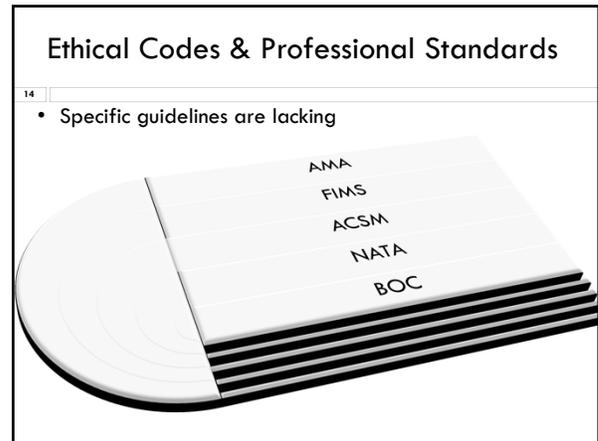
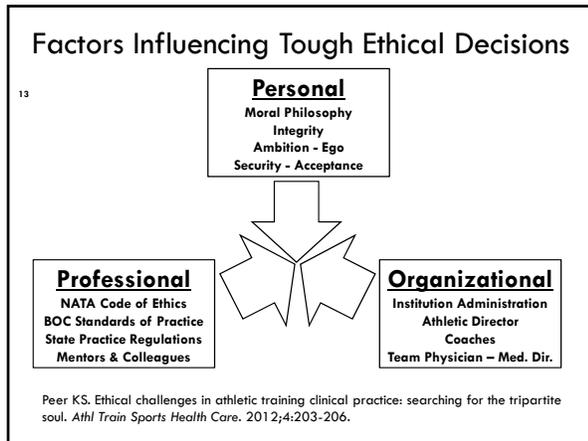
Are we fully aware of state laws that define practice?

Is documentation of athletic injury management adequate?

Do we communicate sufficiently with supervising physicians?

Do we need a better means for clinical skill development?

Sensor JT. We have met the enemy, and it is us. *Athl Train Sports Health Care*.2012;4:147-150.



### AMA Code of Ethics

15

□ **Opinion 3.06 - Sports Medicine**

- Physicians should assist athletes to make informed decisions about their participation in amateur and professional contact sports which entail risks of bodily injury.
- The professional responsibility of the physician who serves in a medical capacity at an athletic contest or sporting event is to protect the health and safety of the contestants.
- The desire of spectators, promoters of the event, or even the injured athlete that he or she not be removed from the contest should not be controlling.
- The physician's judgment should be governed only by medical considerations.

[www.ama-assn.org](http://www.ama-assn.org)

### FIMS Code of Ethics

16

**Medical ethics in general:**

The main duties of a physician include:

- Always make the health of the athlete a priority.
- Never do harm.
- Never impose your authority in a way that impinges on the individual right of the athlete to make his/her own decisions.

[www.fims.org](http://www.fims.org)

### FIMS Code of Ethics

17

**Special Ethical Issues in Sports Medicine:**

The physician's duty to the athlete must be his/her first concern and contractual and other responsibilities are of secondary importance...

A basic ethical principle in health care is that of respect for autonomy. An essential component of autonomy is knowledge. Failure to obtain informed consent is to undermine the athlete's autonomy.

Similarly, failure to give them necessary information violates the right of the athlete to make autonomous choices. Truthfulness is important in health care ethics.

The overriding ethical concern is to provide information to the best of one's ability that is necessary for the patient to decide and act autonomously.

[www.fims.org](http://www.fims.org)

### FIMS Code of Ethics

18

**Injuries and Athletes:**

It is the responsibility of the sports medicine physician to determine whether the injured athlete should continue training or participate in competition. The outcome of the competition or the coaches should not influence the decision, but solely the possible risks and consequences to the health of the athlete.

Injury prevention should receive the highest priority.

[www.fims.org](http://www.fims.org)

## ACSM Code of Ethics



19

**Section 2**  
*Members should maintain high professional and scientific standards and should not voluntarily collaborate professionally with anyone who violates this principle.*

**Section 3**  
*The College, and its members, should safeguard the public and itself against members who are deficient in ethical conduct.*

[www.acsm.org/](http://www.acsm.org/)

## NATA Code of Ethics



20

- 1.2 ...be committed to providing competent care
- 1.3 ...preserve the confidentiality of privileged information...
- 2.2 ...be familiar with & abide by all NATA standards, rules & regulations
- 2.3 ...report illegal or unethical practices related to athletic care ...
- 3.2 ...provide only those services for which they are qualified...
- 3.3 ...provide services, make referrals, & seek compensation only for those services that are necessary
- 4.1 ...conduct themselves personally & professionally in a manner that does not compromise their professional responsibilities or the practice of AT
- 4.3 ...not place financial gain above the patient's welfare & shall not participate in any arrangement that exploits the patient.

[www.nata.org/](http://www.nata.org/)

## BOC Standards



21

- Consists of 2 sections:
  - Practice Standards (7) & Codes (6) of Professional Responsibility
- **Standard 1: Direction**
  - The AT renders service / treatment under the direction of a physician.
- **Standard 2: Prevention**
  - The AT understands and uses preventive measures to ensure the highest quality of care for every patient.
- **Standard 6: Program Discontinuation**
  - The AT, with collaboration of the physician, recommends discontinuation of the athletic training service when the patient has received optimal benefit of the program.

[www.bocatc.org](http://www.bocatc.org)

## BOC Standards



22

**Code 1: Patient Responsibility – The AT:**

- 1.2 Protects the patient from harm, acts always in the patient's best interests and is an advocate for the patient's welfare
- 1.3 Takes appropriate action to protect patients from ATs, other HCPs or ATs who are incompetent, impaired or engaged in illegal or unethical practice
- 1.4 Maintains the confidentiality of patient information...
- 1.5 Communicates clearly and truthfully with patients and other persons involved in the patient's program, including, but not limited to, appropriate discussion of assessment results, program plans and progress
- 1.6 Respects and safeguards his or her relationship of trust and confidence with the patient and does not exploit his or her relationship with the patient for personal or financial gain
- 1.7 Exercises reasonable care, skill and judgment in all professional work

[www.bocatc.org](http://www.bocatc.org)

## Fiduciary Legal Obligation

23

- Fiduciary: A person to whom power is entrusted to the benefit of another (*L. fiduciaris: hold in trust*)
  - Exclusive focus on patient's health – free of conflict!
- Professional ethics impose fiduciary obligations that courts convert into legal obligations
  - Duty to fully disclose all relevant information to patient
  - Duty to resist situational pressures
    - Athletes are particularly vulnerable consumers, poorly equipped to decide whether a medical services is critical, deferrable, or unnecessary

Furrow BR. The problem of the sports doctor: serving two (or is it three or four?) masters. *St Louis Univ Law J.* 2006;50:165-183.

## P-O-P-E Guidelines for Patient-Centered Practice

24

- P** **Protect** athletes & place their welfare over that of the team or other competing interests
- O** **Offer** candid & full disclosure regarding injury
- P** **Practice** good health care – follow guidelines
- E** **Enable** players to avoid unnecessary risks

Furrow BR. The problem of the sports doctor: serving two (or is it three or four?) masters. *St Louis Univ Law J.* 2006;50:165-183.

## How “Patient-Centered” is AT?

25

### □ Ethical aspects of clinical decisions:

- ▣ Expert panel derived from NATA Leadership Directory
- ▣ Identified ethical issues in each of 5 practice domains
- ▣ 0-10 ratings for “frequency of occurrence”

1. Failure to inform athlete about realistic prognosis (7.2)
2. Failure to inform athlete or parents about true extent of injury or risk of further injury (6.7)

Swisher LL, Nyland J, Klossner D, Beckstead J. Ethical issues in athletic training: a foundational descriptive investigation. *Athl Ther Today*. 2009;4(2): 3-9.

## Informed Consent

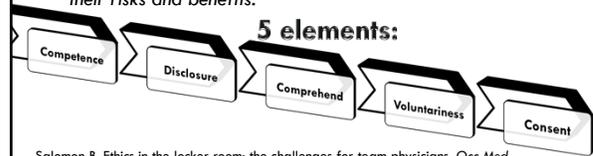
26

### Defined:

Jonsen A, Seigler M, Winslade W. *Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine*, 6th ed. Chicago: McGraw Hill: 2010.

*The willing acceptance of a medical intervention by a patient after adequate disclosure of the procedure, risks, and benefits, as well as of alternative courses with their risks and benefits.*

### 5 elements:



Salomon B. Ethics in the locker room: the challenges for team physicians. *Occ Med*. 2002;17(4): 693-700.

## Patient Choice

27

- Must recognize limits of player autonomy
- This fundamental bioethical principle must be balanced against other principles (i.e., beneficence, etc.)
- Athlete has the autonomy to assume the risk (regardless of medical opinion) as long as he/she is fully informed of the potential consequences
- Respecting autonomy means respecting the choices patients make, not facilitating anything they want to do

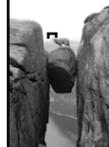
Johnson R. The unique ethics of sports medicine. *Clin Sports Med*. 2004;23:175-182.

Stovitz SD, Satin DJ. Professionalism and the ethics of the sideline physician. *Curr Sports Med Rep*. 2006;5:120-124.

## Informed Consent & 3<sup>rd</sup> Party Influences

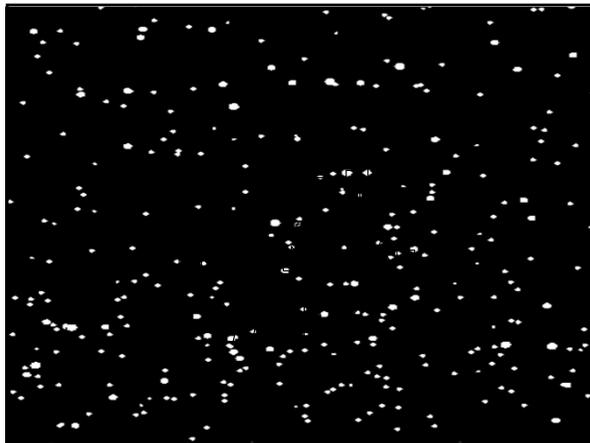
28

- Coercion poses a challenge to fulfilling the condition of voluntariness
- Players desire to return may overwhelm common sense – rendering education and informed consent meaningless
  - ▣ Athlete cannot really be expected to make a truly informed and unbiased assessment of the options



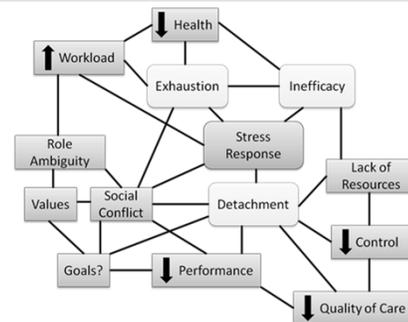
- Especially true if the injury occurs during a game and a decision (e.g. injection) has to be made in the heat of the battle

Stovitz SD, Satin DJ. Professionalism and the ethics of the sideline physician. *Curr Sports Med Rep*. 2006;5:120-124.



## What is the effect of “Burnout” on the delivery of Patient-Centered care in AT?

30



## Job Stress and Burnout

- 31
- Stress: Too many mental and physical demands
  - Burnout: Insufficient rewards and recovery opportunity
    - Feeling empty, depressed, and devoid of motivation
  - Key factors:
    - Role conflict - High time commitment - Low salary
    - Limited career advancement - Poor working conditions
  - High-quality patient-centered care cannot be provided without work-life balance!

## Problems with the Prevailing Organizational Culture of College Athletic Programs

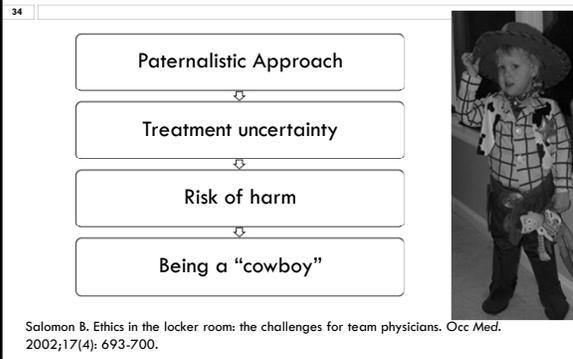
- 32
- Do college ADs and coaches value athletic trainers?
    - Salaries? Job security? Work-life balance? Part of the team?
  - Extent to which coaches are empowered by administrators?
    - 2007 to 2011: 44% increase in football coaches' salaries
    - 42 football coaches making >\$2 million per year
  - Coaches' medical knowledge pertaining to health risks?
    - Imposition of unreasonable physical demands
      - The Inter-Association Task Force for Preventing Sudden Death in Collegiate Conditioning Sessions: Best Practices Recommendations
  - Who hires the team physician?
    - Who evaluates an athletic trainer's job performance?

## Health v. Sport: Conflicts of Interest

- 33
- Privacy / Confidentiality
  - Informed consent
  - Clearance to play
  - RTP
  - Short term gain vs. long-term risk
    - Permitting athletes to continue playing hurt
    - Use of local anesthetic injections to reduce pain and enable an athlete to continue competing
  - Terms of sports medicine service provision
- Mathias MB. The competing demands of sport and health: an essay on the history of ethics in sports medicine. Clin Sports Med. 2004;23: 195-214.*



## Obstacles to a Patient-Centered Focus



## Something to think about...

35

Does it make sense that ATs are governed by the same leadership structure as sport coaches, strength and conditioning coaches, equipment managers and sport information staff?



*Shepherd A. In the right place. Train & Cond. 2009;19:1-4.*

## A Patient-Centered Model for Delivery of Athletic Training Services

- 36
- Athletic trainers solely accountable to sports medicine physicians (subunit of Student Health Services)
    - Performance evaluated from a medical perspective
      - Job security and professional development opportunities
    - Supportive infrastructure for better coordination of care
      - Improved athlete access to various healthcare providers
    - Increased resources – larger clinical staff
      - Increased compensation and more flexible work schedules
    - Collaborative approach to service delivery
      - Improved quality of patient care

*Laursen MR. A patient-centered model for delivery of athletic training services. Athl Ther Today. 15(3):1-3.*

## Relevance to Future AT Education

37

- Major (and mid-major) university athletic programs
  - ▣ Are optimal clinical learning opportunities provided?
    - Coaches' influences on clinical management decisions?
    - Paranoia about secrecy? AT student access?
  - ▣ What is the nature of role modeling that is provided?
    - Loyalty to coach to maintain job security?
    - Willing acceptance of circumstances that prohibit work-life balance?
  - ▣ How are AT Graduate Assistants and Interns utilized?
    - Meaningful professional development vs. cheap labor?
    - Selling plasma to get money for living expenses?

## Evidence-Based vs. Patient-Centered Care

- The individual patient's needs and preferences are often neglected as relevant factors in decision-making
  - ▣ EBM is more "disease-oriented" than "patient-oriented"
    - Psychosocial elements are as important as biomedical factors
  - ▣ EBM emphasis on RCTs as highest quality source of evidence
    - Results applied to patients who would have been excluded from study

Bensing J. Bridging the gap. The separate worlds of evidence-based medicine and patient-centered medicine. *Patient Educ Couns.* 2000;39:17-25.

## Patient-Centered Clinical Research

39

- Randomized clinical trial (RCT)
  - ▣ Rigorous control for internal validity
  - ▣ Random assignment to experimental vs. control groups
- Major limiting factors in most AT settings
  - ▣ Difficulty acquiring large samples of patients with comparable injuries
  - ▣ Equipoise: Alternative treatments must be equally acceptable on the basis of current knowledge
    - Few athletes likely to volunteer for research that presents potential for assignment to treatment perceived to be inferior

## Patient-Centered Clinical Research

40

- Clinical epidemiology:
 

The science of making predictions about individual patients by counting clinical events in groups of similar patients and using scientific methods to ensure that the predictions are accurate

Fletcher RH, Fletcher SW. *Clinical Epidemiology – The Essentials.* 2005
- Clinical prediction guide:
 

A combination of 3-5 prospectively documented patient characteristics that provides a quantifiable likelihood for an outcome

## Differing Inferential Paradigms

41

### Frequentist Approach

- Randomized Assignment
- IV: Group membership
- DV: Continuous measure
- Error: Random variation
- Focus: Statistical significance
  - ▣ Difference between groups
    - Mean values (central tendency)

### Bayesian Approach

- Observation of Cohort
- IV: Exposure status
- DV: Binary outcome
- Error: Misclassification
- Focus: Precision of estimate
  - ▣ Exposure-Outcome association
    - Relative Risk and Odds Ratio

## ATPH of Sports Medicine

42



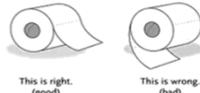
*Those who are not willing to exercise all treatment options will be branded too conservative and risk losing their positions, whereas those who cavalierly treat athletes are running a risk of a different kind.*

Tucker, AM. Ethics and the professional team physician. *Clin Sports Med.* 2004; 23:227-241.

## Must nots...

43

- Must not be overwhelmed by the importance of the athlete
- Must not become a fan (not ethically nor medically sound)
- Must not RTP when the medical findings do not support it
- Value performance, output & efficiency at the expense of realizing other values



Salomon B. Ethics in the locker room: the challenges for team physicians. *Occ Med.* 2002;17(4): 693-700.

Stovitz SD, Satin DJ. Professionalism and the ethics of the sideline physician. *Curr Sports Med Rep.* 2006;5:120-124.

## Musts...

44

- Must apply ethical principles to sports medicine
- Keep our knowledge up-to-date with current clinical and ethical sports medicine standards
- Limit excessive emotional, financial, or personal relationship with the team that may impair your ability to function as an impartial HCP
- Acknowledge that knowing the right answer is not always equivalent to doing the right thing (it is a necessary 1<sup>st</sup> step)

Salomon B. Ethics in the locker room: the challenges for team physicians. *Occ Med.* 2002;17(4): 693-700.

Stovitz SD, Satin DJ. Professionalism and the ethics of the sideline physician. *Curr Sports Med Rep.* 2006;5:120-124.

## Athlete as the #1 Priority

45

- Sports medicine may only be used to ↑ performance as long as this does not lead to exploitation without any regard for losses
- Cannot sacrifice people to performance & success
- Cannot treat athletes as mere means to achieving those ends associated with victory



Mathias MB. The competing demands of sport and health: an essay on the history of ethics in sports medicine. *Clin Sports Med.* 2004;23: 195-214.

## NATA Executive Committee for Education

46

- Future Directions in Athletic Training Education
  - Approved by NATA Board of Directors – June 25, 2012
    - Significant effort should be expended to educate practitioners regarding the fundamentals of evidence-based practice and the use of outcome measures in their practice.
      - Establish an agenda for scholarship that would better inform the practice of athletic training
    - Encourage alignment of professional and post-professional education programs in schools of health professions
      - Emphasizes the correct perception that athletic trainers are primarily healthcare providers

## Best Practices in Sports Medicine Management for Secondary Schools and Colleges

47

- Proposal to develop an inter-association document:
  - Outline best practices regarding the selection, role, and supervisory relationships of the sports medicine team
    - Secondary Schools Athletic Training Committee
    - College and University Athletic Training Committee
    - National Collegiate Athletic Association
    - National Federation of State High School Associations
    - American Medical Society for Sports Medicine
    - American Orthopaedic Society for Sports Medicine
    - American Academy of Pediatrics

## Consensus Statements - Guidelines

48

- Guidelines are shields to repel pressure to provide medical clearance to participate - they reduce uncertainty about traditional "customary practice"

Furrow BR. The problem of the sports doctor: serving two (or is it three or four?) masters. *St Louis Univ Law J.* 2006;50:165-183.

- The Team Physician and the Return-to-Play Decision: A Consensus Statement – 2012 Update
  - Non-game day RTP decisions
    - AAFF, AAOS, ACSM, AMSSM, AOSSM, AOASM

### 3 Step Ethical Decision-Making Model

49

- 1** Is it legal? (fair & just)
- 2** Is it balanced? (extreme?)
- 3** How does it make me feel? (don't ignore)

Blanchard K, Peale N. *The Power of Ethical Management*. New York: William Morrow, 1988.

### The "Big Three"

50



Always make the health of the athlete a priority



Never do harm



Never impose your authority to impinge on the individual right of the athlete to make his/her own decisions

<http://www.fims.org>

### Where do we go from here?

51

- Should we develop position statements and/or accreditation standards for:
  - ▣ Quality of clinical learning experiences within intercollegiate athletics (e.g. professional mentorship)
  - ▣ Meaningful engagement of team physician(s) in terms of administrative management of AT services
  - ▣ Proper documentation employed by clinical sites, which supports outcomes research (integrated with academic requirements)
  - ▣ ATEP within "health sciences" v. "education" academic unit
  - ▣ Evidence of a "patient-centered" philosophy of care and proper recognition of the need to avoid conflicts-of-interest

52

## THANK YOU!

Gary-Wilkerson@utc.edu  
Marisa-Colston@utc.edu

[www.utc.edu/gatp](http://www.utc.edu/gatp)