

UPDATE: Return to Play in Sports

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The following is a summary from a recent article by Creighton et al in the *Clinical Journal of Sports Medicine*. I would argue that a good portion of it is intuitive, but nonetheless, it certainly makes us think about how we go about deciding when an athlete is ready to return to sport. If anything, it's a good review of the things we should be thinking about when discharging/returning to play. I couldn't help but read this and think that it was somewhat idealistic as well because unfortunately, coaches, "the higher ups", and parents put significant pressure on us to let people play and it's often "our fault" if someone isn't ready, regardless of the circumstances or severity of the injury. I certainly am not immune to allowing an athlete to play before he/she was truly ready, but I think all of us would agree that we need to treat each on a case-by-case basis.

The purpose of the article was to propose a decision-based model for return to play (RTP) in sports medicine based on the available but limited research, as well as to clarify the processes that clinicians go through to decide RTP.

Step 1: Evaluation of health status. Essentially, this step is an evaluation of how much healing has occurred and how close to "normal" the injury/injured tissue is. Medical factors assessed here include demographics of the athlete, symptoms, personal medical history (recurrent v. acute), physical exam/signs, lab tests, functional tests, psychosocial state, and potential seriousness (concussion v. grade I muscle strain).

Step 2: Evaluation of participation risk. In this step, the clinician analyzes the injury in question as well as the sport and position that the athlete is returning to. Plus, the high re-injury risk is the main disadvantage to allowing RTP. Sport risk/Decision modifiers include the type of sport (collision v. non-collision), position played, limb dominance, competitive level, ability to protect (braces, padding etc.).

Step 3: Decision modification. These modifiers may change the decision that would have been made if the participation risk had been considered alone. Here, the clinician determines the acceptable level of risk. A few differences are present between these and participation risk. One difference between these and participation risk is that the factors are not just restricted to the athlete. For example, if a physician, athletic trainer, or PT allows an athlete to return, they may be legally held responsible if the athlete encounters a serious injury. This point is perhaps most timely due to how much concussions have been placed at the forefront in the last few years. Second, some clinicians may not consider all the factors listed as appropriate (physician in conflict of interest may risk losing employment), but are included because they are ultimately considered in practice today. Finally, decision modification is independent of others because participation risk doesn't include information about decision modification, and decision modification can't be used to determine RTP except in the context of knowing participation risk. In other words, the legal aspect may not be an issue if we've properly investigated steps 1 and 2.

Decision modifiers include timing and season (off-season v. playoffs), pressure from the athlete, external pressure (coaches, management), masking the injury, conflict of interest (financial, scholarships), and fear of litigation.

Creighton DW, Shrier I, Shultz R, et al. Return-to-play in sport: a decision-based model. *Clin J Sports Med.* 2010; 20(5): 379-385.