

Interprofessional Communication and Practice for Return to Sport/Performance

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How to Incorporate the Principles of Interprofessional Education and Practice Into this Specialty Area of Healthcare

Session Objectives

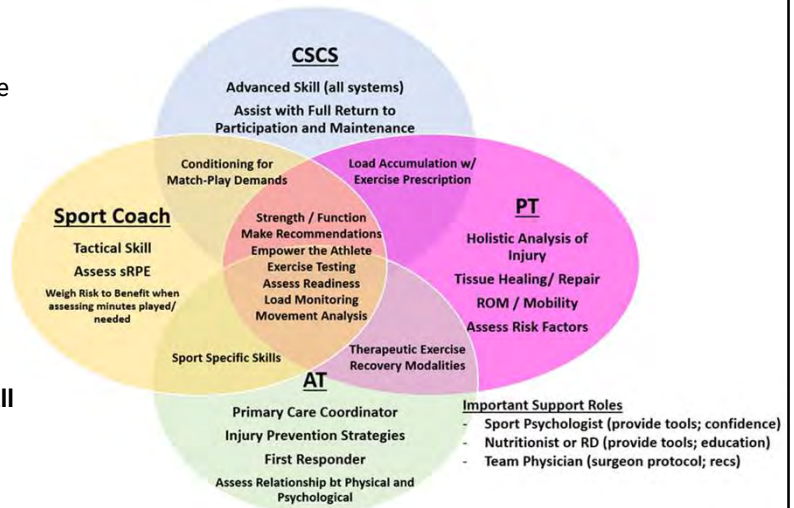
1. Summarize relevant return to sport/performance literature, including roles and responsibilities of professionals typically involved
2. Outline key concepts of interprofessional education (IPE) that should be integrated into curriculum to optimize the interprofessional approach necessary for successful return
3. Discuss learning activities that include the medical system, as well as the health, wellness, and performance systems

Goal: Bridge the Gap

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Background

- ❑ The integration of research and clinical evidence in the RTP decision reflects the care team's experience.¹
- ❑ The structure and designated roles of an IP care team, and the effectiveness of communication strategies, will greatly influence whether an athlete's return is successful.
- ❑ Principles of IPE and practice should be integrated longitudinally across curricula in **all** health sciences to bridge this gap.²



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Relevant Literature

- ❑ Incorporating sport psychology and nutrition into a return to sport model theoretically compliments the milestones used in the medically-based return to sport model.³
- ❑ Who *should* make the return to sport decision?
 - ❑ **Physician** is responsible for clearance for some phases/steps.⁴
- ❑ Who else *should be part* of the shared decision making?
 - ❑ **Sport Coaches** understand the physical, social, and performance stressors.⁵
 - ❑ **Athletic Trainers** assist determining when athletes are physically and mentally ready for return.⁶
 - ❑ **Strength and Conditioning Coaches** consider long-term deficits and effects of detraining, as well as provide an individualized periodized exercise program for the athlete.⁷
 - ❑ **Physical Therapists** progress a patient to return to sport activities, and depends on physician for medical clearance.⁸
- ❑ Why the discrepancy?⁹

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Interprofessional Communication and Practice



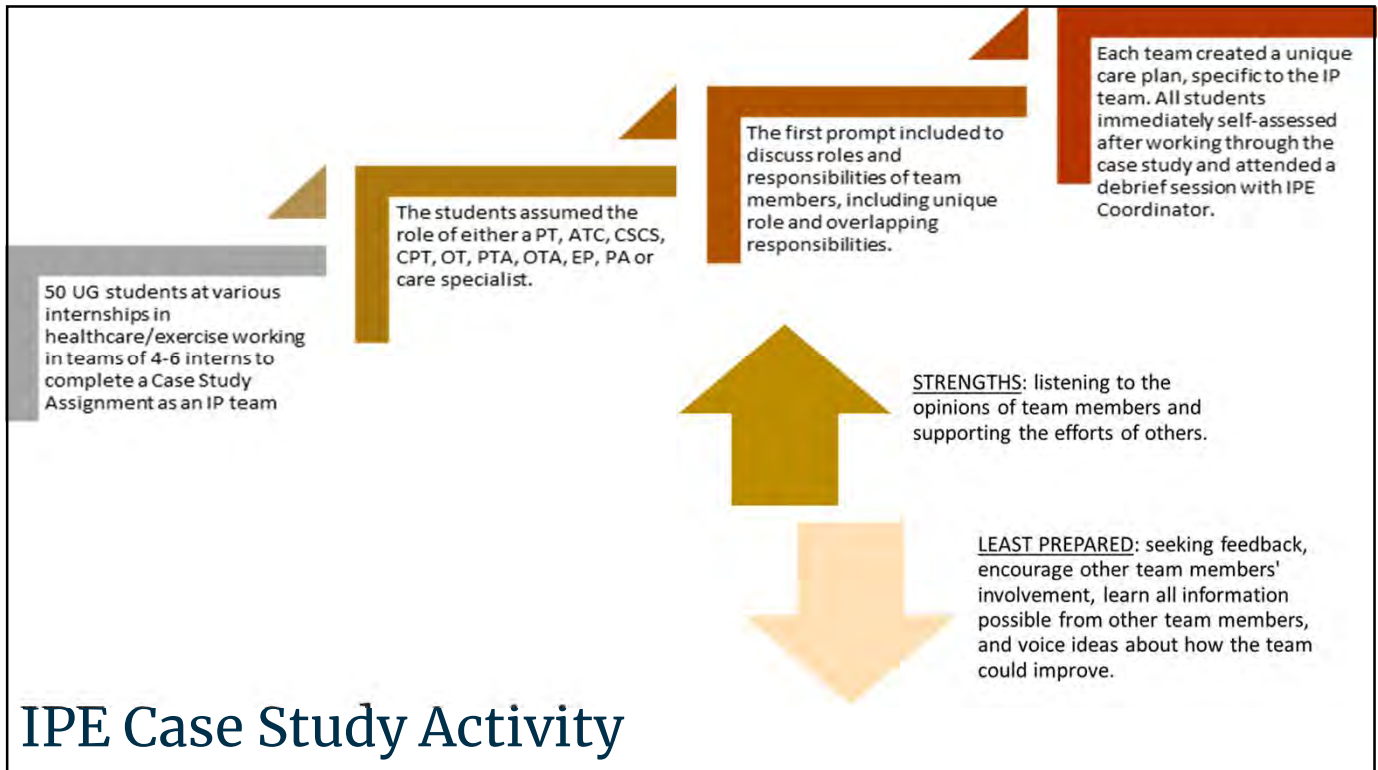
1. It is important to **first identify a leader** who will establish a clear direction while also actively listening and providing supervision to the IP team members.³
2. A **shared decision model** might better serve all stakeholders including the patient, rather than a sole provider being responsible for clearance.⁴
3. Sport coaches report that their role includes ensuring the **athletes' support needs** are met.⁵
4. **Communication, willingness to learn, and humility** between the health professionals and the performance coaches is essential for effective RTS.⁷
5. **If shared decision-making is to become the norm** in clinical sport medicine, we will need to begin a discussion on which discrepancies can be addressed by **education and research**, and which simply reflect the divergence of societal values among different individuals.⁹

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Methods

- Case Study Activity
- Internship course
- UG students in health and exercise science
- Part of IPE curriculum ¹⁰
- Designed to bridge the gaps between professionals involved in RTP decisions for aerobic athletes and includes the patient traveling in and out of the medical and health/performance systems
- Separately, a narrative review was conducted with one aim to assess how an IP team can effectively approach return to performance for aerobic athletes.¹¹
 - This revealed the need for a follow up literature review more specific to roles of professionals and structure of IP RTP care teams (research in progress).

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Narrative Review

Rehabilitation programs:

- Tailored
- Include phases of targeted training
- Lack consistency in return to sport decision making

Why?

- Variability in responsibility for clearing an athlete within interprofessional teams.^{9,12}

Then what??

- Return to performance should include various testing, and interprofessional education is an integral part of working with athletes.²

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		Early Rehab	Mid Rehab	Late Rehab	Testing	Full Return
		Return to Participation			Return to Play	Return to Performance
↑ Interprofessional Communication Strength & Conditioning Coach ↓ Athletic Trainer & Sport Coaches ↑ Physical Therapist ↓	Implement exercises inclusive of the advice of the physical therapist. Emphasize maintenance of strength in non-injured parts of the body. Emphasize appropriate aerobic activity such as unilateral cycling or non-load bearing, when appropriate.	Progress with the same goals as described in early rehab. Continue progression of aerobic activity to include moderate intensity, when appropriate.	Progress with the same goals as described in early and mid rehab. Continue progression of aerobic activity to include higher intensity, consider interval training. Include sport specific movements. Collaborate with other professionals.	Advocate for any performance tests that were not completed by the physical therapist in order to better prescribe exercise in the upcoming weeks and months for full return. For example the Yo-Yo Intermittent Run Test for soccer athletes.	Work with the athlete to regain and improve VO2max in addition to power, strength and endurance based on sport needs.	
	Implement exercises based on the advice of the determination of the interprofessional team. Use caution when training. Use a multi-systems approach.	Progress with the same goals as described in early rehab.	Emphasize on-field training. Emphasize communication between all professionals.	Use the clearance recommendation made by the physical therapist. Question if the assessment addressed all systems. Communicate with the other professionals with concerns.	If VO2max is not within 10% of pre-injury value for soccer or similar athletes, use caution when returning the athlete due to known risk of reinjury. Limit competition minutes until aerobic capacity is restored.	
	Work with the athlete on tissue healing, pain management, range of motion, swelling reduction, normalization of gait, initial strength and function. Emphasize appropriate aerobic activity.	Continue to develop strength and function. Progress to sport specific demands when appropriate. Use evidence-based sport specific frameworks that already exist in addition to industry standards.	Return to activity/on-field activity. Continue to use evidence-based sport specific frameworks that already exist in addition to industry standards.	Take into account time since injury. Test strength and hop per industry and sport-specific standards. Test aerobic capacity in a way that mimics the sport demand and with a test that the athlete has pre-injury values to compare to.	Make recommendations to the rest of the interprofessional team. Include any professional assessment of deficits that may have led to the injury in the first place for the coaching staff to address.	

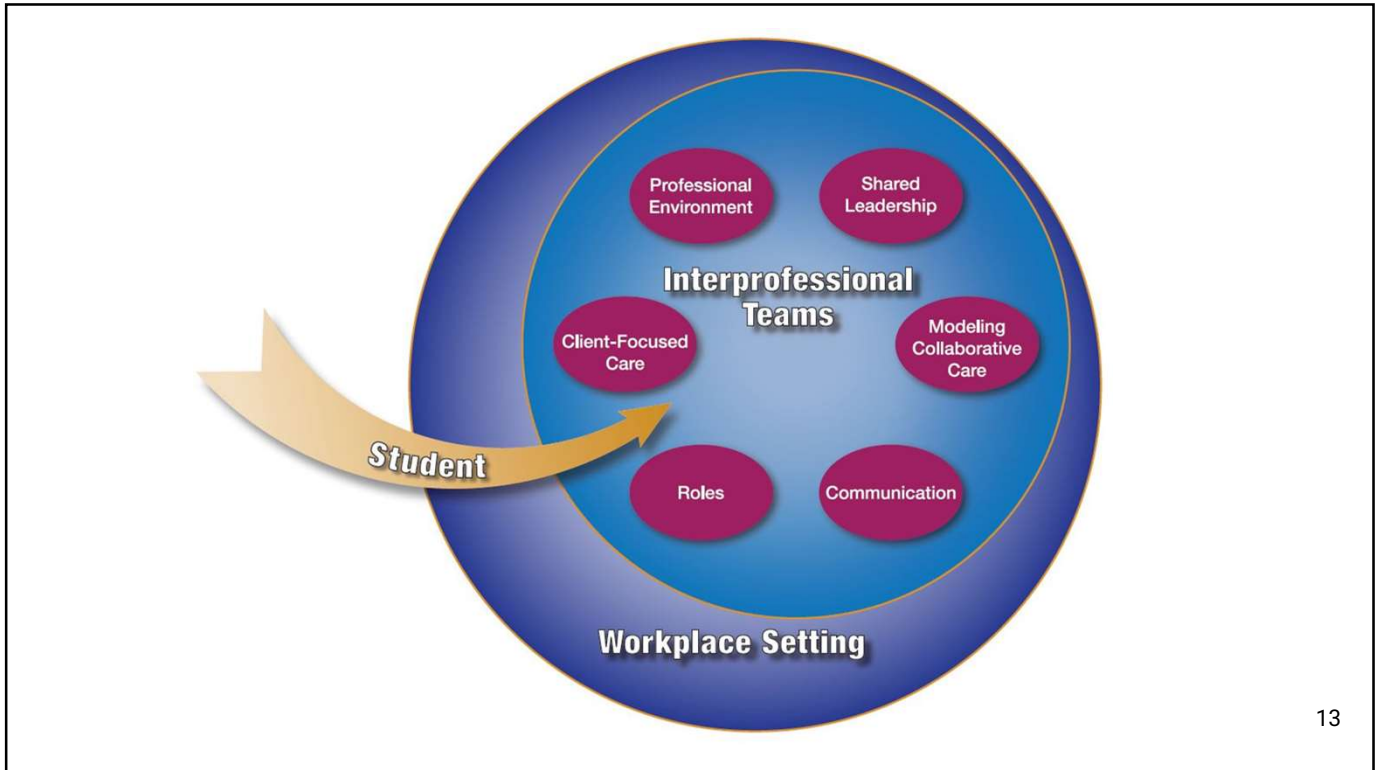
Interprofessional Return to Performance (RTP) Model for Aerobic Fitness¹¹

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Closing the Cleft

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Conclusion

Concepts of IPE and practice, such as roles and responsibilities, shared leadership, team-based care, client-focused care, communication, and modeling collaborative care, can, *and should*, be used to **optimize** the interprofessional approach needed for successful return to performance, and can ultimately **bridge the education to practice gap**.^{11,14}



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Next Steps



- ❑ More research about the perceived roles of IP team members in RTP decision-making, and structure of IP teams in competitive sport RTP.
- ❑ Educational strategies* that focus on real-world context and promote social interaction between coaches, practitioners, sports science personnel and researchers would likely benefit all stakeholders.^{15,16}
 - ❑ Relationships¹⁵
 - ❑ Current Model¹⁶
- ❑ More widespread implementation of IPE in UG programs that bridges the medical system with the health/performance systems.
- ❑ Continue to put our UG students in workplace environments that bridge the gap between education and practice (e.g., internships and clinical experiences with effective IPE teams).

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Questions