The next step in concussion management: 
Return to Learn

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Disclosures
• Current service:
  – Member, OSAA Sports Medicine Advisory Committee
  – Member, Oregon Medical Board
  – Member, BOC Board of Directors

I have no stake or compensation relevant to today’s topic from these entities, or any which may be mentioned in the presentation.

Objectives
• Upon completion, the participant will:
  • have a refreshed knowledge of concussion etiology and recovery
  • understand future requirements of PAs to return patients to sport participation in Oregon
  • have understanding and tools to aid in a patient’s more effective return to a structured learning environment
Returning to learning is often overlooked in concussion from sport.

- Sport caused, sport focused.
- Early return to sport can be catastrophic.
- Suboptimal resumption of occupation (student) can cause subsequent illness.

Concussion review:

- Mild TBI
- Imaging negative
- LOC is not a good indicator of severity
- Brain impairment affects physical, cognitive, and emotional function
- Recovery typically quick, but can be prolonged

Concussion review:

- “everybody’s getting a concussion these days!”

From: https://www.cdc.gov/traumaticbraininjury/data/tex.html
Concussion laws in Oregon were amended in 2018.

- "Max’s Law" and "Jenna’s Law" were amended by Oregon SB 1547 to permit more providers, including chiropractors, naturopaths, physical therapists, and occupational therapists, to clear concussed patients to return to sport participation.
- New online educational training was mandated, and all providers except MD/DO physicians must complete it.
- Training is not yet created.
- Law takes effect July 1, 2020

Return to play follows a progressive approach aligned with symptom resolution.

1. No activity: Complete rest, both physical and cognitive. This may include homework or activities requiring concentration and attention.
2. Light activity: Walking or stationary bike at low intensity.
3. Full activity: Return to full sports training.

Neuropsychologic testing tools often augment clinical judgement in return to play decisionmaking.

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http://www.osaa.org/docs/forms/Concussion-ReturntoParticipation.pdf

https://bjsm.bmj.com/content/bjsports/early/2017/04/26/bjsports-2017-097506SCAT5.full.pdf

https://impacttest.com/
Concussion management is an evolving field.

Rest is important for concussion recovery. -Relatively Speaking-

- Recovery is energy intensive
- Patient is vulnerable to additional injury
- Dysregulation can prolong healing

However, (new)current evidence suggests that resting for too long (greater than 2-3 days) is detrimental.

- Anxiety, depression
- "Nocebo" effect
- Subsymptomatic exercise causes increased blood flow
Learning is cognitively challenging…on a good day.

• How do you get them back to school in a 30 minute family practice office visit? What are your orders?

• Who do we work with?

• What barriers exist?

Overcome barriers of communication with prior planning.

• Clinics and schools follow different laws and guidelines.

• HIPAA and FERPA releases should be ready for completion in your office.

• Know the point person(s) for TBI RTL in your local school districts.

The concussion team may be very large…but should be as simple as possible.

• School Nurse
• School Psychologist
• Counselor
• Coach
• Athletic Director
• Athletic Trainer
• School Administrator
• Teacher
• PCP
• Medical support staff
• Neurologist
• Neuropsychologist
• Physical Therapist
• Parent
• Patient
Overcome barriers of time scarcity with prior planning.

- Cross train multiple people in your clinic to be point-of-contact person for school communication, and to complete some assessments (i.e. - SCAT5) upon check-in.
- Document/resource packets ready for parents/patients, and for school in advance.

Optimize your patient contacts with prior planning.

- Single encounter is often reasonable for return to sport and play. 80% return to regular function within 10 days.
- Subsequent encounters should be pre-planned and take advantage of info pushed from school to clinic.
- Referral to allied professionals often when the first 7-10 days aren’t sufficient for resolution.
- Specialist often occurs after 3-4 week threshold of symptom continuation.

Accommodation of school activities and requirements can be challenging to do from your office.

- Teachers are harder to reach than a specialist on an early Friday afternoon.
- Written lists are a good tool, but not a substitute for trained teammates in the schools.
- Strive to build relationships to the “eval and treat” level of understanding and trust.
Students are entitled to an appropriate education.

- Individualized Education Plan under IDEA is a special education plan
- An IEP may be necessary if concussion symptoms continue for more than a few months. These are truly rare.
- 504 Plan (from sect 504 of the rehabilitation act) is a plan for accommodation in regular education, rather than special education.
- A 504 plan may be helpful to consider when symptoms exceed 3-4 weeks.

Resources for providers, parents, and school personnel are available.

[Link 1](https://cbirt.org/)

[Link 2](http://www.osaa.org/health-safety/concussion)
Resources for providers, parents, and school personnel are available.

https://www.cdc.gov/traumaticbraininjury/index.html

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https://www.osaa.org/docs/health-safety/REAPEnglishAugust2015.pdf

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Ending with a bad slide. And a story…

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Questions?