

The following proposed discussion prompts and potential answers to these prompts were drafted for use in context of my other capstone materials, including the “Physical Therapy Management of Pediatric Patients Post-Concussion” VoiceThread, case study documents, and required reading list.

1. Which additional assessments might be appropriate for use during “B’s” initial evaluation and why?
 - Some potential answers: Cervicogenic testing, more balance assessment (including SOT testing, dynamic visual acuity on InVision system), aerobic/exertional testing (Buffalo Concussion Treadmill Test), subjective symptom severity assessment (such as the PCSS)→ this is a big one for students to pick up on as it is highlighted in the VoiceThread and readings as both a way to identify chief complaints and a way to screen for psychosocial issues such as anxiety and depression.

2. Based on the information we have regarding B’s balance, vestibulocochlear function, and strength, as well as his primary complaints and stated goals, discuss which interventions you might utilize – and why. Create 2 short-term and 2 long-term goals for B based on this initial evaluation and your newly acquired clinical knowledge of post-concussion patient management.
 - Some potential answers: Generally, student’s goals should hone in on impairments identified during B’s evaluation (balance, gaze stability, LE strength) as well as addressing exertional tolerance (as this is something they should pick up on the need for testing of and, because B was a student athlete prior to his concussion, this is part of his return to PLOF.)
 - B’s actual goals for reference (Time Frame: 4 weeks/8weeks)
 - **Short Term Goal 1**: Patient will be independent and compliant with HEP to build on functional gains in PT.
 - **Short Term Goal 2**: Patient will maintain balance on foam with eyes closed x30 seconds to demonstrate improved balance requiring vestibular input.
 - **Short Term Goal 3**: Patient will tolerate 30 seconds of X1 viewing in standing without increased symptoms to demonstrate improving gaze stability.
 - **Long Term Goal 1**: Patient will be independent and compliant with upgraded HEP to build on functional gains in PT.
 - **Long Term Goal 2**: Patient will demonstrate full cervical ROM without pain to demonstrate decrease neck pain and stiffness.
 - **Long Term Goal 3**: Patient will improve score on FGA to at least 30/30 to demonstrate improved dynamic balance.
 - **Long Term Goal 4**: Patient will score 0 on the post concussion symptom scale to demonstrate decreased symptoms.

3. After viewing the case videos, suggest ways that at least two of the demonstrated exercises could be simplified, as well as how they could be progressed. Explain your rationale for each. Make sure to read over the case video descriptions before answering this question.
 - Some potential answers: Generally, students should touch on symptom exacerbation guiding intervention. Progressions can involve moving from performing exercise in static standing or sitting to more dynamic postures, especially those which mimic the sport activities B is hoping to return to (ex. jumping) or adding an unstable support surface. Here would also be a good time for students to reference the “Return-to-activity” guidelines from the VoiceThread and CPG.
 - Actual progressions used by B’s PT included (via CJ):
 - **8897**: Potential variety could be alternating which foot you jump to/from so it’s easier or staying on the same foot to make it harder, change the direction of his head turns, change the distance of his target for X1 viewing.
 - **8903**: We've played with what position the patient is in (just standing today, but starting in sitting, working to more dynamic positions, he has done easier levels while on a wobble board...). You can also do this with X1 for vertical head turns.
4. In video 8903 we see B using the NeuroCom® inVision system. Describe this system, its use, and how we might utilize it to track patient outcomes across a course of care. The inVision system is most commonly utilized in research settings (versus clinical ones) so students interested in clinical research might want to look into this.
 - Some potential answers: Students can reference the NeuroCom® inVision system website listed in the VoiceThread and should identify measures such as the degrees/second B is able to maintain gaze stability as a potential outcome measure (the therapist can adjust beats/minute that the metronome cues the patient to turn their head at.)
5. Identify one recent research study (published within the last 5 years) that deals with rehabilitation strategies for patients with post-concussion symptoms, but is not focused on concussion in sport. Describe the study’s design, participants, interventions, outcomes, and why or why not you would feel comfortable utilizing this intervention approach in clinic. Why is it important to address non-sports related concussions in clinical research?
 - This is an open ended question, but student’s should be able to discuss the importance of looking beyond return-to-sport in order to address patient’s daily function.