Rehabilitation for Youth with Chronic Pain Within and Beyond Interdisciplinary Settings

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Objectives

- Understand the a common framework of disability in youth with chronic pain.
- Identify and implement common rehabilitation measures and interventions for youth with chronic pain.

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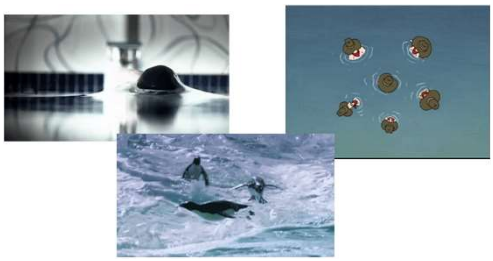
What is interdisciplinary care?



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PPRC Treatment Model

- Intensive Interdisciplinary Pain Treatment (IIPT)

  Mirrors

  – BioPsychoSocial model

  – MD/RN, PT, OT, Psych
- 8 patient census (8-18 y)
- 3-6 weeks, 8 hrs/day, M-F

DAILY SCHEDULE	
Time	Session
8 – 9A	Indiv OT
9 – 10A	Indiv PT (TR)
10 – 11A	Indiv Psych
11 – 12P	Group OT/PT
12 – 2P	Lunch Quiet Time MD visit
2 – 3P	Group Psych
3 – 4P	Family OT/PT/Psych
Post- PPRC	HEP

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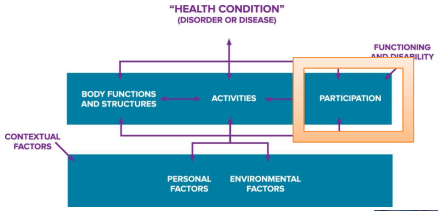
A Framework for Health & Disability:
The International Classification of Functioning: Child & Youth



GUIDE TO PHYSICAL THERAPIST PRACTICE

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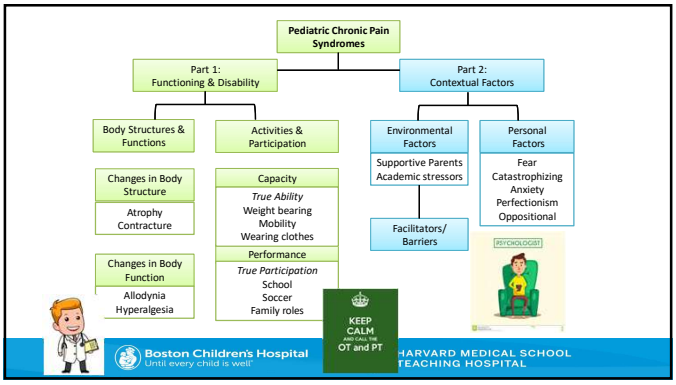

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Mobility & Gross Motor Function

Patient-report

- Pediatric Evaluation of Disability Inventory (PEDI-CAT)
  - Administered via self-report
- Disability Scales
  - Upper/Lower Extremity Functional Scales
  - Headache Impact Test – 6
  - PROMIS Short Forms:
    - Pediatric Pain Interference
    - Pediatric Pain Behavior

Performance-based

- Bruininks-Oseretsky Test of Motor Proficiency -2
- Tests of aerobic capacity
  - 6MWT or Fitkids Treadmill Test (selection depends on patient ability)

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OT-Specific Measures

- Self-Report:
  - Canadian Occupational Performance Measure to identify goals
  - Self-care checklist to identify activity modifications and barriers
- Performance-based
  - Grip and pinch strength
  - Sensory testing (Pedi-Sense, Body Map)
  - Other standardized assessments as indicated (BOT-2, Beery VMI, Sensory Profile)

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Goal Setting

- Focus on function and participation while coping with pain <u>not pain reduction!</u>
  - Wearing clothing
  - Completing ADLs without modifications
  - Endurance
  - Mobility without modifications or devices
- Canadian Occupational Performance Measure can help identify meaningful goals.

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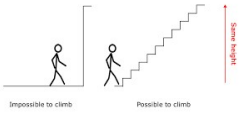
Recommended Treatment Approaches

- Graded activities and task-specific interventions
- Start with easy, fun activities
  - Distraction! Distraction! Distraction!
  - Virtual reality
  - Video games, board games
  - Preferred activities



- Progress to non-preferred or harder activities over time
- Avoid passive interventions (TENS, manual therapy unless contracted)
- **In our experience, mirror box and graded imagery do not improve function/participation.**

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Managing Behaviors

1. Identify the behavior
2. Try to understand the function of the behavior
3. Choose behavioral interventions to address the behavior.
4. Expect response bursts prior to extinction.
5. Reinforce desired responses

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Links and Resources

- PPST:
  - https://bpp.stanford.edu/wp-content/uploads/2019/08/ppst-handout.pdf
- PROMIS Pain Interference Short Form 8a
  - https://www.healthmeasures.net/search-view-measures?task=Search.search
- Behavior Article:
  - **"How understanding the function of behavior can improve physical therapy progress: The case for psychology"**
  - http://ppl.childpain.org/issues/v19n2_2017/v19n2.shtml
- Referral Process:
  - Website: https://www.childrenshospital.org/programs/pediatric-pain-rehabilitation-center
- Websites:
  - www.tamethebeast.org
  - Youtube videos: Joshua Pate, Elliott Krane, Lorimer Mosely
- Contact Info:
  - Julie.Shulman@childrens.Harvard.edu
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