

The background of the slide features a blurred image of healthcare professionals in a meeting. In the foreground, the backs of two people's heads are visible as they sit at a table. In the background, a large screen displays a video conference with ten participants. The text is overlaid on this scene.

Physical Therapy Treatment for Chronic Pain

September 22, 2023



Changing the world by connecting healthcare providers.



Faculty/Presenter Disclosure

- Faculty: Anne Ayling Campos, BScPT & Karen Chiu, MScPT
- Relationships with commercial interests:
 - None
- This program has received financial support from the Ministry of Health (MOH)

Question for you...

Currently in your practice, do you recommend physical strategies directly to your patients as a way of coping with pain? (i.e. relaxation, walking, heat)

- a) Never or infrequently (0-25%)
- b) Sometimes (25-50%)
- c) Often (50-75%)
- d) Always or frequently(75-100%)

Learning Objectives

1

- Explain the theory of using physical strategies in the management of chronic pain

2

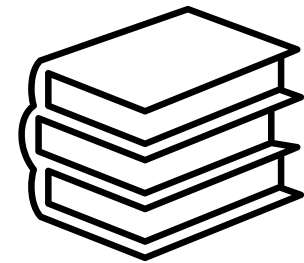
- Identify and list options for physical strategies in the management of paediatric chronic pain

3

- Generate a practical toolkit of strategies that is suitable for the child's or youth's pain presentation

Highlighting Evidence

- Gold standard for chronic pain management is the '3-P' approach involving pharmacology, psychology, and physiotherapy
- Evidence is lacking for many of the interventions, particularly level 1 and 2 evidence
- No standardized treatment protocol for children and youth with chronic pain

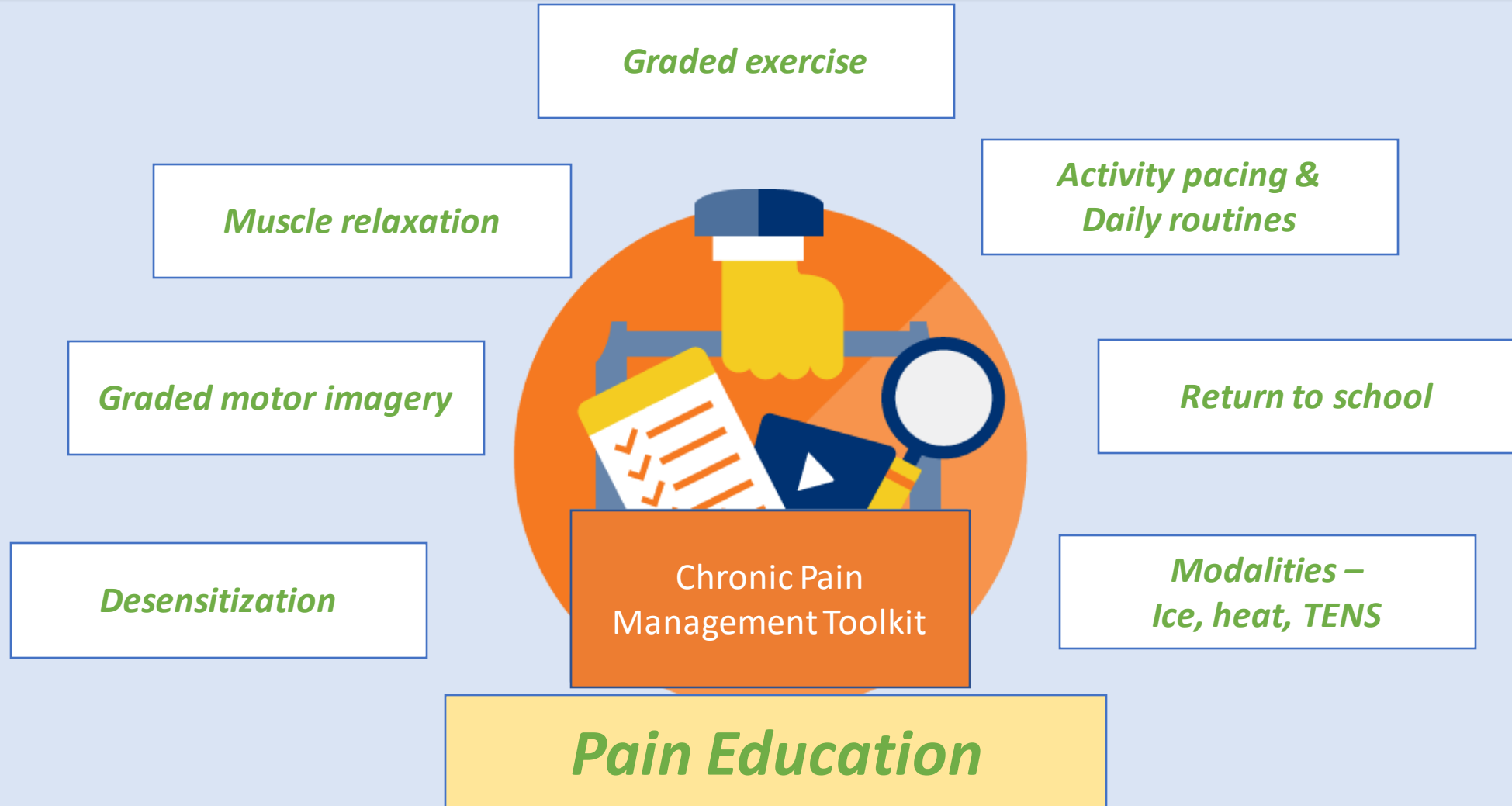


The 'Tool kit'

- Wide variety of interventions provided by a wide array of practitioners
- Physical strategies should assist with pain management to **promote calming of pain pathways** and **restoration of normal physical functioning**



The 'Tool kit'



Pain Education: Question #1

All pain is real.

- a) True
- b) False



Question #2

Pain can be protective or helpful.

- a) True
- b) False



Question #3

Chronic pain is pain that is "all in your head".

- a) True
- b) False



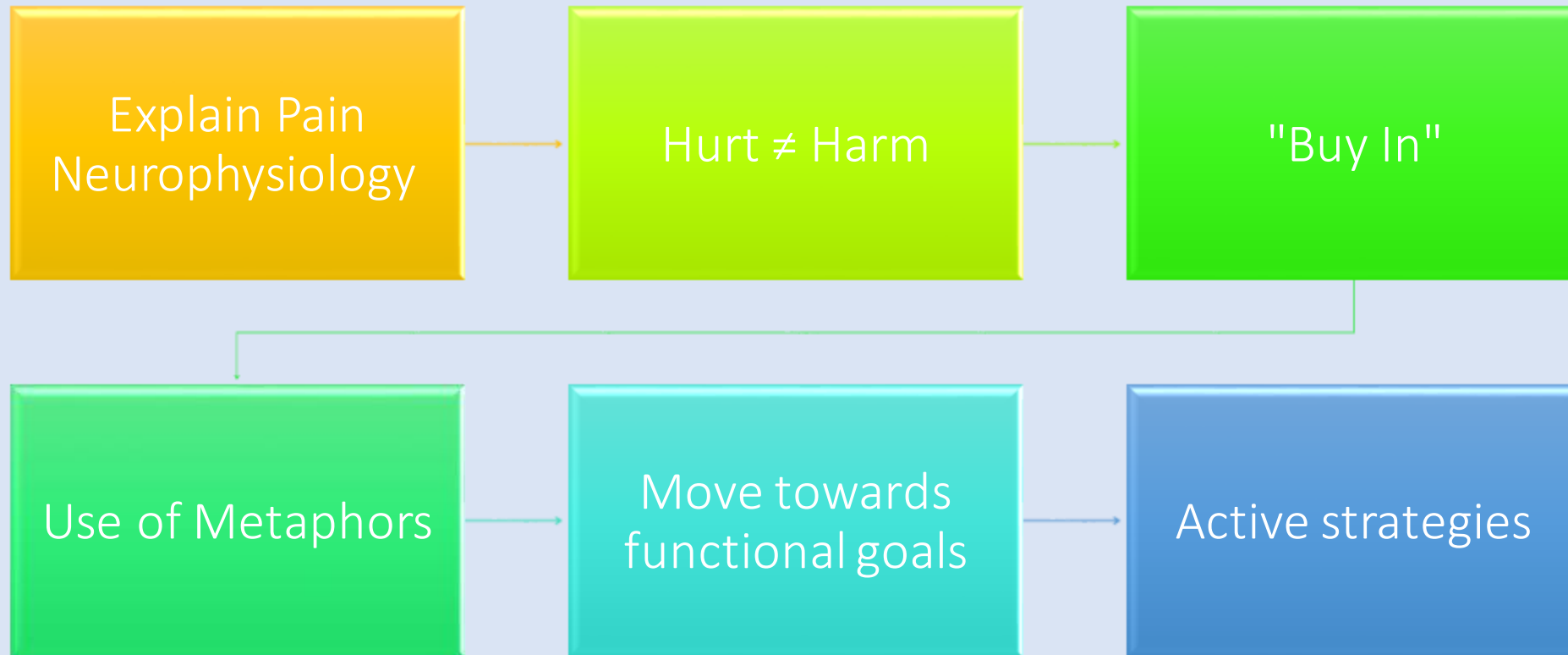
Question #4

The only way to treat chronic pain is through medication.

- a) True
- b) False



Pain Education – Foundation / Tool-box



Pain Education Videos

Video references for pain education which explain pain in a biopsychosocial framework

About Kids Health – What is Chronic Pain?

- https://www.youtube.com/watch?v=EL1E54nH_7c

TedEd - The Mysterious Science of Pain - Joshua W. Pate

- <https://www.youtube.com/watch?v=eakyDiXX6Uc>

AboutKidsHealth - The Impact of Chronic Pain – Focus: Physical Activity

- <https://www.youtube.com/watch?v=7MAoMvCmX1k&list=PLjJtOP3StIuUKKc7L8lcRIImFQ8RV9QPLf&index=2>



Pain Education

SickKids | AboutKidsHealth



RETRAIN PAIN FOUNDATION

ACI Pain Management Network

MYCAREPATH

Passive Strategies

- Ice
- Heat
- Massage
- Manual therapy
- TENS
- Can **facilitate a functional goal**:
 - use a hot-pack over muscles while taking a break during gym class
 - keep ice pack at school to use during breaks in quiet place
 - use TENS machine on back while sitting at desk studying



4 P's

Pacing

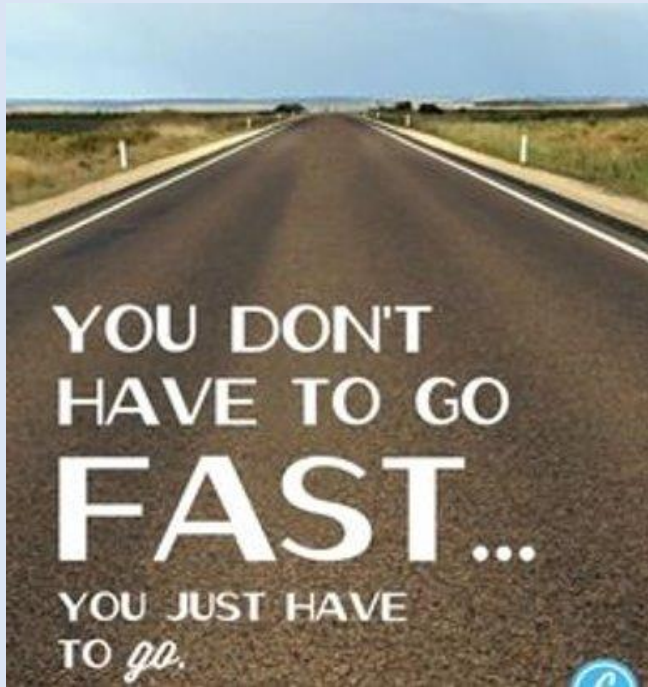
Planning

Prioritizing

Positioning

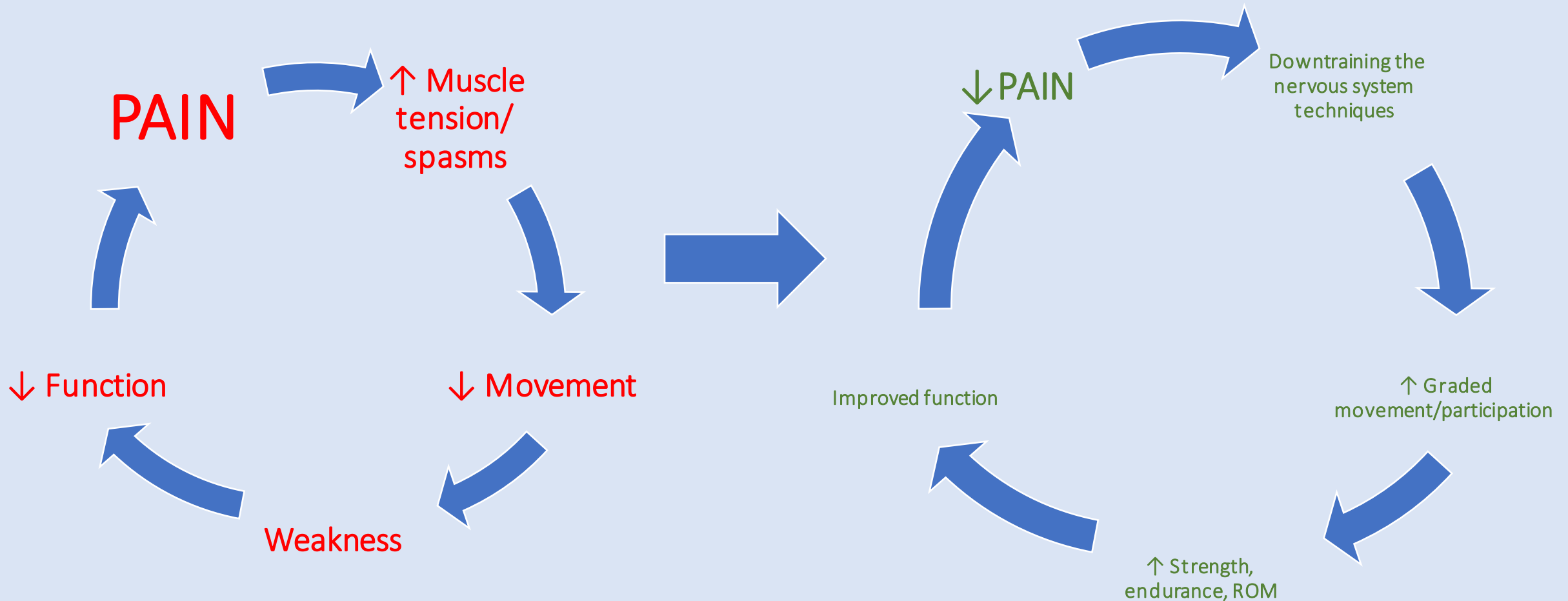


Activity Pacing and Daily Routines



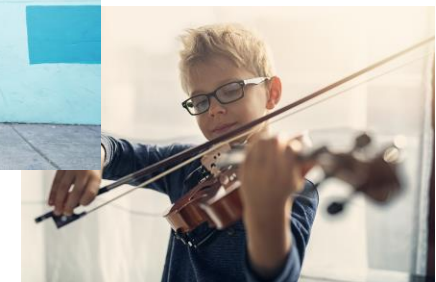
- Pacing means that you slowly increase your levels of activity in a planned way, under your control
- Pacing helps you keep a regular amount of activity each day
- Daily routines starting from wake-up time to bedtime helps with normalization of day-time activities

Graded Exercise & Activity



Graded Exercise & Activity

- SMART goals
- Types of exercise/activities that are meaningful to the child or teen:
 - Simple activities that are accessible
 - Start low and increase slowly to minimize pain activation
 - Increase by 10-20% every 4-5 days of activity completion
 - Do the activity/exercise according to a plan, not according to how you feel



Example of a
graded activity
plan:



My Progressive Plan

Date	Plan	Outcome
09/21	Walking 3000 steps daily for 4-5 days	✓
	Walking 3300 steps daily for 4-5 days	
	Walking 3630 steps daily for 4-5 days	
	Walking 3993 steps daily for 4-5 days	

Desensitization

- **What is it?**
 - Rubbing a variety of textures on an area of skin that is sensitive to touch
 - Massage
 - Goals:
 - normalize sensory input
 - reduce fear of touch through graded exposure
- **Indications:**
 - Allodynia or hyperalgesia
 - Commonly used for neuropathic pain and CRPS
- **How to prescribe:**
 - 15-30 minutes per day
- **Evidence -> Limited**
 - Many different styles/ways of prescribing



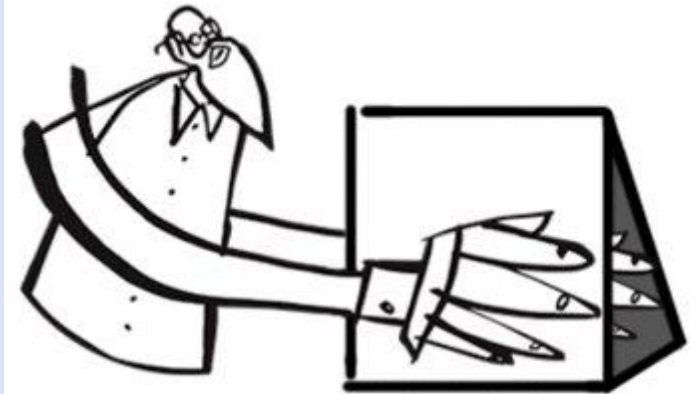
Graded Motor Imagery



Left/right discrimination



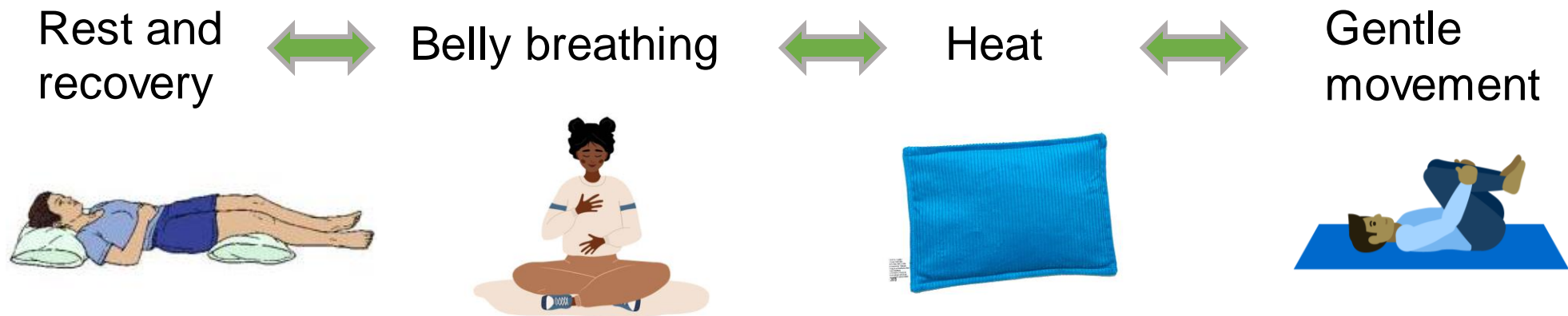
Explicit motor imagery



Mirror therapy

Muscle Relaxation

- Modulating state of the autonomic nervous system
- Reduce muscle tension
- Prepare for activity or post-activity





Return to School

- Point person who the student can go to when support is needed, regular check-ins
- Ability to rest in a quiet place and use pain management strategies in their "tool-kit"
- Ability to stand-up, reposition, take a walking break
- Ability to take breaks during gym class and continue to participate

Learning Objectives

1

- Explain the theory of using physical strategies in the management of chronic pain



*Pain
Education*

2

- Identify and list options for physical strategies in the management of paediatric chronic pain



*Graded exercise
Activity pacing
Daily routines
Return to school
And more...*

3

- Generate a practical toolkit of strategies that is suitable for the child's or youth's pain presentation



Chronic Pain
Management Toolkit

Reflection

How confident are you to explain, identify, and guide your patients with physical strategies to manage pain?

- a) Not at all
- b) Somewhat
- c) Confident
- d) Very confident



References

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<https://doi.org/10.1212/01.wnl.0000249112.56935.32>

Graded motor imagery: <https://www.noigroup.com/graded-motor-imagery/>



Q & A