



## Mr Chris Gregg

Physiotherapist  
TBI Health  
Wellington



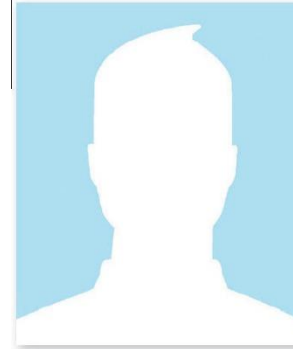
## Mr John Moffat

Clinical Psychologist  
TBI Health Group  
Wellington



## Dr Chris Hoffman

Medical Director and Spine Surgeon  
TBI Health  
Auckland



## Dr Wei Chung Tong

Specialist Anaesthetist  
TARPS (The Auckland Regional Pain Service)  
Auckland

Thursday, June 7, 2018

(Room 1)

14:00 - 16:00 WS #19: Pain Management Symposium

16:30 – 1830 WS #25: Pain Management Symposium (Repeated)

# Evidence-based psychological pain management

John Moffat  
Clinical Psychologist

In the absence of cure, the most appropriate treatment is one that addresses the cognitive, affective, and behavioural factors associated with chronic pain and not solely physical ones.

(Turk, 2002)

There is good evidence for the efficacy of cognitive behavioural therapy (CBT) in improving mood, coping, negative outlook on pain and activity levels.

(Morley et al., 1999; Guzmán et al., 2001; European Guidelines, 2004; Koes et al., 2006; Hoffman et al., 2007; Williams et al., 2012).

# CBT for chronic pain: Basic assumptions

- Cognition (e.g. beliefs, appraisals, attributions, expectancies) modulate the emotional, physiological, and behavioural reaction to pain.
- People should be considered active agents of change.

# CBT for chronic pain: Treatment

1. Education and reconceptualization
2. Acceptance and motivational enhancement
3. Collaborative goal-setting
4. Coping skill acquisition
5. Coping skill consolidation and generalisation

# 1. Pain education and reconceptualization

- Acute versus Chronic Pain
- Hurt versus Harm
- Cognitive-Behavioural model of persistent pain
- Pain-related fear and behavioural avoidance

MOOD

ATTENTION

THOUGHT PROCESSES

STRESS SYSTEM

BEHAVIOUR

RELATIONSHIPS

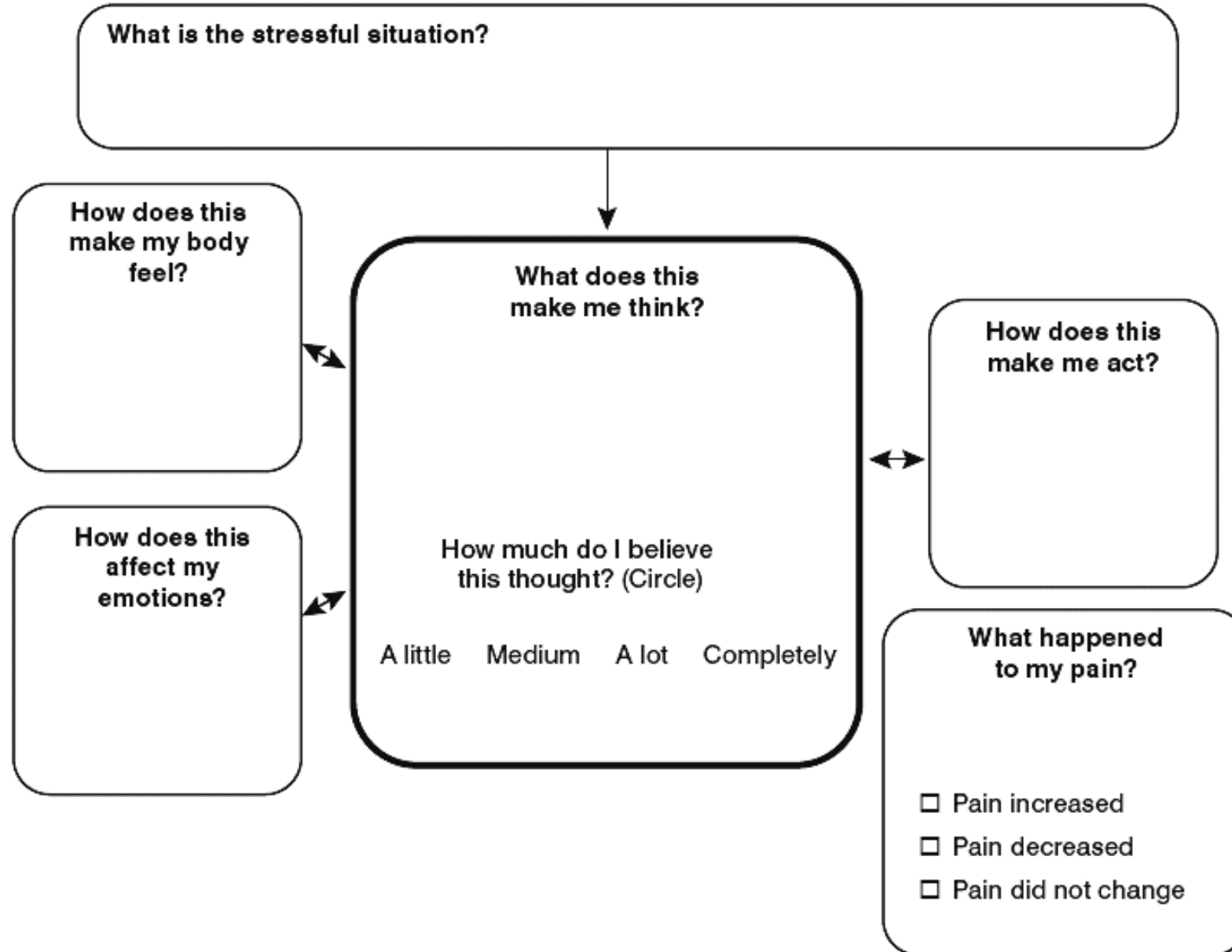
DISABILITY

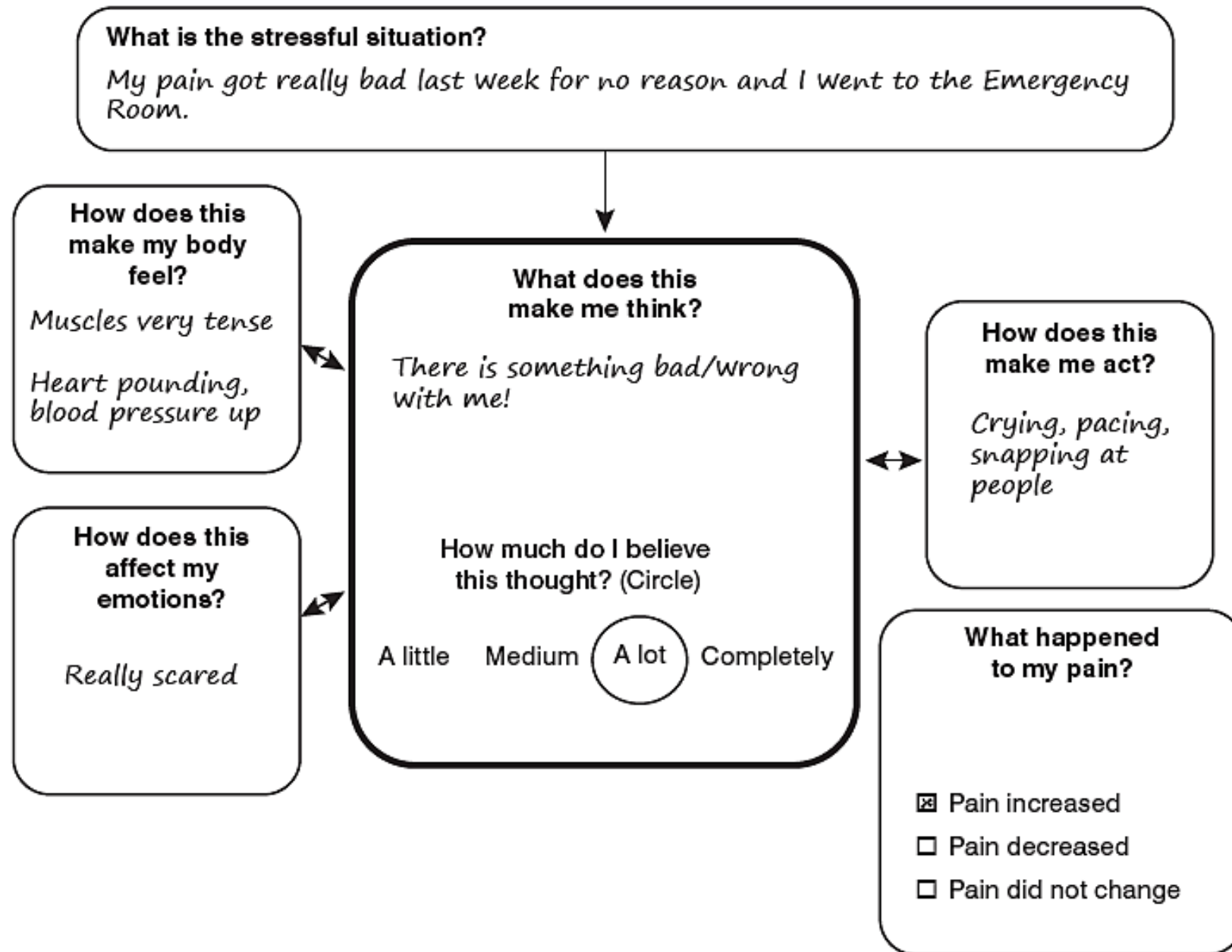
IDENTITY





# Self-monitoring: Applying the cognitive-behavioural model to personal experience





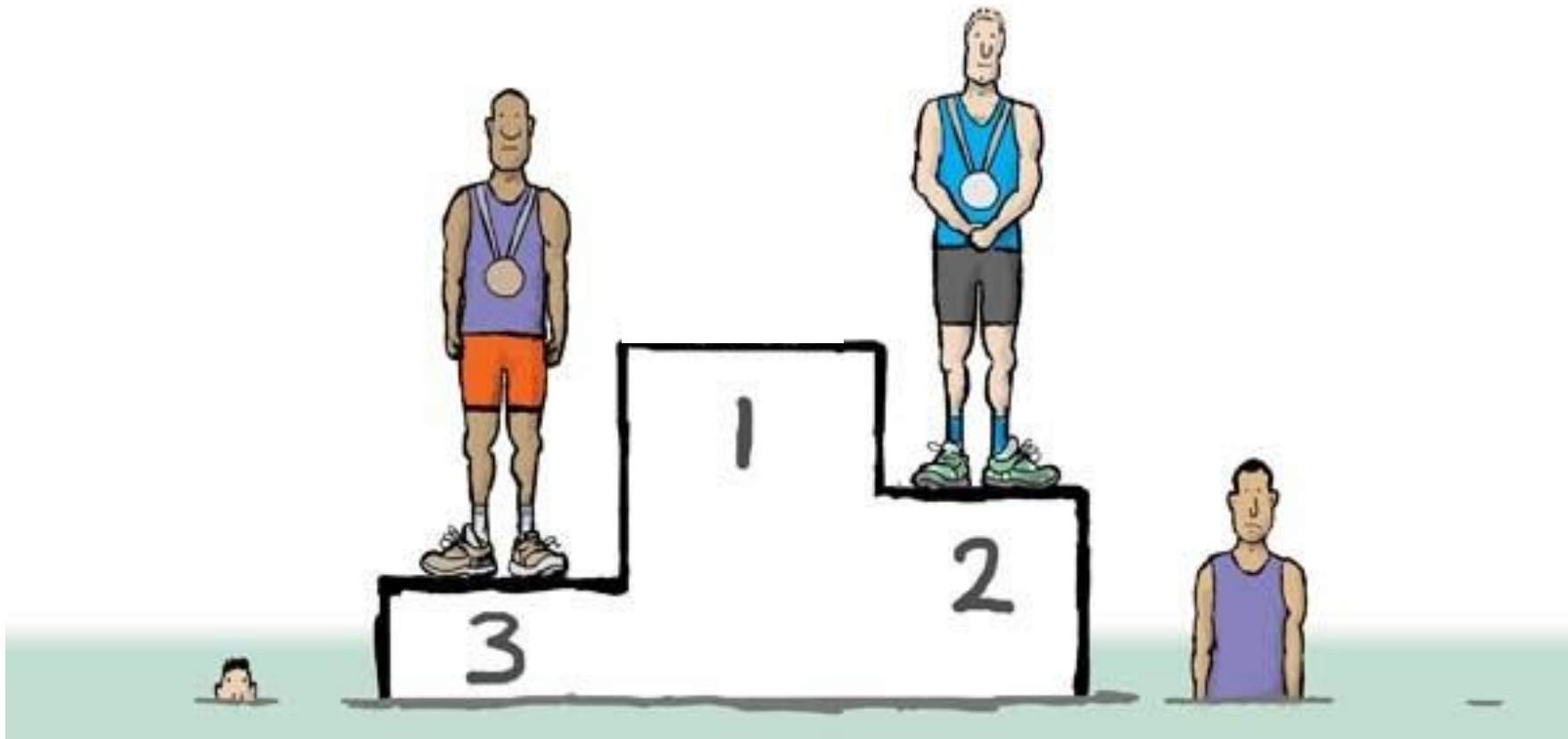
## 2. Acceptance and motivational enhancement

How do we shift the patient from a “cure” to a “self management” model?

Demonstrate the futility of pursuing biomedical cure:

- Education
- Analyse the “workability” of pursuing biomedical cure in terms of the patient’s overall quality of life
- Experiential exercises (e.g. the tug-o-war)

### 3. Collaborative goal-setting



S



Specific

M



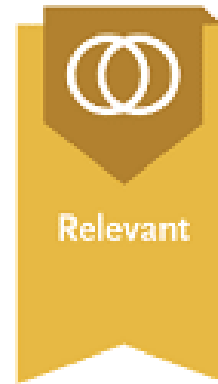
Measurable

A



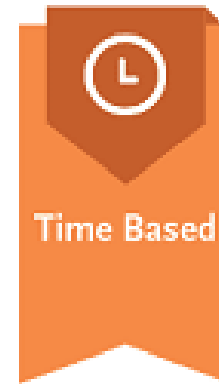
Attainable

R



Relevant

T



Time Based

## 4. Coping skill acquisition

- Education and instruction is provided in the clinical setting.
- Patient practises outside of sessions (skills consolidation and generalisation).
- Homework (e.g. guided audio, handouts and worksheets, behavioural experiments and exposure) should be provided to facilitate home practice.

## CBT for chronic pain usually incorporates:

- Relaxation
- Distraction and other attention-regulation strategies
- Cognitive restructuring
- Graded exposure and behavioural experiments
- Activity pacing
- Problem solving
- Other areas: Communication and assertiveness skills, sleep

# Coping skill acquisition: RELAXATION

## Rationale:

Reduce muscle hypertonicity and spasm, reduce anxiety and stress system reactivity, improve sleep and fatigue.

## Methods:

- Progressive muscle relaxation
- Autogenic training
- Benson's relaxation response
- Diaphragmatic breathing
- Yoga
- Tai Chi



# Coping skill acquisition: ATTENTION REGULATION

## Rationale:

Patients in pain are often preoccupied with their bodily symptoms. This can lead to hypervigilance and overestimation of sensory information.

## Methods:

- Distraction
- Some forms of Meditation (e.g. concentration-focused methods)
- Imagery
- Visualisation
- Hypnoanalgesia
- Focusing on exteroceptive sensory information.

# Coping skill acquisition: COGNITIVE RESTRUCTURING

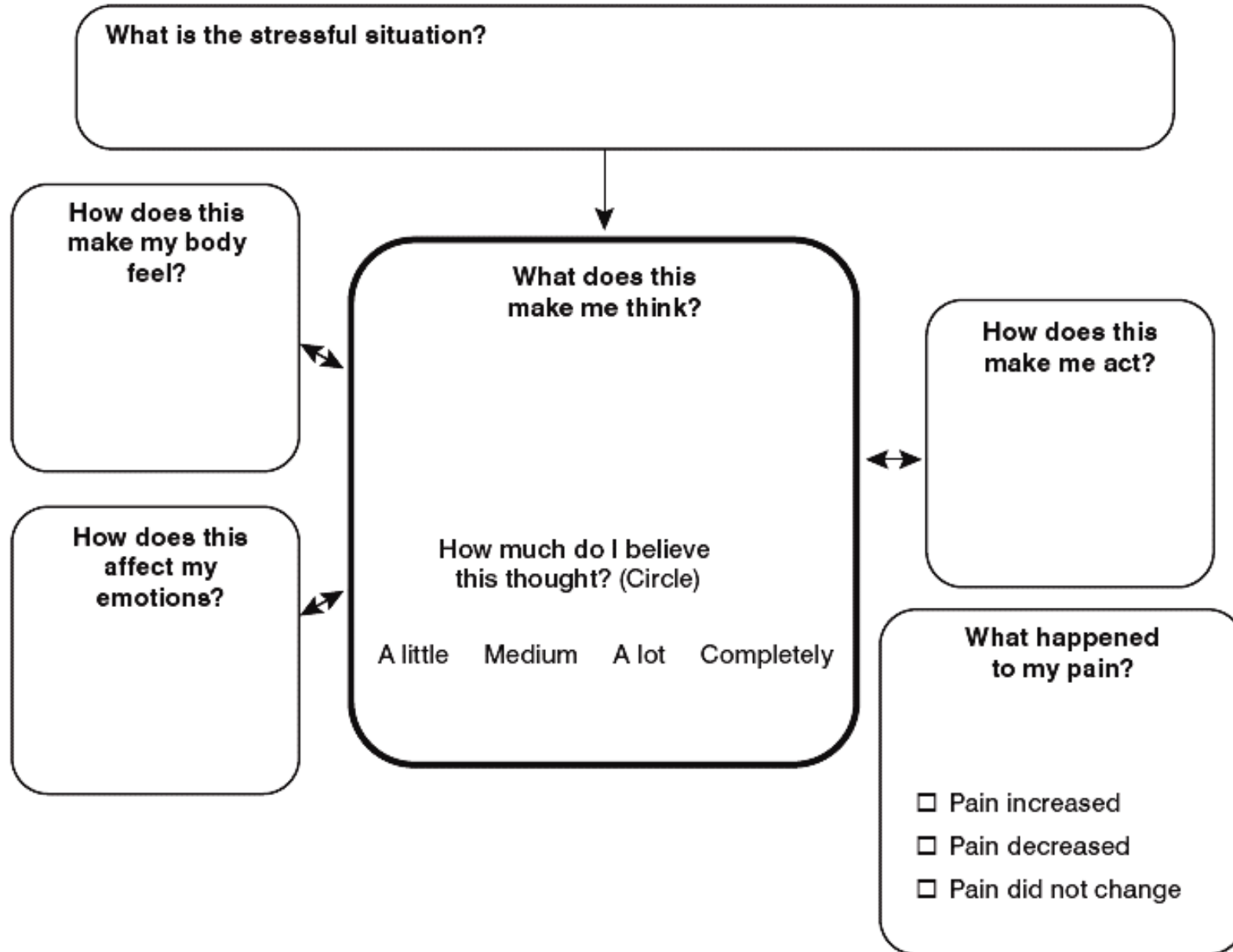
## Rationale:

Thoughts, beliefs, and other cognitive factors can potently influence mood, behaviour, stress system reactivity, and pain perception.

## Methods:

- Thought monitoring
- Instruction in challenging and modifying maladaptive thoughts
- Developing *Coping Statements*

# Thought monitoring



# Challenging maladaptive thinking

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**What is the stressful situation?**

*Spending more time standing at work*

**Automatic Thought(s)**

What does this make me think?

*My spine is completely destroyed*

How much do I believe this thought? (Circle)

A little

Medium

A lot

**Completely**

**What is the evidence?**

What is the evidence to support these thoughts, assumptions, or conclusions?

**What are alternative views?**

How might someone else view this situation?  
If this were happening to someone else, how would I view it?

**Is the thinking distorted?**

Are you only attending to the dark side of things?  
Are you assuming that you can do absolutely nothing to change things?

**What action can you take?**

Where does thinking like this get you?  
What can you do to change the situation or how you feel?

**What is the stressful situation?**

*Spending more time standing at work*

**What happened to my pain?**

- Pain increased
- Pain decreased
- Pain did not change

**Automatic Thought(s)**

What does this make me think?

*My spine is completely destroyed*

How much do I believe this thought? (Circle)

A little    Medium    A lot    **Completely**

**Evidence**

**For** (Facts that support the thought)

*I've had three back surgeries*

*The MRI says I still have problems with my discs*

*I'm on a lot of medicine*

*The medicine's not working*

*I've missed a lot of work this year*

**Against** (Facts that don't support the thought)

*"Completely" is a red-flag word*

*"Destroyed" is pretty red-flag too!*

*If my back were completely destroyed I'd be in a wheelchair . . . and not be working at all*

*I stayed at work all day on Thursday*

*I feel better being at work and distracted than at home useless*

# Developing Coping Statements

**What is the stressful situation?**

*Spending more time standing at work*

**Old Thought(s)**

*My back is completely destroyed*

**How much do I believe  
my old thought NOW?**

*—a lot less!*

**New Thought**

*The MRI doesn't control how much pain I feel*

**How much do you believe your new thought?**

*—more than I ever have before!*

**What happened  
to my pain?**

- Pain increased
- Pain decreased
- Pain did not change

*(hard to tell yet)*

# Coping skill acquisition: GRADED EXPOSURE AND BEHAVIOURAL EXPERIMENTS

## Rationale:

Associative conditioning results in the avoidance of activity associated with pain.

Graded exposure involves gradually confronting and reducing pain-related fear and behavioural avoidance.

## Methods:

- Education on the fear-avoidance model
- Identification of activities avoided due to pain-related fear
- Graded exposure to feared activities
- Exposure can incorporate behavioural experiments (testing fear-related predictive hypotheses)





# Coping skill acquisition: PROBLEM-SOLVING

## Rationale:

Pain patients frequently feel overwhelmed and helpless. This deflates their sense of control and self-efficacy, and entrenches disability.

## Methods:

- Instruction in practical problem-solving:

|                            |  |
|----------------------------|--|
| Problem identification     | <i>“What is the concern?”</i>          |
| Goal selection             | <i>“What do I want?”</i>               |
| Generation of alternatives | <i>“What can I do?”</i>                |
| Decision making            | <i>“What is my decision?”</i>          |
| Implementation             | <i>“Do it!”</i>                        |
| Evaluation                 | <i>“Did it work? If not, recycle.”</i> |

# Coping skill acquisition: **ACTIVITY REGULATION (PACING)**

## Rationale:

Many pain sufferers fall into a “boom-bust” activity cycle.”

This approach tends to increase pain system sensitivity and is associated with negative emotional and physical functioning.

## Methods:

Activity pacing: balancing time spent on activity and rest for the purpose of achieving increased function.

## 5. Consolidation and Generalisation

- Methods for integrating new skills and behaviour change into daily life and maintaining these over the longer term.
- Setback and flare up preparation should also be addressed.

# CBT service delivery

- Individual and group treatment.
- Well suited to interdisciplinary teams
- Psychologists and non-psychologists.
- Primary, secondary and tertiary settings.
- Telehealth.
- Self-help.

# Case Study

# Chronic Back Pain Case

- How and why does it develop
  - Prevention
- Early recognition
  - Early treatment better outcomes
- Long term management
  - Avoid making things worse

# Case Presentation

- 47 yo woman - Bakery Manager
- First fall – Oct 12
  - Sore back, no leg pain
  - self managed but not resolved
- Second fall – Jan 13
  - severe back & leg pain
  - GP review, given analgesia
- Referred for physio
  - ‘won’t touch her’
- Can’t work – on ACC / Xray





# Orthopaedic Opinion

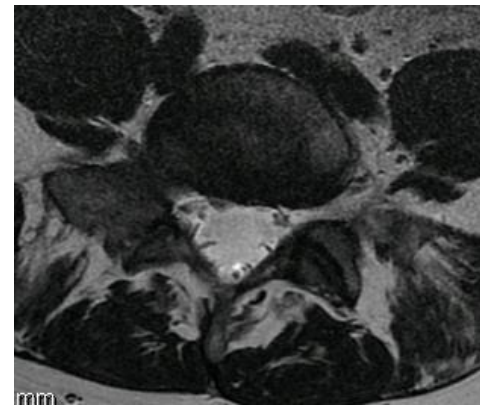
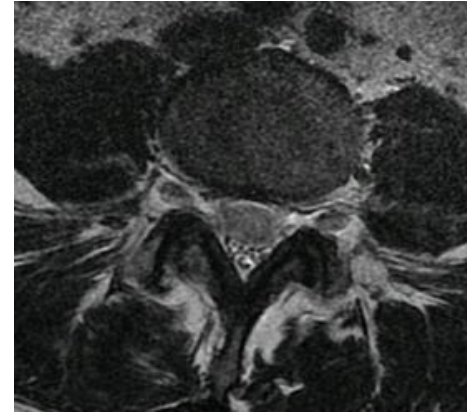
- Feb 13
  - Leg and back pain – some numbness
  - No tension signs, normal neurology
  - Probable disc injury = sciatica
  - Not surgical so recommends physio
  - Nothing further to offer her
- Leaves uncertain => Physio
  - ‘won’ t touch her’
- Loses her job – spends more time in bed
- Referral made on 10 March for 3 June

# ACC orders an IMA

- Out of town specialist
- Sleep disturbance, lost her job
- Waddell signs - Pain behaviour, SLR 10 deg bilat
- Diagnosis
  - “not entirely clear at the present time”
  - “not clear if PIBA”
  - “some degenerative changes”... “difficult to be certain”
  - “specific treatment depends on MRI”
- Recommends Nortripyline => Gabapentin and MRI
- Not Fit to work but ‘favourable prognosis’
- MRI organised – 25 May

# Second opinion – 3 June

- History hasn't changed
- Reassure – P1 Slow +5
- Review MRI
  - mild degenerative changes
  - age related
- Start the Amitrip
- Refer her to the TBI
- Assessed for FRP



# What would you have done?

- Off work, lost job, sleep disturbed, anxious, depressed, in bed and inactive  
... waiting to get better
- Was the initial assessment accurate?
- Was any work site liaison undertaken?
- Were the initial medications appropriate?

Start again.....

# TBI Assessment

- Pattern 1 flexion back pain with central sensitisation
- CBIQ 36, Oswestry 56%
- Psyche review requested
- Begins Program and responds well
- Sleep improves
- Starts Job seeking
- Completes program

# Comprehensive Program

- Information
- De-medicalisation of CLBP
- Systematic modification in activity
- Cognitive Behavioural or Acceptance therapy
- Relaxation training /self hypnosis
- Attention/diversion techniques

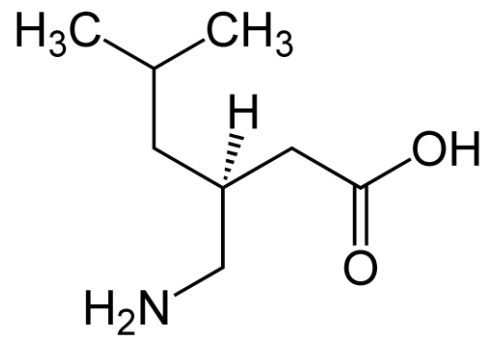
# Final Review

- Excellent response to rehab
- Cleared for RTW
- Complete 3 months of Nortriptyline
- Review with GP
- Discharge to continue job hunting
- Flare-up plan





# Pregabalin take home points



# Pregabalin take home points

- Lyrica
- Use – neuropathic pain, fibromyalgia, epilepsy
- Advantage
  - BD dosing (less pill burden, longer acting)
  - Predictable pharmacokinetics
- Pregabalin is renally cleared
- Pregabalin's side effects very similar to gabapentin.
  - Driving and mood advice as per gabapentin.
- Like gabapentin **not** recommended in pregnancy

- Rough conversion is 1/6<sup>th</sup> gabapentin dose 50mg pregabalin = 300mg gabapentin (err on the lower dose especially if patients on high dose gabapentin)
- Just stop gabapentin and start pregabalin
- Start dose of pregabalin 25mg nocte/BD for elderly
- Recommended starting dose for neuropathic pain 75mg BD
- Dose increase every 3-7 days
- Max dose pregabalin 300mg BD

# Faculty of Pain Medicine

Choosing wisely



1. Avoid prescribing opioids (particularly long acting opioids) as first line or monotherapy for non cancer pain.
2. Do not continue opioid prescription for chronic non cancer pain without ongoing demonstration of functional benefit, periodic attempts at dose reduction and screening for long term harms.

3. Avoid prescribing pregabalin and gabapentin for pain which does not fulfil the criteria for neuropathic pain.
4. Do not prescribe benzodiazepines for low back pain.
5. Do not refer axial lower lumbar back pain for spinal fusion surgery

Thank you



0800 TBIHealth (824 432)  
[www.tbihealth.co.nz](http://www.tbihealth.co.nz)