Managing moderate to severe chronic pain not responding to conservative therapy

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Chronic Non-Cancer Pain

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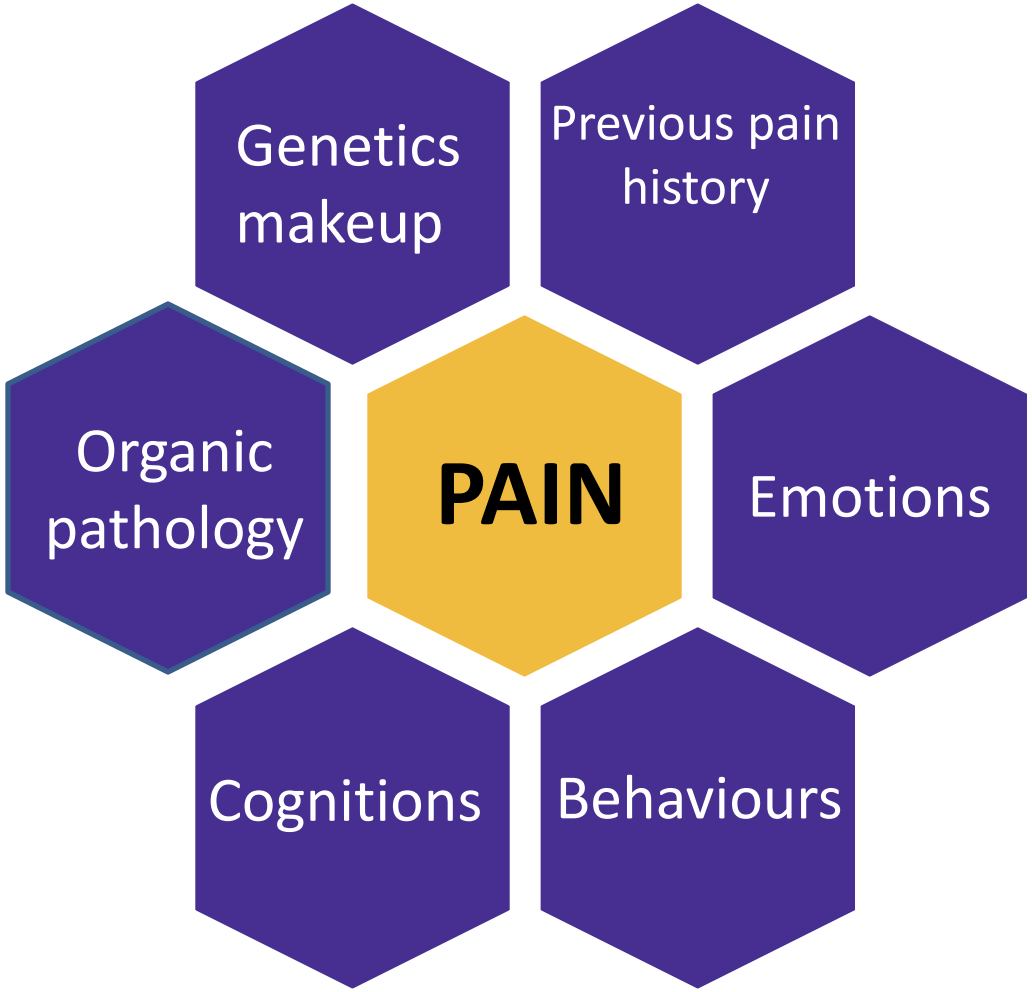
Pain does not occur in a vacuum[1]



1. Turk DC *et al.* Lancet 2011;377(9784):2226-2235.

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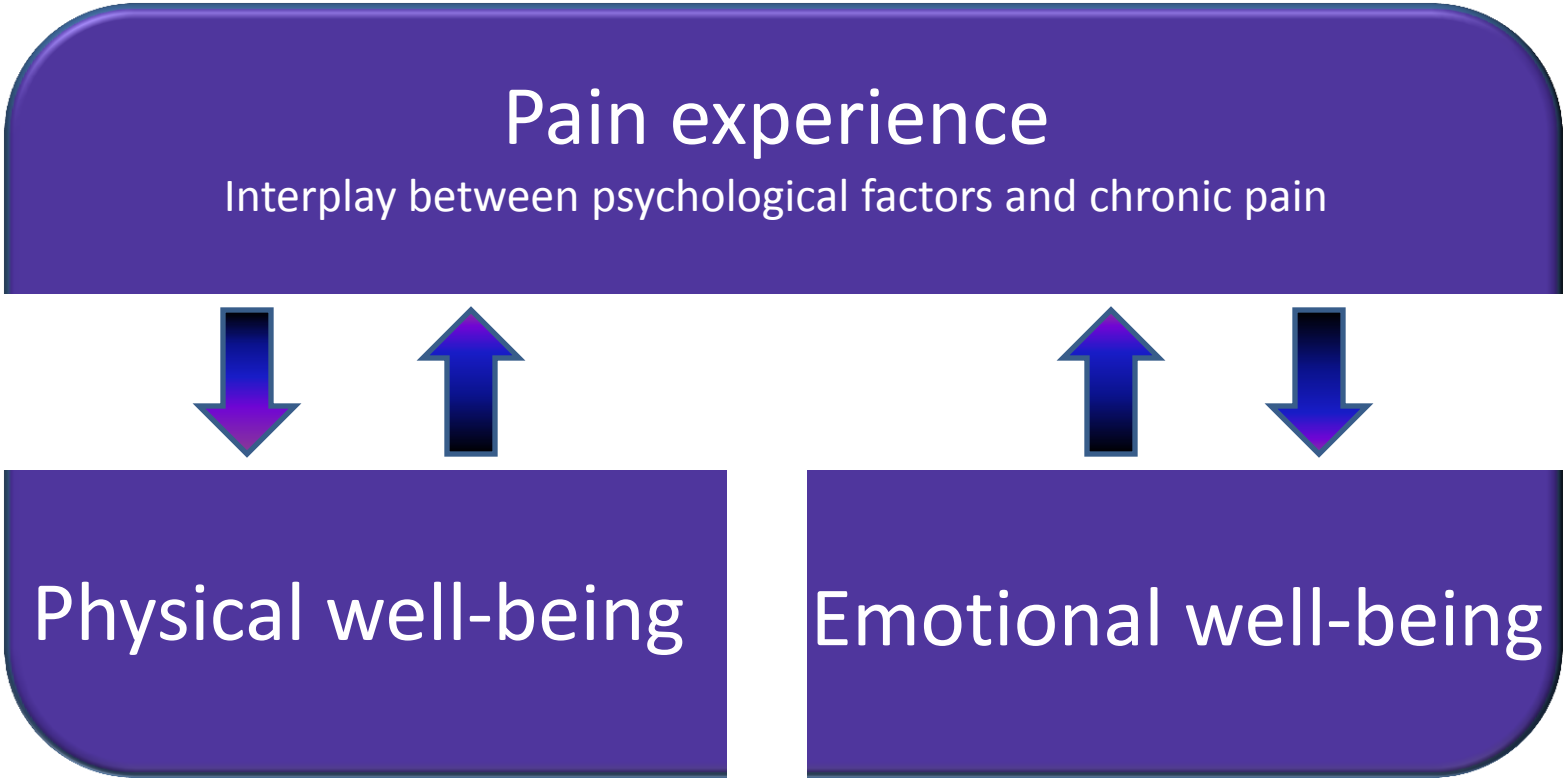
Mind-body connection[1]



1. Kerns RD *et al.* Annu Rev Clin Psychol 2011;7:411-434.

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PAIN - IASP Definition (1979)

'an unpleasant sensory and emotional experience, associated with actual or potential damage or described in terms of such damage'

- **Pain is a complex process**
  - Pain involves thoughts and feelings
  - Whatever the experiencing person says it is
  - Exists whenever the experiencing person says it does

- **All pain is real**
  - Regardless of whether the biological cause is known

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Unimodal biomedical approach[1]

- Pain assessment and management remains focused on biological origin of pain
- Is typically of limited benefit
- Benefits last for only a limited time
- Risks distracting the patient from adopting active pain management strategies

1. Hayes C, Hodson FJ. Pain Med 2011;12(12):1738-1749.

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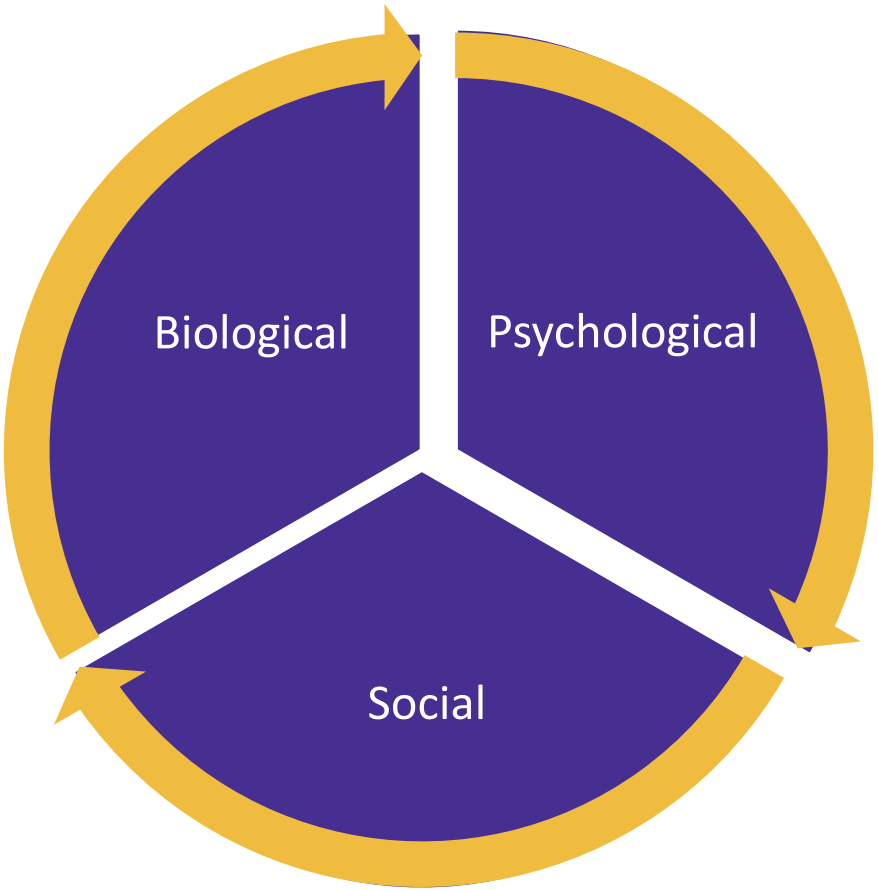
Biopsychosocial approach[1]

What is happening
to the body?
cause of pain



What is happening
to the person?
Impact on ADL's
Sleep
Mood
Self-esteem

What is happening in the person's world?
Impact on family, friends and work

1. Cohen ML, Wodak AD. Medicine Today 2012;13(1):24-32.

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Discussion point:

What factors can influence the development of long-term disability following the onset of musculoskeletal pain (e.g. low back pain)?

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Psychosocial risk factors[1]

Attitudes and beliefs about pain	Pain is harmful ➔ fear-avoidance behaviours
	Pain must be completely abolished before returning to work
Behaviours	Use of extended rest
	Reduced activity or withdrawal from activities of daily life
Emotions	Fear of increased pain or disability with activity or work
	Depression, loss of sense of enjoyment, irritable
Family	Over-protective family/partner
	Socially punitive responses from partner
Work	Belief that work is harmful or will do damage
	Unsupportive or unhappy current work environment
Compensation	Lack of financial incentive to return to work
	Dispute/anger with compensation system
Diagnosis and treatment	Diagnostic language ➔ catastrophising and fear
	Expectation of a 'medical-fix'

1. Hunter Integrated Pain Service. Cognitive behavioural interventions for persistent pain in general practice, July 2005.

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Discussion point:

What do you evaluate when assessing a patient with moderate to severe chronic pain?

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Multidimensional pain assessment[1,2]

1. Assess all contributing pain diagnoses
   - Nociceptive / neuropathic or mixed pain
   - Rule out Red flag conditions
2. Comorbidities that may contribute to pain or influence its management – diabetes, dementia, renal impairment
3. Psychological contributors (e.g. depression, anxiety, personality disorder, yellow flags – catastrophising)
4. Socioeconomic assessment – impact on employment
5. Addiction/problematic use assessment
   - If opioids are being considered
6. Impact of pain on functional status

1. Squire P. J Pain 2007; 8(12):903-905.
2. Cohen ML, Wodak AD. Medicine Today 2012;13(1):24-32.

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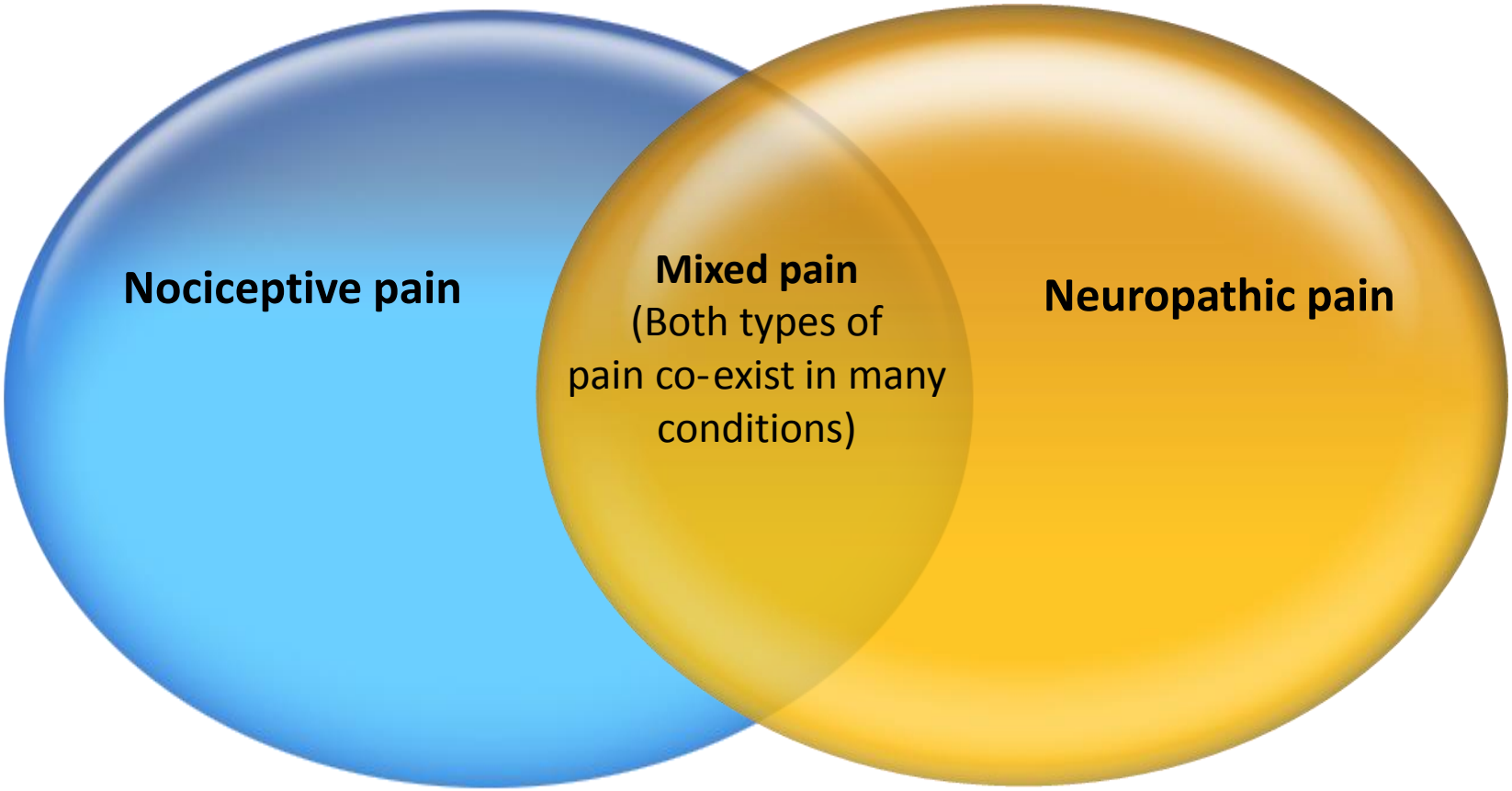
Types of Pain



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Nociceptive pain

- A sensory and emotional experience that occurs when specific peripheral sensory neurons (nociceptors) respond to noxious stimuli
- Painful region is typically localised at the site of injury
  - Throbbing, aching or stiffness
  - Aggravated by movement
- Usually time-limited and resolves when damaged tissue heals (e.g. bone fractures, burns and bruises)
- Can be chronic (e.g. osteoarthritis)
- Responds to conventional analgesics

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Neuropathic pain

- Pain initiated or caused by a primary lesion or dysfunction in the peripheral or central nervous system
- Pain often described as shooting, electric shock-like, burning – commonly associated with tingling or numbness
- Pain occurs in the neurological territory of the affected structure (nerve, root, spinal cord, brain) – typically distant from the site of injury
- Commonly a chronic condition (e.g. Post-herpetic neuralgia, post-stroke pain), but can occur with acute nerve injury (e.g. spinal cord injury, sciatica or surgery)
- Responds poorly to conventional analgesics

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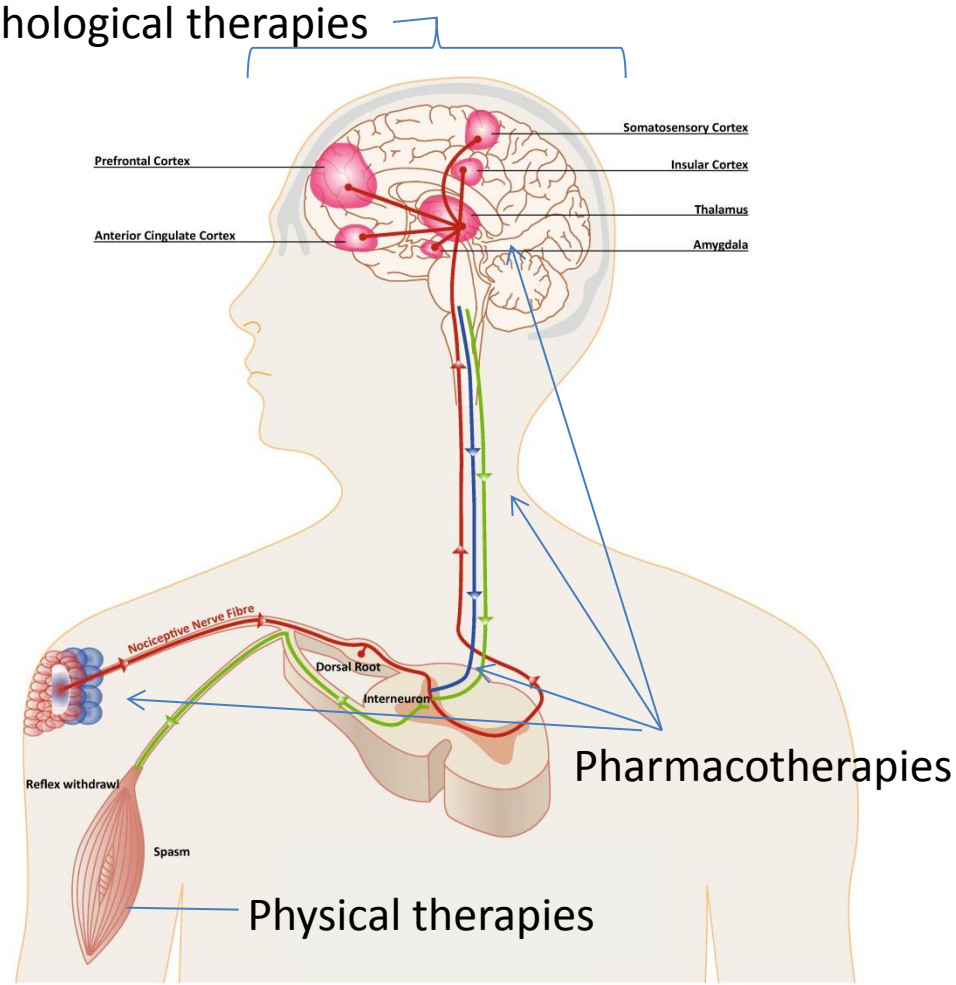
Multimodal pain management[1,2]

- The focus of pain management is on improvement condition, function and activity

- Combining:
  - Physical therapies
  - Cognitive therapies
  - Pharmacotherapies



1. Cohen ML, Wodak AD. Medicine Today 2010;11:10-18.
2. Analgesic Expert Group. Therapeutic Guidelines: Analgesic. Version 5. 2007.

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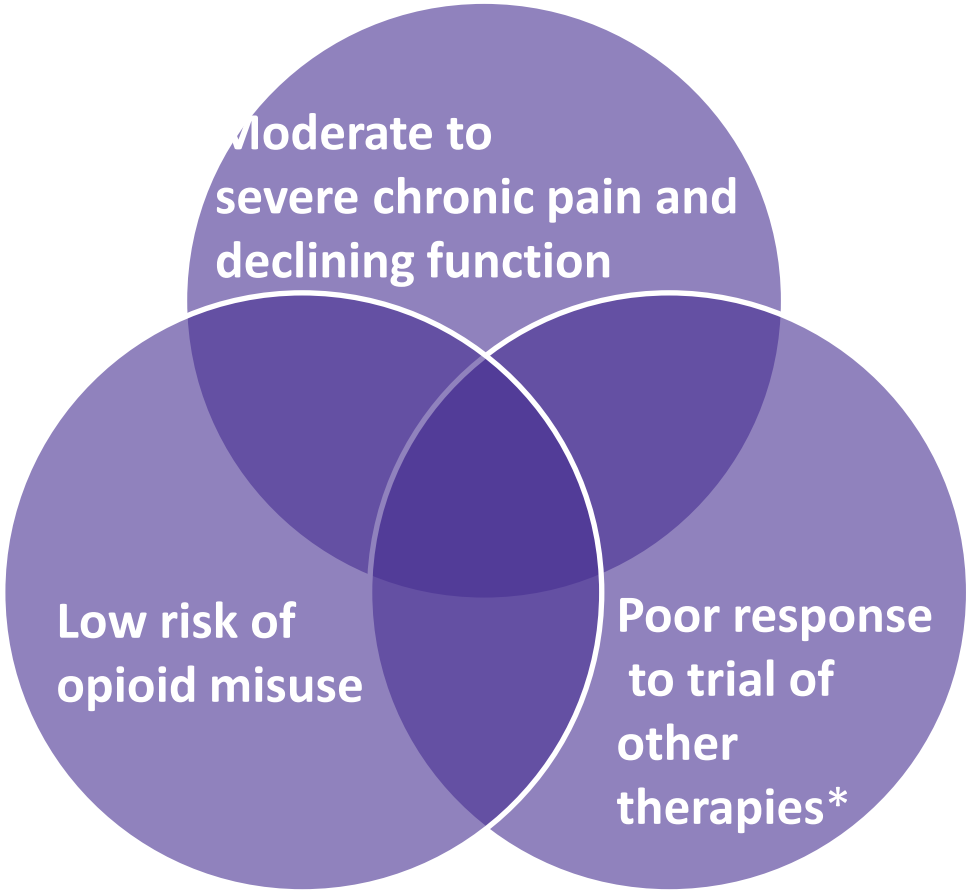
Opioids are reserved for use in appropriately selected patients[1-4]



* Pharmacotherapies and non-pharmacotherapies

1. Cohen ML, Wodak AD. Medicine Today 2010;11:10-18.
2. ANZCA Faculty of Pain Medicine. Principles regarding the use of opioid analgesics in patients with chronic non-cancer pain. 2010.
3. Chou R *et al.* J Pain 2009;10(2):113-130. 4. The Royal Australasian College of Physicians. Prescription Opioid Policy, 2009.

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Case study – JR

52-year-old
Engineer in a manufacturing industry

You have been the family's GP for the past 7 years

Requesting pain relief and doctor's certificate for moderate to severe low back pain

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Initial episode of back pain 10 days ago

- Occurred at the start of annual leave, when working on his car
- Lifting, twisting event
- Initial self-management included:
  - Bed rest
  - OTC ibuprofen/codeine
  - Heat packs

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Physical examination

- Movement is slow with obvious discomfort
- Tenderness L3-5

- 50% reduction in spinal range of motion
  - Forward, lateral flexion and extension by 50%
- Straight leg raise reduced to 60° bilaterally

- Neurological examination normal
  - No numbness or motor weakness

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Red flag assessment[1,2]

Infection

- No fever or other signs of infection

Fracture

- No history of trauma
- No osteoporosis or corticosteroid use

Tumour

- No history of cancer
- No unexplained weight loss
- Pain is relieved with rest

1. Australian Acute Musculoskeletal Pain Guidelines Group. Evidence-based management of acute musculoskeletal pain. A guide for clinicians. 2004.
2. Jensen S. Aust Fam Physician 2004; 33(6):393-401.

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Pain history

Provoking factors	Pain is worse with general activity, walking or standing Pain is eased when sitting or lying down
Quality	Dull, aching pain
Region	Pain in lumbar region No referred pain
Severity	At rest: 3/10 Average: 5/10 With activity: up to 7/10
Timing	Pain becomes more severe as the day progresses

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Psychosocial assessment

Attitudes and beliefs about pain	*"How long do you think I will need to rest for before I can return to work?"*
	"I need to take it easy, to avoid doing further damage"
Behaviours	10 days of rest
Emotions	Fears he will struggle to cope at work in his current condition
Family	Partner is very supportive, "*so I can rest*"
Work	Unknown, has been on vacation
Compensation	NA
Diagnosis and treatment	NA

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Other information

- Medical comorbidities
  - None

- Impact on function
  - Difficulty walking and standing
    - Walking tolerance 15 minutes
    - Standing tolerance 20 minutes
  - Requested doctor’s certificate
    - Can’t go back to work with a bad back

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Discussion points:

Based on the information already gathered:

A. Are you going to conduct any imaging of Jim's back? If yes, what test?

B. Are you going to give Jim a certificate for sick leave? If yes, for how long?

C. How are you going to manage Jim's condition?

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Imaging

- X-rays and scans are generally not warranted in the 1st 4-6 weeks[1]
  - Only indicated if red flag is suspected[1]
  - Poor correlation between structural changes and pain[2]
    - Age results in degenerative changes

- No imaging undertaken at this point in time

1. ACC & NZ Guidelines Group. NZ Acute Low Back Pain Guide. 2004.
2. Jarvik JG *et al.* Spine 2005;30(13):1541-8.

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Pain management plan

- Education[1]
  - Reassure the pain may resolve
  - Hurt ≠ harm[2]
- Encourage activity[1]
  - Stay active, avoid bed rest
  - Encourage prompt return to work (light duties)
- Analgesia
  - Naproxen SR 1000mg OD
  - AA – Mobic 15mg OD

1. ACC & NZ Guidelines Group. NZ Acute Low Back Pain Guide. 2004.
2. Analgesic Expert Group. Therapeutic Guidelines: Analgesic. Version 5. 2007.

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Review appointment: 4 weeks later

- Naproxen had some effect
  - Average pain reduced from 5 to 4/10
  - Pain with activity reduced from 7 to 6/10
  - Troublesome heartburn, pantoprazole 20mg OD
- Activity
  - Returned to work
  - Normal-paced walking 15 minutes per day
  - He misses working on his car

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Jim's request

- *"Doctor I feel like I have got the back of a 70-year-old. I really need you to fix it for me.*

- *My current work environment is not so good. If I don't lift my performance, I'll be high on the list of people facing a redundancy."*

- *"Can you order an MRI or a scan so you can find a cure for my back pain?"*

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Discussion point:

What is your response to Jim's request for scans and seeking a cure for his back pain?

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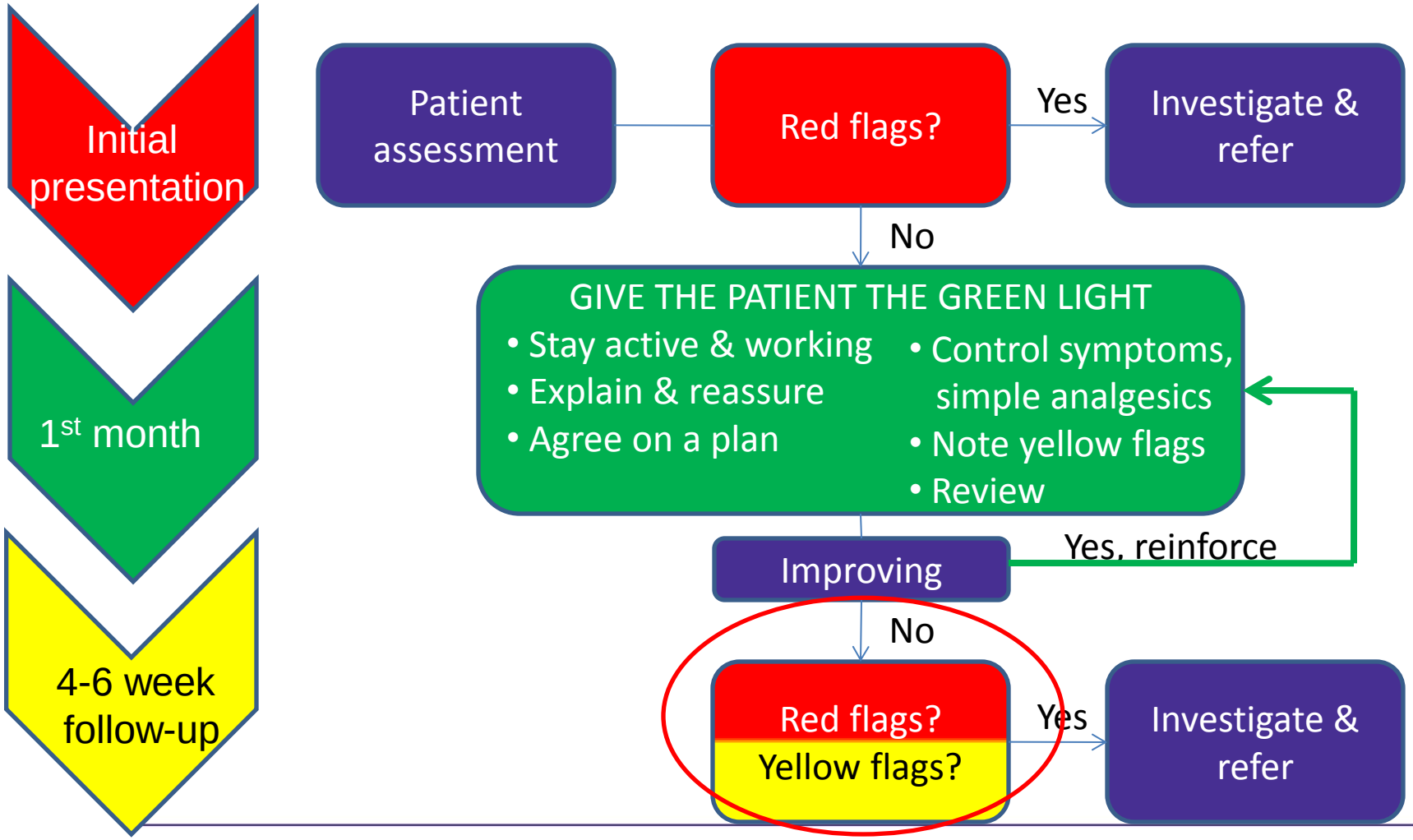
Managing acute low back pain[1]



1. Adapted from ACC and NZ Guidelines Group. New Zealand Acute Low Back Pain Guide. October 2004.

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Diagnostic studies[1]

Test	When
Plain X-ray (AP and lat)	Initially, if risk factors for fractures If the patient fails to improve (within 4-6 weeks)
MRI	Tumour Infection Disc pathology Spinal stenosis
CT	To evaluate bony details (fractures, scoliosis) MRI contraindicated
Bone scans	Infections or fractures not noted on X-rays
Electrodiagnostic studies	Radiculopathy, suspect multilevel root lesions Symptoms don't match imaging studies Fluctuating levels of strength in 1+ muscle groups

1. Bhangle SD *et al.* Cleveland Clin J Med 2009;76(7):393-399.

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Reassess Jim

- Physical examination
  - Confirmed previous findings
- Pain
  - Average 5 ➔ 4/10
  - With activity 7 ➔ 6/10
- Red flags
  - No clinical indicators
- X-ray
  - L3-5 spondylosis
  - L4 grade I spondylolisthesis

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Discussion point:

What is the clinical significance of the X-ray results?

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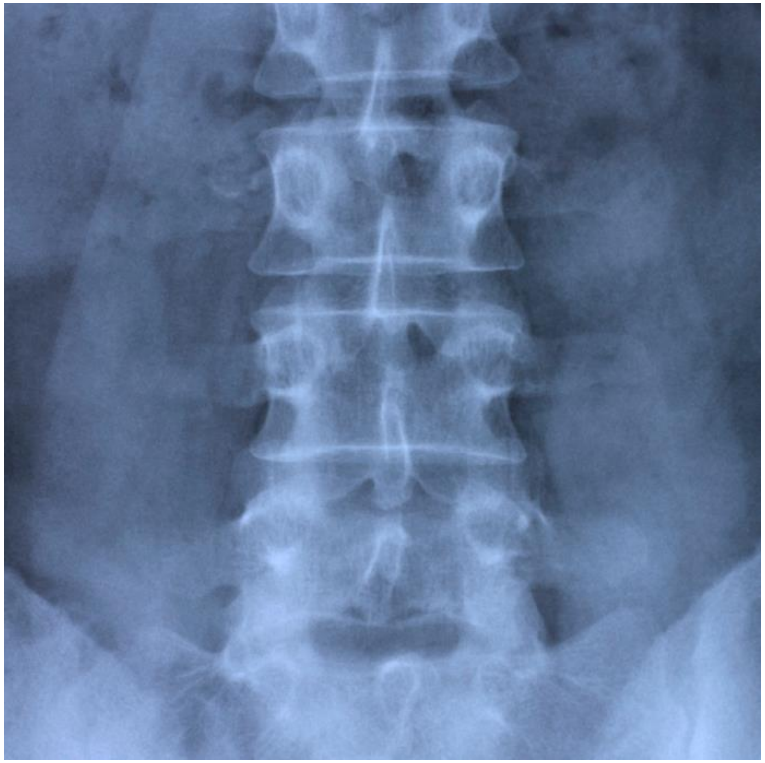
Use of imaging

- Imaging has a role, but psychosocial factors are generally strong predictors of poor long-term outcomes[1]

- Imaging should be used to aid patient understanding



1. Nicholas MK. Pain 2010;148(3):363-364.

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Discussion point:

Is Jim exhibiting significant yellow flags (psychosocial risks of developing long-term disability)?

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Jim's yellow flags - unhelpful behaviours and thoughts

- Has returned to work
- Is doing some exercise

- Expectations of a poor outcome, e.g. *"... back of a 70-year-old"*
- Fear avoidance, *e.g. "I **need to take it easy** to avoid doing further damage"*
- Passive approach, e.g. *"I really **need you** to fix it"*
- Concerned about **redundancy**

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When to act on yellow flags?

- Modified short form of the Örebro Musculoskeletal Pain Screening Questionnaire[1,2]
  - screen for developing long term disability
- 10 questions (patient can self complete) – 5 mins
- Score ≥ 50 identifies people at risk of developing pain-related disability[1]

Date: ____ /____ /____

First Name: _____ Surname: _____

Telephone – Home: _____ Telephone – Mobile: _____

Date of Birth: ____ /____ /____ ☐ Male ☐ Female

	Score
1. How long have you had your current pain problem? *Tick (✓) one.* ☐ 0 - 1 week (1) ☐ 1 - 2 weeks (2) ☐ 3 - 4 weeks (3) ☐ 4 - 5 weeks (4) ☐ 6 - 8 weeks (5) ☐ 9 - 11 weeks (6) ☐ 3 - 6 months (7) ☐ 6 - 9 months (8) ☐ 9 -12 months (9) ☐ over 1 year (10)	
2. How would you rate the pain that you have had during the past week? (*Circle one*). 0 1 2 3 4 5 6 7 8 9 10 No pain — Pain as bad as it could be	
Please circle the one number that best describes your current ability to participate in each of these activities. 3. I can do light work for an hour. 0 1 2 3 4 5 6 7 8 9 10 Can't do it because of pain problem — Can do it without pain being a problem	10 – x
4. I can sleep at night. 0 1 2 3 4 5 6 7 8 9 10 Can't do it because of pain problem — Can do it without pain being a problem	10 – x
5. How tense or anxious have you felt in the past week? (*Circle one*). 0 1 2 3 4 5 6 7 8 9 10 Absolutely calm and relaxed — As tense and anxious as I've ever felt	
6. How much have you been bothered by feeling depressed in the past week? (*Circle one*). 0 1 2 3 4 5 6 7 8 9 10 Not at all — Extremely	
7. In your view, how large is the risk that your pain may become persistent? (*Circle one*). 0 1 2 3 4 5 6 7 8 9 10 No risk — Very large risk	
8. In your estimation, what are the chances that you will be working your normal duties in 3 months? 0 1 2 3 4 5 6 7 8 9 10 No chance — Very large chance	10 – x
Here are some of the things which other people have told us about their pain. For each statement please circle one number from 0-10 to say how much physical activities such as bending, lifting, walking or driving affect your pain. 9. An increase in pain is an indication that I should stop what I'm doing until the pain decreases. 0 1 2 3 4 5 6 7 8 9 10 Completely disagree — Completely agree	
10. I should not do my normal work with my present pain. 0 1 2 3 4 5 6 7 8 9 10 Completely disagree — Completely agree	
Total (sum)	

1. Linton SJ *et al*. Spine 2011;36(22):1891-1895.
2. Örebro Musculoskeletal Pain Screening Questionnaire (modified), Örebro University [accessed 25 July 2012]. Available from: http://www.oru.se/PageFiles/12103/%c3%96rebro_Musculoskeletal_Pain_Questionnaire_Short_version1.pdf

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Jim's Örebro short form (modified)[1,2]

	Score
1. How long have you had your current pain problem? *Tick (✓) one.* ☐ 0 - 1 week (1) ☐ 1 - 2 weeks (2) ☐ 3 - 4 weeks (3) ☒ 4 - 5 weeks (4) ☐ 6 - 8 weeks (5) ☐ 9 - 11 weeks (6) ☐ 3 - 6 months (7) ☐ 6 - 9 months (8) ☐ 9 -12 months (9) ☐ over 1 year (10)	4
2. How would you rate the pain that you have had during the past week? (*Circle one*). 0 1 2 3 (4) 5 6 7 8 9 10 No pain — Pain as bad as it could be	4
Please circle the one number that best describes your current ability to participate in each of these activities.	
3. I can do light work for an hour. 0 1 2 3 4 5 6 (7) 8 9 10 Can't do it because of pain problem — Can do it without pain being a problem	10 – x 7
4. I can sleep at night. 0 1 2 3 4 5 6 7 (8) 9 10 Can't do it because of pain problem — Can do it without pain being a problem	10 – x 2
5. How tense or anxious have you felt in the past week? (*Circle one*). 0 1 2 3 4 5 6 7 (8) 9 10 Absolutely calm and relaxed — As tense and anxious as I've ever felt	8
6. How much have you been bothered by feeling depressed in the past week? (*Circle one*). 0 1 2 3 4 5 (6) 7 8 9 10 Not at all — Extremely	6
7. In your view, how large is the risk that your pain may become persistent? (*Circle one*). 0 1 2 3 4 5 6 7 (8) 9 10 No risk — Very large risk	8
8. In your estimation, what are the chances that you will be working your normal duties in 3 months? 0 1 2 (3) 4 5 6 7 8 9 10 No chance — Very large chance	10 – x 7
Here are some of the things which other people have told us about their pain. For each statement please circle one number from 0-10 to say how much physical activities such as bending, lifting, walking or driving affect your pain. 9. An increase in pain is an indication that I should stop what I'm doing until the pain decreases. 0 1 2 3 4 5 6 (7) 8 9 10 Completely disagree — Completely agree	7
10. I should not do my normal work with my present pain. 0 1 2 3 4 5 (6) 7 8 9 10 Completely disagree — Completely agree	6
Total (sum)	59

- Score 59
- Increased risk of delayed recovery[1,2]
  - fear avoidance
  - low level of self-perceived function
  - high levels of anxiety

1. Linton SJ *et al*. Spine 2011;36(22):1891-1895.
2. Örebro Musculoskeletal Pain Screening Questionnaire (modified), Örebro University [accessed 25 July 2012]. Available from: http://www.oru.se/PageFiles/12103/%c3%96rebro_Musculoskeletal_Pain_Questionnaire_Short_version1.pdf

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Discussion point:

Based on this new information, how are you going to modify Jim's pain management plan?

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Multimodal management plan

Biological

- Replace naproxen with paracetamol/codeine (two 500/30mg tablets QID)
- AA – prefer Tramadol SR

Psychological

- Educate on the importance of remaining active
- Ongoing pain does not mean further damage
- Patient resists referral to psychologist

Social

- Referral to physiotherapist, exercise program
- Varying exercises, e.g. swimming, walking
- Do enjoyable activities

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Discussion point:

Jim does not want to see a psychologist. He does not understand what a psychologist can do for his bad back.

He questions whether you understand what he is going through.

How would you address this situation?

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Addressing Jim's concerns

- Acknowledge his concerns regarding a psychologist
- Referral to a psychologist does not mean that his pain is not real or is not being taken seriously[1]
  - Aims are to improve the ability to cope with pain and maintain function despite pain[1,2]
  - Clinical evidence suggest that psychological treatment may help to reduce pain and improve function[2]

1. Analgesic Expert Group. Therapeutic Guidelines: Analgesic. Version 5. 2007.
2. Turk DC *et al.* Lancet 2011;377(9784):2226-2235.

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Review appointment: 2 weeks later

Biological

- Average pain 4/10, pain with activity 6/10 (no change)
- Also using pain relieving heat packs

Psychological

- Frustrated that his back is not improving
- Concerned about work (3 sick days)

Social

- Difficulty with physiotherapy due to pain
- Walking tolerance 20 minutes
- Enjoying swimming 2/week
- Has helped with a friend's car restoration

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Discussion point:

Jim experienced marginal benefit from paracetamol / codeine therapy. Pain relief is equivalent to naproxen.

The pain is limiting his ability to undertake physiotherapy. Despite this he is trying to remain active. He is working. He is swimming twice per week and he is helping with a mate's car.

How would you adjust Jim's pain management plan?

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Practical information when prescribing opioids[1-7]

Comprehensive pain assessment

- Assess the risk of problematic opioid use

↓

Adequate trial of other therapies

- Pharmacotherapies
- Non-pharmacotherapies

↓

Agreement regarding opioid trial

- Treatment goals
- Consent (written or verbal)
- Opioid contract

↓

Conduct an opioid trial[1-6]

- Analgesia
- Activity
- Adverse effects
- Affect
- Aberrant behaviours
- Accurate records

↓

Subsequent time-limited trial use is based on achieving trial goals[2]

1. Australian and New Zealand College of Anaesthetists Faculty of Pain Medicine. Principles regarding the use of opioid analgesics in patients with chronic non-cancer pain, August 2010. 2. Hunter Integrated Pain Service. Opioid use in persistent pain. April 2012. 3. Gourlay DL *et al.* Pain Med 2005;6(2):107-12. 4. Jovey R. Personal communication 2010. 5. Gourlay DL, Heit HA. Pain Med 2009;10(S2):S115-S123. 6. DeRemer CE *et al.* South Med J 2011;104(9):629-633. 7.Cohen ML, Wodak AD. Medicine Today 2012;13(1):24-32.

Patient suitability for an opioid trial

- Opioid Risk Tool[1]
  - Assesses the risk of aberrant behaviours emerging

Factor	Males	Females
Family history of substance abuse		
- Alcohol	❑ 3 points	❑ 1 point
- Illicit drugs	❑ 3 points	❑ 2 points
- Prescription drugs	❑ 4 points	❑ 4 points
Personal history of substance abuse		
- Alcohol	❑ 3 points	❑ 3 points
- Illicit drugs	❑ 4 points	❑ 4 points
- Prescription drugs	❑ 5 points	❑ 5 points
Aged between 16 and 45	❑ 1 point	❑ 1 point
History of preadolescent sexual abuse	❑ 0 points	❑ 3 points
Psychiatric disease		
- Attention deficit disorder, obsessive-compulsive disorder, bipolar disorder, schizophrenia	❑ 2 points	❑ 2 points
Depression	❑ 1 point	❑ 1 point

- DIRE score[2]
  - Assesses whether the patient is likely to be compliant with opioid therapy
  - Assesses the probability that opioid therapy will be effective in this patient
  - >14 suitable candidate

1. Webster LR, Webster RM. Pain Med 2005;6(6):432-442.
2. Belgrade MJ *et al.* J Pain 2006;7(9):671-681.

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Turn to page 17 in your workbook

Based on the information from this case, please complete a DIRE score for Jim.

Please note any information gaps.

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Jim's DIRE score

Score	Factor	Explanation
2	**Diagnosis**	1 = Benign chronic condition with minimal objective findings or no definite medical diagnosis. Examples: fibromyalgia, migraine headaches, nonspecific back pain. 2 = Slowly progressive condition concordant with moderate pain, or fixed condition with moderate objective findings. Examples: failed back surgery syndrome, back pain with moderate degenerative changes, neuropathic pain. 3 = Advanced condition concordant with severe pain with objective findings. Examples: severe ischemic vascular disease, advanced neuropathy, severe spinal stenosis.
2	**Intractability**	1 = Few therapies have been tried and the patient takes a passive role in his/her pain management process. 2 = Most customary treatments have been tried but the patient is not fully engaged in the pain management process, or barriers prevent (insurance, transportation, medical illness). 3 = Patient fully engaged in a spectrum of appropriate treatments but with inadequate response.
	Risk	(R = Total of P + C + R + S below)
3	Psychological:	1 = Serious personality dysfunction or mental illness interfering with care. Example: personality disorder, severe affective disorder, significant personality issues. 2 = Personality or mental health interferes moderately. Example: depression or anxiety disorder. 3 = Good communication with clinic. No significant personality dysfunction or mental illness.
3	Chemical Health:	1 = Active or very recent use of illicit drugs, excessive alcohol, or prescription drug abuse. 2 = Chemical coper (uses medications to cope with stress) or history of CD in remission. 3 = No CD history. Not drug-focused or chemically reliant.
3	Reliability:	1 = History of numerous problems: medication misuse, missed appointments, rarely follows through. 2 = Occasional difficulties with compliance, but generally reliable. 3 = Highly reliable patient with meds, appointments & treatment.
2.5	Social Support:	1 = Life in chaos. Little family support and few close relationships. Loss of most normal life roles. 2 = Reduction in some relationships and life roles. 3 = Supportive family/close relationships. Involved in work or school and no social isolation.
2	**Efficacy score**	1 = Poor function or minimal pain relief despite moderate to high doses. 2 = Moderate benefit with function improved in a number of ways (or insufficient info – hasn't tried opioid yet or very low doses or too short of a trial). 3 = Good improvement in pain and function and quality of life with stable doses over time.

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1. Belgrade MJ *et al.* J Pain 2006;7(9):671-681.

Consent to 6-week opioid trial

- Initiate buprenorphine patch
  - Commence with 5µg/hr patch and titrate, if required to pain relief and improved function
- Treatment goals are:
  - Reduce pain to tolerable levels
    - Average pain 4 ➔ 3/10, pain with activity 6 ➔ 4/10
  - Improve his ability to undertake physiotherapy
  - Improve walking and standing tolerance
  - Maintain his ability to work and reduce absenteeism
  - Allow him to recommence work on his car
- Weekly review

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Patient monitoring – 6 As[1-7]

Activity	Physical activity Ability to function emotionally and mentally
Analgesia	Average pain Use pain scales or Brief Pain Inventory
Adverse effects	Common, e.g. constipation, nausea, dry mouth
Aberrant behaviours	Pill counts Family member corroboration
Affect	Mood Psychological status (e.g. depression, anxiety)
Accurate records	Keep thorough documentation Record rationale for decisions made

1. Australian and New Zealand College of Anaesthetists Faculty of Pain Medicine. Principles regarding the use of opioid analgesics in patients with chronic non-cancer pain, August 2010. 2. Hunter Integrated Pain Service. Opioid use in persistent pain. April 2012. 3. Gourlay DL *et al.* Pain Med 2005;6(2):107-12. 4. Jovey R. Personal communication 2010. 5. Gourlay DL, Heit HA. Pain Med 2009;10(S2):S115-S123. 6. DeRemer CE *et al.* South Med J 2011;104(9):629-633. 7. Cohen ML, Wodak AD. Medicine Today 2010;11:10-18.

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Assessment at end of opioid trial buprenorphine 5µg/hr

Activity	Weekly physiotherapy plus exercising at home Walking tolerance 20 ➔ 25 minutes, standing tolerance 25 ➔ 35 minutes 1 sick day in the past month
Analgesia	Average pain reduced from 4 to 3/10 Pain with activity reduced from 6 to 4/10
Adverse effects	Transient nausea Mild erythema at application site persists, but is tolerable
Aberrant behaviours	None observed
Affect	Outlook has improved Has recommenced light work on his car
Accurate records	Completed

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Discussion points:

Based on the results of the opioid trial, would you extend the use of buprenorphine patch as part of Jim's multimodal pain management plan?

If yes, for how long?

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Extended opioid trial

- Opioid use in the management of moderate to severe chronic non-cancer pain should be:
  - Treated as an ongoing trial[1]
  - Time limited
    - 3 to 6 months in the first instance[2]
    - If prescribing beyond 12 months, a second opinion is required[3]
  - Accompanied by ongoing monthly monitoring[2,3]

1. Cohen ML, Wodak AD. Medicine Today 2010;11:10-18.
2. Hunter Integrated Pain Service, Opioid use in persistent pain, April 2012.
3. McDonough M. Australian Prescriber 2012;35:20-24.

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Jim's extended opioid trial

- Continue buprenorphine patch (5µg/hr) for a finite period
- New opioid treatment agreement with revised treatment goals:
  - Maintain pain at tolerable levels
    - Average pain 3/10, pain with activity 4/10
  - Continue exercises developed by physiotherapist
  - Improve his walking and standing tolerance
  - Maintain his ability to work and reduce absenteeism
  - Able to work on his car
- Monthly reviews
- Consider stopping the opioid after 3-6 months

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Discussion point:

A month later, Jim returns for his regular review appointment. He appears frustrated and is complaining of increased back pain.

He asks you to prescribe a stronger patch.

What do you want to investigate before responding to Jim's request?

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Multidimensional pain assessment

- No new sources of pain, *"the pain is just getting worse"*
  - Average pain 3 ➔ 6/10
- Less active
  - No swimming or walking for 10 days
- Not sleeping well

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Discussion points:

What do you suspect?

What are your next steps?

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Jim was retrenched

- Jim was made redundant a fortnight ago
  - His pain worsened
  - He feels helpless

- Depression inventory indicates:
  - Major depression
  - No suicidal ideation

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Depression and pain

Frequently coexist (30-50% co-occurrence)[1]

- PAIN[2]
  - Interferes with the recognition of depression
  - Pain that is refractory to treatment may be associated with:
    - Depressive symptoms
    - Depression

Additive adverse effect on treatment outcomes[2]

- DEPRESSION[2]
  - Complicates pain management
  - Is associated with:
    - Pain complaints
    - Long duration of pain
    - Risk of developing chronic pain

A management plan that incorporates assessment and treatment of both depression and pain is recommended[2]

1. Kroenke K *et al.* JAMA 2009; 301(20):2099-2110.
2. Bair MJ *et al.* Arch Intern Med 2003;163(20):2433-2445.

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Discussion point:

How are you going to modify Jim's management?

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Treating his depression

- Commence SSRI (sertraline 50mg/day)
  - AA - Amitripytline 10mg nocte or Duloxetine 30mg mane
  - Monitor progress closely
  - Referral to clinical psychologist
- Analgesic therapy remains unchanged
- Encourage return to regular exercise and physiotherapy

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Follow up after one month

- Jim responded well to SSRI and counselling
  - Psychologist provided a self-help book on managing pain

- Progress vs treatment goals
  - Average pain 3/10, pain with activity 4/10
  - Is exercising regularly
  - Walking tolerance (30 minutes), standing tolerance (45 minutes)
  - Undertaking light work on his car
  - Actively seeking employment

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Discussion points:

Jim has now been prescribed buprenorphine patch for six months. He is regularly exercising (walking, swimming and back exercises) and has learnt new coping skills from his sessions with the clinical psychologist.

Would you consider stopping the opioid at this point in time?

How would you raise this with Jim?

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Stopping the opioid

- Reinforce the gains Jim has made
  - Improved physical condition
  - New skills and coping strategies
- Explain wanting to trial stopping his opioid therapy
  - Plan to stop the opioid gradually
  - If he is not able to function, then opioid use will be reviewed
- If required, use the opioid treatment agreement to reinforce short-term use

Protocol[1]

- Stop the 5µg/hr patch after 1 week
- Review in 2 weeks
  - Reinforce use of self-help coping strategies
  - Paracetamol, if required

1. McDonough M. Australian Prescriber 2012;35:20-24.

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Summary

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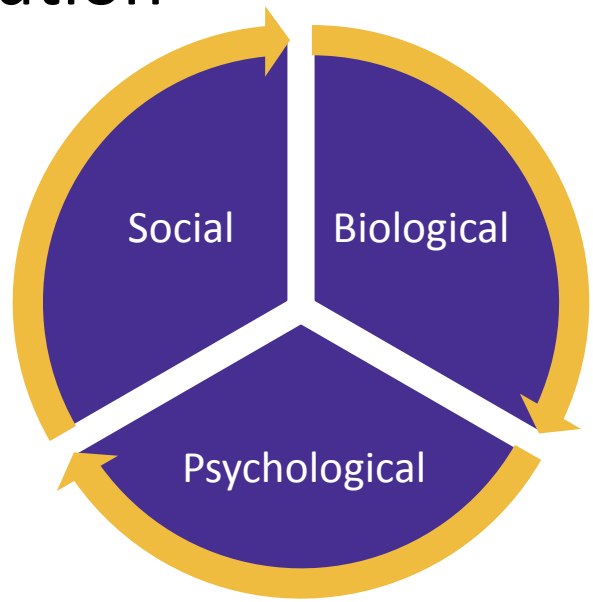
Summary

- Chronic pain is a multidimensional problem that requires a multidimensional solution[1]
  - Multidimensional assessment[2]
  - Multimodal management[3]



- Psychosocial factors can influence patient outcomes[3]

- Opioid use in moderate to severe chronic pain is an ongoing trial[4]

1. Wittink H *et al*. Clin J Pain 2008;24(4):316-324. 2. Squire P. J Pain 2007; 8(12):903-905.
3. Analgesic Expert Group. Therapeutic Guidelines: Analgesic. Version 5. 2007.
4. Cohen ML, Wodak AD. Medicine Today 2012;13(1):24-32.

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Other Considerations

- Neuropathic pain is common, under-reported, under-diagnosed and under-treated
- Consider if pain not responding to conventional analgesia
- A simple, stepwise approach to diagnosis may help differentiate between neuropathic and nociceptive pain:
  - Listen to the patient's pain description
  - Locate a potential nerve lesion/dysfunction, if possible
  - Look for neurological symptoms, such as sensory deficits

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Neuropathic Pain

- Neuropathic pain responds poorly to conventional analgesia
  - First-line treatments include:
    - TCAs (amitriptyline)
    - Alpha 2-delta ligands (gabapentin, pregabalin)
    - SNRIs (duloxetine)
  - Second-line treatments include:
    - Tramadol
    - Opioids
- Constant nociceptive pain should be treated by ***regular long acting medication,*** NOT by short acting drugs given PRN
  - **PRN = pain relief never**

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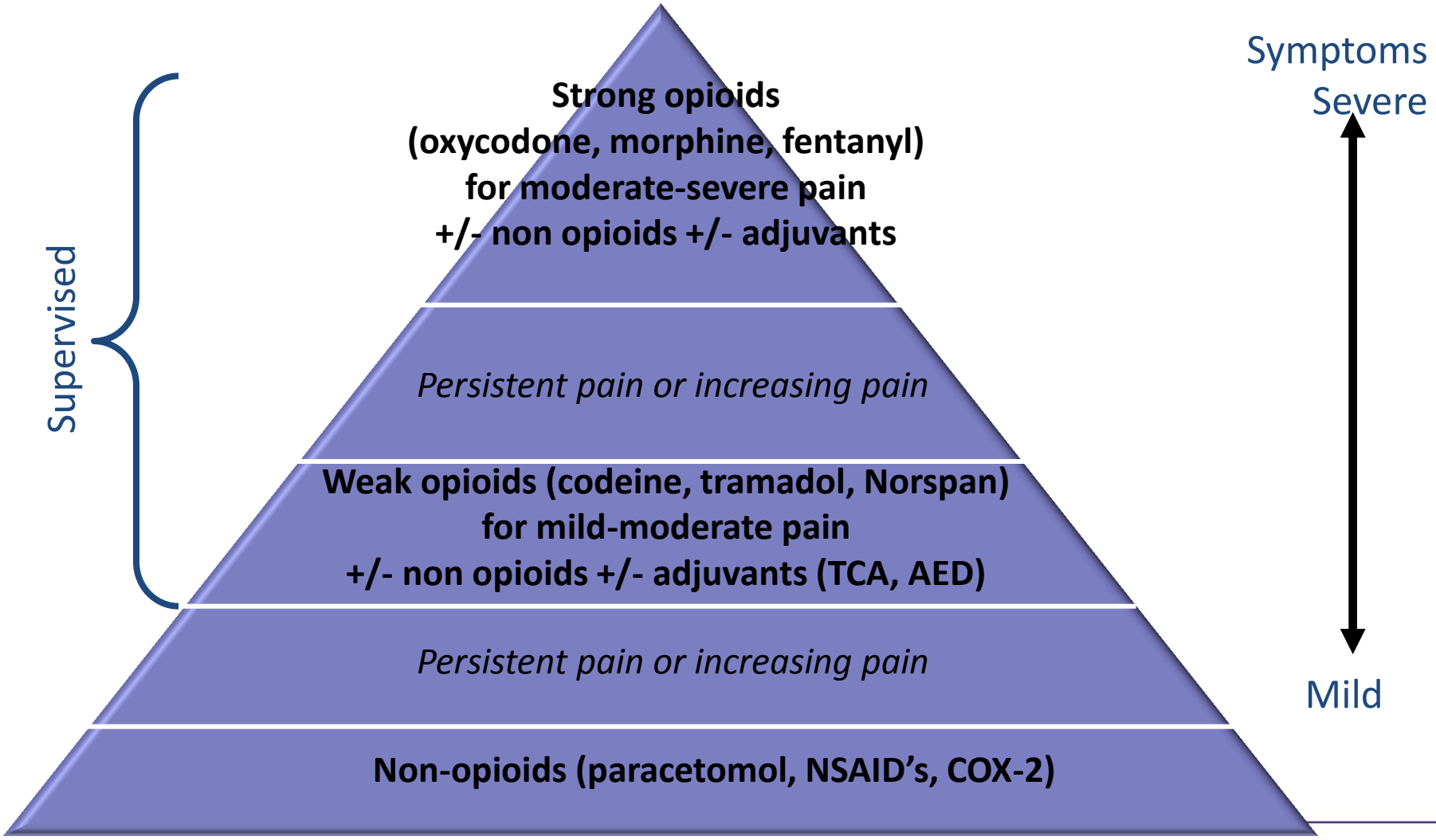
WHO Analgesic Ladder (generally for nociceptive pain)



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PHARMACOTHERAPY

Initial Analgesic options	• Paracetamol (1000mg qid) • Panadeine Forte (2 x 500mg/30mg qid) • Tramadol Quick Acting Capsules (50mg qid)
Pain lasting > 5 days	• Tramadol SR (100-200 mg bd) or Duro-Tram XR (100-300mg nocte) • Buprenorphine patch (5-20 ug/hr weekly) • Oxycontin 10-20 mg bd or Targin 10/5 – 20/10 mg bd • Fentanyl patch 12-25 mcg every 3 days
Nocturnal Pain (TCA antidepressant)	• Amitriptyline (10-25mg nocte) • Nortriptyline (10-25mg nocte) • Doxepin (25-50mg nocte) • Clonazepam (0.25-0.5mg nocte)
Daytime Pain (Adjuvant AED)	• Epilim (200-400 mg bd) • Gabapentin (100 – 600 mg tds) • Pregabalin (25-300 mg bd) • Duloxetine (30-120 mg mane)

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NEUROPATHIC PAIN THERAPY OCT 2012

- Carbamazepine (NNT to obtain 50% relief - 1.7)
- Valproate, Phenytoin,
- Gabapentin, Lamotrigine, Topiramate, Oxcarbazepine
- Pregabalin, Levetiracetam, Tiagabine
- Lacosamide (Vimpat), Zonisamide
- Clonazepam

- Amitriptyline, Nortriptyline, Imipramine
- Duloxetine

- Opioids –Tramadol, Norspan, Oxycodone (Targin)
- Morphine, Fentanyl, Hydromorphone

- Baclofen, Mexilitene, Clonidine
- Capsaicin cream
- N-methyl-D-aspartate (NMDA) blockers – Ketamine, Memantine

- Botulinum Toxin
- Vitamin B12

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Thank you

Please complete evaluation forms

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