

MSK Clinical Translation Framework (MCTF) 1

Psychosocial Considerations - Yellow flags

Psychosocial is an umbrella term for **cognitive** (thoughts and beliefs) and **affective** (emotional) factors, plus **social factors**.

Psychological screening tools

- In the **acute or sub-acute phase** can help to identify individuals at high risk of chronicity.
- In the **chronic phase** also allows for multi-dimensional profiling to inform targeted care pathways.
- Short Orebro Questionnaire, FABQ/TSK (Cognitive screening), DASS (Affective screening), demographic and social questions (Social screening).*

Managing Musculoskeletal Pain is often challenging - both for patients and physiotherapists

There are Guidelines for managing MSK pain disorders, however using them in clinical practice is limited due to multiple **barriers**.

There remains a **gap** between the best available evidence and the ability for clinicians to integrate this knowledge into clinical practice

It is crucial to have a **clinical framework** that enables practical application (e.g. doing, not just knowing) -> **MCTF**

This framework acknowledges the multidimensional nature of pain, disability and associated behaviours in individuals with musculoskeletal pain.

MCTF has been developed for practical use in educational and clinical practice settings

AIM: better enabling clinicians to bridge the current **evidence-practice gap**.

The ability to implement evidence into practice requires

A **clinical translation framework** that enables Physiotherapists to combine both **knowledge** (the 'know') and the necessary **skills** (the 'do')

In order to develop targeted solutions for individuals with **Musculoskeletal pain disorders (MPDs)**.

PAIN: is not only a sensory event but also an emotional experience

Pain is also an individual experience and the **relationship between tissue insult, pathology, pain and disability is highly variable**.

One of the commonly adopted frameworks to understand this multidimensionality is the **biopsychosocial model** of pain.

Framework utility

Create a common language across other health care professions, as well as non-medical stakeholders involved in musculoskeletal health care.

Framework application

By considering all elements of the MCTF, and weighting these elements according to their relative importance, an **individual's clinical profile** is established.

The individual profile includes a **Diagnosis, Stage of the Disorder and Contributing Factors**

6 points

1. Understanding Basic Science of the Elements (e.g. poor sleep as a lifestyle factor)
2. Understanding Connectedness of Elements
3. Identify Elements in Individual Presentations
4. Prioritize Contributing Factors
5. Match Management to Contributing Factors
6. Acknowledge Contextual Sensitivity

Individual's Perspective

To demonstrate a common understanding of the individual's problem, an effective strategy is to **repeat to the individual the main salient points from the clinical interview**

Functional Capacity
Goals/Expectations

Diagnosis- Disorder Type

Clinical Categories

Serious Condition (Red flags)

Signs and /or symptoms potentially associated with a serious condition -> A&E

E.g. malignancy, inflammatory disorders, fracture, infection, and cauda equina syndrome
1% of individuals with MPD

Specific MPD (Musculoskeletal Pain Disorder)

Correlation between the clinical presentation (pain and symptoms) and the pathology or disease.

E.g. rheumatoid arthritis, tendon ruptures, sprained ankle

Non-specific MPD

There is no robust correlation between the clinical presentation and underlying pathology

The label of Non-specific MPD may apply to as many as 90% of MPDs

Pain Features

Pain is a distressing experience associated with actual or potential tissue damage with sensory, emotional, cognitive, and social components - IASP website -

This section of The Framework considers an individual's pain experience in terms of:

Type

- Nociceptive:** pain associated with acute tissue damage. E.g. ankle sprain, bone fracture
- Neuropathic:** pain caused by a lesion or disease of the somatosensory nervous system. E.g. post-shingles, phantom limb pain, diabetic neuropathy
- Nociplastic:** pain arises from altered nociception despite no clear evidence of actual or threatened tissue damage causing the activation of peripheral nociceptors
- Mixed pain

Characteristics

- Mechanical patterns**
 - Response proportionate to the stimulus
 - Pain fluctuations is linked to aggravating and easing activities
 - E.g. Acute sprained ankle: moving the ankle hurts and resting eases the pain
- Non-mechanical patterns**
 - Response disproportionate to the stimulus
 - Constant pain with difficulty to find easing postures or activities
 - E.g. Individual may describe "I am not sure why it is sore. Even when I'm resting, it has a life on it's own"

Focus on addressing relevant **Functional Behaviours** (which is influenced by physical and psychological factors)

Focus on addressing **mechanical factors is unlikely to be helpful**. Broad management focus required to consider other contributing factors.

Allodynia and Hyperalgesia typically occur in both acute and persistent pain states. Increased sensitisation is normal in acute tissue injuries (such as ankle sprain), or following tissue inflammation or infection

The pain is real but biologically unhelpful

Sensitisation

Is defined as an increased responsiveness of nociceptors in the central or peripheral nervous system

E.g. Allodynia, mechanical or thermal hyperalgesia.

Stage of disorder - Time Course

- Acute
- Sub-acute
- Recurrent
- Chronic/Persistent

Presence of clear tissue injury

E.g. Ankle sprain

Apply the PRICE principle for acute ankle sprain

Absence of clear tissue injury

E.g. A student with Acute neck-related headache associated with increased stress, sleep deprivation and long periods of study

Focus would be on symptom relief, regaining function and addressing the underlying contributing factors.