



International Association for the Study of Pain

# MULTIDISCIPLINARY PAIN CENTER DEVELOPMENT MANUAL



*Created by the IASP Multidisciplinary Pain Center Toolkit Advisory Group*

[www.iasp-pain.org/MPCManual](http://www.iasp-pain.org/MPCManual)

# 1

## **THE NEED FOR MULTIDISCIPLINARY PAIN MANAGEMENT CENTERS**

*Pain—whether acute or chronic—is a multifactorial condition that has biological, psychological, and social contributors. This is referred to as the biopsychosocial framework.*

## IASP

The International Association for the Study of Pain (IASP) is the world's largest association of scientists and clinicians dedicated to the study and treatment of pain with more than 7,000 direct members and a network of 95 chapters globally. As a multidisciplinary organization, IASP brings together scientists, researchers, clinicians, healthcare providers, policymakers, and others from diverse disciplines working together towards a shared goal of pain relief worldwide.

## Project Mission/Vision

Thanks to an unrestricted grant from Pfizer's Independent Grants for Learning and Change, IASP assembled a diverse group of global leaders to develop this toolkit and training program.

The materials and samples provided in these materials are for the use of the pain community. IASP asks that those using these resources register their Center at the Association's website for the purposes of research and measurement. We also invite your feedback. While this manual was originally developed for South East Asian countries, the information is applicable to other countries with similar resource levels in other regions.

## Pain Clinic versus Center

This manual is focused on the creation of a Multidisciplinary Pain Center. Due to limited resources, the Advisory Group felt that the most efficient way for lower-resource countries to support the development of multiple pain clinics across the country is with the creation of a Multidisciplinary Pain Center that can serve as a “hub” and center of excellence. The Center will provide training and mentoring services that will facilitate the development of new clinical services across each country. Accordingly, this manual focuses on the creation of the Center as a first step towards the development of a network of multidisciplinary pain clinics in each country. (For details about the differences between Pain Clinic and Pain Centers, please see [chapter 3, Table 3.1](#)).

In [Appendix 1](#), an example of a Model of Care from the state of New South Wales in Australia provides an illustration of the different levels of pain services that can be provided within a region or country. With this model it is recognized that most people with chronic pain can be managed at their local community level, while a smaller number will need a Multidisciplinary Pain Clinic, and an even smaller number will need the services of a Multidisciplinary Pain Center. This model also envisages that the Multidisciplinary Pain Center will act as a resource for training and research for the more numerous Pain Clinics and health professionals working in Primary Care.

## What is pain?

IASP defines pain as “an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage” [26]. Pain is often described as either acute or chronic.

**Acute pain** is pain that lasts from a few seconds to three months, and is usually associated with actual or threatened tissue injury.

**Chronic pain** is pain that lasts or recurs for more than three months, and can last for several years.

Pain—whether acute or chronic—is a multifactorial condition that has biological, psychological, and social contributors. This is referred to as the biopsychosocial framework. How much each domain contributes to a particular patient's pain varies from one patient to another, and over time.

## What is chronic pain?

Chronic pain has recently been classified by an IASP task force as either primary (where it is the main presenting problem) or secondary (where it is due to an identifiable underlying cause). This classification has been adopted by the World Health Organization (WHO) for the next version of the International Classification of Diseases (ICD-11). Access this edition and learn more about its development at the [WHO Revision website](#). See also Treede 2019 [12] for a summary.

*Globally, chronic pain is one of the biggest contributors to the non-fatal burden of disease experienced by populations, with musculoskeletal pain the leading global cause of disability.*

**Chronic Primary Pain** may occur in one or more anatomical regions and it is associated with significant emotional distress (anxiety, anger/frustration or depressed mood) or functional disability (interference in daily life activities and reduced participation in social roles). The diagnosis is appropriate independent of identified biological or psychological contributors unless another diagnosis would better account for the presenting symptoms. That means it can have both biological and psychological contributors. Chronic primary pain is the most common form of chronic pain, and treatment should be focused on reducing pain-related distress and disability, as well as enhancing quality of life.

Examples include Chronic Widespread Pain (e.g. Fibromyalgia); Complex Regional Pain Syndrome; Chronic Primary Headache and Orofacial Pain; Chronic Primary Visceral Pain; and Chronic Primary Musculoskeletal Pain (e.g. low back pain).

Common **Chronic Secondary Pain** conditions have been grouped into six major categories:

1. **Chronic cancer-related pain** is chronic pain that is due to cancer or its treatment, such as chemotherapy.
2. **Chronic post-surgical or post-traumatic pain** is chronic pain that develops or increases in intensity after a tissue trauma (surgical or accidental) and persists beyond three months.
3. **Chronic neuropathic pain** is chronic pain caused by a lesion or disease of the somatosensory nervous system. Peripheral and central neuropathic pain are classified here.
4. **Chronic secondary headache or orofacial pain** contains the chronic forms of symptomatic headaches (those termed primary headaches in the International Classification of Headache Disorders (ICHD-3) are part of chronic primary pain) and follows closely the ICHD-3 classification. Chronic secondary orofacial pain, such as chronic dental pain, supplements this section.

5. **Chronic secondary visceral pain** is chronic pain secondary to an underlying condition originating from internal organs of the head or neck region or of the thoracic, abdominal or pelvic regions. This pain can be caused by persistent inflammation, vascular mechanisms or mechanical factors.
6. **Chronic secondary musculoskeletal pain** is chronic pain in bones, joint and tendons arising from an underlying disease classified elsewhere. It can be due to persistent inflammation, associated with structural changes or caused by altered biomechanical function due to diseases of the nervous system.

### Who is affected by pain?

Globally, chronic pain is one of the biggest contributors to the non-fatal burden of disease experienced by populations, with musculoskeletal pain the leading global cause of disability. The [Global Burden of Disease Study](#) has estimated that during the period from 2006 to 2016, the number of estimated years lived with disability for low back and neck pain together rose by 19.3 percent, a major increase driven by aging of the world's population (see Appendix 2, graphical representations of these data).

Chronic pain is seen in almost all age groups and is strongly linked to older age. The consequences of aging populations as a driver of population pain burden is a particular challenge for the countries of Asia, since the rate of population aging in this region is forecast to be much faster than in developed countries. Asia is predicted to have the greatest increase in numbers of older people in the next few decades. Current estimates suggest that by 2050, around two-thirds of the world's population aged 65 years and over will reside in Asia.

*In addition to the impact of pain on individuals, chronic pain also affects families, communities, workplaces, health systems, and the economy as a whole.*

## What does the burden of disease from pain look like?

For patients, chronic pain can have wide-ranging negative physical, psychological, and functional effects that leave them unable to participate fully in life. The experience of these effects by patients may be influenced by many factors such as age, gender, education, economic position, cultural factors, and religious and health beliefs.

In addition to the impact of pain on individuals, chronic pain also affects families, communities, workplaces, health systems, and the economy as a whole. Despite very strong and consistent evidence of the impact of pain burden globally, there is a mismatch between burden and resources allocated to acting on the causes of the problem and improving timely access to effective treatments.

This mismatch is evident in the lack of availability of or access to comprehensive, multidisciplinary pain management services. In contrast, access to more narrowly-focused attempts to relieve significant and disabling pain through procedures such as nerve blocks and drugs is often easier even though they may do little to ease the burden of persisting pain experienced by patients, communities, and health systems. **Without the necessary training and support, the vision of more comprehensive services will remain unrealized. This toolkit project is intended to address this key obstacle.**

## What is multidisciplinary pain management?

Multidisciplinary pain management (MDPM) refers to an integrated approach in which multimodal treatment is provided by a multidisciplinary team collaborating in assessment and treatment using a shared biopsychosocial model and goals. An example is the prescription of an antidepressant medication by a physician alongside an exercise plan from a physiotherapist and training in pain self-management skills from a psychologist. All team members work closely together by participating in regular meetings (in person or online) and agreeing on diagnosis, therapeutic aims, and plans for treatment and review.

More recently, the term “**Interdisciplinary pain management**” has been introduced [27], but we have retained the “Multidisciplinary pain management (MDPM)” throughout the Toolkit as most clinicians are familiar with it and we want to avoid confusion.

MDPM is mostly delivered in outpatient settings, but if resources permit, it can also be employed in inpatient settings. While it is most often used for chronic, non-cancer pain conditions, patients with other types of pain (for example, certain acute pain conditions and cancer pain) can also benefit from multidisciplinary pain management if assessed as suitable.

## What problems can be addressed by MDPM?

Specifically, MDPM services can help patients with a range of functional disabilities and suffering associated with pain. These include disrupted activities of daily living, inability to work or care for family members, psychological distress, and sleep disturbance, as well as unhelpful medication dependence.

## What are the benefits of MDPM?

MDPM services offer a greater range of options for the health system than any single specialist doctor can provide alone.

MDPM is one of the most efficient and effective ways of helping patients with chronic pain reduce the severity of their pain and its impact on their lives. That is, it can significantly reduce pain-related suffering and disability. There is good evidence that if patients apply the skills learned at an MDPM service they will become much more functional in their daily lives, experience much improved mood, confidence, and sleep. Because MDPM typically promotes self-management of pain by the patient, it can also reduce the likelihood of patients becoming dependent on unhelpful long-term medications as it offers the patients alternative ways of managing their pain.

### What evidence supports the use of MDPM?

Evidence supporting MDPM treatments comes from a range of sources published since the 1970s. These include randomized controlled trials comparing MDPM treatments with single discipline treatments [8; 23; 24; 25; 17]. Broader support has been summarized in systematic reviews and meta-analyses [4; 5; 10; 21]. There is also supporting evidence from evaluations of MDPM in primary care [3; 7; 11; 13; 20] as well as from narrative reviews [18; 6; 12; 19]. Consistent with the philosophy underpinning these interventions that aim to enable patients with chronic pain to self-manage their pain, there is an expectation (and some evidence) that those who regularly apply the self-management strategies taught in MDPM treatments improve more than those who do not [15]. There is also evidence that these differences can last at least a year [16]. While most of the published studies have been conducted in Europe, North America, and Australia, these methods have also been shown to be effective in other regions, including Southeast Asia. Cardoso et al [1] reported significant improvements among 70 chronic pain patients who were monitored for one year post-treatment. This study was conducted in Kuala Lumpur (Malaysia), describes the work of local health professionals, and was delivered in multiple local languages.

### Purpose and Scope of the Toolkit

**VISION:** To improve the lives of people affected by pain in Southeast Asia and beyond

**MISSION:** To increase capacity in delivering interdisciplinary pain management and treatment in Southeast Asia

**GOALS:** To provide local clinical leaders in pain management with the knowledge, skills, and training to establish Multidisciplinary Pain Centers (MPCs) based on interdisciplinary models of care in Indonesia, Myanmar, and Vietnam by late 2020.

**PROJECT HISTORY:** In 2017, IASP launched a multi-year project to develop a “toolkit” and related training that would encourage and

help health care providers in Southeast Asia develop multidisciplinary pain centers to better assess and manage chronic pain. The healthcare systems of the three targeted countries— Vietnam, Indonesia, and Myanmar — historically have not widely adopted multidisciplinary approaches to pain, which IASP and pain researchers have concluded are most effective for pain management and treatment.

With funding from Pfizer’s Independent Grants for Learning and Change, IASP formed an international Multidisciplinary Pain Center Toolkit Advisory Group that included two representative leaders from each country’s pain communities. In 2018, the group first gathered in Malaysia to learn more about the countries’ pain management needs, challenges, opportunities, and health care environments. The greater local understanding enabled them to create a toolkit framework, assign further development tasks to small groups, and organize the project phases of this multi-year project.

The group communicated virtually and met again in person in September 2018 at the World Congress on Pain to identify content gaps, continue drafting the toolkit, and receive updates on multidisciplinary pain management progress from the country representatives. In January 2019, a subgroup met in Malaysia and produced the first draft of all Phase 1 content. IASP edited the draft and coordinated preliminary review by external pain experts. After additional collection of appendices and another edit, the draft was shared for review by the full advisory group.

In April 2019, the full advisory group met at the Association of South-East Asian Pain Societies (ASEAPS) Congress in Kuching, Sarawak, Malaysia, to discuss and finalize the beta version of the toolkit to be used for training health providers in Vietnam, Indonesia, and Myanmar. Training took place in Myanmar in August 2019. Trainings in Vietnam and Indonesia were to take place in 2020 but have been put on hold due to the COVID-19 pandemic.

Phase 2 content development will continue after the initial training, when testing with local providers allows for more refinement and expansion. Pending toolkit sections include working with patient

advocacy groups, revising strategies for enhancing providers' ability to implement pain self-management strategies for patients, and options for partnering with government agencies, nonprofits, and academic institutions. The project also may evolve to include a global registry for data collected from these and other Multidisciplinary Pain Centers worldwide.

## Summary

The key messages of the introduction are

- Pain is a multi-dimensional phenomenon with biological, psychological and social/environmental contributors and should be assessed and treated using this framework.
- Pain is an important cause of health burden to patients, communities, and health systems.
- Effective treatment using a multidisciplinary approach will reduce the burden on individuals by maintaining and maximizing their ability to function and enjoy life.
- Using the right treatment for the right patients will lead to more-appropriate use of limited health system resources [2, 7].
- The right treatment may be delivered at the local community level for relatively low cost once the knowledge and skills required are adequately disseminated [11].

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