

painaustralia

**NATIONAL STRATEGIC
ACTION PLAN FOR
PAIN MANAGEMENT**

EVIDENCE BASE – COMPANION DOCUMENT

2019

Purpose:

This companion document to the National Strategic Action Plan for Pain Management (the Action Plan) provides a contemporary evidence base and background information on the issue of pain in Australia to support the recommendations and actions in the Action Plan.

CONTENTS

INTRODUCTION	1
DEFINING PAIN	2
WHY PAIN MUST BE A PUBLIC HEALTH PRIORITY	5
WHAT IS BEST PRACTICE PAIN MANAGEMENT?	10
THE BARRIERS TO ACCESSING PAIN MANAGEMENT	13
WHAT CAN BE DONE TO REDUCE THE PAIN BURDEN?	16
CONCLUSION	17
REFERENCES	18

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INTRODUCTION

This document provides a comprehensive and contemporary evidence base to support the recommendations set out in the National Strategic Action Plan for Pain Management (the Action Plan). Drawing on a host of Australian and international sources, this evidence base provides a rationale for changes in policy and practice to reduce Australia's pain burden.

This includes the need to understand the complexity of pain and pain conditions and causes, the social and economic impact of pain for individuals, their carers and families, communities and Australia, the low awareness of pain and best practice pain management and the multitude of barriers facing millions of Australians that live with chronic pain to access support and treatment.

DEFINING PAIN

Acute, chronic and recurrent pain

The International Association for the Study of Pain (IASP) defines pain as 'an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage'.¹

Nociceptive pain is caused by damage to body tissue and is usually described as a sharp, aching, or throbbing pain and can be caused by a range of conditions or factors including injury, surgery, arthritis, osteoporosis or musculoskeletal conditions.

Neuropathic pain is a type of pain that occurs following damage to the nervous system itself. The sensations associated with this type of pain are described as burning or shooting pains. The skin can be numb, tingling or extremely sensitive.²

Nociplastic pain is essentially pain related to increased nervous system sensitisation rather than tissue or nerve injury. The new IASP definition states that it is 'pain that arises from altered nociception despite no clear evidence of actual or threatened tissue damage causing the activation of peripheral activation of peripheral nociceptors or evidence for disease or lesion of the somatosensory system causing the pain'.

The length of time pain persists is important.

Acute pain is considered a 'normal, time-limited response to trauma, surgery or other noxious experiences' and usually only lasts while the injury or damage heals.³ If it is poorly managed, it can lead to more serious health issues, including chronic pain.⁴

Chronic pain, also called persistent pain, is pain that continues for three months or more beyond the time expected for a painful condition or injury to heal.⁵

Chronic pain can be associated with a range of conditions and can develop in a variety of ways:

- It can be associated with surgery, trauma or other condition, or occur in the absence of any tissue injury.
- It can be a symptom of another disease, or it can be a stand-alone condition.
- It might be associated with changes on a scan or test, or there may be no 'structural' evidence of its existence.
- It can occur anywhere in the body, or at multiple sites.
- One person can have several forms of pain, or just one.
- It can be daily, or recurrent (such as migraine).⁶

What are some of the pain conditions and contributors?

Many health conditions can play a contributory role in the development and maintenance of chronic pain. Many people, especially older Australians, have more than one long-term health condition, so it can be difficult to isolate which conditions are associated with the most pain.⁷

Pain-specific conditions include but are not limited to⁸:

- > Back and leg pain (low back pain is the leading cause of disability worldwide⁹);
- > Complex Regional Pain Syndrome (CPRS);
- > Chronic widespread pain ('Fibromyalgia')
- > Pelvic pain, including endometriosis;
- > Migraine and headache;
- > Sciatica;
- > Orofacial pain;
- > Neuropathic (nerve) pain; and
- > Musculoskeletal conditions - conditions of the bones, joints, muscles and connective tissues, including arthritis, osteoarthritis, osteoporosis and gout.

There is low awareness some of these conditions in the community and by health practitioners.

Injury is also a leading contributor to chronic pain. Chronic pain can also follow surgery. Patient characteristics as recorded in the ePPOC (Electronic Persistent Pain Outcomes Collaboration) program which measures outcomes in pain services across Australia and New Zealand, found in almost 40% of pain cases an injury at work, home or school or another place was the triggering event, in 10.3% it was a motor vehicle crash and surgery accounted for 10.5% of pain cases.

Seventeen percent of pain cases had no known cause (from the patient perspective), 10% was due to illness and 12% had other causes.¹⁰

Pain is complex and subjective

Pain is complex, and everyone experiences it differently. The definitions outlined above make it clear that pain is a subjective experience.

Even in acute pain situations following surgery or injury, the person's experience of pain goes beyond the tissue injury component. Research by Professor H. Beecher into World War II soldiers wounded in battle found there was not a 'one to one' relationship between injury and pain but rather pain was influenced by the 'meaning of the injury', with many soldiers not reporting pain despite significant injuries. In the case of the soldiers, this could include repatriation from the frontline.¹¹ This can be also be observed on the sports field, with injured sportspeople playing on, motivated by the contest outcome, despite having a severe ligament injury or fracture.¹²

There is a belief that pain is a mystery, but more is becoming known about the nature of pain. While acute pain is a normal part of life and it is important not to medicalise the everyday experience, it is important to deepen the understanding of debilitating chronic pain, given its significant impact to individuals and the community.

Over the last three decades there has been an increasing understanding and evidence base highlighting the relationship between the brain, neurology, psychology and pain.

For example, chronic pain can and does occur even if there is no injury or existing condition, as the nerves and spinal cord become over-sensitive and magnify messages when there is no active damaging stimulus (nociceptive pain). When the nerve messages reach the brain, the brain may interpret and react by experiencing pain.¹³ Brain imaging has shown that diverse areas of the brain are activated in different ways in different people experiencing apparently the same physical noxious stimulus.

The National Pain Strategy documents the growing epidemiological and ‘risk factor’ research base that has provided very strong support for the ‘bio-psycho-social’ model of pain assessment and management. This model recognises three components: physical, psychological and social/environmental, which can overlap, and that to assess a person living with pain, it is important to assess the contribution of factors in these three areas to the pain experience of each patient.¹⁴ This understanding has led to enhanced knowledge, effectiveness and innovation in pain management.

People living with pain conditions often experience comorbidity

Comorbidity refers to the occurrence of two or more diseases in a person at one time. Understanding more about comorbidities can provide vital information for prevention, management and treatment of chronic diseases.

Chronic pain can have an adverse effect on an individual’s mood, physical functioning, and social relationships. Individuals with chronic pain can also experience depression, sleep disturbance and fatigue.

ePPOC also reviews the most common comorbidities with chronic pain among patients presenting to a pain specialist, and their findings are as summarised in the table below. The reported comorbidity for chronic pain and depression or anxiety is estimated at 44.6% of patients, which is within the range of estimated values from the international literature. People who are presenting to a pain specialist are more likely to be experiencing more severe pain, and for this reason, the estimate may not be appropriate to apply to all people with chronic pain.¹⁵

Comorbidity	Percentage of patients
Depression or anxiety	44.6
Osteoarthritis and degenerative arthritis	29.3
High blood pressure	25.1
Diabetes	12.5
Heart disease	8.4
Rheumatoid arthritis	7.3
Ulcer or stomach disease	7.3
Lung disease	5.4
Stroke or neurological condition	5.3
Anaemia or other blood disease	4.7
Cancer	4.3
Kidney disease	3.1
Other medical problems	31.1

Source: Adapted from Tardif et al (2018).

WHY PAIN MUST BE A PUBLIC HEALTH PRIORITY

The pain burden is growing

New research by Deloitte Access Economics on the cost of pain in Australia estimates that in 2018:

- 3.24 million Australians were living with chronic pain, of whom 1.50 million were male and 1.74 million were female;
- 2.21 million Australians of working age were living with chronic pain, representing more than 68% of the total;
- the prevalence of chronic pain will increase to 5.23 million Australians (16.9%) by 2050; and
- by 2050, 2.95 million Australians living with chronic pain will be limited in the activities (e.g. mobility, self care, or work) they can undertake as a result of their pain, compared to 1.80 million people today.

Osteoarthritis, which is the most common form of joint disease, is projected to affect three million people (up from 1.9 million), back problems to affect 3.8 million people (up from 2.9 million) and osteoporosis to affect 1.2 million people (up from 0.8 million) - all in the next 15 years.¹⁶

WITH THE TRUE COST OF PAIN IN AUSTRALIA EXPOSED, **ACTION IS URGENT** 

Millions of aussies in chronic pain are overlooked as they fall through the gaps of our health system, and struggle day-to-day, while costing the nation billions.

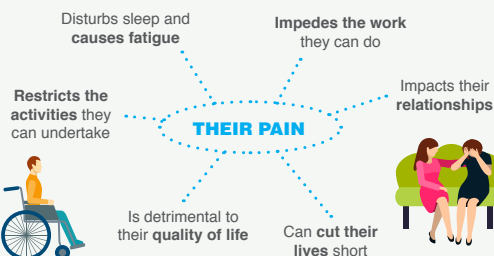
Chronic pain impacts the physical, mental & emotional wellbeing of millions:

44.6%
also live with
depression and anxiety

increasing
to over **2.33M**
by 2050



In 2018, approximately 3.24 million Australians lived with chronic pain; this is set to rise to 5.23 million by 2050. 68.3% are of working age.



As the population ages, the burden of chronic pain only increases as will the billion dollar hit to an individual's back pocket and the economy:

\$73.2b
in 2018
comprising of:  equating to **\$22,588**
per person



\$12.2b
Health System
costs



\$48.3b
Productivity
losses



\$12.7b
Informal care, aids,
deadweight losses

If action is not taken, the annual cost of chronic pain in Australia will rise from \$139.3 billion in 2018 to an estimated \$215.6 billion by 2050*.

\$66.1b
Reduction
in quality of life

\$2.7b
Out of their
own pocket

*In real 2018 dollars, and in the absence of changes to treatment or prevalence rates, and assuming that costs remain constant in real terms.

Millions of Aussies in chronic pain are overlooked as they fall through the gaps of our health system, and struggle day-to-day, while costing the nation billions.

A lack of specialists & well equipped GPs means most don't receive the multidisciplinary care they should.

Around one-fifth of all GP presentations in Australia involve chronic pain.

1/100 Will receive multidisciplinary care



"It is my sincerest hope that this revealing and important evidence base will compel national action in how we respond to pain. In a country like Australia, we must do better for the millions of people in pain. Anything less is unacceptable..."

Carol Bennett, Chief Executive Officer, Painaustralia

>15%

Referrals to pain specialists occur in less than 15% of GP consultations where pain is managed



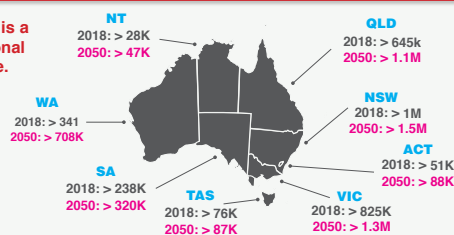
70%

Medications are used in close to 70% of GP consultations for chronic pain management

Best-practice **does not support long term use of medication** for chronic pain management



Pain is a national issue.



"While the cost of pain is enormous and looks insurmountable, there are realistic pathways that are strongly supported by evidence and once they are implemented, they will reap significant rewards across the board – from the everyday Australian to the federal budget to the bottom line of the nation's economy..."

Carol Bennett, Chief Executive Officer, Painaustralia

The issue is not insurmountable, there are pathways to alleviate pressure at the coalface of care.

The roll out of a pain specialist-designed and led national GP training program:

This would cost \$45 million but save \$209 million in overdose related costs.



Doubling access to multidisciplinary care:

This would cost \$70 million a year but save the nation approximately \$271 million (made up of health system costs, absenteeism, and improved wellbeing).



*in real 2018 dollars, and in the absence of changes to treatment or prevalence rates, and assuming that costs remain constant in real terms.

Millions of Australians live with chronic pain

One in five Australian adults are estimated to live with chronic pain (daily pain for more than three months, experienced in the last three months)¹⁷. This is consistent with global estimates.¹⁸

Pain in general is prevalent, with 67% of Australians reporting experiencing bodily pain in the last four weeks in 2007-08. Around one in ten Australians experience severe or very severe levels of pain.¹⁹

The rates of chronic pain are on a par with the prevalence of mental ill-health in Australia,²⁰ yet pain remains neglected and misunderstood as a public health issue.²¹

Pain conditions are widespread, with 30% of the population or 6.9 million Australians reporting arthritis in 2014-15, back pain was the third leading cause of disease burden in 2011 and one in 11 Australians reported osteoarthritis in 201.²²

Almost one in five of all General Practitioner (GP) consultations involved patients who had arthritis, chronic back pain or both conditions, irrespective of whether the condition was managed.²³

Some pain conditions are more prevalent in rural communities, with people outside the major cities reported to be 23% more likely to have back pain, rising to 30% for residents aged 55 to 64.²⁴ This may be due to a greater proportion of the working population undertaking manual labour in these communities, increasing the incidence of workplace injury which can lead to pain conditions.

Children and adolescents are also affected by chronic pain, though it can be overlooked in these age groups due to a range of factors. Between 25 to 35% of children experience chronic pain, with the greatest incidence in adolescents, especially for young girls, and about 5% of children have moderate to severe pain, with headaches, abdominal pain, limb pain and complex regional pain syndrome the most common forms of pain.²⁵

Older Australians are particularly affected, impacting quality of life and participation

The Cost of Pain report finds that 1.03 million older Australians (65 years and over) were living with chronic pain, with rates almost twice as high as the working age population.²⁶

For both men and women, the likelihood of experiencing severe or very severe pain increased with age and chronic pain is even more common among Australians aged over 65, with one in three living with chronic pain.²⁷

People aged 45 years and over were nearly twice as likely to experience severe/very severe pain compared with those aged under 45 years (13% compared with 7%). The highest rates of severe/very severe pain were reported by those aged 75 years and over (14% for men and 19% for women).²⁸

Pain management is a significant issue for people living in residential aged care, with up to 80 percent of residents living with persistent pain, which is often under-treated or poorly managed.²⁹

People living in residential aged care are at greater risk of other things that can cause pain such as falls, accidents and injuries, as well as a range of other medical conditions that can cause pain.³⁰ And if residents live with dementia or other cognitive impairment, they may be less able to express emotion or communicate to their carers that they are in pain, which can cause severe behaviours.

Pain is closely associated with other health conditions and disability

Ten years ago, only 5% of people who rated their health as excellent or very good had severe/very severe pain compared with 27% of people in fair or poor health.

Likewise, people with severe or very severe pain were less likely than those without pain to report excellent or very good health (28% compared with 70%) and more likely to report only fair or poor health (42% compared with 7%).

Of those people with a profound/severe disability, 38% experienced severe or very severe pain compared with only 4% of those without a disability or long-term health condition.³⁴

As mentioned above, comorbidity (the occurrence of two or more diseases in a person at one time) is very common among people living with pain conditions like arthritis and back pain. While the existence of these multiple health conditions may be unrelated, in many instances—and particularly in relation to chronic diseases—there is some association between them, and a range of chronic diseases share common risk factors. Addressing these comorbidities is vital in the prevention, management and treatment of chronic pain.

Pain and mental health problems are very strongly correlated

Chronic pain and mental health problems, particularly depression, commonly occur together. Major depression in patients with chronic pain is associated with decreased function, poorer treatment response and increased health care costs.³² High rates of generalised anxiety disorder, post-traumatic stress disorder and substance misuse are also reported in people with chronic pain.³³

In Australia and New Zealand, 44.6% of pain patients captured in ePPOC data in 2018 reported also suffering depression and/or anxiety³⁴ which correlates with global studies.

Almost one third of Australian adults with severe or very severe pain experienced high or very high levels of psychological distress, which was around six times the rate of those with no pain. One in five Australian adults with severe or very severe pain also suffered depression or other mood disorders.³⁵

Physical illness is prevalent in suicide deaths, and suicidal behaviour is found to be two to three times higher in those with chronic pain compared to the general population³⁶ and this may occur regardless of the existence of a co-morbid mental health disorder.³⁷

There is still much to learn about the link between chronic pain and mental health, with evidence showing that there may be differences in depression in patients with chronic pain compared with those presenting with mental health disorders, and specific expertise in pain psychology and psychiatry may assist.³⁸

Chronic pain is a leading cause of economic and social exclusion

Pain, particularly chronic or recurrent pain, deeply impacts on people's ability to participate in work, education or the life of their community. Globally, the median period that a person lives with chronic pain is seven years,³⁹ which presents a significant barrier to social and economic participation, particularly when there is often no known cure.

For the majority (56%) of Australians living with chronic pain, their pain restricts what activities they are able to undertake.

Most people of working age (15–64) with disability and chronic back problems experience employment restrictions, with a substantial proportion permanently unable to work.

Chronic pain and arthritis are two of the most common health conditions that cause premature retirement for people between the ages of 45 and 64, accounting for about 40% of cases - both associated with chronic pain.^{40,41}

Most patients included in 2016 ePPOC data stated that their pain affected the number of hours they were able to work or study (92%) and the type of work they were able to do (95%). 19% of episodes involved a compensation claim and over one third of patients (34%) were unemployed due to their pain condition while 8% were on leave.⁴²

The daily challenges of chronic pain include decreased enjoyment of normal activities, loss of function and relationship difficulties.⁴³

Children and adolescents living with pain can experience low school attendance, become socially isolated and unable to participate in sporting or other activities.⁴⁴

The daily challenges of chronic pain that are commonly described include decreased enjoyment of normal activities, loss of function, role change and relationship difficulties.⁴⁵

As chronic pain is largely invisible, people living with chronic pain can feel misunderstood and stigmatised by co-workers, friends, family, and even the medical profession.⁴⁶ If their condition cannot be explained in the typical framework of biomedicine, people with chronic pain can find their personal legitimacy is compromised, and they can experience barriers to accessing income support, health care and other support services.

Pain carries a significant economic cost

Those excluded from the workforce due to chronic pain earn lower incomes, pay significantly less taxation and receive significantly more in government support payments – and this all carries a substantial economic cost to the nation and the individual. Chronic pain is closely associated with the markers of social disadvantage, for example, rates of poverty are very high among people with back problems due to worklessness.⁴⁷

The Cost of Pain report has pulled data out of the health, aging and disability sectors, to reveal the staggering cost of chronic pain to taxpayers. In 2018, this figure was \$139 billion. This was on top of the fact that last year alone, Australians paid \$2.7 billion in out of pocket expenses to manage their pain, with costs to the health system in excess of \$12 billion.⁴⁸

There were estimated to be 9.9 million missed workdays due to chronic pain each year in Australia in 2006.⁴⁹

Chronic pain is estimated to be Australia's third most costly health condition in terms of health expenditure, noting musculoskeletal conditions are the second most costly, and injuries the fourth (both carry a strong association with chronic pain).⁵⁰

Pain management is recognised as a human right

As part of the 13th World Congress on Pain in Montreal and the world's first International Pain Summit, hosted by the International Association for the Study of Pain in September 2010, delegates from 129 countries supported a declaration that 'Access to Pain Management' is a fundamental human right.⁵¹

The declaration calls for access to effective pain management to eliminate avoidable suffering of people throughout the world. It proposes that governments and all healthcare institutions establish laws, policies and systems that will help promote access to effective pain management.

The principles of the Declaration have been endorsed by the Institute of Medicine and the World Medical Association (WMA). At the 62nd General Assembly in 2011, the WMA adopted a Resolution on the Access to Adequate Pain Treatment, which states that denial of pain treatment violates the right to health and might be medically unethical.⁵²

WHAT IS BEST PRACTICE PAIN MANAGEMENT ?

Untreated and poorly managed pain devastates the lives of individuals who live with it and impacts their relationships and ability to participate in work, education and the community.

There is a growing consensus and research base that supports the importance of coordinated interdisciplinary management strategies to address pain, regarded as best practice, as well as strategies to prevent the escalation of acute pain to chronic pain.

Even in acute pain, standard care is enhanced by 'whole person' assessment, that includes psychological assessment and the social context of the presenting problems e.g. worker's compensation, family issues. Additional components incorporate physical activity, sleep patterns, nutrition and past and current use of addictive substances.⁵³

What does interdisciplinary mean?

Due to the complexity of chronic pain, it must be managed differently from acute pain, ideally through an interdisciplinary or multidisciplinary pain management approach. This approach is endorsed in the 2010 National Pain Strategy and by the International Association for the Study of Pain.

This requires coordinated interdisciplinary assessment and management involving, at a minimum, physical, psychological, and social/environmental risk factors in each patient. It is unlikely to simply focus solely on pain relief, but function and other factors that contribute to the pain experience.⁵⁴

This is known as the biopsychosocial (or more recently 'sociopsychobiomedical') prism to view a complex health issue like pain from different angles. The emerging consensus rightly promotes more holistic evaluation of a patient where neither psychology nor biology is rendered redundant in addressing the complexity of chronic pain.⁵⁵

Treatment is not 'one-size-fits-all' but needs to be person-specific. A multidisciplinary team is likely to include a physician, clinical psychologist or psychiatrist, physiotherapist or other allied health professional, pharmacist and may include a dietician and social worker or counsellor.⁵⁶

A critical step in the development of an effective pain management plan is face-to-face discussion by team members on the relative importance of factors identified by them in the patient, and ongoing communication between team members and patients on the progress of the pain management strategy.

The International Association for the Study of Pain's Taskforce on Multimodal Pain Treatment developed definitions in late 2017 to clarify approaches to treating chronic pain:

- **Unimodal treatment** is defined as a single therapeutic intervention directed at a specific pain mechanism or pain diagnosis. E.g. the application of exercise treatment by a physiotherapist.
- **Multimodal treatment** is defined as the concurrent use of separate therapeutic interventions with different mechanisms of action within one discipline aimed at different pain mechanisms. E.g. the use of opioids for pain control by a physician; the use of NSAID and orthosis for pain control by a physician.
- **Multidisciplinary treatment** is defined as multimodal treatment provided by practitioners from different disciplines. For example: the prescription of an anti-depressant by a physician alongside exercise treatment from a physiotherapist, and cognitive behavioural treatment by a psychologist, all the professions working separately with their own therapeutic aim for the patient and not necessarily communicating with each other.
- **Interdisciplinary treatment** is defined as multimodal treatment provided by a multidisciplinary team collaborating in assessment and treatment using a shared biopsychosocial model and goals. E.g. the prescription of an anti-depressant by a physician alongside exercise treatment from a physiotherapist, and cognitive behavioural treatment by a psychologist, all working closely together with regular team meetings (face to face or online), agreement on diagnosis, therapeutic aims and plans for treatment and review.

A multidisciplinary approach may include medical interventions and medication (which may or may not be required), but it primarily focuses on non-invasive and non-pharmacological treatments. Overwhelmingly, clinical evidence is growing that questions the efficacy of a number of invasive and pharmacological treatments.

For example, patients often receive the same approach to pain treatment for chronic pain that would be applied to acute pain however, this is not effective in the great majority of cases⁵⁷ and the use of pain medications such as opioids alone may provide limited analgesic benefit but is unlikely to result in functional or psychological improvement.⁵⁸ In recent decades, these medications have been increasingly used for chronic pain, despite limited evidence of efficacy or safety.⁵⁹

Guidelines for using opioids to treat pain have changed markedly, with prescription of opioids now recommended for acute or cancer pain or palliative care. A recent landmark randomised controlled trial of long-term opioids compared to non-opioid medicines found the use of opioids failed to improve function but caused more adverse effects and less analgesia than non-opioid medication.⁶⁰

As new evidence emerges, guidelines for specific conditions are also changing. The Faculty of Pain Medicine (FPM)/ANZCA recently released a list of pain medicine related practices commonly used for chronic low back pain that have possible limited benefit based on clinical evidence to inform a new Choosing Wisely campaign released by the National Prescribing Service (NPS). Together with not recommending the use of opioids and benzodiazepines for chronic low back pain, patients should not be referred for spinal fusion surgery.⁶¹

Interdisciplinary pain management can be provided in specialist pain clinics however, the National Pain Strategy recommends the vast majority of people with pain could be best supported in primary care. Given many people cannot access a pain specialist due to the barriers outlined below, strengthening the capacity of primary care is important. Primary health practitioners such as GPs, have the advantage of capacity, accessibility and the ability to provide longitudinal, holistic and opportunistic care.⁶²

It is important GPs do not think the only options to treat chronic pain are prescribing opioids or referring patients to specialist care. They may also need support if tapering or stopping opioids and understanding more effective approaches.⁶³

Education and training for generalist health practitioners, the development of electronic health systems to share information effectively and safely between health providers, telehealth to link with specialist services if required in regional locations and funding models that underpin access to a range of services as is the case for other chronic conditions are all important priorities to improve access at the primary care level.⁶⁴

Evidence to support the importance of interdisciplinary approaches is growing. Efforts to measure patient outcomes of 60 pain services in Australia and New Zealand that apply interdisciplinary approaches are showing significant reductions in medication use and 75% of patients improved mental health or reduced interference in the quality of life cause by their pain.⁶⁵

Prescribing Wellness: Comprehensive pain management outside specialist services (Holliday, Hayes, Jones, Harris and Nicholas, 2018)

Physical – Establishing safe, consistent patterns of movement can calm nervous system arousal and reduce central sensitisation. This can be facilitated by negotiating measurable, achievable treatment goals that reflect meaningful and enjoyable activities, not just pain relief.

Psychological – It is important to explore any cognitive, behavioural and affective factors contributing to pain, to recognise and modify unhelpful conditions.

Social engagement – People typically feel safe when socially well connected and under threat when isolated. Meaningful positive engagement at work or home is crucial for pain recovery.

Nutrition – Obesity is frequently associated with chronic pain. Simple nutritional interventions for pain are recommended.

Self-management and mental health strategies have a role in best practice pain medicine

Substantial evidence shows patients with chronic pain who are engaged in active approaches to manage their pain have less disability than those who are engaged in passive therapies, such as taking medication or surgery.⁶⁶

Self-management often requires patients to understand that pain may not disappear or be cured, especially using passively received medical treatments, and once this is accepted, patients are encouraged and supported to take an active role in managing their pain.

Self-management techniques include 'pacing', incorporating a sufficient amount of activity into every day and keeping it at an even level to avoid pain episodes, exercises and strategies like mindfulness.

Group-based pain support programs can also be an effective and important part of interdisciplinary pain management and reduce wait times at pain clinics⁶⁷, but access can be limited.⁶⁸

Can chronic pain be prevented?

There are vast gains to be made through prevention, community awareness and early intervention⁶⁹.

Chronic pain always starts as acute pain (for example, surgery, injury, or illness) and severity of acute pain is a risk factor for progression to chronic pain. Effective management of acute pain may provide an important opportunity in prevention of chronic pain.⁷⁰

The transition from acute to chronic pain (sometimes called the 'sub-acute phase') is the time from tissue healing (approximately one to two months) to the three-month time point that currently defines the presence of chronic pain. There is a window of opportunity during this transition phase where it may be possible to apply appropriate diagnostic and treatment strategies to prevent the transition from acute to chronic pain.

Most people who do not return to work within six months of an injury attribute this to unresolved pain.⁷¹ Assessment post injury and support in the transition stage, increasing community awareness of best practice pain management and treatment options, access to physiotherapy and other allied health services can also assist to reduce the escalation of pain conditions.⁷²

The 2016 Work Injury Screening and Early Intervention (WISE) study conducted in NSW found that outcomes for workers at risk of poor recovery can be improved by early intervention and coordinated physical and psychological treatment. The study identified patients in NSW hospitals at risk of poor recovery or return to work within days of their injury and provided coordinated treatment and psychology services agreed by patients, workplace, insurers, insurance regulators and treatment providers, reducing the average recovery time from 53 to 29 days. At 18 months post injury, the intervention group's health costs were about \$4,400 less per worker than the control group.⁷³

THE BARRIERS TO ACCESSING PAIN MANAGEMENT

People can't get access to pain and allied services

Consumer access to best practice pain management, through interdisciplinary or preventative approaches, has not kept up with the advances in science and the clinical evidence base.⁷⁴

In Australia today, up to 80% of people living with chronic pain are missing out on treatment that could improve their health, quality of life and workforce participation.⁷⁵ This includes access to pain specialists and one-stop pain clinics that offer interdisciplinary care, but also services at the primary care level. Knowledge of pain treatment options and where to get help remains low among consumers.

Patients with chronic pain can face long waiting times to access public services typically located in public hospitals, with the situation being more acute in rural and remote areas. The standard and range among providers in services offered, including provision and duration of allied-health pain management programs vary greatly and the level of service provision for children and rural patients is notably lower than that reported for adults in urban areas.⁷⁶

Most public and private pain clinics that offer interdisciplinary care in one physical location are predominately located in the major capital cities, as are the Level 1 Pain teaching clinics.⁷⁷ Specialist Pain Medicine Physicians (SPMPs) who serve both as a consultant to other physicians and often as the principal treating physician are concentrated in the major cities of NSW, Victoria and Queensland, as are the Level 1 Pain teaching clinics. There is no pain specialist in the NT.

There are only 333 active fellows of the Faculty of Pain Medicine (FPM) in Australia. The FPM is responsible for the training, examination and specialist accreditation of specialist pain medicine physicians and for the standards of clinical practice for pain medicine in Australia and New Zealand.⁷⁸

Specialist Pain Medicine Physicians (SPMPs) provide holistic care that includes prescribing medication, coordinating rehabilitative services, performing pain relieving procedures, counselling patients and families, directing a multidisciplinary team that often includes psychological and psychiatric services, cooperating with other healthcare professionals and liaising with public and private agencies. In 2005, the discipline of pain medicine was recognised as a medical speciality.

There are only seven paediatric pain clinics in Australia, with three in NSW and none in Tasmania, the ACT or the NT.

This makes it difficult for GPs to refer patients in rural and remote areas to an interdisciplinary clinic due to travel and accommodation costs.

The physiotherapy workforce, which is also integral to interdisciplinary pain management, is also not evenly distributed and there is a shortage in rural and remote areas.⁷⁹ The Australian Physiotherapy Association point to specific reasons for this maldistribution including:

- Lack of incentives to live and work in rural and remote areas;
- Professional isolation, lack of career structure and suboptimal management of allied health professionals; and
- Poor access to professional development opportunities and support.

Many of these factors would apply to other health practitioners, that are critical to achieving best practice pain management.

There is an increasing need for benchmarks and best practice in wait-time management, given the deterioration in health and quality of life while waiting for pain treatment.⁸⁰

While specialist pain clinics offer interdisciplinary care, in addition to waiting times these clinics have unacceptably long waiting lists and are poorly integrated with primary health care and community-based services.⁸¹

At the same time, current funding and private health insurance arrangements are such that outmoded treatments with limited evidence of efficacy, including some invasive procedures, are often favoured over less invasive treatments with evidence of efficacy. This risks overtreatment by inappropriate methods and additional costs for sub-optimal outcomes.

In addition, while community-based self-management programs have been shown to be effective for a range of conditions, there has been no specific subsidy for such programs in relation to chronic pain.

There is low awareness of pain and its treatment options

Since February 2018 medicines containing codeine are no longer available without a prescription from a doctor or other suitably qualified health professional. This highlighted low levels of awareness in the community of alternative pain treatment options, that includes non-pharmacological options. A range of resources were required to provide greater awareness of these options.⁸²

Despite efforts to improve pain education and awareness, beliefs about pain are well entrenched and continue to spread. The belief that pain is an inevitable part of the human condition is widespread, while complex interactions between cultural concepts of pain, pain relief, and social behaviour exist.

Awareness of pain and pain management is also low among health practitioners. For example, clinicians' beliefs and practice behaviours relating to low back pain (LBP) were found to be discordant with contemporary evidence on the most effective treatments.⁸³

The National Pain Strategy recommends⁸⁴ any patient presenting to their GP with chronic pain being considered for treatment with opioids should be given a comprehensive pain assessment and a plan that includes a multidisciplinary approach, sound communication and early liaison with a pain management service. Achieving this level of care will require targeted actions including the provision of training and guidelines on the characteristics of pain and identifying people at risk of chronic pain.

To achieve this model of care, there are a range of issues to resolve that are likely to require further resources to increase access to training and clearer clinical guidance support for practitioners to deliver this model of care.⁸⁵

Both health practitioners and consumers need to understand that chronic pain may not be 'fixed', and treatment needs to be reframed as managing a chronic condition with coordinated care from a range of disciplines.

Challenging beliefs about pain and its treatment is critical to build resilience in consumers, encourage consumers to seek out best practice pain management and participate in self-management strategies.

Explaining the neuroscience of pain has been shown to improve pain, movement and fear avoidance.⁸⁶

In the last 20 years between 1996 and 2016, research aimed at understanding pain has only attracted \$133 million. In comparison, between 2012 and 2017, cardiovascular disease received \$687 million of research funding.⁸⁷ Funding for pain has been spread across a wide and varied scope of 50 field areas.

Without a strategic research focus, outcomes across the myriad of research topics remain difficult to clarify and collate as is the essential task of mapping translation knowledge and the impact of research dollars on improving outcomes for people with pain.

Low awareness causes a greater reliance on medications, which has consequences

Without adequate access and knowledge of pain management, there is a greater reliance on pain medications to treat chronic pain despite limited evidence of their efficacy for that purpose or safety.⁸⁸ This has seen a 30% increase in opioid prescribing between 2009 and 2014⁸⁹ and opioid overdoses including accidental overdoses at record levels in Australia.⁹⁰

Consumption of prescription opioids in regional areas was much greater than in capital cities as found in a 2017 analysis of 54 wastewater sites by the Australian Criminal Intelligence Commission. Consumption of powerful opioids oxycodone and fentanyl in regional sites was well above capital city levels, with the average use of oxycodone in regional areas almost double that in capital cities.

The Australian Commission on Safety and Quality in Health Care revealed opioid medications were being prescribed in some regional areas at 10 times the rate of other areas and they recommend action on pain and opioid management in rural areas.⁹²

Rising numbers of Australians are dying from accidentally overdosing on prescription drugs including opioids. The rate of opioid induced deaths almost doubled in 10 years, from 3.8 to 6.6 deaths per 100,000 Australians between 2007 and 2016 and more than three-quarters of all drug deaths involved pharmaceutical opioids.

A total of 1045 people from 15 to 64 years old died from opioid overdoses in Australia in 2016 with:

- Prescription drugs accounting for 65% of these deaths (679 people).
- Almost 500 people died from overdosing on natural and semi-synthetic opioids such as morphine, oxycodone and codeine;
- 214 deaths were caused by synthetic opioids such as fentanyl, tramadol and pethidine, rising from 0.11 per 100,000 people in 2007 (15 deaths) to 1.3 per 100,000 people in 2016.
- Most of the opioid deaths (85%) were considered accidental, 12% were intentional and 3% were not clear.

The rate of opioid deaths was highest among 35- to 44-year-olds, accounting for 364 deaths (11.3 per 100,000 people) and men accounted for more than two-thirds of all opioid-related deaths (714 men, 331 women).⁹³

There is growing public and administrative interest in ensuring the safe and effective use of prescription medications. The Therapeutic Goods Administration (TGA) is currently consulting on options for a regulatory response to the potential misuse of prescribed Schedule 8 (S8) opioids in Australia⁹⁴ in the wake of codeine being upscheduled to a prescription-only medicine on 1 February 2018.

There is an Australian Government commitment to implement a national real time prescription monitoring scheme⁹⁵ with some states and territory governments retaining existing schemes and others developing new schemes.

WHAT CAN BE DONE TO REDUCE THE PAIN BURDEN?

The 2010 National Pain Strategy⁹⁶ identified six key goals to improve access to pain management:

- People in pain as a national health priority
- Knowledgeable, empowered and supported consumers
- Skilled professionals and best-practice evidence-based care
- Access to interdisciplinary care at all levels
- Quality improvement and evaluation
- Research

A Roundtable of eminent health experts to stocktake progress since the 2010 National Pain Strategy and assess and prioritise core components for the development of the National Strategic Action Plan for Pain Management was held in June 2018.

The Roundtable endorsed the National Pain Strategy as providing a clear framework for best practice pain management and providing the guiding principles for the Action Plan.

By building on progress made since 2010 that has brought about a more skilled health workforce and improvement in the quality of pain services, together with recognising pain as a condition in its own right, the pain burden can be addressed.

Persistent issues identified by the Roundtable include the low level of understanding of pain and its treatment options, ongoing stigma faced by people living with pain and quality use of medicines.⁹⁷

The Action Plan will provide a roadmap to implement the National Pain Strategy through measures that can be implemented in the next three years by supporting:

- Empowered and resilient consumers;
- Knowledgeable practitioners, with effective pain management plans coordinated at the primary health level;
- A reduction in the prescribing of pain medications; and
- Better access to interdisciplinary care by harnessing technology and emerging research.

CONCLUSION

This document highlights the clear need for a national and holistic strategy to better prevent, treat and manage pain as a national health priority.

Better understanding the complexity of pain and best practice treatment that keeps pace with clinical and scientific advances remains a perennial challenge, together with remedying the barriers to receiving pain treatment and support.

Pain management is at the intersection of merging and contemporary challenges including ensuring safe and effective use of medications. Pain is a rising health issue facing Australia, as the population ages and the prevalence of chronic conditions increase and cause social and economic exclusion.

Action is required that supports consumers, health practitioners and the wider community to improve health outcomes for those living with pain and builds on significant efforts to date to clarify best practice and set key priorities in the 2010 National Pain Strategy.

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