

Australian Government

Department of Health

NATIONAL STRATEGIC ACTION PLAN FOR PAIN MANAGEMENT

2019

© Commonwealth of Australia as represented by the Department of Health 2019 National Strategic Action Plan for Pain Management Creative Commons Licence

This publication is licensed under the Creative Commons Attribution 4.0 International Public License available from https://creativecommons.org/licenses/by/4.0/legalcode ("Licence"). You must read and understand the Licence before using any material from this publication.

Restrictions

The Licence may not give you all the permissions necessary for your intended use. For example, other rights (such as publicity, privacy and moral rights) may limit how you use the material found in this publication.

The Licence does not cover, and there is no permission given for, use of any of the following material found in this publication:

- the Commonwealth Coat of Arms. (by way
 of information, the terms under which the
 Coat of Arms may be used can be found
 on the Department of Prime Minister and
 Cabinet website http://www.dpmc.gov.au/
 government/commonwealth-coat-arms);
- any logos and trademarks;
- any photographs and images;
- · any signatures; and
- any material belonging to third parties.

Attribution

Without limiting your obligations under the Licence, the Department of Health requests that you attribute this publication in your work. Any reasonable form of words may be used provided that you:

- include a reference to this publication and where, practicable, the relevant page numbers;
- make it clear that you have permission to use the material under the Creative Commons Attribution 4.0 International Public License;
- make it clear whether or not you have changed the material used from this publication;
- include a copyright notice in relation to the material used. In the case of no change to the material, the words "© Commonwealth of Australia (Department of Health) 2019" may be used. In the case where the material has been changed or adapted, the words: "Based on Commonwealth of Australia (Department of Health) material" may be used; and
- do not suggest that the Department of Health endorses you or your use of the material.

Enquiries

Enquiries regarding any other use of this publication should be addressed to the Branch Manager, Communication Branch, Department of Health, GPO Box 9848, Canberra ACT 2601, or via e-mail to copyright@health.gov.au

"Important: This transmission is intended only for the use of the addressee and may contain confidential or legally privileged information. If you are not the intended recipient, you are notified that any use or dissemination of this communication is strictly prohibited. If you receive this transmission in error please notify the author immediately and delete all copies of this transmission."

CONTENTS

ABOUT THE PLAN	1
ACKNOWLEDGEMENTS	2
HOW PAIN IS DEFINED	3
WHY ACTION IS NEEDED – AUSTRALIA'S PAIN BURDEN	4
WHAT WE WANT TO ACHIEVE: VISION 2021	8
PARTNERSHIPS AND ENABLERS	10
INTERDISCIPLINARY PAIN MANAGEMENT	11
KEY GOALS AND ACTIONS 2018-2021 – THE ACTION PLAN	12
REFERENCES	24

ABOUT THE PLAN

For many people, pain is a temporary discomfort associated with injury, illness or post-surgery. However, when pain becomes chronic (persistent or recurrent for 3 months of longer), it has a deep impact on quality of life as people living with pain become excluded from community, work or education.

With at least one in five Australians living experiencing chronic pain today, it is an escalating health issue and carries a significant economic burden in lost productivity and health costs. Addressing pain is in the interests of all Australians.

Yet many people living with pain cannot get access to best practice pain management, often due to cost, location or low awareness of treatment options, and medication is playing an increasing role. To date, pain has not been a national health policy priority, despite its significant impact on people's lives.

The Australian Government announced support for the development of the first ever National Strategic Action Plan for Pain Management (the Action Plan) in May 2018. The Action Plan sets out the key priority actions to improve access to, and knowledge of best practice pain management, in the next three years.

Painaustralia, the national peak body working to improve the quality of life for people living with pain, has consulted widely with consumers and consumer groups, clinicians, allied health practitioners, key health groups, researchers, experts and the whole community to understand what people think the key priorities are for the Action Plan.

These consultations have confirmed the need for action and nationally coordinated policy setting. Greater awareness of pain and pain management, more timely access to consumercentred interdisciplinary services and research to underpin greater knowledge of pain as well as new treatments have emerged as key priorities, as has harnessing leaps in research, clinical evidence and technology.

The Action Plan builds on the strong foundation and advocacy of Australia's pain sector which developed

the National Pain Strategy in 2010 to provide a blueprint for best practice pain management.

The Action Plan also leverages and builds on key activities taking place at a state and territory level and through primary health networks (PHNs) that have increased community awareness of pain management, integrated services, provided education and training for health practitioners and invested in pain services. The Action Plan also seeks to foster innovation in service design and delivery.

National leadership and action on pain is critical to ensure Australians live healthier lives through effective prevention and coordinated management of chronic conditions: the leading cause of illness, disability and death in Australia. The Action Plan aligns to the goals of the National Strategic Framework for Chronic Conditions published by Australian Health Ministers Advisory Council (AHMAC) in 2017 and will underpin Australia's obligations as a member state of the World Health Organisation and its efforts through the Global Action Plan for Prevention and Control of Non-Communicable Diseases 2013-2020.

The Action Plan comes at a critical time: pain management finds itself at the intersection of key global public health challenges of the 21st century including the safe and effective use of medications and the urgent need to stem the rise of chronic conditions.

The Action Plan will provide a key step towards a national and holistic policy framework that will support consumers, health practitioners and the wider community to improve the quality of life for people living with pain, their families and carers and minimise its impact.

ACKNOWLEDGEMENTS

Painaustralia wishes to acknowledge the support of Hon Greg Hunt MP, Minister for Health and the Department of Health in funding and supporting the development of this Action Plan.

We also acknowledge the many organisations and individuals that have contributed to the development of this Action Plan, including:

- > ACT Pain Support
- > Arthritis Australia
- > Australian Pain Association
- > Australian Pain Management Association
- > Australian Pain Society
- > Australian Rheumatology Association
- > Australian Physiotherapy Association
- > Brain Foundation
- > Carers Australia
- > Chronic Pain Australia
- > Consumers Health Forum
- > Department of Health, Australian Government
- Faculty of Pain Medicine, Australian and New Zealand College of Anaesthetists
- > MS Australia
- > National Rural Health Alliance
- Pain Revolution
- Palliative Care Australia
- > Parkinson's Australia
- > Pharmaceutical Society of Australia
- > Primary Health Networks
- > Royal Australian College of General Practice
- > Royal Australasian College of Physicians
- > Royal Australasian College of Psychiatrists
- > Scriptwise
- > State and Territory Departments of Health

We also wish to thank the all the consumers and consumer groups that participated in the CHF-led consumer roundtable held in September 2018 and participated in our online survey July-August 2018.



HOW IS PAINS DEFINED?

Five categories of pain (National Pain Strategy):

- Acute pain, defined as a normal and timelimited response to trauma or other 'noxious' experience, including pain related to medical procedures and acute medical conditions. Acute pain can also arise from physiological causes such as childbirth. If poorly managed, it can lead to more serious health issues, including chronic pain.
- > Pain that is progressing towards chronic pain, but this progression may be prevented ('subacute' pain). For example, acute wound pain may progress to chronic wound-associated pain.
- > Recurrent pain, e.g. migraine
- Chronic (or persistent) non-cancer pain that persists for longer than 3 months
- > Cancer-related pain

Pain is complex and has many contributors

While acute pain is often a normal part of life, it is also important to deepen the understanding of chronic pain, given its significant impact.

The National Pain Strategy documents the evidence-base for the 'bio-psycho-social' model of pain assessment and management. This model recognises three overlapping components: physical, psychological and environmental, and notes that to assess a person suffering from pain, it is important to assess the contribution of factors in these three areas to the pain experience of each patient.

Different types of pain:

Nociceptive pain is caused by damage to body tissue and 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.

Nociplastic pain is essentially pain related to increased nervous system sensitisation rather than tissue or nerve injury despite no clear evidence of actual or threatened tissue damage.

Many health conditions can contribute to the development and maintenance of chronic pain:

- Back and leg pain (lower back pain is the leading cause of disability worldwide);
- 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.

Injury is also a leading contributor to chronic pain, and pain can follow surgery. The ePPOC program that benchmarks Australian and New Zealand pain services 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. 17% of pain cases had no known cause (from the patient perspective), 10% was due to illness and 12% had other causes.



WHY ACTION IS NEEDED -AUSTRALIA'S PAIN BURDEN

Millions of Australians live with 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)¹. This is consistent with global burden of disease data, which show that lower back pain was the leading cause of disability globally in 2017.² Four million Australians currently live with arthritis, and this is projected to rise to 5.4 million by 2030.³

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 64.4

Chronic pain is even more common among Australians aged over 65, with one in three living with chronic pain. Up to 80 percent of residents of aged cared facilities are living with persistent pain, which is often under-treated or poorly managed.

Between 25 to 35% of children and adolescents experience chronic pain.²

The pain burden is growing

Chronic pain affects more than 3.24 million Australians. Painaustralia's report, The Cost of Pain in Australia by Deloitte Access Economics, provides the most comprehensive analysis of the financial impact of chronic pain in Australia to date and it found more than 68% of people living with chronic pain are of working age. Without action, the prevalence of chronic pain will increase to 5.23 million Australians (16.9%) by 2050.8

By 2032, it is projected that the number of cases of arthritis and other musculoskeletal conditions will increase by 43% to 8.7 million and affect over 30.2% of the population. Osteoarthritis 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).²

Pain is closely associated with other health conditions, mental health and disability

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.

For those who experience chronic pain, the pain can be debilitating and have an adverse effect on work, sleep, and relationships. Individuals with chronic pain may also commonly experience comorbidities such as depression, sleep disturbance and fatigue.

These comorbidities often contribute to worse health, societal and financial outcomes – for example, major depression in patients with chronic pain is associated with reduced functioning, poorer treatment response, and increased health care costs.



Chronic pain and mental health problems, particularly depression, commonly occur together. Major depression in patients with chronic pain is associated with reduced functioning, poorer treatment response and increased health care costs. High rates of generalised anxiety disorder, post traumatic stress disorder and substance misuse are also reported in people with chronic pain. Moreover, suicide is reported to be two to three times higher in those suffering chronic pain compared to the general population, and it is associated with depression. ¹⁰ This may be due to opioid related deaths, but there is a lack of research in this area.

In 2018 the top three chronic disease combinations were: depression or anxiety (44.6%), osteoarthritis and degenerative arthritis (29.3%) and high blood pressure (25.1%).¹¹

Chronic pain and mental health problems, particularly depression, commonly occur together. ¹² In Australia and New Zealand, 40.5% of pain patients captured in ePPOC data in 2016 reported also suffering depression and/or anxiety. ¹³

Pain carries a significant economic cost

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 \$139.3 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. 14

There were estimated to be 9.9 million missed workdays due to chronic pain each year in Australia in 2006.¹⁵

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).¹⁶

Chronic pain is a leading cause of economic and social exclusion

Pain deeply impacts on people's ability to participate in work, education or the community. Globally, the median period that a person lives with chronic pain is seven years.¹⁷

Back 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. 18, 19

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 34% were unemployed due to their pain condition.²⁰

The daily challenges of chronic pain include decreased enjoyment of normal activities, loss of function and relationship difficulties.²¹

As chronic pain is largely invisible, those living with pain report feeling stigmatised by coworkers, friends, family, and the medical profession.²²

People can't access pain services

Up to 80% of people living with chronic pain are missing out on treatment that could improve their health, quality of life and workforce participation²³ including access to pain specialists and one-stop pain clinics that offer interdisciplinary care, but also services at the primary care level.

Most public and private pain clinics that offer interdisciplinary care in one physical location are predominately located in the major capital cities.²⁴ Specialist Pain Medicine Physicians (SPMPs) are concentrated in the major cities of NSW, South Australia, Victoria, Western Australia and Queensland. There is no pain specialist in the NT.

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

The physiotherapy workforce, integral to interdisciplinary pain management, is also not evenly distributed and there is a shortage in rural and remote areas.²⁵

There is low awareness of pain and its treatment options

Awareness of pain and pain management is also low among health practitioners and consumers. For example, clinicians' beliefs and practice behaviours relating to lower back pain were found to be discordant with contemporary evidence on the most effective treatments.²⁶

Challenging beliefs about pain and its treatment is critical to build resilience in consumers and producing more effective health outcomes. Explaining the neuroscience of pain has been shown to improve pain and movement, and reduce fear avoidance.^{2Z}

Over the last 20 years between 1996 and 2016, research aimed at understanding pain has attracted \$133 million. In comparison, between 2012 and 2017, cardiovascular disease has received \$687 million of research funding.²⁸

There is a reliance on pain medications

A 30% increase in opioid prescribing occurred between 2009 and 2014.²⁹

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.³⁰

Rising numbers of Australians are dying from accidentally overdosing on a prescription drug. 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. There is growing interest in ensuring the safe and effective use of medications.

Specific and significant recent changes were made to address these issues, including the upscheduling of codeine and the decision to progress real time prescription monitoring. However, there is more that can be done to address over-reliance on pain medications and its negative consequences.

WHAT CONSUMERS TOLD US



There have been some small improvements (since 2010)-however there are still lengthy delays in accessing pain services'

'People with chronic pain just wish to live a life free of pain, or lessened pain. Education needs to be improved in this area, instead of the constant stigma across all of the community'

'I want to become a productive member of my community again. I hate living under the poverty line. And I hate having no selfesteem because I don't feel I contribute'

We need public awareness campaigns...not all pain is not treatable and curable... people need to be empowered and trusted to manage their own pain'

'Our voices need to be heard, we are not being listened to by decision-makers, but we need more support to tell our stories – resources will help us'

'Carers, especially young carers of people living with pain need to be better supported and heard so they can continue to care'

WHAT WE WANT TO ACHIEVE – VISION FOR 2021

OVERARCHING GOAL: Improved quality of life for people living with pain and the pain burden for individuals and the community is minimised

KEY GOALS

OBJECTIVES

GOAL 1:

People living with pain are recognised as a national and public health priority

- > Pain is understood as key public policy priority by decision-makers.
- Pain is included in other key national health and economic strategies, policies, plans and frameworks, particularly chronic conditions frameworks, being brought forward by governments or health and medical groups.
- > Future pain policy is underpinned by frameworks that ensure actions are evaluated and that pain is included in future priority setting.

GOAL 2:

Consumers, their carers and the wider community are more empowered knowledgeable and supported to understand and manage pain

- > Consumers will have confidence and knowledge to seek out best practice advice and treatment and to be active participants in their remedial journey, which will build resilience in managing chronic pain.
- > Consumers will be supported by the community and by the economic and regulatory environment, and stigma will be reduced.
- > Community understanding of chronic pain, the safe and effective use of pain medications and best practice management including active non-pharmacological management is enhanced.
- > Accessible and user-friendly information and support programs are available to all consumers, carers and families, regardless of background and location.

GOAL 3:

Health practitioners are well-informed and skilled on best practice evidence-based care and are supported to deliver this care

- > All health practitioners and carers are trained in pain management to improve conceptualisation of pain and underpin care plans and practices.
- > Systems and guidelines are established that ensure pain is adequately managed across health and care systems.

GOAL 4

People living with pain have timely access to consumer-centred best practice pain management including self-management, early intervention strategies and interdisciplinary care and support

- Patient-centred interdisciplinary assessment and pain care and support services that takes into the account the health and wellbeing of the whole person is offered in all locations and made available through delivery and funding models at the primary care level wherever possible
- > Opportunities for communication between health practitioners and patients about pain assessment and care plans are possible
- > Technology is harnessed to expand access to multiple services including primary care services and pain specialists.
- > Through targeted interventions, specific population groups are not excluded from best practice services or information about pain management.
- > The reliance on prescribing pain medications for chronic pain is minimised.

GOAL 5:

Outcomes in pain management are improved and evaluated on an ongoing basis to ensure consumer-centred pain services are provided that are best practice and keep pace with innovation

- > All pain services can participate in independent evaluation.
- > Pain services are patient-centred and offer best practice care that keeps pace with innovation and the latest clinical evidence base.
- Quality use of medicines is evaluated and benchmarked across the health system.
- > Pharmacological and non-pharmacological pain management interventions are better understood.
- > The role of primary and tertiary level health services in pain management are each understood.

GOAL 6:

Knowledge of pain flourishes and is communicated to health practitioners and consumers through a national research strategy

- > Pain research at a national level through a network of pain research specialists.
- > Identification of gaps in knowledge and practice in achieving the Action Plan goals
- > Translation and dissemination of research into practice and policy
- > Research findings are communicated to the community.

GOAL 7

Chronic pain is minimised through prevention and early intervention strategies

- > Best practice acute and sub-acute diagnostic and treatment strategies are understood and provided across health settings.
- > Pain policy is linked to chronic disease frameworks.
- > Greater support is provided to people returning to work following an injury, surgery or diagnosis of a pain condition.

GOAL 8:

People living with pain are supported to participate in work and community

> Greater support is provided to people returning to work following an injury, surgery or diagnosis of a pain condition.

PARTNERSHIPS AND ENABLERS

The delivery of this Action Plan will require commitment and priority setting at all levels of government and by key partners including not-for profit organisations, researchers, the private sector, individuals and communities.

Real improvements in awareness of pain management will require whole-of-community engagement, while the improvement in access to interdisciplinary services will require strong partnerships between governments, health practitioners, primary health networks and consumers.

In 2010, Australia was the first country in the world to develop a national framework for pain, as 200 delegates gathered to develop a National Pain Strategy which provides a blueprint for the treatment and management of acute, chronic and cancer pain. Pain medicine is an independent medical speciality; the importance of interdisciplinary care is recognised; and our education and research programs are internationally recognised. We must harness the opportunity of our collective local knowledge and expertise, and implement effective initiatives that are evidence based, reflect current national guidelines, and align with key national health initiatives such as MyHealth Record.



INTERDISCIPLINARY PAIN MANAGEMENT

There is a growing consensus and research base that supports the importance of coordinated interdisciplinary management strategies to address pain. 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.³¹

This is known as the biopsychosocial (or more recently sociopsychobiomedical) prism from which to view a complex health issue like pain from different angles. 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 such as occupational therapist, pharmacist and may include a dietician and social worker or counsellor. ³² Nurses are also an important part of the multidisciplinary team. A critical step in the development of an effective pain management plan is face-to-face discussion by consumers and 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.

Interdisciplinary pain management can be provided in specialist pain clinics. However, the National Pain Strategy recommends that in most cases, people living with pain can be best supported in primary care, with only a small proportion requiring tertiary care.³³

Evidence to support the importance of interdisciplinary approaches is growing. 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 caused by their pain.³⁴

Specialist Pain Medicine Physicians accessible across pain sector

Prescribing Wellness: Comprehensive

pain management outside specialist

services (Holliday, Hayes, Jones, Harris

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

Psychological – It is important to explore

any cognitive, behavioural and affective

factors contributing to pain, to recognise

Social engagement – People typically feel

safe when socially well connected and

under threat when isolated. Meaningful

positive engagement at work or home is

Nutrition - Obesity is frequently

associated with chronic pain. Simple

nutritional interventions for pain are

and modify unhelpful conditions.

crucial for pain recovery.

recommended.

and Nicholas, 2018)

relief.

Funding models that underpin affordable and coordinated health services

Education, training and support for health professionals

Empowered consumers and carers

Integrated care including electronic health systems

Telehealth to link specialist services

Interdisciplinary pain management

Figure 2: ENABLERS FOR INTERDISIPLINARY PAIN MANAGEMENT

Australian Government
Department of Health

KEY GOALS AND ACTIONS 2018-2021 – THE KEY PRIORITIES

Establish a National Pain Leadership Group

COAG Health Ministers to endorse the Action Plan

Community awareness campaign

Interactive national website and app to provide a 'one stop shop' for information and resources

Include pain management in accreditation standards for health providers

Establish a National Institute of Pain Research

Provide an overarching education strategy for health practitioners

Map and review pain services by location and needs analysis

Recognise pain as a complex condition in its own right for the purposes of MBS rebates

Determine a single validated assessment and monitoring tool for chronic pain

These high priority actions have been guided by principles of assessment including ensuring they:

- Have the greatest positive impact for consumers
- Will be the most effective investment of efforts and resources
- Ensure consumers and carers are given a strong voice
- Are evidence based and meet principles of best practice pain management
- Can be widely supported and endorsed
- Deliver on the goals of the National Pain Strategy or meet a newly identified goal
- Meet unmet need
- Have the support of key enablers

THE
FOLLOWING
ACTIONS
EMERGED
AS THE KEY
PRIORITIES
DURING THE
CONSULTATION
PROCESS



2018-2021

BETTER COORDINATION AND LEADERSHIP

GOAL 1

People living with pain are recognised as a national and public health priority

ACTION ITEMS (how this will be achieved):

- 1.1 The formation and development of a National Pain Leadership Group (NPLG) to inform, support and lead and govern advice provided to the Minister for Health and COAG Health Ministers on the delivery and ongoing evaluation of the Action Plan and the national adoption and delivery of the 2010 National Pain Strategy as the key overarching document. It will:
- identify partnerships, frameworks and resources to deliver the National Action Plan and realise the goals of the 2010 National Pain Strategy over the longer term;
- inform future responses to contemporary challenges facing the pain sector and consumers living with pain; and
- be underpinned and directly informed by a Consumer Reference Group that recognises consumers as key partners and involves representatives from across Australia and reflects a consumer-led strategy.
- 1.2 COAG Health Ministers to endorse the Action Plan to lead and govern the delivery of the goals of the 2010 National Pain Strategy.
- 1.3 Supporting Painaustralia as the national peak pain advocacy body to advocate to decision-makers and raise awareness across the community to improve quality of life for people living with pain, their carers and families and to minimise the social and economic burden of pain on individuals and the community, as well as convene the NPLG to deliver constructive, unified advice.

CONTEXT

Pain remains one of the most misunderstood and neglected health issues, despite at least one in five Australians living with chronic pain. Pain has significant social and economic impacts and costs.

To date, pain has not been a key consideration in national health policy strategies and frameworks. For example, the Aboriginal and Torres Strait Islander Health Plan 2013-2023 or the Fifth National Mental Health Plan are silent on pain, yet it is a key priority to address chronic conditions as outlined in the National Strategic Framework or Chronic Conditions that has been agreed by Australian Health Ministers in 2017.

A focus on pain by the Australian Government will underpin efforts to reduce the burden of noncommunicable disease through the World Health Organisation Global Action Plan to Prevent and Control Non-Communicable Dieses 2013-2020. Pain treatment is regarded a human right by the World Medical Association.³⁵

Pain is a critical consideration to ensure Australians live healthier lives through effective prevention and coordinated management of chronic conditions: the leading cause of illness, disability and death in Australia. Strategic and ongoing national action is required to recognise the complexity and ubiquity of pain in our community and reduce its impact.

GOAL 2

Consumers, their carers and the wider community are more empowered, knowledgeable and supported to understand and manage pain

ACTION ITEMS (how this will be achieved):

2.1 Fund and implement a **community awareness campaign** on pain and pain management treatment and support options with materials and messages developed in partnership with consumers, health professionals and community groups.

It will include:

- Vertically integrated communication strategies that ensure accessible and diverse communication through various media platforms including TV, radio, social media, print media and clinic-based media to share messages and reach out to a wide community audience.
- Specific strategies to communicate to Aboriginal and Torres Strait Islander Australians, Culturally and Linguistically Diverse (CALD) Australians and people accessing community and residential aged care services.
- Specific messaging and resources to be developed on 'living with pain' – a complex message but powerful opportunity to build resilience for people managing pain as a chronic condition.
- Storybooks, consumer vignettes and videos will be used to enhance understanding of the consumer lived experience.
- Care pathway summaries and guidance documents improve understanding by consumers and health practitioners of 'pain across the lifespan'.
- Materials to guide and raise awareness of the role of carers, including young carers of people with chronic pain, that taps into existing carer resources, but are pain-specific.
- Targeted communication strategies to highlight the latest evidence and guidelines for specific conditions e.g. lower back pain.
- Targeted communication strategy on the quality use of medicines with a pain focus to provide clear

direction and guidance on emerging treatments, such as medicinal cannabis for chronic pain that disseminates recent TGA guidance and better meets consumer expectations. Such guidance must be evidence-based, and further research is needed to improve the evidence base for some emerging treatments, including the use of medicinal cannabis for chronic non-cancer pain.

- **2.2** Development and dissemination of a **consumer handbook and smartphone application** for people living with chronic pain or those who have received a recent diagnosis of a pain condition. It will provide a definitive and best practice guide for people with chronic pain to improve health literacy, questions to ask health providers, where to get help and self-management strategies. It will support them to navigate health pathways on their remedial journey to be active participants in their healthcare. It will be available as a smartphone app in plain English, multiple languages and in electronic and print form. It will be provided at point of care and through other channels.
- **2.3** Interactive and comprehensive national website and app for easy access to the website for consumers, carers and health practitioners a 'one stop shop' providing a gateway for best practice evidence-based pain education and information in Australia.

It will harness and support a wide array of emerging online tools and resources including:

- Information about pain and best practice treatment options.
- Up to date information about where to seek help.
- Self-check tools to help consumers screen for risk factors.
- Real life stories from consumers about how they manage their pain and remain engaged in life and work.
- Information for health professionals, courses and training opportunities and a community of practice.
- An online forum to connect consumers, carers and other people affected by pain, administered by trained moderators.
- A directory of courses on pain management for health practitioners.



- 2.4 Develop or collate existing national standardised patient information and guidance into a document for distribution on discharge from hospital on safe and effective use of pain medications, and on non-pharmacological management of pain, required to be delivered by hospital standards.
- 2.5 Provide consumers with access to effective resources that enable them to communicate and navigate their pain experience between health providers, workplaces, carers or family to reduce stigma, the need to repeat their story and better self-manage pain. Examples include 'PainTrain' and pain diaries. These tools also support health providers to better coordinate care
- **2.6** Development of an **education program and resources for schools,** including building on the findings of the Hunter New England Population Health Children Initiative which is currently conducting consultations to define the best approach for integrating pain education in the school setting.
- 2.7 Explore the feasibility of expanded activities for the 'Brain Bus' children's education program. 'The Brain Bus' provides an opportunity for school age children to learn about pain and the science behind it, through an interactive program that draws on the principles of neuroscience with the use of illusions and virtual reality. The program ignites interest in science while laying the foundations to help children understand their own pain experiences, promoting prevention and early intervention of chronic pain in our future generations.
- 2.8 National information and support telephone line that is resourced by accredited and trained staff and volunteers. This could draw on existing models operated nationally such as the Butterfly Foundation, Lifeline and National Health Direct phone services.
- **2.9** Small grants for **community pain support groups** that are not-for-profit, charity groups providing essential support services for people with chronic pain, their family and carers, linking them to activities, events, discussion forums and support networks. A small grants program would enable these organisations to increase their capacity on the ground. This could be coordinated by Painaustralia.

- 2.10 Develop a peer to peer support network, facilitated by trained and accredited providers. Peer supporters are identified and trained to support other people living with pain, particularly those who have recently had a chronic pain condition diagnosis. A trial of this initiative could be developed in a local community with an existing peer to peer network for wider adoption.
- 2.11 Partnerships between pain groups to coordinate a funded national Pain Champion Advocacy Network that includes a network of speakers that can inspire action across communities and develop resources to support consumer advocacy such as a self-advocacy kit.

CONTEXT

There is low awareness of pain and its treatment options in the community.

People living with pain commonly report stigma and misunderstanding of their condition in the community, workplace and by health practitioners.

Increasing community understanding of best practice pain treatments will more effectively align professional and consumer conversations on pain management. Changing common beliefs about pain and its treatment is also critical to achieve better outcomes from pain management.

Consumers need greater confidence to seek out best practice treatment and be active participants in their remedial journey as well as building resilience in managing chronic pain.

Currently there are a range of overlapping resources and websites in place which consumers can access to support them in their pain management. The development of a national website and resource suite should be cognisant of these existing resources, and seek to curate existing material and provide a single portal to enable sharing of and access to evidence-based information and resources, rather than duplicating existing information and resources.

It will be important that consumer-focused initiatives are inclusive of the needs of specific groups including Aboriginal and Torres Strait Islander peoples, people from culturally and linguistically diverse backgrounds, people from rural and remote areas, older Australians, people with dementia, children and young people, and other relevant groups.



2018-2021

BETTER CARE

GOAL 3

Health practitioners are well-informed on best practice evidencebased assessment and care and supported to deliver this care

ACTION ITEMS (how this will be achieved):

- 3.1 Develop an **overarching education strategy** to promote evidence-based pain management education across health practitioner disciplines, through undergraduate, postgraduate and continuing education. This should include, among other things, standardisation among universities in their teaching curricula with regard to pain management; and a focus on value based healthcare. The development of this strategy should also take into account the National Registration and Accreditation System review recommendations; and self-regulated allied health professionals should be among the health practitioner disciplines engaged in the education strategy.
- 3.2 Develop a broad national approach to assessment and monitoring, involving an integrated suite of validated assessment and monitoring tools for chronic pain use by GPs, practice nurses etc. across Australia, that combines existing best practice assessment techniques and the sociopsychobiomedical approach. This includes consideration of assessment and monitoring tools for priority population groups, e.g. CALD, Indigenous Australians, children and young people.
- 3.3 Develop national clinical guidelines on pain and support for health providers to provide best practice pain management as outlined in the National Pain Strategy. Available in accessible format through a handbook, smartphone application and other communication strategies, for provision to all health services and health practitioners in Australia. This will include models of care and pain assessment.

- 3.4 Review of existing decision plan support systems available, including medical software that is readily available, dose calculators, treatment protocols and plans, tapering or stopping opioid treatments, advice for health practitioners and online tools.
- 3.5 Expand training opportunities for health practitioners in pain management licencing for an expanded number of health practitioners to complete training such as the Faculty of Pain Medicine Better Pain Management Program, or greater access for more practitioners to have access to selected modules of relevance. Provide short courses to expand general knowledge in primary care.
- 3.6 Develop a six-month workplace-based certificate in clinical pain medicine for GPs or other interested health professionals to complete.
- 3.7 Creation of a public database of health practitioners who have completed pain management training courses (on interactive website).
- 3.8 MBS item for pain education by medical, nursing or allied health practitioners, like the diabetes educator model which is already funded under the MBS.
- 3.9 MBS item for GPs with specialist qualification in pain medicine as a fellow of the FPM.



- 3.10 Specific materials and engagement activities to provide prescribers with guidance on the quality use of medications. This can be developed between professional bodies, peak groups and the Chief Medical Officer. This includes ensuring existing guidance is being provided, identification of the barriers to uptake of guidance and provision of engagement activities such as webinars and workshops in place.
- 3.11 Develop a 'train the trainer' model for Residential Aged Care providers and distribution and dissemination of the existing guidance and management strategy documents.
- 3.12 Adopt the guideline for treatment of persistent pain in children, as per the WHO Global Action Plan for the Prevention and Control of Non-Communicable Diseases 2013-2020.

CONTEXT

Pain remains one of the most misunderstood and neglected health issues, despite at least one in five Australians living with chronic pain. Pain has significant social and economic impacts and costs.

To date, pain has not been a key consideration in national health policy strategies and frameworks. For example, the Aboriginal and Torres Strait Islander Health Plan 2013-2023 or the Fifth National Mental Health Plan are silent on pain, yet it clearly as a key priority to address chronic conditions as outlined in the National Strategic Framework or Chronic Conditions that has been agreed by Australian Health Ministers in 2017.

A focus on pain by the Australian Government will underpin efforts to reduce the burden of non-communicable disease through the World Health Organisation Global Action Plan to Prevent and Control Non-Communicable Dieses 2013-2020. Pain treatment is regarded a human right by the World Medical Association.

Pain is a critical consideration to ensure Australians live healthier lives through effective prevention and coordinated management of chronic conditions: the leading cause of illness, disability and death in Australia. Strategic and ongoing national action is required to recognise the complexity and ubiquity of pain in our community and reduce its impact.

GOAL 4

People living with pain have timely access to consumer-centred best practice pain management including self-management, early intervention strategies and interdisciplinary care and support

ACTION ITEMS (how this will be achieved):

4.1 Map and review pain services by location in collaboration with States and Territories, Primary Health Networks and consumers to identify areas of most need and those with limited services. This will capture areas with waiting times of 18 months and over, and lack of capacity in specific regions to meet demand. This mapping will include a specific focus on paediatric pain services.

This will inform:

- Future investments by State and Territory Governments in interdisciplinary communitybased pain services in areas of most need.
- Investments by all governments in telehealth, health practitioner training and other initiatives.
- Investments in services for specific groups including such as children and young people.
- 4.2 Recognise pain as a complex condition in its own right for the purposes of Medicare-supported pain management plan with access to 10 individual services and 10 group services per calendar year based on clinical discretion (a similar level of support as the Better Access Mental Health Care program) including case conference attendant by a multidisciplinary team, seven telehealth services as part of the overall plan and specific supports like mental health services and allied health services.
- **4.3** Provide an **MBS item for chronic pain group programs** that are similar to those provided for mental health.
- 4.4 Review existing models of 'mini pain programs' that can be extended in regional and/or rural communities to provide coordinated care packages and increase capacity of health practitioners. Existing models include the Pain Revolution Local Pain Educator (LPE) model and other models in South Australia and Western Australia that embed capacity in regional and rural communities in pain management and education. This involves health practitioners enrolling in pain courses and then becoming pain educators and mentors once training is complete ('train the trainer'), as well as improving

- coordination of services between general practice and allied health and referral pathways. Some PHNs are also undertaking activities to address the needs of people with persistent pain in their communities through expert education programs and individual case management, indicating potential for PHNs more broadly to play a key role in this area.
- 4.5 Expand and offer a telehealth pain services program to regional Australia as part of the telehealth program. Also expanded Medicare item 2820 to support telehealth variations like pain education and involvement of multidisciplinary teams.
- 4.6 Extend access to Medicare Item 132 to all specialist pain medicine specialists (SPMPs) currently only available to FRACP or FAFRM qualified specialists.
- 4.7 Allow Specialist Pain Management Physicians to generate and extend interdisciplinary care plans through Medicare and eliminate the risk of non-referral for a Chronic Disease Management Plan that could significantly improve consumer outcomes.
- 4.8 The national rollout of information portals that support clinicians to assess and manage patient care through primary, secondary and community care. Examples include 'HealthPathways' which are available to varying degrees across PHNs. This will underpin efforts to develop 'care maps' and models of care that support interdisciplinary pain management in all PHNs so all members of a health care team whether they are in primary or secondary settings can work effectively together in the care and management of an individual, and referral to tertiary settings where needed.

- 4.9 Develop best practice 'models of care' to provide pathways for pain management in all communities, even those without pain services, and in settings where new models for pain management are required including palliative care, residential aged care, and referrals to addiction specialists. These will be developed by a Working Group of experts that reports to the National Pain Leadership Group and will include examples where State or Territory governments or PHNs have:
- Developed 'care maps' to support interdisciplinary pain management for all members of a health care team and tools such as 'HealthPathways'.
- Embedded self-management and empowerment strategies for consumers in their model of care.
- 4.10 Establishment of clinical pain liaison roles that utilises the skills of GPs, nurses or allied health practitioners to identify chronic pain early in primary care, support education of local practitioners and smooth transitions and communications across services. For example, NSW is currently rolling out a program of this nature the roles are flexibly employed depending on community need e.g. indigenous health, age care. The roles are jointly governed by Local Health Districts and PHNs.

CONTEXT

Many Australians with pain cannot access best practice pain management due to:

- cost
- location
- limited consumer knowledge and confidence
- lack of appropriately skilled health professionals
- failure to prioritise pain and pain management in health information and services for specific population groups
- failure of health funding and systems to support access to coordinated multiple services.

Most pain specialists and pain services are in metropolitan areas and to date, access to telehealth has been limited. The geographical variation in opioid prescribing highlights the reliance on these treatments in regional areas in lieu of alternative treatment options that are not available. Fifty per cent of Australians do not have private health insurance and cannot access private services and other treatments, and access to public services is limited.

There are significant barriers to accessing coordinated pain management at the primary care level, and it is unacceptable that people with chronic pain are required to have another chronic condition to access a Medicare GP Management Plan.

Without action, the translation of interdisciplinary chronic pain assessment and care into time-poor primary care settings will remain out of reach. Yet embedding this in primary care is vital to improve health outcomes for people living with pain.

In ensuring access to best practice pain management services, it will be important to consider the needs of specific groups including Aboriginal and Torres Strait Islander peoples, people from culturally and linguistically diverse backgrounds, people from rural and remote areas, older Australians, people with dementia, children and young people, and other relevant groups.

It will also be critical that access to best practice pain management across a range of settings is considered, including hospitals (noting opioid stewardship by hospitals is an issue that requires specific focus), residential aged care facilities, and prisons.

2018-2021

BETTER IMPLEMENTATION

GOAL 5

Outcomes in pain management are improved and evaluated on an ongoing basis to ensure consumer-centred pain services are provided that are best practice and keep pace with innovation

ACTION ITEMS (how this will be achieved):

- **5.1** Include pain assessment, reassessment and management principles in accreditation standards for hospitals, residential aged care facilities and community regulated by the Australian Commission on Safety and Quality in Health Care (ACSQHC).
- 5.2 Secure the future funding of the Electronic Persistent Pain Outcomes Collaboration (ePPOC). This includes developing a model for outcomes measurement developed at the primary care level and ensuring all public pain services can be funded to participate.
- 5.3 Embed consumer perspectives in service design and quality improvement at the service level, such as the Stanford 'CHOIR' Pain model.
- **5.4** Evaluation of the effectiveness of existing patient resources for pain management with a view to making them widely available in the Australian context e.g. pain diaries, selfmanagement strategies.
- 5.5 Strengthen requirements for pain management within aged care funding and accreditation systems

CONTEXT

Pain medicine is an evolving medical speciality, and since the 2010 National Pain Strategy, some progress has been made in some areas of pain management and service delivery.

The Australasian benchmarking system Electronic Persistent Pain Outcomes Collaboration (ePPOC) is providing a vital insight into pain services, but not all services participate due to funding contracts. Consumer engagement in the design and delivery of services also requires further development.

Initiatives to evaluate and improve outcomes in pain management should be inclusive of specific groups including Aboriginal and Torres Strait Islander peoples, people from culturally and linguistically diverse backgrounds, people from rural and remote areas, older Australians, people with dementia, children and young people, and other relevant groups.

Addressing the needs of people with cognitive impairment, including dementia, is particularly important. More than sixty per cent of the people living with dementia who are referred to the Australian Government-funded Severe Behaviour Response Teams have unidentified undiagnosed pain. People with cognitive impairment are often unable to say they are in pain or identify the site of pain. Their pain may be expressed through changes in behaviour, such as confusion, distress, restlessness, irritability or aggression. Appropriate pain management may reduce the inappropriate use of antipsychotic medication. Hospital and aged care staff in particular should have the clinical skills in pain assessment and management for people with cognitive impairment. The knowledge and experience of families and carers in managing a person's pain should also be sought.

2018-2021

BETTER RESEARCH

GOAL 6

Best practice pain knowledge is growing and is communicated to health practitioners and consumers through a national pain research strategy.

ACTION ITEMS (how this will be achieved):

- **6.1 Establish a new National Institute of Pain Research.** This body would link key partners and work across institutional and geographical boundaries to develop a pain research strategy (similar to the National Institute of Dementia Research model) to:
- establish and support a network of pain researchers by operating across organisational and geographic boundaries, bringing together capabilities and driving trans-disciplinary approaches to 'learn by doing' and 'learn from others';
- amplify our collective impact by harvesting our capabilities across research, health professional and government sectors and harnessing the value of our scientific, clinical and entrepreneurial resources. This would enable a shared commitment that 'leapfrogs' business-as-usual thinking to translate new investments into better patient experiences and outcomes;
- establish a forward plan of pain research priorities in collaboration with the pain sector, consumers and governments; and
- bring about the collaboration and open innovation needed to take Australia beyond the traditional and conventional pain management mindset as new approaches support experimentation and learning, and a continuous flow of knowledge and ideas that develops, attracts and retains talent and partners.
- 6.2 Pain and pain medicine to be a strategic priority for disbursement through the Medical Research Future Fund and NHMRC.

- 6.3 Support for ongoing research and clinical guidance on the use of emerging pharmacological and non-pharmacological interventions, including emerging treaments such as medicinal cannabis. This must keep pace with rising consumer expectations and be accompanied by effective communication strategies. It is noted that clinical guidance of pharmacological and non-pharmacological interventions come under the umbrella of Therapeutic Goods Administration/ Pharmaceutical Benefits Advisory Committee and Medical Services Advisory Committee.
- 6.4 Update and analyse the collection of information on pain in the ABS National Health Survey 2017-18 to develop a strong and new understanding of the prevalence of pain and its social and economic impact.

CONTEXT

Investments in pain research over the last 20 years have not been coordinated or prioritised, despite the significant impact of pain.

Investment has not kept pace with the burden of pain, attracting 1/6 of funding of other conditions and spread across a wide and varied scope of 50 field areas.

Strategic focus and investment are needed to understand the impact of research on improving health outcomes. For Australians to have access to the most up to date pain treatments, research is critical.

Australia has some of the leading pain researchers and the opportunity to be a world leader in this area.

Pain research should include a focus on improving the evidence base for pain management for specific groups including Aboriginal and Torres Strait Islander peoples, people from culturally and linguistically diverse backgrounds, people from rural and remote areas, older Australians, people with dementia, children and young people, and other relevant groups.



2018-2021

BETTER PREVENTION

GOAL 7

Chronic pain is minimised through prevention and early intervention strategies

ACTION ITEMS (how this will be achieved):

- 7.1 Strategies for improved management of acute pain and early recognition of patients at risk of developing chronic pain offer important preventative options in decreasing the prevalence of chronic pain. E.g. Dissemination and instruction in hospitals, primary care and other health settings, noting FPM has developed the leading resource on evidenced-based acute pain management, Acute Pain Management: Scientific Evidence. This could include rapid response pain clinics in hospitals.
- 7.2 Develop a national standardised pain and rehabilitation strategy/program for perioperative, post-injury or illness care and recovery and other strategies including safe and effective use of medications.
- 7.1 Link measures to reduce obesity such as improving levels of physical activity with chronic pain prevention strategies and information and recognising the role of nutrition in chronic pain management.
- 7.2 Trial preventative Quality Use of Medicine (QUM) strategies to alleviate the transition from sub-acute to chronic pain. The role of NPS MedicinesWise should be considered in the implementation of this and other relevant action items within this Action Plan.

CONTEXT

All chronic pain starts with acute pain. Preventing the escalation of chronic pain is in the whole community's interest and is critical to prevent the misuse of medications, but a renewed focus is needed to:

- offer best practice post injury, operation or illness pain assessment, support and management; and
- ensure appropriate diagnostic and treatment strategies to prevent the transition from acute to chronic pain.

Prevention and early intervention strategies should include initiatives relevant to specific groups including Aboriginal and Torres Strait Islander peoples, people from culturally and linguistically diverse backgrounds, people from rural and remote areas, older Australians, people with dementia, children and young people, and other relevant groups.

2018-2021

BETTER SUPPORT

GOAL 8

People living with pain are supported to participate in work, education and the community

ACTION ITEMS (how this will be achieved):

- 8.1 Support initiatives to develop a national approach to better support people to return to work following injury or diagnosis of a chronic pain condition through an early intervention and interdisciplinary pain management pathway, that includes counselling and support delivered in the workplace on return to work. This requires partnerships between insurers, employers, workers compensation providers and primary and tertiary health services.
- **8.2** Challenging beliefs following certification of work unfitness for health practitioners and the community: that it can be reviewed over time, that work is generally positive for health outcomes, the impact of certification of sickness on health and wellbeing outcomes and how evidence-based pain management can assist people to re-enter the workforce.
- **8.3** Support for group pain programs as in Goal 4 and greater support for pain community support groups as in Goal 2.

CONTEXT

Pain carries a significant economic cost and is the leading cause of early retirement. People living with pain become socially isolated and endure higher levels of poverty.

More access to support and coordination of treatment and support has been shown to enable a return to function and/or work such as those identified in the Work Injury Screening and Early Intervention (WISE) study, or group pain education and exercise programs such as ADAPT, INTERVENE and STEPS programs offered in NSW and WA.

Initiatives to support people living with pain to participate in work, education and the community should be inclusive of specific groups including Aboriginal and Torres Strait Islander peoples, people from culturally and linguistically diverse backgrounds, people from rural and remote areas, older Australians, people with dementia, children and young people, and other relevant groups.

REFERENCES

- 1 Blyth FM, March LM, Brnabic AJ, Jorn LR, Williamson M, Cousins MJ (2001). Chronic pain in Australia: A prevalence study. Pain, Jan; 89(2-3):127-34. https://www.ncbi.nlm.nih.gov/pubmed/11166468.
- 2 Institute for Health Metrics and Evaluation (IHME). Findings from the Global Burden of Disease Study 2017. Seattle, WA: IHME, 2018.
- 3 Arthritis and Osteoporosis Victoria (2013). A problem worth solving: the rising cost of musculoskeletal conditions in Australia. http://apo.org.au/node/35957
- 4 Australian Bureau of Statistics (2011). Australian social trends March 2011. http://www.abs.gov.au/ AUSSTATS/abs%40.nsf/Lookup/4102.0Main%2BFeatures30Mar%2B2011
- 5 Blyth FM, March LM, Brnabic AJ, Jorn LR, Williamson M, Cousins MJ (2001). Chronic pain in Australia: A prevalence study. Pain, Jan; 89(2-3):127-34. https://www.ncbi.nlm.nih.gov/pubmed/11166468
- 6 Savvas S, Gibson S (2015). Pain management in residential aged care facilities. Aust Fam Phys, April, 44(4): 198-203. https://www.racgp.org.au/afp/2015/april/pain-management-in-residential-aged-care-facilities/
- 7 Faculty of Pain Medicine (Australian and New Zealand College of Anaesthetists) 2017. Children with chronic pain miss out on services. Media Release, access online at: http://www.anzca.edu.au/documents/children-with-chronic-pain-miss-out-on-services-me.pdf
- 8 Deloitte Access Economics 2019. Cost of Pain in Australia. Painaustralia. Canberra. Access online https://www.painaustralia.org.au/static/uploads/files/the-cost-of-pain-in-australia-launch-20190404-wfrsaslpzsnh.pdf.
- 9 Arthritis and Osteoporosis Victoria (2013). A problem worth solving: the rising cost of musculoskeletal conditions in Australia. http://apo.org.au/node/35957
- 10 Racine M 2017 https://www.ncbi.nlm.nih.gov/pubmed/?term=Racine%20 M%5BAuthor%5D&cauthor=true&cauthor_uid=28847525. Chronic pain and suicide risk: A comprehensive review. Prog Neuropsychopharmacol Biol Psychiatry. 2018 Dec 20;87(Pt B):269-280. doi: 10.1016/j.pnpbp.2017.08.020. Epub 2017 Aug 26.
- 11 Deloitte Access Economics 2019. Cost of Pain in Australia. Painaustralia. Canberra. Access online at: https://www.painaustralia.org.au/static/uploads/files/the-cost-of-pain-in-australia-launch-20190404-wfrsaslpzsnh.pdf.
- 12 Deloitte Access Economics 2019. Cost of Pain in Australia. Painaustralia. Canberra. Access online at: https://www.painaustralia.org.au/static/uploads/files/the-cost-of-pain-in-australia-launch-20190404-wfrsaslpzsnh.pdf.
- 13 Blanchard M, Tardif H, Fenwick N, Blissett C and Eagar K (2017) Electronic Persistent Pain Outcomes Collaboration Annual Data Report 2016. Australian Health Services Research Institute, University of Wollongong.
- 14 Deloitte Access Economics 2019. Cost of Pain in Australia. Painaustralia. Canberra. Access online at: https://www.painaustralia.org.au/static/uploads/files/the-cost-of-pain-in-australia-launch-20190404-wfrsaslpzsnh.pdf.
- 15 Van Leeuwen MT, Blyth FM, March LM, Nicholas MK, Cousins MJ (2006). Chronic pain and reduced work effectiveness: The hidden cost to Australian employers. Eur J Pain. Feb;10(2):161-6. https://www.ncbi.nlm.nih.gov/pubmed/16310720
- 16 Access Economics (2007). The high price of pain: The economic impact of persistent pain in Australia. Report for the MBF Foundation. http://www.painaustralia.org.au/static/uploads/files/mbf-economic-impact-wffhrlzqsaht.pdf; https://www.aihw.gov.au/reports-statistics/health-conditions-disability-deaths/chronic-disease/overview;



- 17 Daniel S Goldberg 1 and Summer J McGee2 Pain as a global public health priority BMC Public Health. 2011; 11: 770. Published online 2011 Oct 6. doi: 10.1186/1471-2458-11-770
- 18 Deborah J Schofield, et.al 2015.Lost productive life years caused by chronic conditions in Australians aged 45–64 years, 2010–2030. Med J Aust 2015; 203 (6): 260. | | doi: 10.5694/mja15.00132
- 19 Schofield. D, et.al. 2014. Health&WealthMOD2030: A Microsimulation Model of the Long Term Economic Impacts of Disease leading to premature retirements of Australians Aged 45-64 Years Old.
- 20 Blanchard M, Tardif H, Fenwick N, Blissett C and Eagar K (2017) Electronic Persistent Pain Outcomes Collaboration Annual Data Report 2016. Australian Health Services Research Institute, University of Wollongong
- 21 Holmes A, Christelis N, Arnold C (2013). Depression and chronic pain. Med J Aust, 199 (6 Suppl): S17-S20. doi: 10.5694/mja12.10589
- 22 Cohen M, Quintner J, Buchanan D, Nielsen M, Guy L (2011). Stigmatization of patients with chronic pain: the extinction of empathy. Pain Med, Nov; 12(11):1637-43. doi: 10.1111/j.1526-4637.2011.01264.x. Epub 2011 Nov 4. https://www.ncbi.nlm.nih.gov/pubmed/22054062
- 23 Painaustralia 2010. National Pain Strategy, Canberra. Available online at: https://www.painaustralia.org.au/static/uploads/files/national-pain-strategy-2011-wfvjawttsanq.pdf
- 24 Painaustralia 2018. Pain services. Access online at: https://www.painaustralia.org.au/getting-help/pain-services
- 25 National Rural Health Alliance 2018. Aged Care Legislated Review submission. Access online at: http://www.ruralhealth.org.au/sites/default/files/documents/nrha-policy-document/submissions/submissionaged-care-legislated-review-131216.pdf.
- 26 Briggs AM, Slater H, Smith AJ, Parkin-Smith GF, Watkins K, Chua J (2013). Low back pain-related beliefs and likely practice behaviours among final-year cross-discipline health students.
- 27 <u>Holliday</u>, S. Prescribing wellness: comprehensive pain management outside specialist services. Aust Prescr. 2018 Jun; 41(3): 86–91. Published online 2018 May 15. <u>doi: 10.18773/austprescr.2018.023</u>
- 28 National Health and Medical Research Centre Grant Funding. https://www.nhmrc.gov.au/grants-funding/research-funding-statistics-and-data
- 29 Thereapeutic Goods Administration 2018. Prescription strong (Schedule 8) opioid use and misuse in Australia options for a regulatory response Consultation paper. Access online at: https://www.tga.gov.au/sites/default/files/consultation-prescription-strong-schedule-8-opiod-use-misuse-in-australia-options-for-regulatory-response.pdf
- 30 Australian Commission on Safety and Quality in Health Care 2015. Key Finding and recommendations from the Atlast of Health Variation. Access online at: https://www.safetyandquality.gov.au/wp-content/uploads/2015/11/SAQ201_01_FrontSection_v10_FILM_TAGGED-3-Key-findings-and-recommendations.pdf
- 31 Painaustralia 2010. National Pain Strategy, Canberra. Available online at: https://www.painaustralia.org.au/static/uploads/files/national-pain-strategy-2011-wfvjawttsanq.pdf
- 32 Cousins MJ, Gallagher RM (2015). Fast facts: Cancer and chronic pain. Abingdon, England Health Press. https://trove.nla.gov.au/work/155140237?q&sort=holdings+desc&=1534230194614&versionId=212593017
- 33 Holliday S, et al (2018). Prescribing wellness: Comprehensive pain management outside specialist services. Aust Prescr, Jun; 41(3): 86–91. Published online 2018 May 15. doi: [10.18773/austprescr.2018.023]. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6003009/
- 34 Blanchard M, Tardif H, Fenwick N, Blissett C and Eagar K (2017) Electronic Persistent Pain Outcomes Collaboration Annual Data Report 2016. Australian Health Services Research Institute, University of Wollongong
- 35 Painaustralia 2010. National Pain Strategy, Canberra. Available online at: https://www.painaustralia.org.au/static/uploads/files/national-pain-strategy-2011-wfvjawttsanq.pdf



