painaustralia

Consultation on Australian Medical Research and Innovation Priorities for 2018-2021

September 2018

About Painaustralia

Painaustralia is the national peak body working to improve the quality of life of people living with pain, their families and carers, and to minimise the social and economic burden of pain. Members include pain and other specialists, health practitioners, health groups, consumers and researchers. Painaustralia works with our network to inform practical and strategic solutions to address this complex and widespread issue.

Executive Summary

Painaustralia welcomes the opportunity to contribute to the Australian Medical Research Advisory Board (AMRAB)'s national consultation to inform the development of the second set of Medical Research Future Fund (MRFF) Australian Medical Research and Innovation Priorities (Priorities) for 2018-2020.

Pain is a significant health, social and economic burden for millions of Australians and its prevalence is growing as the population ages and the rate of chronic conditions rises. It also carries a substantial economic cost to the nation, calculated at more than \$34 billion per year in 2007. Chronic pain is the third most costly health condition only following cardiovascular disease and musculoskeletal conditions which include pain as a major symptom,.¹ Yet despite the staggering impact and cost of pain, it remains a neglected and misunderstood health condition that continues to fall between the cracks of our health and research systems (Appendix A).

Over the 20 years between 1996 and 2016, research aimed at understanding the causes, management and impact of pain (which has multiple causes and strong relationship to other health conditions) has only attracted \$133 million dollars, averaging about \$6.6 million in funding per annum. In comparison, in the six years between 2012-2017, cardiovascular disease has funded \$687 million of research.²

Moreover, the \$133 million invested in pain research over the course of 20 years has been spread across a wide scope of over 50 field areas, ranging from Aboriginal and Torres Strait Islander health to therapies and therapeutic technology. Without a research strategy that focuses on pain management, outcomes across this myriad of topics remain hard to clarify and collate. It is harder yet to map knowledge translation and build a robust evidence base of the impact of pain management on health outcomes.

This sporadic and unstructured approach to dealing with pain is not unique to medical research and funding. Overall, Painaustralia has serious concerns about the lack of recognition of pain as a key health policy priority at all levels of government and the real implications for improving the quality of life for millions of Australians.

While pain medicine is a recognised medical specialty and there is wide support across the pain sector for best practice models of care, pain to date has been a neglected policy priority. While the National Pain Strategy was developed in 2010 with the support of 200 stakeholders from across the pain, health, medical and consumer sectors and provides a blueprint for the treatment and management of acute, chronic and cancer pain, it has not yet been funded or adopted at a national level There are significant barriers to accessing best practice pain management that require a range of policy responses and initiatives.

The prevalence, impact and cost of pain is an issue that Australia cannot afford to ignore any further. Research across this sector is not growing quickly enough to be able to compete in the research funding environment. There is a need to attract new researchers into the field at early and mid-career levels and to establish a cohort of future pain specialist researchers. To achieve this, there needs to be a strategic, sustained and increased investment in pain research.

Painaustralia recommends two key strategies to deliver an improved outcome in pain research that could make a difference to awareness and understanding and management of the burden of chronic pain in Australia:

- a targeted research strategy for pain
- a National Institute for Pain Research
- 1 MBF Foundation The high price of pain: the economic impact of persistent pain in Australia. Report conducted by Access Economics in collaboration with the Pain Management Research Institute, 2007
- 2 NHMRC Grants 2000-2016 Access online here.

Background: current state of play in pain research

Despite the staggering reach, impact and cost of pain, it remains a condition that continues to fall between the cracks of the health and research systems (Appendix B). Pain medicine was recognised as a medical specialty in Australia in 2005. In some ways, it is an emerging health sector.

Over the 20 years between 1996 and 2016, research aimed at understanding pain has only attracted \$133 million, averaging about \$6.6 million in funding per annum. By comparison, in the six years between 2012-2017, cardiovascular disease was funded \$687 million.³

Moreover, the \$133 million invested in pain research over the course of 20 years have been spread across a wide scope of over 50 field areas, ranging from Aboriginal and Torres Strait Islander health to therapies and therapeutic technology. Without strategic research focus on pain management, outcomes across the myriad of topics remain hard to distinguish and it will be even harder yet to map knowledge translation and actual impact on pain management across this funding.

While we have a network of exceptional leaders in pain management and medicines, and a small number of dedicated pain research programs across Australia, a clear and strategic research agenda for pain is essential to help identify gaps in knowledge and practice.

This includes understanding the causes and consequences of chronic pain and how to prevent and minimise its impact. The translation and dissemination of early clinical research is also important to ensure results can translate into health practice and policy, as well as be communicated to consumers.

Key Issues

Targeted research strategy for pain

In the 2018-19 Budget, the Australian Government committed \$125 million over nine years from the MRFF to establish a Targeted Translation Research Accelerator in chronic conditions. This is an excellent initiative that recognises that chronic conditions carry a significant disease burden for Australians. This initiative also provides a platform to further examine the common role chronic pain plays across the spectrum of chronic conditions.

In 2005, the most recent year for which comparable prevalence data on all diseases are available, chronic pain prevalence was comparable to, or higher than, a number of National Health Priority Areas (NHPAs). Current NHPA conditions are: cardiovascular disease, cancer, musculoskeletal diseases, injuries, mental disorders, asthma and diabetes, with dementia added in 2014.⁴ Chronic pain is a factor common to many of these conditions.

Despite international recognition of chronic pain as a chronic condition or disease in its own right,⁵ including by the World Medical Association⁶ and growing awareness of internationally recognised best practice strategies for pain, Australia has no official research strategy that addresses this serious and disabling health condition.

The establishment of a research strategy and the accompanying support for an effective network of researchers in sharing existing data would ensure the best use of resources, linkages between national, international and emerging research streams.

A focused research strategy in this area could:

- 1. Improve community understanding of pain and best practice pain management
- 2. Achieve access to multidisciplinary care at all levels
- 3. Support skilled professionals
- 4. Identify cause of pain conditions and understand preventative measures that reduce the impact of pain
- 5. Understand emerging treatments and innovation in pain medicine and develop the evidence base of what is working.
- 3 NHMRC Grants 2000-2016 Access online here.
- 4 Australian Bureau of Statistics (2005) National Health Survey (NHS) 2004-05
- 5 European Pain Federation Declaration: http://www.efic.org/index.asp?sub=724B97A2EjBu1C
- 6 World Medical Association Resolution: http://www.wma.net/en/30publications/10policies/p2/

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While Painaustralia welcomes the MRFF Strategy and Priorities and recommends that continued investments are made in drug effectiveness and repurposing, targeted translation topics and building evidence in primary care, we would like to emphasise the importance of ensuring a focus on pain across the MRFF priorities, given the following contemporary issues:

- Understanding the efficacy and safety of pharmacological treatment options remain of critical importance to
 people with pain and health practitioners, with current evidence highlighting the efficacy of some pain medications
 to restore function in chronic pain patients. There is growing interest and expectation around the use of products
 like medicinal cannabis for chronic pain, however there is still limited availability of well-designed clinical studies
 to support quality evidence for the use of medicinal cannabis for chronic non-cancer pain (CNCP), and much
 public opinion on its use is influenced by anecdote. More independent research and community awareness are
 needed to ensure the safe and effective use of all medicines for chronic pain.
- Many pain conditions could be effectively managed at the primary care level, yet there are significant barriers to achieving coordinated best practice pain management for the majority of people living with pain. Enriching our understanding of best practice pain management at the primary care level is a key priority for the pain sector and would significantly benefit many consumers.

Making pain management a strategic priority will assist in improving funding for laboratory, medical and social research in pain, and facilitate research translation into policy and practice. Specific issues include:

- identifying and supporting centres for research excellence in pain;
- promoting collaboration between laboratory and clinical based researchers; and
- supporting multi-centred trials of innovative therapy and/or models of care in pain medicine.

Australia has some of the world's leading pain researchers in the animal physiology, brain imaging and social aspects of pain: broadening this skill base and providing improved support and co-ordination could produce significant discoveries and practice change. Australia's health care system and regulatory practices make it a suitable environment for rapid transition of international and local drug and biological agent development into early (phase 1, 2) clinical trials.

Recommendation

Make pain management a strategic research priority consistent with the Australian Government's policy of reducing the significant burden of chronic conditions in Australia

A National Institute for Pain Research

Research is a key priority for the pain sector. The National Pain Strategy, developed in 2010 by 200 stakeholders representing the health, medical and community and consumers, outlined the research priorities to enable better outcomes for people living with chronic pain.

The Strategy was recently reviewed at a Roundtable convened by Painaustralia and attended by the Minister for Health Hon Greg Hunt MP in June 2018, with the participants finding it 'fit for purpose' today and highlighting 'slow progress since 2010 in pain research and the significant opportunity to harness new research, innovation and technology to improve health outcomes'.

The specific action outlined in the National Pain Strategy (see Appendix A) can be used to guide the strategic direction of the proposed New Institute of Pain Management.

A National Institute of Pain Research could provide a dedicated and focused avenue for achieving an improvement in investment and effort in pain research. The establishment of an Institute would provide a key platform to deliver a strategic approach that would enable Australia to make progress on pain research and innovation and would:

- establish and support a working 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, medical 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 traditional and conventional pain management mindset as new approaches support experimentation and learning, and a continuous flow or knowledge and ideas that develops, attracts and retains talent and partners.

Recommendation

Funding be made available from the MRRF to establish a National Institute of Pain Management with the aim of improving the level of investment and dedicated focus in pain research in collaboration with the health and research sector.

Conclusion

A research agenda for pain needs to be developed as a matter of urgency to identify and address the significant gaps in knowledge and practice. Research into the clinical, social and economic aspects of pain needs to be supported by appropriate funding. Similarly, translation and dissemination strategies need to be developed to ensure that research results in practice and policy. Importantly, research findings need to be communicated to consumers, with particular attention to health literacy issues to assist them to self-manage pain conditions.

The Government's \$125 million commitment over nine years from the MRFF to establish a Targeted Translation Research Accelerator in chronic conditions is a strong indicator of their support for furthering chronic condition research, and we recommend that chronic pain is considered as an integral component of tackling the burden of chronic disease.

We trust that the matters raised through our submission will be useful in helping the AMRAB determine funding priorities for the MRFF and welcome the opportunity to discuss our submission with you further.

APPENDIX A

National Pain Strategy Strategic Research Priorities

Enable pain research at a 22.1 Designate pain as a discrete field in NHMRC/ARC funding streams and project national level grant applications **High priority** 22.2 Designate basic and clinical pain research as a priority area of research for NHMRC 22.3 Provide infrastructure and new funding for research at a basic level and at all levels of the health care hierarchy and at all levels of evidence: including selfmanagement and carer support, primary health care, hospitals, pain clinics, universities and government, and quality assurance through to meta-analysis 22.4 Establish data linkage methodologies between Medicare, PBS and other relevant databases to assist evaluation of treatments and models of service delivery 22.5 Promote policy-relevant research, including health services, health systems and/or cost-effectiveness research 22.6 Promote collaboration between chronic pain researchers and cancer researchers around cancer survivors and pain 22.7 Foster research collaborations such as PaCCSC (Palliative Care Clinical Studies Collaborative) and the peak palliative medicine bodies in each state (e. g. Palliative Medicine Committee of Victorian Cooperative Oncology Group) 22.8 Develop a national paediatric pain research agenda with an appropriate funding stream to support it Identify information gaps 23.1 Assess burden of chronic pain in acute care system through changing coding underpinning all objecfocus (see 3.2) tives in this document **High priority** 23.2 In collaboration with people with pain, carers and other supporters, define consumer barriers for poor uptake of pain assessment and interventions, and examine ways to increase consumers' ability to request pain assessment and therapy 23.3 Undertake a comprehensive evaluation of community and clinical interventions

23.3 Undertake a comprehensive evaluation of community and clinical interventions for chronic pain management, including models of care, medicines, procedures, complementary interventions, and consumer education/self-management programs. Evaluation should include assessment of global functioning (e.g. return to work status, self rated disability, quality of life) and follow-up over longer time periods (12 months plus).

- 23.4 Develop a research agenda, including qualitative, quantitative, health services and knowledge transfer research, in public and private settings, to identify gaps in the evidence base and gather the evidence necessary to improve outcomes for pain management
- 23.5 Assess community attitudes towards pain and people with pain
- 23.6 Collect data on chronic pain as a contributing factor to suicide and increased mortality7
- 23.7 Assess impact of chronic pain in childhood on future educational achievement, social isolation, transition to adult chronic pain, and difficulties in transition to the workforce
- 23.8 Assess impact of ageing population and workforce on incidence of pain
- 23.9 Investigate cost-effectiveness of strategies that may reduce the future burden of pain (e.g. obesity management to reduce burden of osteoarthritis)
- 23.10 Determine the organisational arrangements or care pathways that support best patient outcomes and cost-effectiveness
- 23.11 Investigate which patient resources and psycho-educational strategies (e.g. pain diaries, medication sheets, patient education) improve outcomes for particular patient populations
- 23.12 Evaluate the introduction of evidence-based complementary medicine by accredited practitioners in an inpatient setting
- 24.1 Identify barriers to pain research in special needs groups (e.g. aged, Aboriginal and Torres Strait Islander, CALD, cognitively/ intellectually impaired, infants, relevant to populations children and adolescents)
 - 24.2 Develop strategies and measurement tools to overcome barriers
 - 24.3 Seek evidence of safety and efficacy of pain treatments frequently used in older people, where there is lack of evidence in this population
 - 24.4 Improve the evidence base for analgesia based on differing needs:
 - in the chronic non-cancer pain trajectory
 - in the cancer trajectory
 - in the palliative care trajectory, from 'palliative approach' to 'end of life' to 'terminal care'
 - cultural and contextual difference

Andersson 2009. 7

Ensure research is

with special needs

APPENDIX B

Background: Understanding Pain

Pain represents a significant health, social and economic burden for millions of Australians and carries a substantial economic cost to the nation.

DEFINING PAIN

Acute, chronic and recurrent pain

The International Association for the Study of Pain 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 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.

Beyond looking for the causes of pain (and often there is no known cause of pain²) it is helpful to consider the length of time pain persists because the longer the pain experience, the more significant its impact on individuals, communities and the economy.

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 beyond the time expected for a painful condition or injury to heal, usually about 3 months.⁵

Chronic pain can be caused by a range of conditions or factors including injury, arthritis, osteoporosis or a range of musculoskeletal conditions, and can develop in a variety of ways:

- It can be associated with surgery, trauma or other condition, or it can exist without a clear reason.
- It can be a symptom of another disease, or it can be a stand-alone condition.
- It might show up in a scan or test, or there may be no 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

The National Pain Strategy defines pain in five categories:

- Acute pain, defined as a normal and time-limited response to trauma or other 'noxious' experience, including pain related to medical procedures and acute medical conditions
- 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
- Cancer-related pain.

What are some of the pain conditions and causes?

Pain is an issue for many people living with conditions that are directly considered to be the cause of pain and for those living with other chronic conditions that include pain as a symptom.

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:

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

Injury is also a leading cause of chronic pain and it can occur post-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.

17% of pain cases had no known cause, 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 makes it clear that pain is a subjective experience.

Even in acute pain situations following surgery or injury, the person's experience of pain will not only depend on the pain stimulus itself. 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 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. When the nerve messages reach the brain, the brain thinks there is harm and reacts by feeling 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 pain 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 environmental, which can overlap, and 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.¹⁴ This understanding has led to enhanced knowledge, effectiveness and innovation in pain medicine.

The Prevalence: 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).⁸ This is consistent with global estimates.⁹

Pain in general is prevalent, with 67% of Australians reporting experience bodily pain in the last four weeks in 2007-08. Around one in ten Australian experience severe or very severe levels of pain.¹⁰

The rates of chronic pain are on a par with the prevalence of mental ill-health in Australia,¹¹ yet pain remains a neglected and misunderstood as a public health issue.¹²

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 2011.¹³

Almost one in five of all GP consultations involved patients who had arthritis, chronic back pain or both conditions, irrespective of whether the condition was managed.¹⁴

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 64.¹⁵ 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 per cent of children experience chronic pain, with the greatest incidence in adolescents, especially for young girls, and about five per cent of children have moderate to severe pain, with headaches, abdominal pain, limb pain and complex regional pain syndrome the most common forms of pain.¹⁶

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 living with chronic pain is seven years,¹⁷ which presents a significant barrier to social and economic participation, particularly when there is often no known cure.¹⁸

Most people of working age (15–64) with disability and chronic back problems experience employment restrictions, with a substantial proportion permanently unable to work. International and Australian studies that show low back pain is a leading cause of work absence, inability to work and premature exit from the workforce, lost productive life years and receipt of disability benefit.¹⁹

Two of the most common health conditions that cause people to retire early are back injuries and arthritis in about 40% of cases - both associated with chronic pain.^{20,21}

The majority of patients included in 2016 Electronic Persistent Pain Outcomes Collaboration (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%). Nineteen percent of episodes involved a compensation claim and over one third of patients (34%) were unemployed due to their pain condition and 8% were on leave.²²

The daily challenges of chronic pain include decreased enjoyment of normal activities, loss of function and relationship difficulties.²³

Children and adolescents living with pain can experience low school attendance, become socially isolated and unable to participate in sporting or other activities.²⁴

The vast majority (90%) of people with severe/very severe pain reported some level of interference with their normal work (both outside the home and housework) in the previous four weeks.²⁵

The daily challenges of chronic pain that are commonly described include decreased enjoyment of normal activities, loss of function, role change and relationship difficulties.²⁶

As chronic pain is largely invisible, sufferers can feel misunderstood and stigmatised, by co-workers, friends, family, and even the medical profession.²⁷ 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 is closely associated with other health, mental 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.²⁸

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.

Chronic pain and mental illness, 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.²⁹ High rates of generalised anxiety disorder, post-traumatic stress disorder and substance misuse are also reported in people with chronic pain.³⁰

In Australia and New Zealand, 40.5% of pain patients captured in ePPOC data in 2016 reported also suffering depression and/or anxiety³¹ which correlates with global studies.

This 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.³²

It is over 10 years since the total cost of chronic pain was estimated and it is likely to be much greater today with the rise in the burden of chronic pain. In 2007, it was estimated at \$34.3 billion, with total productivity costs making up around \$11.7 billion of this cost.³³

Health system costs represented \$7 billion, including inpatient, outpatient and out of hospital medical costs as well as other professional services, pharmaceuticals and pain management in residential aged care. Losses from transfer payments comprise \$2.6 billion. Years lost to disability (YLD) accounted for \$11.5 billion.

When it is considered that the total cost of arthritis and other musculoskeletal conditions in Australia was estimated at \$55.1 billion in 2012 – the cost of all chronic pain is exponential.³⁴

Addressing chronic pain, a burgeoning health issue, is critical to addressing lost productivity. In 2012 some 650,000 Australians aged 45-64 years are lost from the workforce because of their ill health, receive a weekly income that is less than one quarter of those in full time employment, lose about \$300 per week in taxation, and pay an additional \$150 per week in government income support payments on average.³⁵ There were estimated to be 9.9 million missed workdays due to chronic pain each year in Australia in 2006.³⁶

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 (all of which carry a strong association with chronic pain).³⁷

Acting on pain is therefore is an imperative, not just in determining the MRFF priorities, but across the scope of our health system. Australia urgently needs to recognize that pain is a national health priority.

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- 8 https://www.ncbi.nlm.nih.gov/pubmed/11166468
- 9 https://www.ncbi.nlm.nih.gov/pubmed/27537761
- 10 http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4841.0Chapter12011
- 11 http://www.health.gov.au/internet/main/publishing.nsf/content/mental-fifth-national-mental-health-plan
- 12 https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-11-770
- 13 https://www.aihw.gov.au/reports-statistics/health-conditions-disability-deaths/chronic-musculoskeletal-conditions/overview
- 14 https://www.myhealthycommunities.gov.au/our-reports/gp-care-patients-chronic-conditions/december-2014/report/key-findings-gp-care-forpatients-with-arthritis-and-chronic-back-pain
- 15 http://www.abs.gov.au/AUSSTATS/abs%40.nsf/Lookup/4102.0Main%2BFeatures30Mar%2B2011
- 16 http://www.anzca.edu.au/documents/children-with-chronic-pain-miss-out-on-services-me.pdf
- 17 http://www.iasp-pain.org/AM/Template.cfm?Section=Home&Template=/CM/ContentDisplay.cfm&ContentID=2908
- 18 https://www.huffingtonpost.com.au/2017/10/12/pain-disorder-chronic-pain-with-no-explanation_a_23240605/
- 19 https://www.apsoc.org.au/PDF/Publications/20160816_AIHW_Impacts_of_Chronic_Back_Pain.pdf
- 20 http://www.microsimulation.org/IJM/V7_2/4_IJM_7_2_2014_Schofield_et_al.pdf
- 21 Schofield, D. et.al., Quantifying the Productivity Impacts of poor health and health interventions, University of Sydney, 2012
- 22 https://ahsri.uow.edu.au/content/groups/public/@web/@chsd/@aroc/documents/doc/uow240735.pdf
- 23 https://www.mja.com.au/journal/2013/199/6/depression-and-chronic-pain
- 24 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5380848/
- 25 http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4841.0Chapter12011
- 26 https://www.mja.com.au/open/2012/1/4/depression-and-chronic-pain
- 27 https://www.ncbi.nlm.nih.gov/pubmed/22054062
- 28 http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4841.0Chapter12011
- 29 https://www.mja.com.au/journal/2013/199/6/depression-and-chronic-pain
- 30 https://www.ncbi.nlm.nih.gov/pubmed/17350169
- 31 https://ahsri.uow.edu.au/content/groups/public/@web/@chsd/@aroc/documents/doc/uow240735.pdf
- 32 Schofield, D. et al., Quantifying the Productivity Impacts of poor health and health interventions, University of Sydney, 2012
- 33 http://www.painaustralia.org.au/static/uploads/files/mbf-economic-impact-wffhrlzqsaht.pdf
- 34 http://apo.org.au/node/35957
- 35 http://www.microsimulation.org/IJM/V7_2/4_IJM_7_2_2014_Schofield_et_al.pdf
- 36 https://www.ncbi.nlm.nih.gov/pubmed/16310720
- 37 http://www.painaustralia.org.au/static/uploads/files/mbf-economic-impact-wffhrlzqsaht.pdf

- 1 http://www.iasp-pain.org/PublicationsNews/Content.aspx?ItemNumber=1957&navItem-Number=677
- 2 https://www.huffingtonpost.com.au/2017/10/12/pain-disorder-chronic-pain-with-no-explanation_a_23240605/
- 3 https://www.aci.health.nsw.gov.au/chronic-pain/painbytes/introduction-to-pain/what-isacute-pain-and-chronic-pain
- 4 http://www.painaustralia.org.au/improving-policy/national-pain-strategy
- 5 https://www.nps.org.au/medical-info/consumer-info/chronic-pain-explained?c=what-ischronic-pain-e25c6ccf
- 6 www.painaustralia.org.au/about-pain/common-forms-of-pain
- 7 http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4841.0Chapter12011
- 8 https://www.painmanagement.org.au/resources/about-pain/conditions.html
- 9 https://www.sciencedaily.com/releases/2018/03/180321130901.htm
- 10 https://ahsri.uow.edu.au/content/groups/public/@web/@chsd/@aroc/documents/doc/ uow240735.pdf
- 11 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1803463/?page=1
- 12 http://www.painaustralia.org.au/improving-policy/national-pain-strategy
- 13 https://www.nps.org.au/medical-info/consumer-info/chronic-pain-explained?c=what-ischronic-pain-e25c6ccf
- 14 http://www.painaustralia.org.au/improving-policy/national-pain-strategy

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Mailing address: PO Box 9406 DEAKIN ACT 2600 Phone: 02 6232 5588 Email: admin@painaustralia.org.au Website: www.painaustralia.org.au