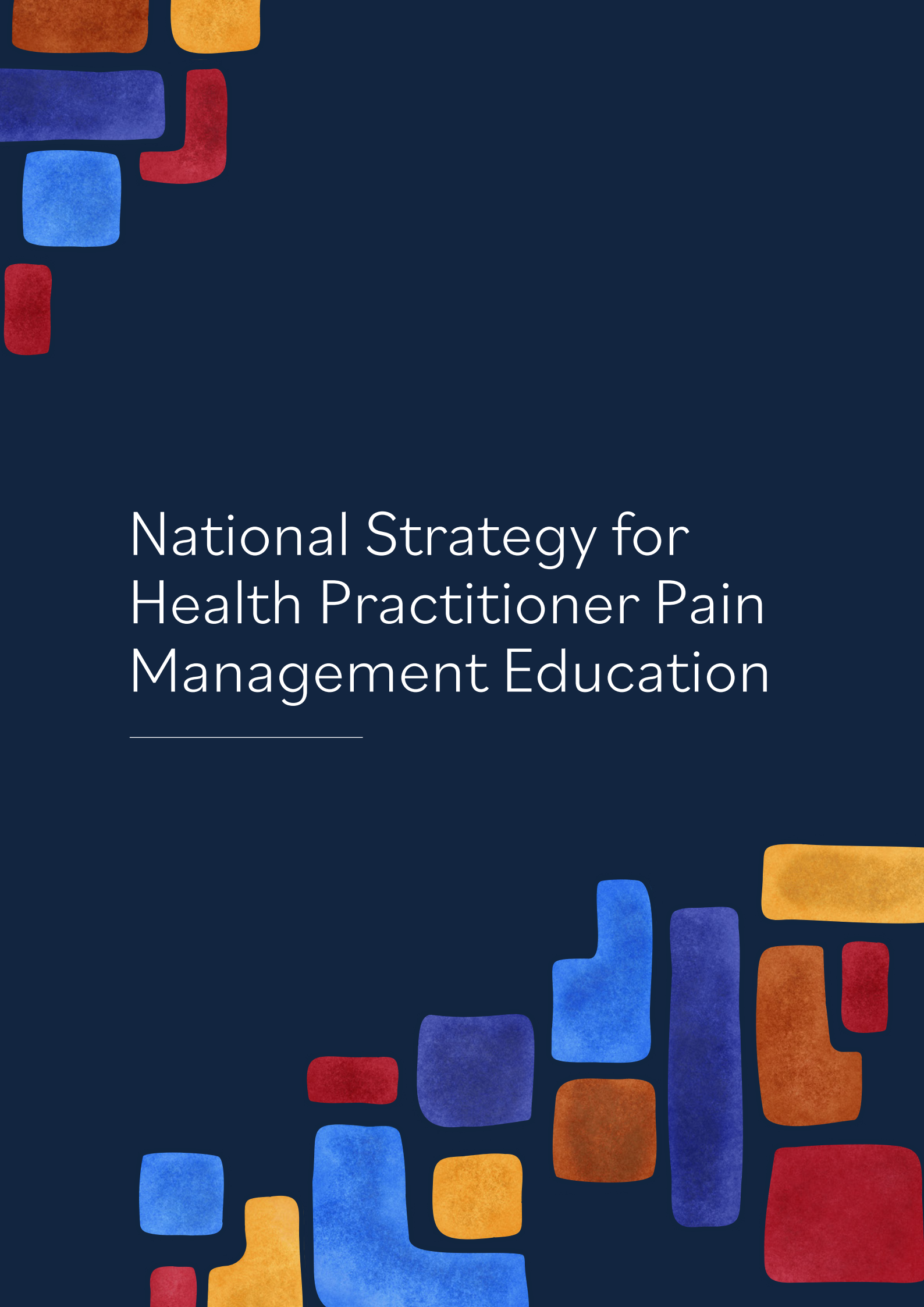
National Strategy for Health Practitioner Pain Management Education



Australian Government

The National Strategy for Health Practitioner Pain Management Education project was funded through an Australian Government grant and developed by the Faculty of Pain Medicine, Australian and New Zealand College of Anaesthetists.

FPM

Faculty of Pain Medicine
ANZCA

ANZCA acknowledges the traditional custodians of Country throughout Australia and recognises their unique cultural and spiritual relationships to the land, waters and seas and their rich contribution to society. We pay our respects to ancestors and Elders, past, present and emerging.

ANZCA acknowledges and respects ngā iwi Māori as the Tangata Whenua of Aotearoa and is committed to upholding the principles of the Treaty of Waitangi, fostering the college's relationship with Māori, supporting Māori fellows and trainees, and striving to improve the health of Māori.

Foreword

Pain is a universal human experience, but pain that persists beyond the healing time of an injury or disease is one of the major public health problems facing Australians. Around one in five of us will suffer persistent pain at some point in our life.

It has never been more urgent, given the complexity of medical care and burgeoning knowledge about the complexities of chronic pain, for health professionals to be educated in the most effective and up-to-date ways to assess and treat people with these problems.

The *National Strategic Action Plan for Pain Management* recognised this significant issue and this health practitioner education strategy is one of the first tangible outcomes of the implementation phase of the Action Plan.

The Faculty of Pain Medicine of the Australian and New Zealand College of Anaesthetists was uniquely placed to deliver this strategy. Founded in 1998, the Faculty is a unique institution, with a dedication and expertise in pain management education that is broad and deep.

Work on this strategy commenced in June 2020 and, despite the challenges of lockdowns and travel restrictions, a very comprehensive cross-section of stakeholders was actively engaged, their feedback listened to, and outcomes used to shape the final strategy.

On behalf of the Faculty of Pain Medicine, I would like to thank the project team for their enormous effort in developing this comprehensive plan for improving health practitioner pain management education. In years to come I hope it will be seen as the beginning of the end of the era where health professionals of all disciplines feel unprepared for managing and assessing patients with persistent pain.

I would like to thank the Federal Department of Health for commissioning this *National Strategy for Health Practitioner Pain Management Education*, thereby progressing the implementation of an important aspect of the *National Strategic Action Plan for Pain Management*. I look forward to welcoming the widespread adoption of the recommendations of this strategic roadmap for the betterment of the health and wellbeing of the Australian people.

Sincerely,

Associate Professor Michael Vagg
Immediate Past Dean
Faculty of Pain Medicine
Australian & New Zealand College of Anaesthetists

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Glossary

Aboriginal and/or Torres Strait Islander person: A person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander.

Best practice: Best practice is more than practice based on evidence. It represents quality care which is deemed optimal.

Biopsychosocial: A model reflecting the development of illness through the complex interaction of biological factors, psychological factors and social factors.

Community engagement: Working with individuals and communities to establish education solutions for pain management challenges.

Competency framework: An established set of knowledge, skills and professional behaviours recognised as essential for effective pain management.

Continuing professional development: Education for health practitioners to maintain, improve and broaden their knowledge, skills and professional behaviours relevant to their area of practice.

Culturally and linguistically diverse communities: Broad term used to describe communities with diverse languages, ethnic backgrounds, nationalities, traditions, societal structures and religions.

Cultural safety: "Cultural safety is about creating an environment that is safe for Aboriginal and Torres Strait Islander people. This means there is no assault, challenge or denial of their identity and experience. Cultural safety is about: Shared respect, shared meaning and shared knowledge." (Department of Health, Victoria).

Entry-to-practice: The term 'entry-to-practice' covers a broad range of education that may be undertaken prior to an individual entering their area of clinical practice.

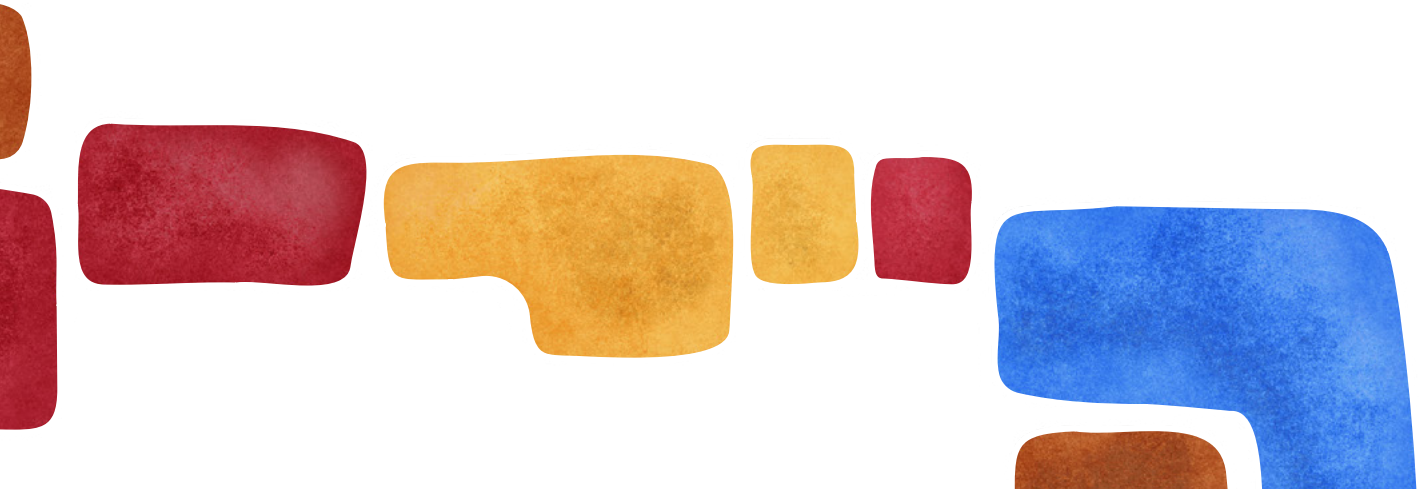
Evidence-based: The principle that discipline-specific practices should be based on the best available scientific evidence, rather than tradition, personal judgement, or other influences.

Health: The World Health Organization (WHO) defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Health practitioner/professional: Any individual who practices a health profession.

Hospitalisation: An episode of hospital care that starts with the formal admission process and ends with the formal separation process.

Industry reference group: An advisory body of health practitioners recognised as having expertise in pain and clinical pain management to provide a healthcare industry perspective.



Interdisciplinary: Denotes that a variety of disciplines are coordinated toward a common and coherent approach in the care of persons living with pain.

Interprofessional learning: When two or more professions learn with, about, and from each other to enable effective collaboration and improve health outcomes.

Iterative consultation: Multiple independent group discussions aimed at generating themes to inform the build, refinement and improvement of goals, principles and action plan.

Learner-centred: When the learner is placed at the centre of learning as an active participant, putting their interests first and recognising that the learner brings their own knowledge, past experiences, education, and ideas to the learning opportunity.

Medicare: A national, government-funded scheme that subsidises the cost of personal medical services for all Australians and aims to help them afford medical care.

Multidisciplinary: Denotes the additive engagement of multiple health practitioners who stay within the boundaries of their fields in providing pain care for persons living with pain.

Partnership: A voluntary agreement between two or more partners to work cooperatively toward a set of shared health outcomes. Partners may include consumers, carers and their communities, health practitioners, learners, educators, educational organisations and/or regulators.

Pharmaceutical Benefits Scheme (PBS): A national, government-funded scheme that subsidises the cost of a wide variety of pharmaceutical drugs, covering all Australians, to help them afford medicines.

Postgraduate education: A period of advanced study undertaken after successful completion of an undergraduate degree level course at a college or university.

Specialist education: A period of advanced vocational education and training in a recognised training program to attain fellowship of an Australian specialist college.

Telemedicine: The remote delivery of health care services, such as health assessments or consultations, over the telecommunications infrastructure.

The International Association for the Study of Pain (IASP): An international learned society promoting research, education, and policies for the understanding, prevention and treatment of pain.

With gratitude

The Faculty of Pain Medicine acknowledges the valuable input of the many individuals and organisations that took part in workshops, roundtable discussions, and meetings to shape this strategy.

We would also like to express our sincere appreciation to those individuals who shared their lived experience of pain with us so that we may learn from them.

THE INTERNATIONAL ASSOCIATION
FOR THE STUDY OF PAIN STATES THAT PAIN IS:

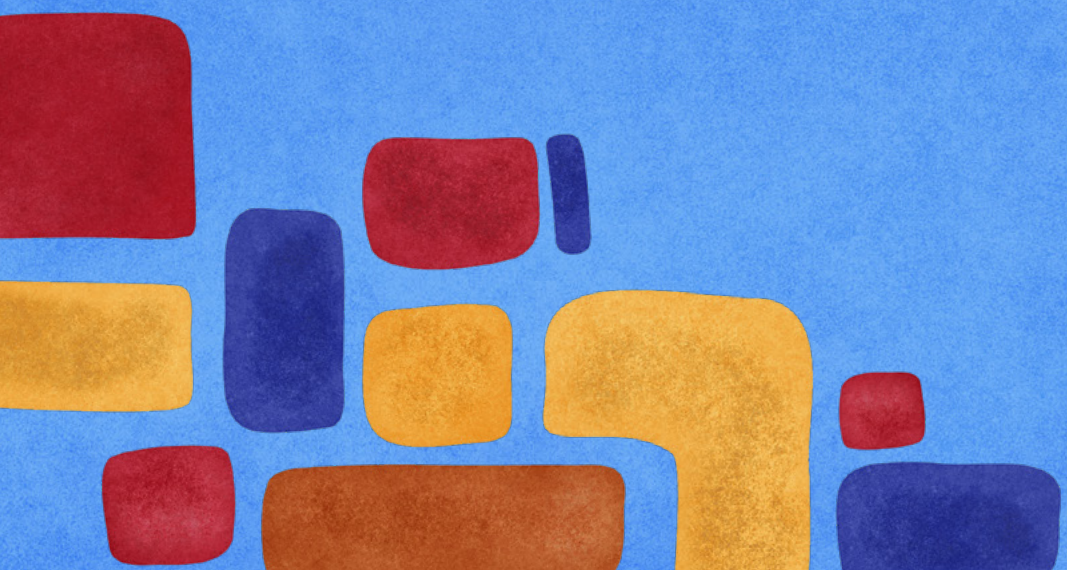
"An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage"

and is expanded upon by the addition of six key notes:

- Pain is always a personal experience that is influenced to varying degrees by biological, psychological, and social factors.
- Pain and nociception are different phenomena. Pain cannot be inferred solely from activity in sensory neurons.
- Through their life experiences, individuals learn the concept of pain.
- A person's report of an experience as pain should be respected.
- Although pain usually serves an adaptive role, it may have adverse effects on function and social and psychological wellbeing.
- Verbal description is only one of several behaviours to express pain; inability to communicate does not negate the possibility that a human or a nonhuman animal experiences pain.[1]

Figure 1: The International Association for the Study of Pain definition of pain[1]

Overview



The burden of pain in our society has reached crisis point and carries with it high social and economic costs. Despite these factors, many health practitioners have a poor understanding of pain and contemporary management options [2]. It is estimated that up to 80 per cent of Australians living with chronic pain may be missing out on best-practice treatments [3]. This situation highlights a critical need for improving the knowledge, skills and practice of health practitioners caring for individuals living with pain.

In 2019 the 'need to improve the pain management-related knowledge and skills of health practitioners' was identified as a key priority within the National Strategic Action Plan for Pain Management [2].

In 2020 the Australian government demonstrated its commitment to this priority by funding the Faculty of Pain Medicine (FPM), Australian and New Zealand College of Anaesthetists (ANZCA), to develop a national strategic roadmap for health practitioner pain management education.

The *National Strategy for Health Practitioner Pain Management Education* provides a blueprint for the future of pain education over the next five to 10 years with its underpinning values, principles, goals and detailed implementation plan. It articulates not only 'what' needs to be achieved, but 'how' we can achieve the desired goals in the most effective and resource-efficient way, to ensure a meaningful and positive impact for those in the community living with pain.

NATIONAL STRATEGY FOR HEALTH PRACTITIONER PAIN MANAGEMENT EDUCATION

A clear strategic roadmap to guide the upskilling of the Australian health workforce in contemporary, evidence-based pain care with the aim of improving the health outcomes of individuals living with pain.

This strategy should be considered in conjunction with other sector-specific health strategies and broader health workforce plans that include workforce upskilling (Refer to Appendix 1: Australian health strategies and action plans).

AIM

The overarching aim of the *National Strategy for Health Practitioner Pain Management Education* is that health practitioners receive high quality, evidence-based, contextually relevant and timely education throughout their career-span to support the delivery of best-practice care for individuals living with pain in our community.

SCOPE

This strategy targets the learning needs of a broad range of key health practitioners (registered, self-regulated and unregulated) at critical points within their education and career continuum including: entry-to-practice programs (vocational and higher education), postgraduate and specialist education, and continuing professional development (Figure 2).

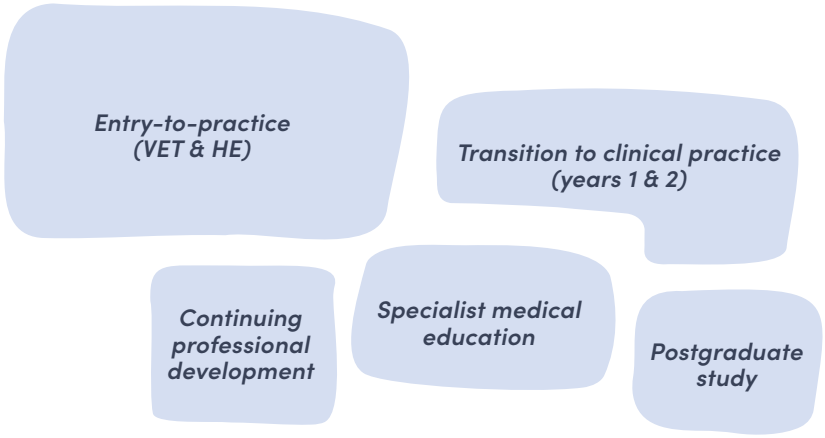


Figure 2: Health practitioners' education and career continuum

STRATEGY DEVELOPMENT

At the outset of the project in 2020 an extensive environmental scan and literature review *(see Appendix 2)* were undertaken to provide a clear picture of the current state of pain management and the related education of health practitioners. The review provided a foundation on which to build the strategy.

A key strength of the strategy development process was the extensive stakeholder engagement undertaken.

Approximately 180 individuals and organisations from across Australia took part in a series of workshops, roundtable discussions and targeted meetings and the FPM team employed an iterative consultation process to ensure that initial concepts were able to emerge organically and then be further refined. This process established buy-in and set the foundation for partnerships and collaborations in relation to the future implementation of the strategy.

OUTCOMES

The literature review clearly supported the urgent need for improved pain care and the lack of consistency in high quality pain-related education across health disciplines. Issues such as increasing waiting times for specialist pain care, lack of adequate access to services in rural, regional and remote regions, and emergence of long-COVID make this strategy all the more urgent and relevant.

Emerging from the iterative consultation process was a clear vision for health practitioner pain management education in Australia:

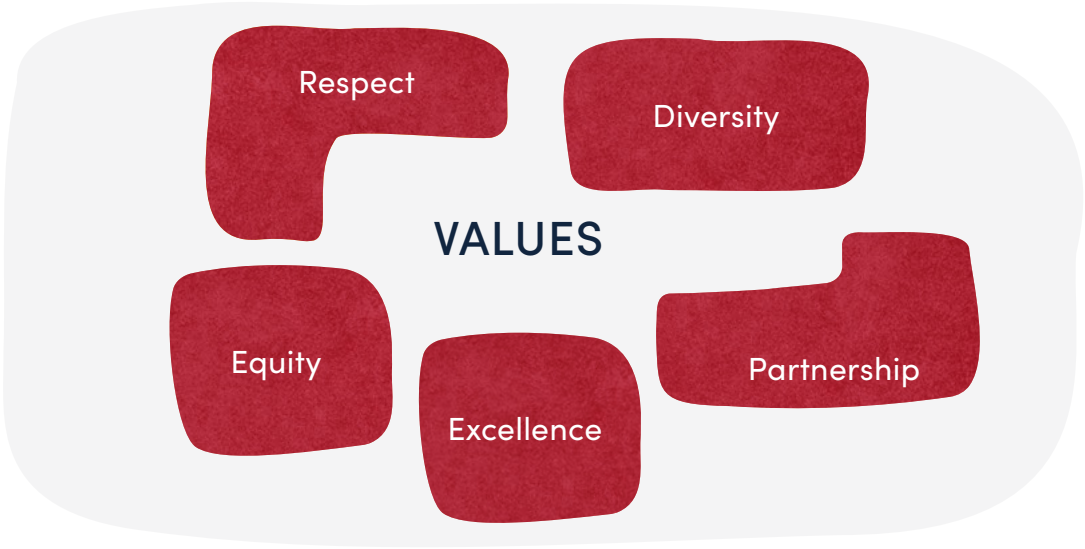
VISION

"Australia has a national education strategy which promotes evidence-based, best practice health care for individuals experiencing pain.

A nationally consistent set of values, principles and goals underpins and guides health practitioner pain management education in entry-to-practice, postgraduate and continuing education programs."

Stakeholders called for consistency and a 'common language and understanding' across health disciplines.

This common understanding will be supported by the set of shared values and principles developed and refined through the iterative consultation process:



PRINCIPLES

1. There is culturally safe collaboration and partnership in the design and delivery of pain management education.
2. Pain management education methodology and content are evidence-based.
3. Pain management education is learner-centred, relevant to place and context, and translated into practice.
4. Pain management education is accessible to all health practitioners.

The principles are designed to guide those developing and implementing pain management education, to ensure initiatives are successful, address areas of need, and have maximum impact.

This strategy document unpacks each of the principles, shining a spotlight on issues emerging from the literature and stakeholder discussions, providing a way forward.

Implementation of the strategy has been prioritised through five key goals which form the basis of the strategy's 'implementation plan'.

While each goal can be viewed as a potentially stand-alone body of work, it is important to note that the success of goal four will be supported by goals one to three being in place. The need to progress goals one and two is therefore a priority if transformative change is to occur across the entry-to-practice space in a timely way. Fortunately, there is already a body of work emerging from the concurrent *Health Professional Pain Management Education and Training Project* (which has a resource-development focus), that will support the achievement of goal three. This project is discussed later.

GOALS

1. Develop national standards for health practitioner pain management education.
2. Create a national pain management education competency/ capability/practice framework.
3. Develop educational resources that align with the standards and competency framework.
4. Embed pain management education into entry-to-practice curricula.
5. Equip educators to deliver pain management education.

To provide clear direction with regard to the recommended actions needed to achieve each of the goals, and to highlight key considerations, a detailed implementation plan has been developed.

IMPLEMENTATION PLAN

The Implementation Plan is a comprehensive roadmap to guide application of the National Strategy for Health Practitioner Pain Management Education.

The activities and considerations outlined in the implementation plan can be viewed on pages 46 - 51.

KEY MESSAGES

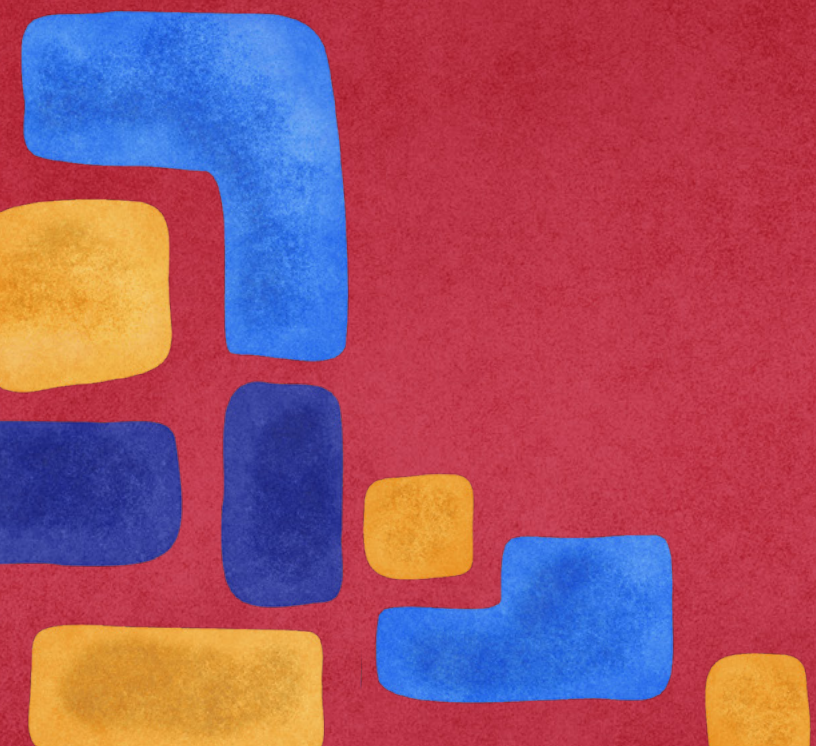
Underpinning this national strategy is the strong belief in the power of education to effect change. Education initiatives that are: informed by consumers, grounded in best-practice, well-constructed and resourced, relevant to the context of care, accessible for all health workers, and facilitated by skilled educators have the power to change practice and improve health outcomes in the community.

The strategy supports the use of contemporary teaching and learning methods that are applied to practice, incorporate interprofessional dimensions, and are aimed at achieving optimum learning outcomes. Achieving systems-level outcomes that lead to deep and sustainable changes in the way in which health practitioners view, approach and manage pain, requires the application of strategies that are designed to foster inclusion, buy-in and commitment at all levels. It is only through working in true partnership with our communities that we will achieve education solutions that improve the lives of Australians living with pain. This is particularly true when it comes to priority populations such as Aboriginal and Torres Strait Islander peoples, culturally and linguistically diverse communities, people in the aged care and disability sectors and children and young people.

Australia has a rich tapestry of cultures which is challenging when it comes to designing education that will benefit the whole population. There may be limited awareness of the varied cultural perspectives, beliefs and practices related to pain and pain management amongst culturally and linguistically diverse communities. Engaging directly with these communities in the design and development of education solutions will provide the best opportunity of improving health outcomes.

Lastly, throughout the development of this strategy, it was apparent that there is a clear and urgent need to inform quality pain management and pain management education.

The burden and impact of pain



Globally, there is a crisis in pain care with a disproportionate burden falling onto those in lower socio-economic groups.

Pain continues to be poorly managed globally. The World Health Organisation estimates more than 80 per cent of the world's population, mostly in low and middle-income countries, lack access to contemporary pain care [4-6]. Countries face challenges implementing reforms [7] and in developed countries with few barriers to treatment, attempts over recent decades to improve acute pain management have been less successful than expected.

Chronic pain is a major and increasing cause of morbidity and disability worldwide [13] (Figure 3). Chronic pain pervades all levels of society, disproportionately affecting those from lower socio-economic backgrounds [14]. It is commonly associated with a wide range of medical conditions, surgery, and injuries although, in some cases, no physical cause may be identified [13]. Investigations into the mechanisms underpinning the transition from acute to chronic pain are incomplete and the distinction between them imprecise, remaining time-based rather than mechanistic [9, 11, 12, 15, 16].

The International Association for the Study of Pain currently defines chronic pain as:

"Pain that lasts or recurs for longer than 3 months."

Figure 3: The International Association for the Study of Pain definition of chronic pain[13]

The Global Burden of Diseases Study 2019 [17] reported that musculoskeletal disorders (rheumatoid arthritis, osteoarthritis, low back pain, neck pain, gout, and all others) alone were responsible for 5·9% (4·6–7·3) of the total age-standardised disability-adjusted life-years (DALYs) in 2019, of which 98·1% (97·3–98·7) were years lived with disability (YLDs), equating 150 million (95% UI 109–198) DALYs [18]. In addition, headache disorders (migraine, tension-type headache and medication-overuse headache predominantly) were responsible for another 46·6 million (95% UI 9·77–100) YLDs in 2019 [19]. All other pain-related disorders add to this total albeit to lesser degrees.

Low back pain and other musculoskeletal diseases form an increasingly large component of the disease burden in countries with a high sociodemographic index such as Australia. Low back pain and headache disorders rank in the top 10 disorders in the 10 to 24-year and 25 to 49-year age groups with musculoskeletal disorders entering the top 10 for the 25 to 49 age group and ranked eleventh in the 50 to 74 age group [9, 16, 18, 19]. Importantly, these disorders also form a much larger component of health expenditure. However, this is yet to be reflected in investments in research to identify more effective treatments and preventative measures [20].

The COVID-19 pandemic is adding to the burden of pain.

As communities around the world recover from the worst of the COVID-19 pandemic, a new global health challenge has emerged: post-COVID condition/s [21-23] or currently named, 'long COVID'.

The various post-COVID conditions are yet to be fully elucidated [22]. Reported prevalence varies from one in two to one in five hospitalised patients remaining symptomatic at 12 months post-infection [24, 25]; while around three per cent of the general population may self-report symptoms [26]. Signs and symptoms vary enormously, fluctuating over time and generally impacting daily functioning [25, 27, 28]. However, the various manifestations of pain associated with COVID-19 infection have received little specific attention as yet.

Pain is one of the most common reasons Australians seek health care.

Almost one in five Australian adults, estimated at 3.24 million in 2018, lives with chronic pain [29-31] (Figure 4). Without action, this number is expected to increase to 5.23 million by 2050 [32, 33].

Patient visits to their general practitioner for the management of chronic back pain, or other unspecified chronic pain, rose by 67% in the decade from 2006-7 to 2015-16, estimated at an additional 400,000 consultations [31].

Pain prevalence differs by age and gender, cultural group and location across Australia, disproportionately affecting females and the elderly, Aboriginal and Torres Strait Islander peoples and Australians living in regional, rural and remote areas [34-36].

Differences in the health burden from painful conditions related to gender are particularly stark. Younger females have a greater risk of violence with intimate partner violence highest among females 40 to 44 years old with the consequent health burden second only to anxiety and depression. Musculoskeletal disorders, osteoporosis and back pain, are the leading causes or health burden in females aged over 45 (Women's Health Strategy, Appendix 1).

In contrast, more than 70% of the health burden related to injuries is borne by males, including self-inflicted injuries and suicide, transport and workplace accidents, assault, thermal injuries, drowning and falls (Men's Health Strategy, Appendix 1). Males living in remote Australia experience injury-related hospitalisation at twice the rate of urban males, increasing to four times the rate for transport accidents, and Aboriginals and Torres Strait Islander males having rates double those of non-indigenous males [35,36].

Osteoarthritis and endometriosis alone contribute to very high burdens of pain and disability for around 2.5 million Australians of working age. [37, 38].

In addition, chronic pain is the primary or compounding reason for over 100,000 hospitalisations Australia-wide every year [31, 39], affecting patient management and delaying discharge.

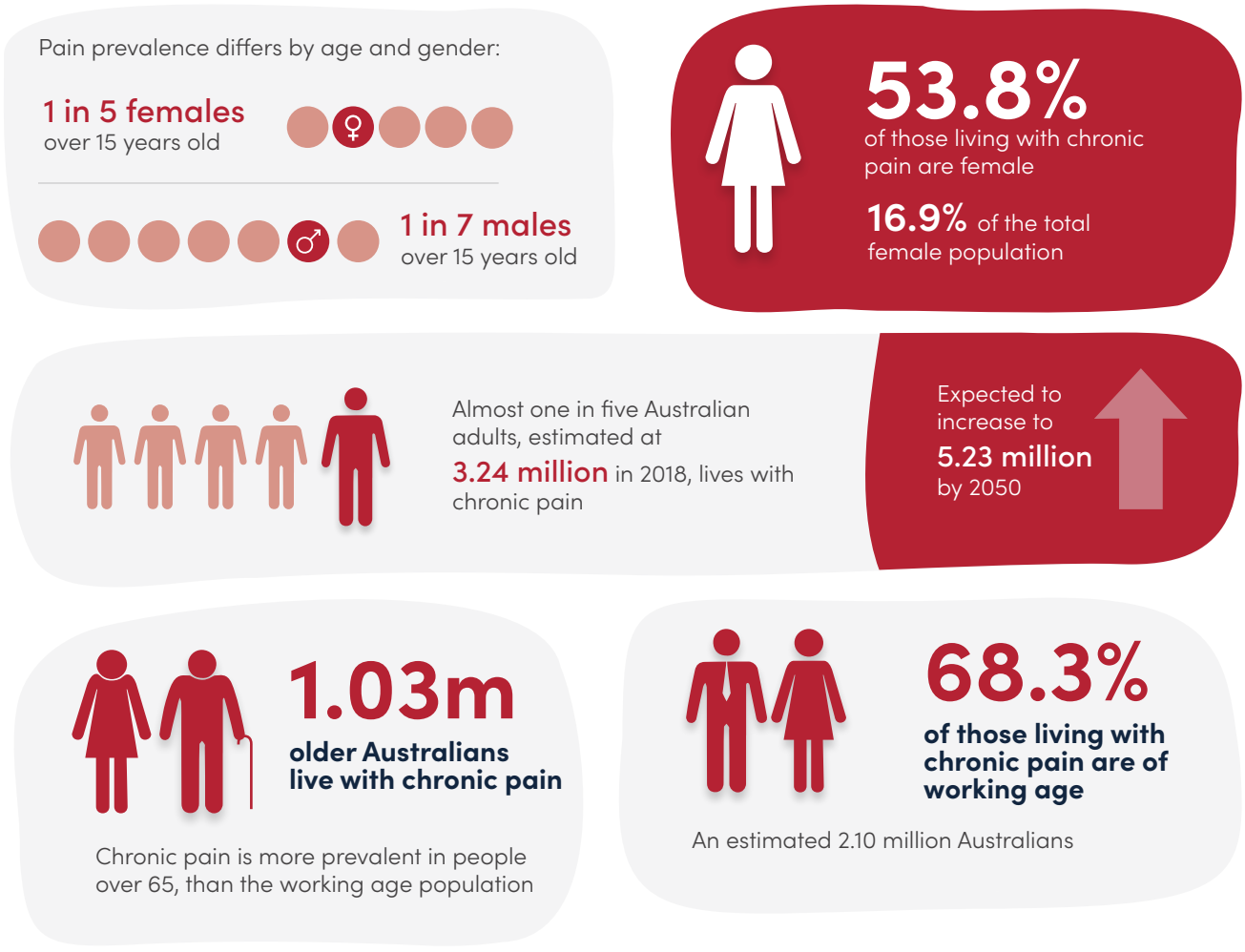


Figure 4: Prevalence of pain in the Australian population[29]

Acute pain is considered to last up to seven days but may be prolonged up to 30 days [9] (Figure 5). Its management remains problematic [10] and some Australians will transition to chronic pain following an episode of acute pain, including after surgery. Approximately one in 10 postsurgical patients is estimated to experience continuing pain severe enough to cause ongoing functional impairment [40-43].

The International Association for the Study of Pain's definition of acute pain:

"Acute pain is considered to last up to seven days"

....with four qualifications:

1. its duration reflects the mechanism and severity of the underlying inciting event;
2. prolongations from seven to 30 days are common;
3. prolongations beyond the duration of acute pain but not extending past 90 days post-onset/injury are common; and
4. our understanding of pain mechanisms is currently insufficient to link these durations to specific physiologic mechanisms.

Figure 5: The International Association for the Study of Pain definition of acute pain [13]

Factors associated with health inequalities in rural, regional and remote Australia.

- Reduced access to healthcare and health professionals/specialists.
- Reduced income, education and employment opportunities.
- Higher rates of risky behaviours.
- Higher rates of occupational and physical risk (mining, agriculture, transport).

Figure 6: Factors associated with health inequities in rural, regional and remote Australia [36]

The following content is intended to provide some examples of the issues facing particular priority populations of the Australian community, noting there are many others facing similar challenges.

PEOPLE LIVING IN RURAL, REGIONAL AND REMOTE COMMUNITIES

Australians living in rural, regional and remote areas have on average lower socioeconomic status, more chronic disease, and are faced with higher costs when accessing healthcare in the context of reduced ability to pay [44]**.**

Almost seven million Australians, or 28 per cent of the population, live in diverse places and communities across rural, regional and remote areas, scattered over vast distances. Although Australians living in small rural towns report higher levels of life satisfaction compared with their urban counterparts, they face a range of challenges and health inequities. These include poorer health outcomes, higher rates of hospitalisation, injury and death, including suicide due to living with chronic pain [35, 45, 46]. The differences in health outcomes with increasing remoteness may reflect the high proportion of Aboriginal and Torres Strait Islander peoples living in these areas with their concomitant health disparities [35, 36].

Geographical remoteness means that people living in rural, regional and remote areas often pay higher prices for goods and services, travel greater distances to access healthcare, and tend to be on lower incomes [36]. Because they experience more socioeconomic disadvantage, they are more likely to delay accessing, or go without, prescription medication and consulting with healthcare practitioners [47] (Figure 6). They have less access to primary health care services, and experience waiting longer for appointments to see a medical specialist or an after-hours general practitioner [47]. Pain is one of the most common reasons for emergency ambulance attendances in regional and rural areas [48].

Maldistribution of the health workforce away from rural, regional and remote areas also contributes to poorer health outcomes. Access to allied health practitioners, in particular, is disproportionately low due to barriers to recruitment and retention, training and career pathways in rural, regional and remote areas [44]. This, in turn, impacts the provision of services such as the National Disability Insurance Scheme, resulting in irregular treatment and care for those with disabilities and chronic conditions.

Transition to telehealth services accelerated due to the COVID-19 pandemic making healthcare consultations and pain management programs more accessible and affordable [49, 50], however, inconsistent internet connectivity and mobile phone reception in rural, regional and remote areas can be barriers to taking advantage of these services [44].

OLDER AUSTRALIANS

One in three Australians over the age of 65 years lives with chronic pain.

The projected ageing of the Australian population is expected to expand the cohort already at increased risk of declining health and reduced function [51]. This has major implications for pain care needs considering 1.03 million (one in three) Australians aged over 65 years live with chronic pain already [33] and the relative growth in those aged over 65 years is projected to increase from 16 per cent to 21-23 per cent of the population by 2066 [32, 51].

Experiences of pain change with ageing especially with increasing frailty and cognitive decline but pain is often overlooked in Australians aged 65 years and over. Older Australians bear a disproportionate burden of disease with two of the top three causes, musculoskeletal disorders and dementia [51], associated with pain. In addition, one in three Australians hospitalised for injuries in 2019-20 were aged 65 and over and 15% of older men and 20% of older women were living with severe or profound disability requiring supportive care [51]. Within residential aged care, undiagnosed or mismanaged pain is a significant cause of distress behaviours, especially in those with dementia.

CHILDREN AND ADOLESCENTS

Persisting pain in childhood and youth is a predictive factor for pain in adulthood.

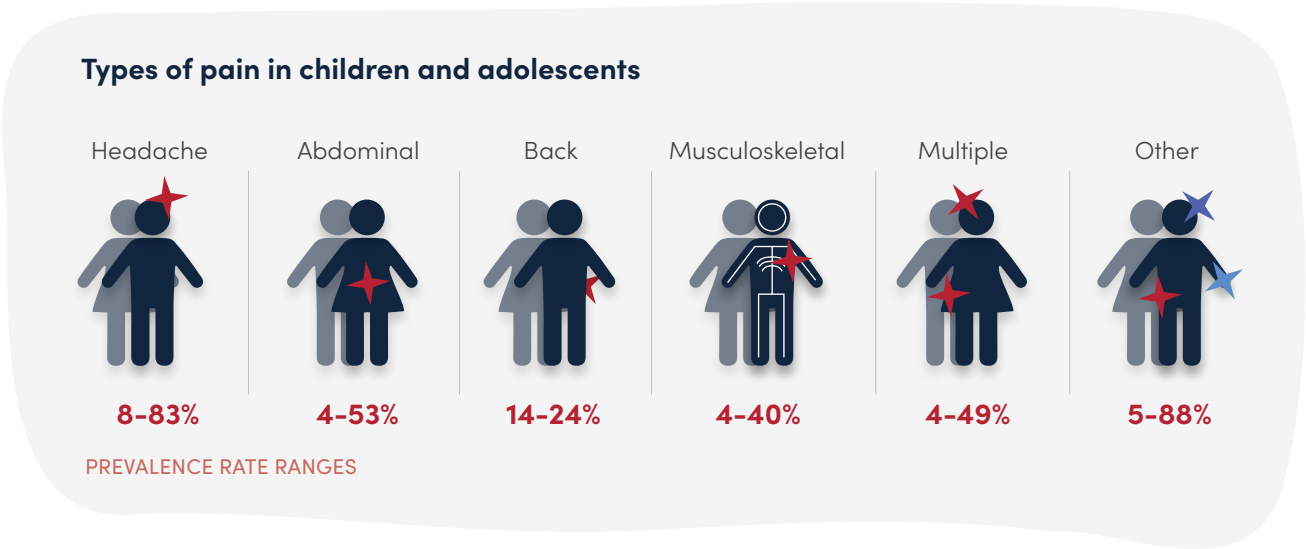


Figure 7: Prevalence rates and types of pain in children[53]

Although nationwide studies of persistent pain in Australian children and adolescents are lacking, international data report a prevalence of 24 per cent on average in community-based studies, with rates higher in girls and rising with increasing age [52-54] (Figure 7). A study of musculoskeletal pain conditions in Australian children and adolescents attending primary care practitioners reported musculoskeletal pain was the sixth most common reason for attending for care, noting increases with age and female sex [54]. The prevalence of persistent pain in emerging adults (18-29 years) ranges between five and 30 per cent [55]. Female sex, familial chronic pain and previous experiences of chronic pain in childhood were consistently reported as associations, and anxiety, depression and sleep impairment were noted both prior to and after the onset of persistent pain.

ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES

National prevalence data are lacking on chronic pain in Aboriginal and Torres Strait Islander peoples.

Aboriginal and Torres Strait Islander people experience a higher-than-average burden of disease and lower life expectancy. This reflects the many health inequities faced by these communities and the systemic, interpersonal and intrapersonal racism and discrimination, especially of those living in regional, rural and remote areas [35, 56, 57] (Figure 8).

Racial discrimination experiences reported by one in 3 Aboriginal and Torres Strait Islander peoples aged over 15 years.

female 35.3%	**male 31.7%**
15-44yrs 36-40%	**45+ yrs 31%**
non-remote 34.9%	**remote 28.2%**

These experiences are strongly associated with increased prevalence rations (PR) of:

Frequent experiences of pain	**1.55 PR**
High psychological distress	**2.47 PR**
Low life satisfaction	**3.41 PR**

Figure 8: Racial discrimination experiences of Aboriginal and Torres Strait Islander peoples[60]

In early studies on chronic pain in Aboriginal and Torres Strait Islander peoples, the reported prevalence was widely variable [58].

More recent studies, however, have shown a prevalence of equivalent to, if not higher than non-Indigenous Australians, especially considering the impacts of racism and intergenerational trauma from British colonisation [59].

Recent data from The National Study of Aboriginal and Torres Strait Islander Wellbeing, the Mayi Kuwayu Study [60], suggest Aboriginal and Torres Strait Islander peoples experiencing moderate to high levels of discrimination are 1.6 times as likely to have frequent experiences of pain and lower levels of wellbeing than Aboriginal and Torres Strait Islander peoples not reporting discrimination [60].

CLYTIE LIVES ON THE TRADITIONAL LANDS OF THE WURUNDJERI. HER MOB IS THE PANTYIKALI PEOPLE FROM NORTH OF BROKEN HILL.

"I live with multiple health conditions. Going to hospital can be such an ordeal that many of us would rather suffer than go to hospital for anything. Each Emergency Department should have someone trained in dealing with chronic pain. I would like to see doctors work together, listen to their patients, work with allied health more, and increase their knowledge-base on the many pain conditions out there."

Source: Australian Pain Management Association

CULTURALLY AND LINGUISTICALLY DIVERSE (CALD) POPULATIONS

Australia-specific data concerning pain prevalence in CALD communities remain limited despite known inequities across a range of Australian health settings [61-63].

Migrants to Australia have arrived from North-West Europe and Oceania traditionally, but are now surpassed by those from Asia in particular, with smaller cohorts from several Middle Eastern and North African nations [64] (Figure 9).

The above-average health status of immigrants on arrival wanes with duration of residency in Australia so overall, CALD communities have a higher burden of disease likely due to barriers to accessing care [65, 66].

Australian studies reflect international data showing that language and ethnocultural influences impact the way people experience and understand pain and pain care [63, 66-69]. Increasing numbers of migrants and refugees arriving in Australia from areas of conflict where many experienced torture or other physical and/or psychological harms, will add further complexity to pain care needs in these communities well into the future [70-72].

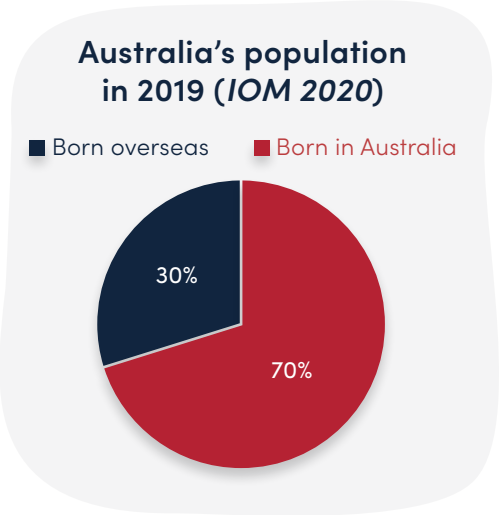


Figure 9: Proportion of Australia's population born overseas compared with born in Australia[64]

PEOPLE LIVING WITH DISABILITY

Pain is at least as common in people living with disability as in the general population.

Around four million Australians or 18 per cent of the Australian population live with a disability [73], many experiencing pain generated by their impairment. Of the eight most common chronic conditions associated with disability burden, arthritis and back pain and related conditions rank third and fourth respectively.

Data on the prevalence of pain in Australians living with intellectual disability are lacking [74, 75]; however, the two most common conditions are cerebral palsy, affecting around 35,000 Australians [76], of whom approximately 50% live with an intellectual disability, and Down syndrome, affecting up to 15,000 [77]. Limited international data suggest pain may affect up to 74 per cent of children and adults with cerebral palsy [76], with a paucity of high-quality research supporting pain management options [78]. However, no data exists for Australians with Down syndrome, although they commonly experience a range of musculoskeletal conditions likely to cause pain from early childhood [75].

Despite recent efforts to develop more appropriate pain assessment tools and better tailor management, challenges remain in understanding the biological basis of pain, discerning pain from distress, anxiety and depression and addressing erroneous stereotyped beliefs about pain in all persons living with intellectual disability [79].

IMPACT ON THE PERSON LIVING WITH PAIN

Pain may have a significant impact on the quality of life, especially for those living with chronic pain.

Pain affects the ability of individuals to do physical tasks and engage in work and education. It interferes with sleep and relationships with others, impacts on mental health, and often leads to financial difficulties and social exclusion. Low back pain is associated with high rates of work absenteeism [80] and workers' compensation claims [81]. Conversely, the persistence of pain after occupational injury can slow recovery and negatively impact outcomes from worker's compensation systems [82, 83].

PAIN AND COMORBIDITIES

Other chronic conditions such as cardiovascular diseases, asthma, diabetes, stroke and bowel disease are associated with an increased risk of experiencing chronic pain [39] *(Figure 10).*

People living with chronic pain are more likely to have:

other long-term health conditions or a long-term injury	2.4 times
mental health problems	2.5 times
osteoporosis	2.5 times
arthritis	2.6 times

compared with those without chronic pain.

Figure 10: Comorbidities affecting people living with chronic pain compared with those without chronic pain[39]

Smokers and ex-smokers are almost twice as likely to self-report chronic pain [84]. Obesity is a risk factor for developing musculoskeletal pain, fibromyalgia, headaches and abdominal pain [85, 86].

Endometriosis and related conditions are associated with recurrent severe acute pain affecting more than 10 per cent of Australian women and girls, transgender, non-binary and gender-diverse people assigned female at birth. Transition to chronic pelvic pain is frequent, partly due to under-recognition, delayed diagnosis and inadequate treatments [87].

Mental health disorders including depression, anxiety, and post-traumatic stress disorder frequently affect those living with chronic pain and are associated with increased rates of suicide [88]. Childhood adversity (physical, emotional and sexual abuse, and neglect) increase the risk of and severity of pain in adulthood [89] as does interpersonal trauma in women [90].

DANIEL LIVES IN ADELAIDE

"I suffer from a condition called Complex Regional Pain Syndrome (CRPS), this is a type of chronic pain. I was diagnosed with this condition at age 12 after falling off a trampoline and breaking my left arm.

People unfortunately, that have not suffered with chronic pain, do not understand the highs and lows that you have, both physically and mentally. I have left appointments feeling more hyped up with a plan to move forward but also, in some circumstances more disheartened.

Pain isn't just a feeling, there is an emotion that comes with pain that can stick with you forever. This is what I believe needs to be looked at, making practitioners realise that pain is something that triggers an emotion, which in turn triggers a memory which can be relived over and over again."

Low socioeconomic status, financial stress [90] and other psychosocial variables including low self-esteem, bullying and social exclusion are known factors contributing to and exacerbated by pain. Job loss [91] and long-term unemployment are more likely, and the need for social security support adds to their stresses [92]. Participation in workers' compensation systems or litigation may delay return to work, slow pain resolution and negatively impact mental health, increasing disability duration [93, 94].

Adverse outcomes of pain treatments add to the individual's pain burden

Many medications used to treat pain have limited effectiveness leading to prescribing cascades and polypharmacy causing significant harm especially in the elderly [95]. Off-label and unlicenced use of medicines for managing pain is common, especially in some patient groups or when pain has been poorly responsive to approved therapies. This is particularly problematic for children and youth for whom trial data are limited and physiological development may affect drug handling [96]. Off-label use is associated with the increased risk of adverse drug reactions and other harms as there is relatively limited information available for prescribers, pharmacists, nurses and consumers. Although various guidance has been promulgated, many practitioners may not have considered the medical, ethical and legal implications of such use [97-99].

Between 30 and 40 per cent of people with chronic pain are prescribed an opioid [100]. Although low-dose opioids can provide some with an improved quality of life not otherwise achievable [101], long term opioid use is associated with little or no benefit for most [102, 103], risking a wide range of harms and potentially making pain worse [104-107]. Benzodiazepines, gabapentinoids, antidepressants, and antipsychotics are often prescribed with opioids, increasing the risk of accidental overdose and death [108] (Figure 11). Simple analgesics are not without potential for harm either [109].

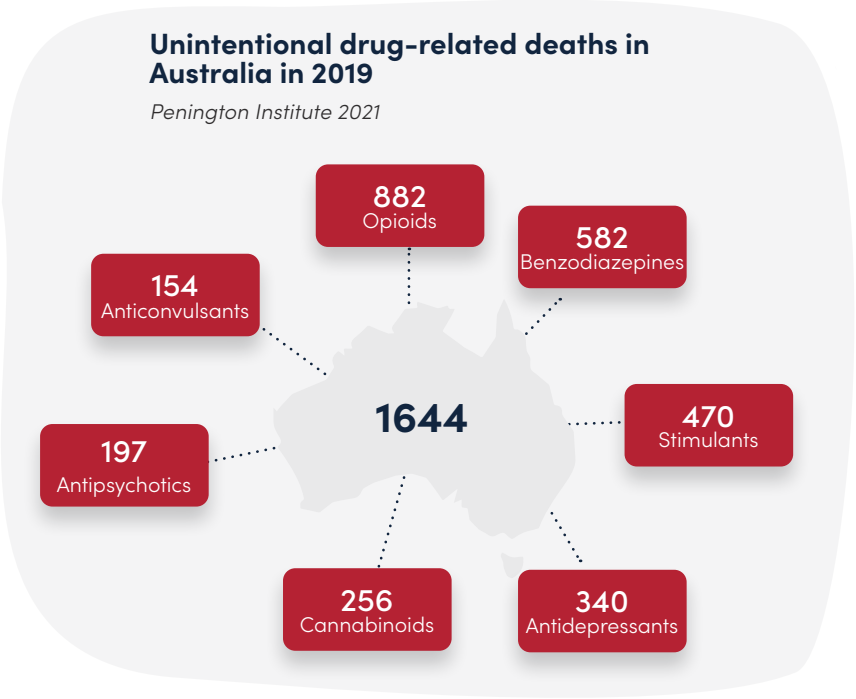


Figure 11: Unintentional drug-related deaths in Australia in 2019[108]

Neuromodulation has been increasingly recommended as an alternative to medications promising more effective outcomes for longer term pain reduction; however, the evidence base supporting this contention is of very low to low certainty with reports of a variety of adverse events, ranging from infection, electrode lead failure and need for reoperation/reimplantation to very serious life-changing/life-threatening events [110]. Similarly, the benefits of surgical procedures for chronic pain remain controversial with concerns about poor outcomes, high costs and anaesthesia-related risks [111].

Pain in COVID-19 is often overlooked and under-appreciated

Approximately five per cent of Australian survivors of COVID-19 had persistent symptoms at three months post-infection, including headaches, joint and muscle pain and chest pain [112], with potential for a large number of cases of long-COVID based on early modelling [113].

Headache, abdominal pain, and multiple musculoskeletal and neuropathic pain complaints are commonly reported [114, 115]. A range of factors is associated with an increased risk of long-COVID, including working in health or social care, and education settings [116, 117].

Whether long-COVID is distinct from other post-viral syndromes, the pathophysiological mechanisms and impacts of re-infection with new variants remain unclear [118]. Consumers have searched for help from a variety of social media and other sources as in-person healthcare consultations have been restricted [119, 120]. Targeted treatments are currently limited [23] [121] although many clinical trials are underway, including in Australia [122].

Concerns are already being raised about the disproportionate effects of long-COVID on Australians from socially disadvantaged groups [123]. Persons with pre-existing chronic pain and those on long-term opioid therapy for pain are also more likely to be disproportionately affected [124].

COST OF PAIN IN THE COMMUNITY

The social and financial burden to the individual and their family is enormous and the costs to the Australian economy (up to $A139.3 billion in 2018) due to lost productivity along with rising health and welfare payments [33] *(Figure 12).*

The total financial cost of chronic pain in Australia in 2018 is estimated at

$139.3 billion comprising:

$12.2 billion	in health system costs
$48.3 billion	in productivity losses;
$12.7 billion	in other personal financial costs (informal care, aids, modifications and deadweight losses)
$66.1 billion	valuation of reduction in their quality of life.

Expected to increase from $139.3 billion

to $215.6 billion by 2050 in real 2018 dollars

Figure 12: The cost of pain in Australia in 2018[33]

In 2015, Australians lost 4.8 million years of healthy life due to illness or premature death from disease or injury which is essentially unchanged from 2003. Half of this burden was from living with the impacts of disease and injury [39]. Back pain emerged as the second leading cause of burden for adults aged 25–64 in 2015, up from fourth in 2003 [39].

Children experiencing chronic pain may miss school, reduce physical activity and withdraw from social activities and are less likely to reach their educational and employment potential [125-127]. No Australian data exist on the financial costs of pain in children and adolescents. However, studies in Canada and the United Kingdom estimate the total healthcare costs alone for adolescents with chronic pain at more than double that for young people without pain [128]. The financial impact on families was estimated at £8,000 per adolescent in 2005 (approximately AUD14,500 in 2021 terms) [129].

CURRENT HEALTHCARE ENVIRONMENT – ADEQUACY OF MEETING NEEDS

Up to 80 per cent of Australians living with chronic pain could be missing out on best-practice pain treatments most likely to improve their health and quality of life [130]. The reasons are multifactorial and vary according to individual circumstances.

Complexity of pain

No one health practitioner from any single discipline has the knowledge and skills to meet the needs of every person living with pain.

Pain is a complex and personal experience, affected by socio-environmental, psychological, and biological factors. This very complexity means that each person living with pain has specific needs best addressed by a range of health professionals from different disciplines. A single clinician using a holistic approach within a biopsychosocial framework can be effective, especially when intervening early and when pain is less complex; however, persons with longer-standing pain and other comorbidities may benefit more from a personalised team of clinicians from disciplines specific for their needs.

Models of care

Best-practice pain care involves a multi-component team-based, ideally interdisciplinary approach that is timely, personalised, and consistent with current guidelines [131, 132].

Models of care vary from intradisciplinary to multidisciplinary or interdisciplinary, depending on the needs of the person with pain, the healthcare setting and funding models, and the availability of the required health practitioners and how they interact [131, 132]. In Australia, a range of clinical care guidelines grounded in pain education, active and psychological therapies, and self-management skills are available to support best-practice care for the majority of persons with pain who are managed in primary care [133-135]. For those with more complex pain care needs referral to a specialist pain management clinic may be appropriate. Multidisciplinary pain management clinics are most commonly located in the public sector and urban-based [136] with a range of pre-clinic education and in-clinic care including one-on-one consultations, targeted pain interventions and group-based treatments of varying duration and intensity. Private pain services more commonly offer a range of care that may be more targeted to specific patient groups. A few specialist clinics are available for children and adolescents, for adults with cancer pain, and for pelvic pain.

The patient-practitioner relationship

Persons living with pain report experiencing stigma by healthcare practitioners and needing to repeatedly justify their requests for pain care [137].

People with pain are more likely to experience stigmatisation and invalidation from others, including in healthcare settings impacting on patient-clinician relationships [138, 139]. Most recently, people with long-COVID symptoms report being disbelieved or refused referral to appropriate medical services [140].

Discrepancies exist between consumers' and health practitioners' expectations that may impact treatment choices and outcomes, leading to both being dissatisfied [141]. Yet, the success of any pain treatment depends on developing a trusting relationship where consumers "feel worthy of care, and hearing their story is integral" [137].

The biomedical paradigm continues to strongly influence health professionals' and students' attitudes to persons reporting pain, unconsciously influencing their judgments and leading to negative appraisal of patients despite the biopsychosocial framework underpinning contemporary pain medicine theory and practice [142-144].

Lost in translation

Many people describe interactions with healthcare systems as 'an adversarial struggle' [137].

Communication barriers are common, frequently deterring disadvantaged persons such as those from Aboriginal and Torres Strait Islander and culturally and linguistically diverse communities from seeking care and leading to delays in receiving treatment [34, 35, 58, 62]. Barriers due to language and the need for interpreters, not feeling culturally safe, and diverse explanatory models for conceptualising pain as well as geographical and transport barriers, also reduce pain care outcomes for those from these communities [62, 145].

People with vision, speech and/or hearing impairments also experience communication breakdowns due to health practitioner discomfort approaching them and low awareness of their needs; written healthcare information that is not presented in a suitable format; and reliance on memory to follow instructions [146-148].

Not surprisingly, persons with sensory impairments are also at increased risk of suboptimal care and harms from misunderstandings [149].

NADINE LIVES IN REGIONAL VICTORIA

"I'm 31 years old with Complex Regional Pain Syndrome & I have had terrible experiences trying to access help in both ED departments as well as seeing other medical professionals due to stigma and a lack of knowledge about my condition.

I need compassion, understanding, and not to be asked what drugs I am seeking?..... or am I looking for my next hit? Stigmas have delayed emergency treatment on several presentations. [Health practitioner] education about chronic pain management is important."

Source: Australian Pain Management Association

Healthcare practitioners' knowledge, attitudes and beliefs about pain

Graduates emerging from many Australian tertiary healthcare education programs do not have adequate knowledge, attitudes, and skills to effectively apply contemporary evidence-based pain management [132].

The reasons are complex and may include delivery of pain education, not just content [150]. Lack of nationally consistent curricula, clarity about psychosocial contributors to the pain experience, limited ability to identify those contributors and deficient education and training in holistic pain care in most training programs across the career span contribute to difficulties in developing strong clinician-patient therapeutic alliances [132, 142, 151].

Awareness of treatment options

Discrepancies in providing best-practice acute and chronic pain care in clinical practice persist despite well-established clinical care guidelines being available for common pain conditions [152, 153].

Referral to specialist medical services without exhausting non-specialist options is common [154]. Although the reasons are likely multi-factorial, general practitioners' reliance on a biomedical model of pain and lack of understanding of the benefits of allied health professionals in the treatment of chronic pain are key contributors [132, 154].

Organisational barriers limiting access to other healthcare professionals and inefficient communication between health professionals often lead to different treatment options and conflicting patient advice and less than optimal outcomes [132].

Financial cost

A range of financial barriers impacts patients accessing holistic pain care [132].

Australians were estimated to personally spend over $12.7 billion on pain care in 2018 [33] in addition to the heavily subsidised state and federal health systems. Australia's Medicare system [155] disproportionately funds medical consultations, favouring short consultation times, and surgical procedures, leaving persons with pain seeking to engage with allied health practitioners having high out-of-pocket expenses [156]. In addition, the Pharmaceutical Benefits Scheme [157] subsidises most medications used for managing chronic pain rendering opioids and antineuropathic drugs as accessible, cheap treatments despite opioids in particular not being recommended as first-line or sole treatments, seldom being effective alone, and often causing significant harm [158, 159].

Service availability and accessibility

Demand continues to exceed availability and most services are located in metropolitan areas with services limited or completely lacking in regional, rural, and remote areas of Australia [136].

Cost, long-term health conditions, and living in areas of socio-economic disadvantage are the most common reasons for delaying or not using health services across all levels of the community [160].

Travel times for those living more than 30 to 60 minutes from a specialist multidisciplinary pain clinic reduce attendance rates and engagement in pain programs, relying instead on single visits or medical practitioner-only consultations [161].

The vast majority of patients requiring public-funded pain care remain reliant on their primary care practitioners [130]. Most primary health networks now consider pain an important area of work; however, programs vary widely, based on perceived local needs with the majority being consumer-focused initiatives; far fewer address health practitioner capacity building, and only a small number work at the heath-system level, lacking program standardisation or national coordination [162, 163].

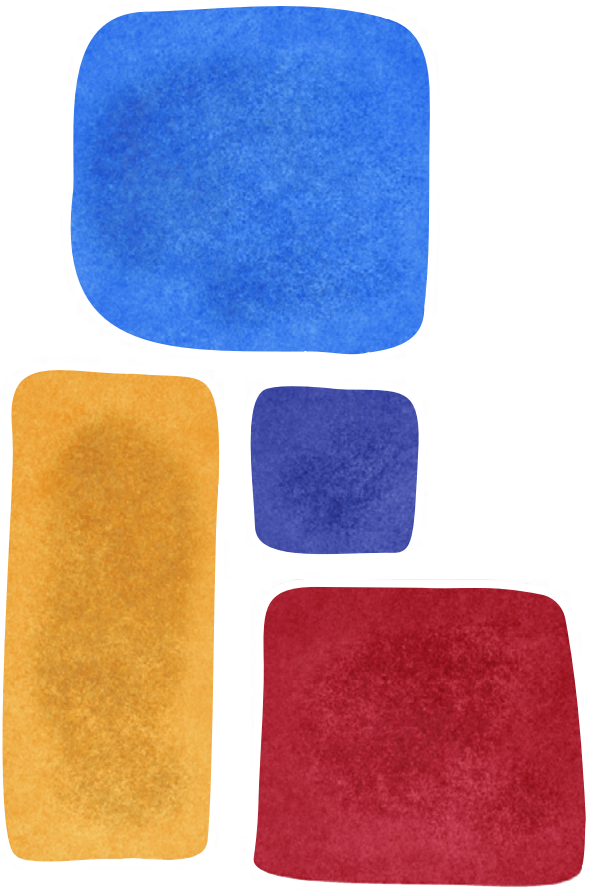
Impact of the changing opioid regulatory environment in Australia

Unintentional overdose of prescription medicines often prescribed for pain is implicated in the early deaths of more than three Australians a day and is 3.5 times more likely in Aboriginal and Torres Strait Islander peoples [108].

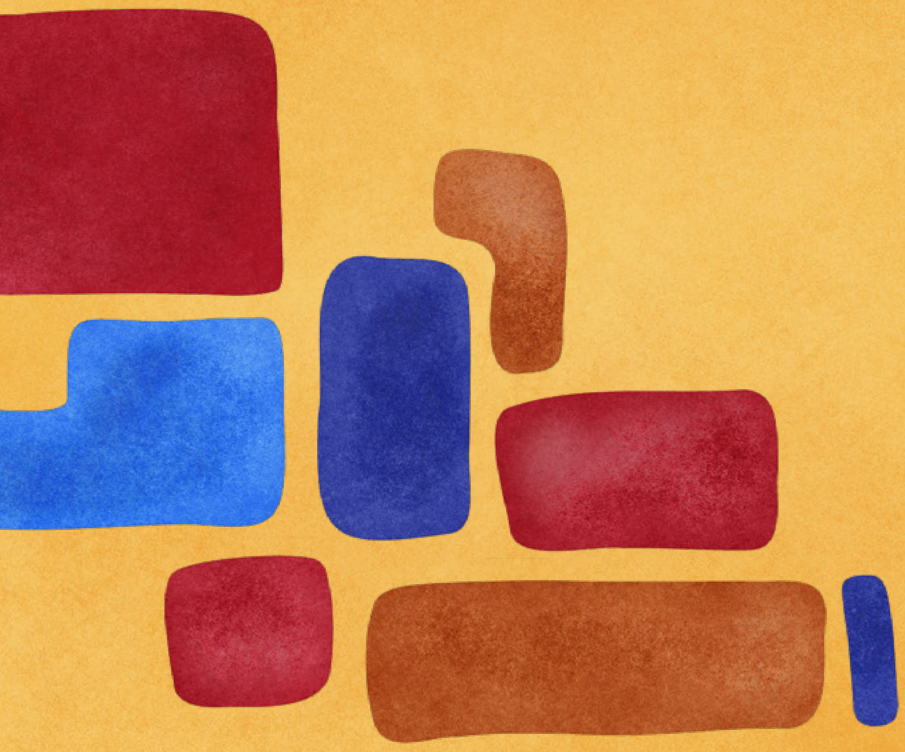
In response to rising concerns about the escalating rate of opioid-related deaths in particular and strong links between supply and harm, opioid regulatory changes and real-time prescription monitoring programs have been enacted across Australia over the last five years [159, 164]. Codeine rescheduling in 2018 resulted in a significant reduction in codeine-related harms without increased prescribing of other opioids, worsening pain or mental health [165, 166]. However, the more recent regulatory changes (smaller pack sizes, boxed warnings and class statements on Product Information (PI), updating of Consumer Medicines Information (CMI), and changes in indications for use [159]) have raised alarm [167-170].

Australians living with persistent pain reported that the reforms had created an additional layer of complexity, increasing difficulty accessing opioid-based medications to manage their pain, perpetuating stigma and isolation leading to loss of function and significant impact on their mental health [168].

Mortality risk is associated with higher opioid doses, but more severe pain, mental health comorbidities, including suicidal intent, and polypharmacy are significant complicating factors [171, 172]. Half of the victims of opioid-related deaths in Australia had documented chronic pain [173]. Recent recommendations to simply taper long-term opioid therapy prescribed for chronic pain have led to an increase in mental health crises, overdose and death in other jurisdictions [174, 175]. Developing national clinical care standards for the use of opioids in acute care endeavours to reduce inappropriate prescribing and supply, especially in hospital settings [176], however, without greater efforts to address co-morbid chronic pain by federal and state health systems, regulatory responses alone will be ineffectual in preventing most opioid-related deaths in Australia and are likely to be harmful [164, 177].



Pain education for health practitioners



INTERNATIONAL CONTEXT

Internationally, pain management education is inadequate across health practitioner disciplines at every career stage.

Surveys of pain content in entry-to-practice curricula for health practitioner disciplines in Europe and North America have repeatedly found limited pain-related curriculum content [178-183]. The International Association for the Study of Pain (IASP) also highlighted insufficient pain content in entry-to-practice curricula and a lack of continuing professional development opportunities related to pain during the 2018 *Global Year for Excellence in Pain Education* [184].

When pain content is included in entry-to-practice curricula, it is often not fit-for-purpose.

Effective pain management involves a multidisciplinary team who take into account the social and psychological factors contributing to pain [132, 185]. A small number of published studies include discussion of a biopsychosocial approach to pain management at the entry-to-practice level [186-188]. However, pain is often taught using a biomedical lens, with less time given to topics that would help learners understand a biopsychosocial approach to pain management [178, 182]. Additionally, didactic teaching methods are often used within a single discipline context, with limited opportunities for interprofessional or applied learning including simulation or experiential learning in the clinical environment [178, 181, 184].

Registration and accreditation standards rarely stipulate competency in appropriate pain assessment and management [184].

There is inadequate published evaluation of what works in pain management education across learning stages, specifically in relation to patient outcomes [178].

Evaluations of pain management education typically measure changes in knowledge and self-reported changes in behaviour and clinical practice [189-192], rather than patient outcomes [184] . A large number of evaluations utilise a pre-test and post-test design, with limited long-term follow up [187, 192-197]. Quality improvement initiatives in settings such as a hospital inpatient unit or aged care facility [198, 199] seem better placed to measure changes in patient outcomes over a longer period than research investigating entry-to-practice education. However, even with these initiatives, there is a paucity of published evaluations to illustrate and share best practices in pain management education.

There are pain management education 'centres of excellence' across the world, but limited evidence for a coordinated response in any country.

Outside Australia, the United States and Canada are the only English-speaking countries in the world with a government-sponsored national pain strategy. Despite the generally limited availability of effective pain management education, initiatives that may provide inspiration for those implementing education initiatives are highlighted in the boxes below:

Project ECHO

Project Extension for Community Health Outcomes (Project ECHO) was originally developed by the University of New Mexico's Health Science Centre to build the capacities of primary care providers and to increase access to specialist care in rural and underserved populations [200]. Project ECHO uses a "Hub" and "Spoke" model to promote knowledge exchange (using didactic teaching and case-based tele-mentoring) between a multidisciplinary panel of subject matter experts ("the hub") and health professionals in geographically diverse areas (the "spokes") [201]. The Project ECHO model has been implemented in Australia and internationally to upskill health professionals in best practice pain care and has been shown to increase health professional knowledge and confidence [202, 203]; improve job satisfaction and reduce professional isolation [204, 205]; increase referrals to allied health practitioners [206]; and reduce opioid prescribing [207].

European Pain Federation – Pain Curricula

Recognising the need to offer more structured support in pain management for clinicians across Europe, the European Pain Federation (EFIC) has developed five pain management core curricula. Four curricula support postgraduate diplomas in pain medicine, pain psychology, pain physiotherapy and pain nursing, while one is for European medical schools. Using the curricula, diplomas and associated exams, EFIC aims to contribute to Europe-wide standards of training and certification in pain management [211].

University of Toronto Interfaculty Pain Curriculum

Established in 2002, the Interfaculty Pain Curriculum (IPC) is collaboratively implemented by four University of Toronto health science faculties [208]. The IPC is a 20-hour stand-alone, mandatory program for students including those from the faculties of dentistry, medicine, nursing, occupational therapy, pharmacy and physical therapy. It takes place across three and a half days in students' second or third year of study [209]. Half of the course time focuses on facilitated small group learning, with students working in interdisciplinary teams to develop an integrated patient care plan [29, 30, 208]. A core element of the IPC is dedicated time for patients to share their experiences of a variety of pain conditions and learners are encouraged to critically reflect on their assumptions and how to work best in an interdisciplinary team to create a management plan [30, 38, 208, 210]. Students' pain knowledge and beliefs are assessed using pre and post-test questionnaires and the group management plans are evaluated.

The IASP has developed pain curricula for use in entry-to-practice education, including a specific interprofessional curriculum [212].

These curricula have been utilised to create core competencies in pain management [213] and as a basis for pain management education at the entry-to-practice level [186, 208, 214]. However, national surveys have identified that, in general, the curricula are poorly integrated into entry-to-practice education, despite their increased use being cited as key to building a biopsychosocial approach to pain management [178].

Limited published evaluations of pain management education initiatives at all health practitioner education stages make it difficult to build a picture of pain management education in the Australian context.

AUSTRALIAN CONTEXT

While centres of excellence exist across the country, there is limited evidence of a national, coordinated approach for pain management education at all levels of learning.

There is a gap in the translation of knowledge into practice, in relation to both pain management education and care. A paucity of evaluated pain management initiatives in the published literature may contribute to this gap, in addition to unhelpful attitudes towards pain [215], and other factors such as the structure of the health system and organisational culture [132, 216].

There is limited Australian-specific evidence concerning the context of pain content in entry-to-practice curricula.

The single published study investigated the delivery of pain medicine education in Australian and New Zealand medical schools found a lack of clearly articulated comprehensive pain curricula or the use of teaching and learning methods appropriate to the complexity of pain [151]. Given the lack of published literature on the subject, the manner in which other disciplines are addressing pain management within their curricula is uncertain. A grey literature search illustrated wide variation in the inclusion of pain management within entry-to-practice curricula.

There is a variety of pain management education initiatives in the postgraduate and continuing professional development space.

These offerings use different methodologies, ranging from structured, multidisciplinary postgraduate and short courses [217] and educational visits [210] to self-directed online modules and webinars [218, 219]. However, there is no central repository for learners to identify educational offerings and no accreditation system to rate the quality of the education programs and educators. Furthermore, there are currently limited published evaluations of programs demonstrating changes in practice or patient outcomes in the Australian context.

Pain management is not widely included as a required competency by accreditation bodies in Australia.

A search of relevant accrediting council standards identified no reference to pain or pain management as competencies for higher education entry-to-practice course graduates [220-224]. However, there are a number of initiatives in the wider clinical standards space. The Australian Commission for Safety and Quality in Healthcare (2022) launched the Low Back Pain Clinical Care Standard [134] and the Society of Hospital Pharmacists of Australia has developed standards of practice in pain management for pharmacy services, with specific areas of focus around education, training and quality improvement [218, 225].

Concurrent with the National Strategy for Health Practitioner Pain Management Education, a Commonwealth Funded Grant for Health Professional Pain Education (G02810) was awarded to a consortium led by the Pain Management Research Institute (University of Sydney).

This grant is resourced over four years, to co-develop and implement digitally-supported interdisciplinary, health and medical professional pain management training programs. Consortium members include University of Sydney (Pain Management Research Institute), Curtin University, the Australian Pain Society in partnership with the National Ageing Research Institute, and the University of South Australia (Pain Revolution). The program of work is positioned to support a collaborative effort with the Faculty of Pain Medicine (FPM) in the implementation of Goal 3 of the *National Strategic Action Plan for Pain Management* [2].

The intention of the pain training program is to improve the cross-discipline integration and management of chronic pain in partnership with people living with chronic pain and carers. Using this partnership approach, an empirically-derived framework of pain care priorities has been developed [226]. The consortium is currently progressing implementation of this framework across members' pain training programs.

The training programs aim to build Australian health workforce capacity, with a focus on developing practical competencies for all health professionals to support people living with chronic pain. The program will incorporate guidance on the quality use of medications for those with chronic pain, a train-the-trainer model for pain management by residential aged care providers, and community-based mentoring and support for health professionals in rural and regional areas across Australia. A digital platform, fit for purpose, will be developed to support ready access to pain training for health professionals across Australia.

The COVID-19 pandemic has challenged education providers to deliver education and training through the adoption of digital technologies.

It appears this has been successfully achieved and there has been widespread acceptance of the various technologies for online and hybrid courses [231]. Online lectures and synchronous discussion are preferred to pre-recorded material [232]. Benefits of online learning include accessibility, affordability and flexibility [233, 234]. The downside includes fatigue and lack of personal contact [235] as well as information technology issues and staff expertise with technologies [236]. It should be noted that students do prefer face-to-face learning [231]. The experiences during this critical time of change provides opportunity for future education offerings to be agile enough to incorporate approaches that offer face-to-face and tailored online learning. The use of technologies can encourage the move beyond geographical boundaries of the states to enable a nation-wide approach.

AUSTRALIAN PAIN MANAGEMENT EDUCATION:

(nb: selected examples only)

Pain Revolution – Local Pain Educators Program [227]

A grassroots movement aiming to change how people understand pain in rural and regional Australia. Through the Local Pain Educator Program, the Pain Revolution team members mentor and support local health professionals to become pain experts. Local Pain Educators then use their knowledge and skills around best-practice pain care to teach community members, carers and other health practitioners.

NPS Medicinewise Opioid Education Program [210]

To address opioid-related harms in the community, a multi-faceted program has been implemented by the National Prescribing Service's (NPS) education arm. The aim of this program is to raise awareness of non-pharmacological approaches to pain management and reduce opioid prescribing. The educational initiatives targeting general practitioners and pharmacists include educational visits, practice reviews, and clinical audits. Early program evaluations indicate significant changes to GPs' practice, including a significantly greater proportion of participants who would use non-pharmacological approaches to pain management and a significant increase in the number of GPs who would perform appropriate opioid tapering steps [210]. This program is available at learn.nps.org.au.

Project ECHO for Persistent Pain [162, 205, 228]

Project ECHO initiatives focusing on persistent pain have been implemented across Australia by Primary Health Networks (PHNs) and hospital networks. Health professionals participating in the Western Victoria PHN Project ECHO (Persistent Pain) initiative reported improved knowledge (89%) and confidence (78%); improved perceived quality of patient pain care (78%); improved professional support (100%); and reduced professional isolation (78%)[228].

Pain Management Research Institute

The Pain Management Research Institute offers five streams of postgraduate courses in pain management [217]. The courses are endorsed by the IASP and informed by the IASP interprofessional pain curriculum [212].

Australian Physiotherapy Association [229]

The Australian Physiotherapy Association's "Pain in Physiotherapy" continuing professional development category collates a number of online modules, lectures and case studies covering various pain management topics. The associated Australian College of Physiotherapists offers a clinical specialisation in pain for those interested in undertaking further formal study in the area.

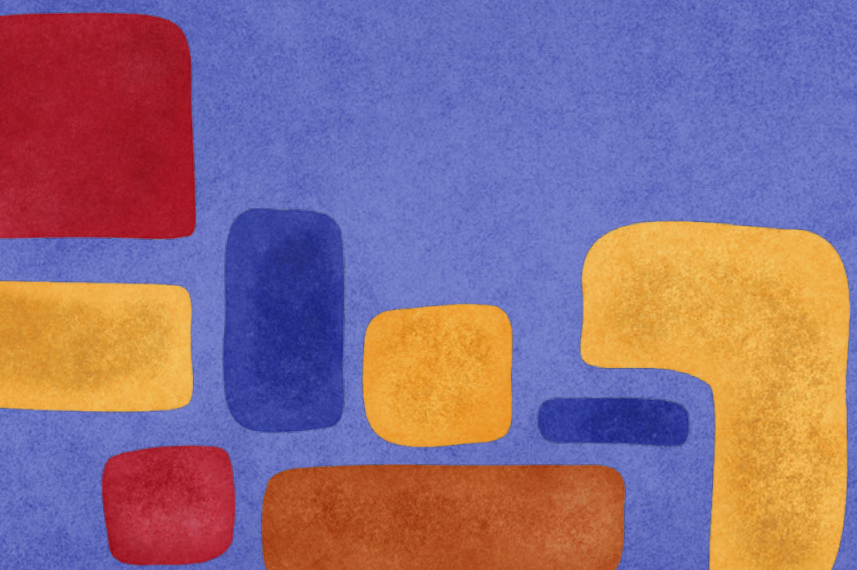
Better Pain Management [219]

Offered by the Faculty of Pain Medicine, Australian and New Zealand College of Anaesthetists, *Better Pain Management* is a self-directed online course comprising 12 modules. Specialist pain medicine physicians and other pain management experts developed the course content, which is designed for those managing patients with acute and chronic pain. Course content includes: recognition and assessment of individuals with complex pain; effective management planning and prescribing options; and best practice pain management and communication skills.

Good Medicine Better Health (GMBH) chronic pain modules [230]

The GMBH chronic pain modules for Aboriginal and Torres Strait Islander Health Workers and Practitioners have been developed by NPS MedicineWise in collaboration with the Menzies Centre for Health Policy and Economics, University of Sydney (May 2022) as part of a Commonwealth Funded Grant for Health Professional Pain Education (G02810). The modules are endorsed with 3 CPD hours with the National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners. This program is available at www.naccho.org.au.

A national strategy for health practitioner pain management education



The literature review provided valuable context and reinforced the need to improve pain management education across Australian health disciplines. To achieve this aim, it was important to provide an overarching strategic roadmap to guide and inform activity over the next five to ten years. The following sections of this document provide an overview of the national strategy development process, the outcomes that emerged from extensive stakeholder engagement and an implementation plan for the future.

SCOPE

In the context of this strategy, scope was defined in relation to the:

1. range of health disciplines that provide care for individuals with acute or chronic pain; and
2. learning opportunities that were identified across the career-span of these health practitioners.

Most health practitioners will be faced with managing individuals experiencing acute or chronic pain during their career.

The table below shows the key health practitioner disciplines initially considered as comprising a significant proportion of the Australian health workforce engaged in the care of individuals with pain (Table 1).

Table 1: Health practitioner disciplines engaged in the strategy consultation

Key health practitioner disciplines

Registered	*Self-regulated*
• doctors	• aged care workers
• nurses	• aboriginal health workers
• physiotherapists	• exercise physiologists *(accredited by Exercise & Sports Science Australia)*
• occupational therapists	
• pharmacists	
• psychologists	
• dentists	
• Aboriginal health practitioners	

Narrowing the scope was in no way meant to exclude other disciplines from the strategy, rather, it assisted the project team in determining the breadth of the initial stakeholder engagement and iterative consultation. It is hoped that the outcomes arising from this education strategy will be more broadly applicable across a wide range of health disciplines.

CHRISTINE IS A HEALTHCARE PROFESSIONAL LIVING IN ADELAIDE

"Diagnosed with Multiple Sclerosis (MS) 24 years ago, pain is an ever-present experience for me. It affects me day and night.

Most of my pain is not obvious. Much arises from my condition – muscle spasms, sitting in a wheelchair all my waking hours, falls, and wearing incontinence protection. As I am unable to control my limbs, I often knock them hard resulting in cuts and bruises. I have regular 'torture sessions', that is, weekly neurophysioptherapy and hydrotherapy, and remedial massage every fortnight. These are essential treatments to maintain function, flexibility and strength. Despite them causing significant pain, I keep having these treatments, so I don't live as a 'seized up ball' unable to do anything.

Pain education should be included at every stage of their [health practitioners'] training. It needs to be included in undergraduate curricula and continue through to ongoing professional development to remain up to date with current, evidence-based information. An increased awareness of the impact of pain on people's lives and provision of excellent management, will be of enormous benefit to the millions of Australians living with pain. We all deserve maximal quality of life so we can realise our full potential."

Across the career-span of a health practitioner there are a number of points which can be considered as 'critical learning opportunities'.

Entry-to-practice programs

Undoubtedly the most critical learning opportunities for any health practitioner are during entry-to practice programs where the foundations are set for their future career. Well implemented improvements in best-practice, holistic, multidisciplinary pain management education at this point have the potential for significant positive impact on health consumers living with pain.

The term 'entry-to-practice' covers a broad range of education that may be undertaken prior to an individual entering their area of clinical practice. Higher education programs can include bachelor and masters programs, and in some instances, a doctorate. Para-professional and other roles (regulated and unregulated or self-regulated) may involve vocational education and training (VET) at Certificate III, Diploma or Advanced Diploma level.

It is worth noting at this point that there are large proportions of the health workforce, particularly in the aged care and disability sectors, where care is provided by workers without any formal education or training.

Early graduate years

The transition to clinical practice that takes place in the first year or two of a health practitioner's career provides the important consolidation of knowledge, skills and attitudes acquired during entry-to-practice programs by applying these directly within a range of health care contexts.

During this time new graduates are anxious to assimilate into their work environment and be accepted as part of the 'team' [237-240]. They can be easily influenced by the culture and clinical practices of their workplace, good and bad. Clinicians recognise the importance of the biopsychosocial principles for managing pain, however barriers exist in terms of confidence, knowledge and skills to implement them [132]. This is an important time to reinforce best-practice pain management principles and practice.

Postgraduate clinical programs

Many health professionals undertake further studies in their chosen field following their entry into practice. This may include undertaking an honours year, graduate certificate and / or diploma, as well as masters and doctoral degrees. It is important that more advanced concepts related to pain management be included in these programs, where relevant, and pain research is fostered and well supported.

Specialist medical training

In Australia specialist medical training is undertaken through recognised specialist medical colleges. Specialist medical colleges must meet *the Standards for Assessment and Accreditation of Specialist Medical Programs and Professional Development Programs by the Australian Medical Council 2015* [241].

Pain is relevant to a broad range of medical specialty areas so it follows that specialist medical training programs should contain contemporary, evidence-based content on pain and pain care relevant to their discipline.

Specialist physiotherapy training

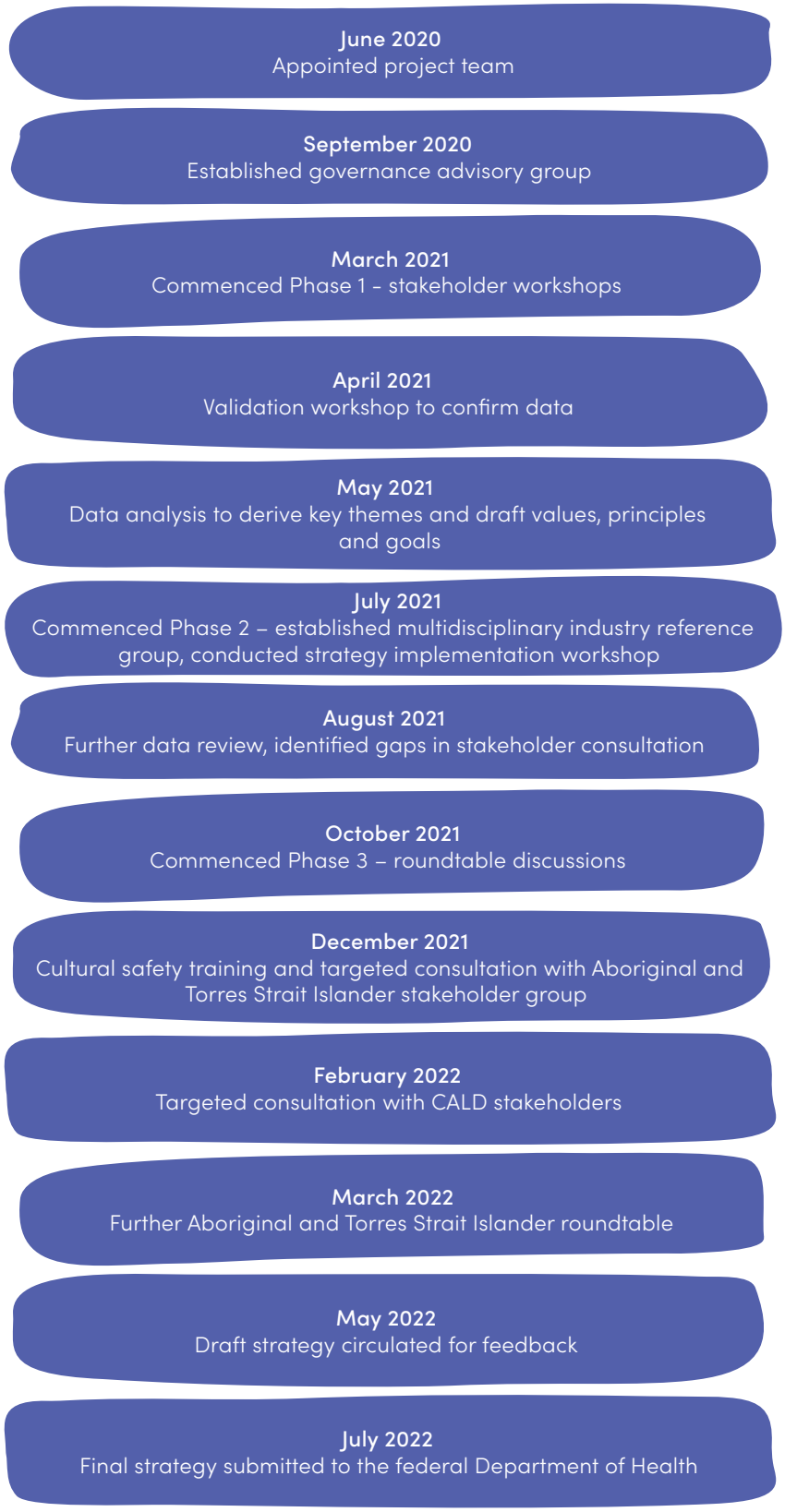
Specialisation may be undertaken through the Australian College of Physiotherapists leading to qualification as a Fellow of the Australian College of Physiotherapists following the completion of a rigorous two-year training and examination process. A specialisation pathway for pain is one of the nine clinical specialist pathways [229].

Continuing professional development

All registered health professionals in Australia have a requirement to maintain their currency of knowledge and practice to support them in the delivery of safe and appropriate care. Continuing professional development provides the opportunity to not only facilitate the updating of a clinician's practice but to fill the knowledge and skill gaps resulting from inadequate coverage of pain management in entry-to-practice and postgraduate education. It also provides the ideal platform for interprofessional education.

STRATEGY DEVELOPMENT

Strategy development incorporated rigorous cycles of literature review, iterative stakeholder consultation, and data analysis and review across the two-year timespan of the project. The following diagram illustrates the key steps involved in the development of the strategy:



ITERATIVE CONSULTATION

In developing this strategy, the project team undertook an iterative consultation process with a broad range of stakeholders.

The term 'iterative consultation' is used deliberately here to signal the difference between the approach taken in this project with that of other initiatives which tend to use stakeholder consultation as a way of 'sense-checking' or validating a strategy that has already been developed, albeit perhaps in a draft format.

The iterative consultation process took place across three phases (Figure 13).

Figure 13: The iterative consultation process

PHASE 1

The first round of iterative consultation in March 2021 comprised a series of seven four-hour workshops (combination of virtual and face-to-face), including one dedicated to rural and remote perspectives.

The workshops took the form of facilitated conversations with a focus on developing key elements of the national education strategy including: the vision; underpinning values and principles; goals; and implementation strategies. To ensure all relevant voices were captured, the net was cast wide to include a broad range of stakeholders including:

- consumers;
- health professional educators;
- health practitioners;
- entry-to-practice students;
- government and other policy makers;
- regulatory bodies; and
- health professional associations.

Phase one workshop participants totalled 120. The following tables illustrate the range of participants and the numbers from each jurisdiction (Figures 14 and 15).

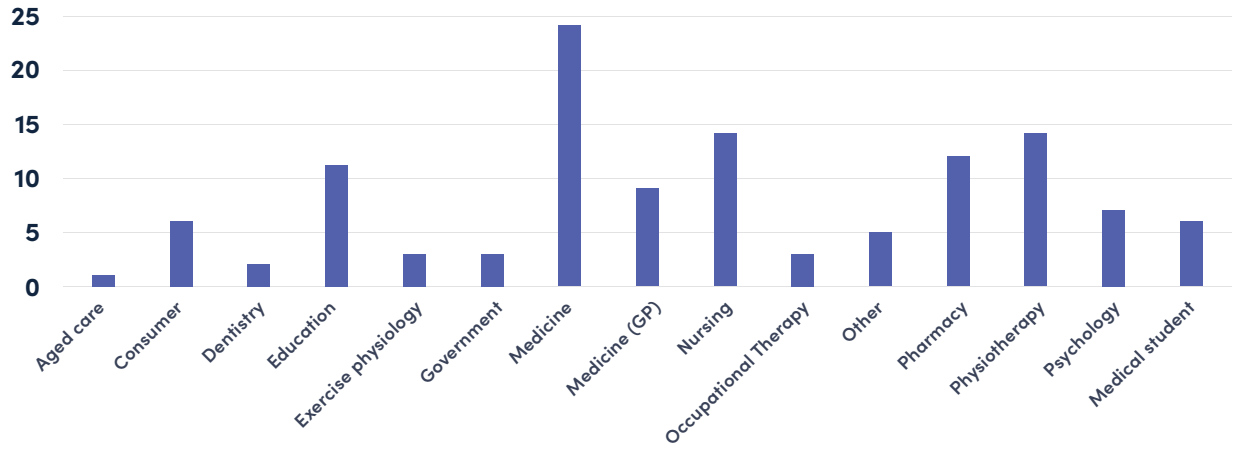


Figure 14: Distribution of participants by discipline

Figure 15: Distribution of participants by location

Data gaps identified

At the conclusion of the first phase of consultation the following data issues were identified:

- While there was a high degree of consensus around values, principles and goals, there was a lack of data related to potential implementation strategies.
- The data lacked the voices of some priority populations such as Aboriginal and Torres Strait Islander peoples, culturally and linguistically diverse communities, disability, aged-care, and children and young people.
- There was limited engagement in the workshops by key regulatory and policy agencies.

PHASE 2

In an effort to address the limited data pertaining to implementation strategies an *Industry Reference Group* was established. This group comprised some representatives from phase one workshops as well as additional representation from government, policy and regulatory groups. A workshop was subsequently held with this group in June 2021 and the data analysed and combined with existing findings.

PHASE 3

Phase three aimed to address gaps in the data in relation to input by key regulatory and policy agencies as well as input from Aboriginal and Torres Strait Islander and culturally and linguistically diverse communities. Five 90-minute roundtable discussions were subsequently convened.

The project team also engaged with several key stakeholders individually for the purpose of providing further explanation and advice. In total the stakeholder engagement included approximately 180 individuals, many of whom were representing the perspectives of key groups and agencies.

This extensive iterative consultation process has shaped the following sections of this education strategy.

VISION

Providing a vision for the National Strategy for Health Practitioner Pain Management Education was seen as important in ensuring a clear focus in the development of the strategy. The vision is aspirational and created with a 5 to 10-year timeline in mind:

"Australia has a national education strategy which promotes evidence-based, best practice health care for individuals experiencing pain.

A nationally consistent set of values, principles and goals underpins and guides health practitioner pain management education in entry-to-practice, postgraduate and continuing education programs."

VALUES

There was strong agreement among stakeholders that this strategy is supported by a set of underpinning values that speak to all aspects of pain management education developed and delivered across a diverse range of communities. Emerging, with a high degree of consensus, from stakeholder workshops and discussions were the following values:

Diversity

Pain management education, content and delivery reflects the diversity of the community in which it is applied, individuals' experiences of pain and the unique needs of the learner.

Partnership

The development and delivery of sustainable pain management education is built through authentic, mutually beneficial education partnerships which are founded on a platform of trust and enduring long-term relationships.

Excellence

Within pain management education there is a focus on maintaining high standards and implementing continuous quality improvement.

Equity

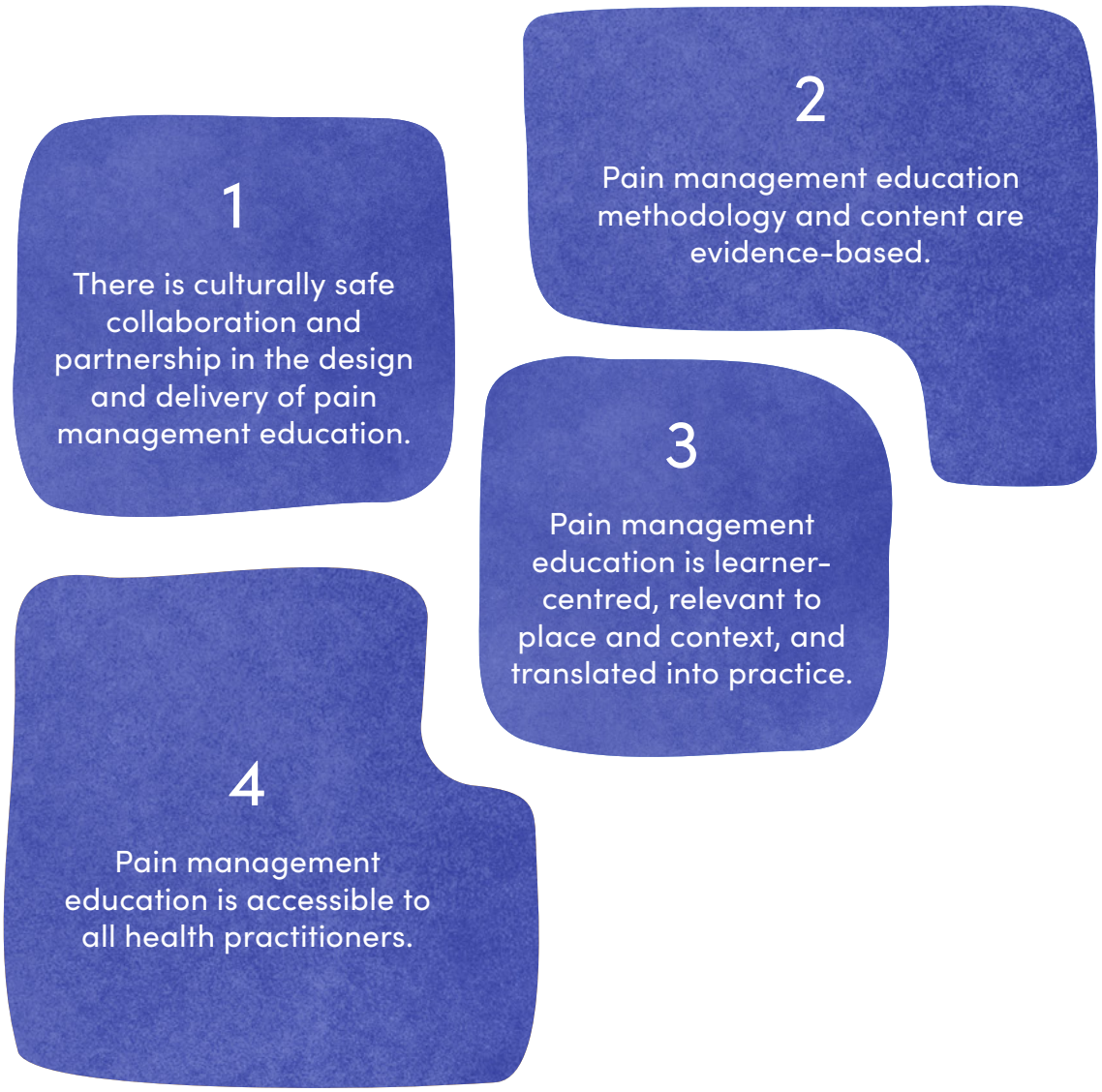
Pain management education is accessible to all health practitioners. It supports the right to self-determination and empowers health practitioner communities through partnering in the creation of education solutions.

Respect

The development and delivery of pain management education respects the importance of 'place' and 'community' and takes place in a culturally safe space with mutual respect for all involved regardless of perceived 'status', health discipline, or educational background.

PRINCIPLES

The following set of principles was derived through the iterative consultation process described above. They build on the values and will assist in guiding the way in which we design and deliver pain management education into the future.



Principle 1

There is culturally safe collaboration and partnership in the design and delivery of pain management education.

Education programs must be aimed at meaningful outcomes for consumers and direct consumer input into educational delivery can provide extremely powerful and memorable learning opportunities for health practitioners [226].

This means that consumers must be central to program design and delivery. It is important to understand the desired impact and outcomes of health practitioner education from the consumer perspective. Having consumers inform design will ensure that learning outcomes will address their concerns [226].

Engaging consumers in education delivery adds a powerful dimension to the learning experience of health practitioners. For example: the use of storytelling, simulation-based learning and case-based scenarios, that are linked with defined learning outcomes, are excellent ways for learners to engage with consumers. These teaching approaches will increase the readiness for practice of beginning practitioners and are ideal for developing empathy and communication skills. They can be used equally effectively in postgraduate and ongoing learning contexts.

Appropriate development, implementation and translation of education to practice can only happen when we truly understand the communities in which it is applied.

To facilitate the appropriate application of pain management education it is important for education providers to be well connected within the communities in which it is delivered. Building long-term meaningful relationships and mutually beneficial partnerships, to develop a sense of trust and mutual understanding is pivotal to the success and sustainability of education programs.

ELLIE LIVES IN BRISBANE, QUEENSLAND

"I am a twenty-six-year young woman living in Brisbane and lived with a diagnosis of Spastic Quadriplegic Cerebral Palsy since birth.

At 16, as a consequence of not receiving support and advocacy from a pain management team, my pain was inadequately treated....I was isolated by my pain, made to feel invisible, and my concerns were invalidated.

If I could make one request of you as doctors and clinicians it would be please share your power with your patients, work in partnership with them to find solutions set goals and have a shared vision. The patient sitting in front of you cannot be simply summed up or defined in a patient chart. Patients are people to be met before they are conditions to treated."

Source: Australian Pain Management Association

These partnerships should be founded on the premise of 'learning from each other' rather than 'knowledge giving', recognising and incorporating the deep learnings that are held by Aboriginal and Torres Strait Islander peoples and culturally and linguistically diverse (CALD) populations.

Partnerships with Aboriginal and Torres Strait Islander communities must involve the broader community, be respectful and cognisant of the significance of 'place' and support the right to self-determination and elimination of racism in all its forms.

Australia has a rich and diverse migrant population that is not well served by generic 'one size fits all' approaches to education. Education provision must be informed and guided by those who understand the community and cultural contexts to ensure that it has a real impact at the coalface in care provision. Consultation with stakeholders from culturally and linguistically diverse backgrounds highlighted how the complexity of pain is compounded within these communities by many aspects including:

- language barriers;
- past trauma;
- lack of understanding of the Australian health system [242];
- lack of cultural awareness by health practitioners [243]; and
- the disconnect between western medical beliefs and those of other cultures [242].

In all situations, community engagement and program delivery need to be within a culturally safe environment.

The need for effective community partnerships becomes all the more important due to the glaring gaps in research relating to both Aboriginal and Torres Strait Islander peoples and CALD populations and their practices, beliefs, experiences and responses to pain.

Quality educational program design should also involve collaboration and partnership with all key health disciplines, as well as learners, to ensure that educational outcomes are relevant to clinical practice.

Optimal pain management requires a holistic, biopsychosocial approach that is tailored to meet the needs of the individual experiencing pain. This is particularly important in the management of those living with chronic or persistent pain and is reflective of its complexity. For meaningful interdisciplinary collaboration to occur it is important that all participants feel culturally safe, regardless of perceived professional 'status', race, culture or social background.

It follows that the design and delivery of programs should reflect this multidisciplinary aspect of pain care and, where practicable, an interprofessional education approach is preferred.

Building collaborative partnerships within and across education and clinical environments to engage key stakeholders will lead to quality, clinically relevant, education solutions. Not all education contexts will lend themselves easily to interprofessional education delivery, however this should not be a barrier to collaboration in program design.

While interprofessional education should ideally involve students and teachers from a range of discipline areas learning with and about each other as they apply their craft, fostering interprofessional education can also be supported through multidisciplinary case-based learning [244, 245] and simulation-based education using standardised patients and actors to play the role of other members of the health team [246, 247].

Developing a common philosophy and language for pain will act as an enabler for interprofessional pain management education.

It is important that pain management education is founded on a common conceptual understanding, philosophical approach and evidence-based model of pain. The foundation of knowledge, skills and professional attributes required in pain management can be viewed as transdisciplinary. A common understanding leads to a generic language and definitions that cross disciplinary boundaries and resonate at all levels of education. There was strong support throughout stakeholder consultations to support the acceptance of the International Association for the Study of Pain (IASP) definition of pain.

Principle 2

Pain management education methodology and content are evidence-based.

Throughout all stakeholder consultations there was strong consensus around the need for pain management education to be reflective of contemporary knowledge and practice.

It is important, therefore, that all pain management education be based on contemporary, reliable evidence and relevant best-practice guidelines and principles. Evidence-based content should not be developed through a solely 'biomedical' lens, rather it should be situated within a 'holistic' framework that incorporates the sociocultural, psychological, and spiritual perspectives together with the biophysical dimension.

As evidence continues to evolve, learning must be regularly updated through continuing professional development.

To ensure that a health practitioner's practice continues to be founded on contemporary evidence it is important that they embrace continuing self-reflection and learning throughout their career. Fostering a culture of continual learning and professional development within entry-to-practice programs, and then supporting this through ongoing education, peer support and mentorship throughout the health practitioner's career, will support best-practice care delivery.

There is an urgent need for further quality research to support the evidence-base underpinning pain education.

The field of pain management is dynamic in that our understanding of mechanisms of pain and, in particular, chronic pain responses, has changed and grown significantly over the last two decades with research at the core of this change. However, gaps remain in our research, particularly in relation to understanding the experience and effective management of pain within some priority populations, including Aboriginal and Torres Strait Islander peoples and culturally and linguistically diverse communities.

Teaching methods need to be contemporary, evidence-based, fit-for-purpose, cater to a variety of learning styles, and be relevant to the level of the learner.

Evidence-based content alone will not ensure the development of a clinically competent health practitioner and the translation of theory into practice. As stated above, teaching methods need to incorporate best-practice, contemporary approaches. Over the last decade there has been an increasing move away from didactic, teacher-focused educational delivery towards more learner-centred, applied forms of learning.

Assessment in contemporary health practitioner education is also moving away from high stakes summative assessment (assessment of learning) towards more formative assessment (assessment for learning) with a trend towards programmatic or global assessment.

Principle 3

Pain management education is learner-centred, relevant to place and context, and translated into practice.

A dynamic and responsive curriculum will have mechanisms for continuous feedback from the clinical coalface and a deep understanding of the community context in which it is delivered.

Pain is an issue within all community environments; however, the geographical, social and cultural contexts of communities can vary greatly. Differing community contexts can impact directly on the health care needs of consumers and the learning needs of health workers on the ground. Pain management education solutions must be flexible enough to be applied across a range of environments.

It is not only important to consider 'what' we teach, but to look at 'how' we teach pain management to facilitate translation to practice.

Technology is being harnessed to assist in catering to the wide variation in individual learning styles and to enable learners to apply concepts to practice more readily [231]. Online learning, simulation-based education (including augmented and virtual reality) and supervised clinical practice all need to be considered as valuable teaching and learning methods in preparing health practitioners for the realities of the workforce or in changing the practices of the existing health workforce.

Principle 4

Pain management education is accessible to all health practitioners.

Pain management education should be flexible, adaptable and affordable to enable clinical capability to be enhanced in the communities with the greatest need.

Centralising the development of teaching and learning resources can be an efficient way of reducing the cost by reducing duplication of effort and leveraging expertise across a broad range of organisations and disciplines. Making these resources adaptable and readily available as 'share-ware' would also ensure equity in access to quality materials. That said, it is crucial to consider the sustainability issues in maintaining shared resources.

Geographical location should not be a barrier to accessing high quality, relevant pain management education.

Technology has greatly enhanced accessibility to quality education across the vast distances of rural, regional and remote Australia. However, it is important to be aware of the fact that not all geographical areas are well supported by adequate technological infrastructure and not all health practitioners have access to the relevant resources on the ground. Other learning delivery mechanisms must be provided to avoid excluding educators and learners living and working in these circumstances.

Pain management education should be available across a broad range of education levels including: vocational education and training (VET); higher education; and continuing education through education institutions and health networks.

Large sectors of the community are cared for by workers with qualifications attained within the VET sector. Many of these are our most vulnerable groups including: aged care; disability; and Aboriginal and Torres Strait Islander communities. In order to improve the pain care of all Australians living with pain it is important that education solutions are offered to these workers.

Language should not be a barrier to accessing quality education.

Health practitioners, particularly those working within culturally diverse communities, may not have English as their first language. To ensure equity of access in these circumstances, it will be important to provide tailored teaching and learning resources and education.

GOALS

The following goals were derived through the process of iterative consultation and with a view to achieving broad, sustainable system and cultural change.

Goal 1: Develop national standards for health practitioner pain management education.

Timeframe: 2023 - 2024

Objectives

There is a nationally consistent set of aspirational standards for health practitioner pain management education that:

- is relevant across multiple disciplines and levels of education;
- is underpinned by the values and principles of the National Strategy for Health Practitioner Pain Management Education;
- sets the minimum level of quality; and
- provides guidance for the development and delivery of pain management education.

A set of well-developed and accepted national standards for health practitioner pain management education should aim to inform policy, education and practice to improve the care of Australians living with pain. National standards will provide a framework for the development and delivery of pain management education, ensuring consistency across disciplines and education sectors. The standards will be a set of concise statements that act as quality markers for health practitioner pain management education. They will also provide a template for changing the way in which we develop and deliver pain education to ensure that it is accessible and relevant for all.

Goal 2: Create a national pain management education competency/capability /practice framework.

Timeframe: 2023 - 2024

Objectives

There is a national pain management competency/capability/practice framework that:

- aligns with the national standards for pain management education;
- is generic by nature but flexible enough that it can be translated across multiple health disciplines and community contexts;
- is underpinned by the values and principles of the National Strategy for Health Practitioner Pain Management Education;
- promotes a holistic and multidisciplinary approach to pain management through interprofessional education;
- informs the development and delivery of pain management education; and
- informs the assessment of pain management education.

The development of a pain management competency framework (capability/practice framework), that can be applied across a range of health disciplines, education levels, and community contexts, will provide clear guidance to those creating education programs. A competency framework will need to be built on cross-disciplinary engagement and consensus and leverage existing competency frameworks nationally and internationally.

Goal 3: Develop educational resources that align with the standards and competency framework.

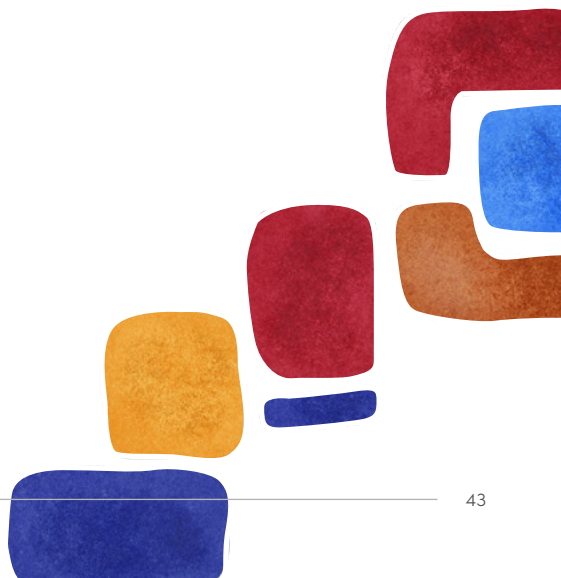
Timeframe: 2022 - 2024

Objectives

Educational resources are developed in alignment with the national standards and competency framework to support the efficient and effective delivery of pain management education. They are:

- based on contemporary evidence and best-practice principles;
- accessible across geographical regions;
- developed for all levels of learning across vocational education and training to higher education and specialist training;
- flexible and adaptable to the curriculum and community context in which they are delivered;
- cater to the needs of all learners, including those working within disadvantaged communities and with English as a second language;
- affordable; and
- enable education providers to rapidly implement pain management education within existing or new programs.

Pain management education standards and competencies will directly inform the development of learning resources that are widely available. This will ensure a consistent quality and understanding across health disciplines and they should be underpinned by a common language and a philosophy that supports multidisciplinary pain care.



Goal 4: Embed pain management education into entry-to-practice curricula.

Timeframe: 2023 - 2026

Objectives

Entry-to-practice health students are equipped with the knowledge, skills and attitudes to deliver best-practice, evidence-based care for individuals experiencing pain when they transition into clinical practice.

This is arguably the most ambitious of the strategy's goals. Ensuring the inclusion of quality pain management education into already crowded entry-to-practice curricula, in a way that is consistent across disciplines, evidence-based, meaningful, and allows for appropriate scaffolding of learning within the framework of individual curriculum designs, is a great challenge. To improve pain care in Australia it is important that pain management content is incorporated across these programs, despite the challenges.

Equally challenging is moving the paradigm of pain care from the dominant 'biomedical' western health focus of many health curricula towards a more holistic, biopsychosocial one that incorporates the social, cultural and psychological dimensions of an individual's experience of pain.

Importantly, the first three goals of the strategy will be the 'enablers' of change in the entry-to-practice space and form the foundation on which this goal can be built.

Goal 5: Equip educators to deliver pain management education.

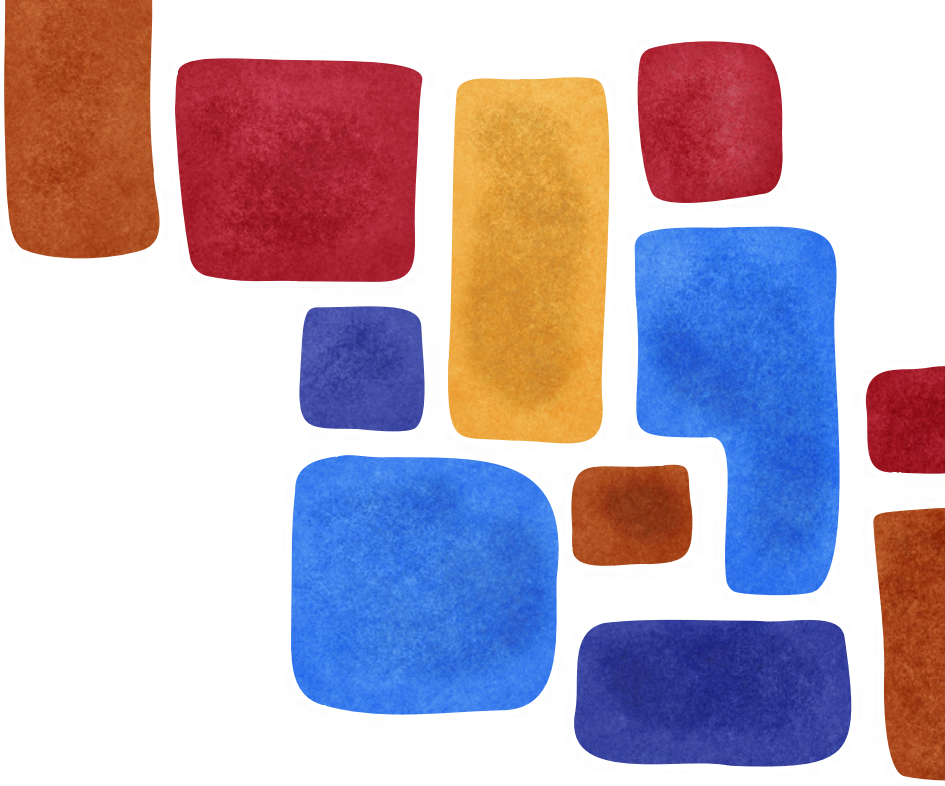
Timeframe: 2023 - 2026

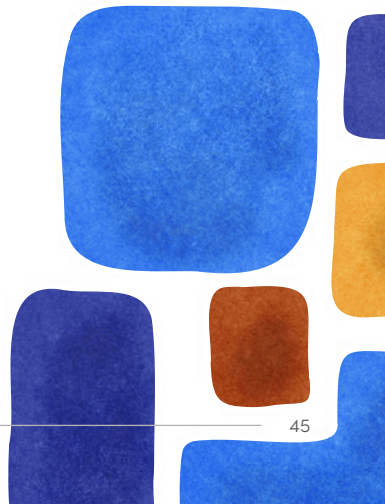
Objectives

All educators engaged in the delivery of pain management education will have the knowledge, skills and available resources to facilitate best-practice, evidence-based pain management education.

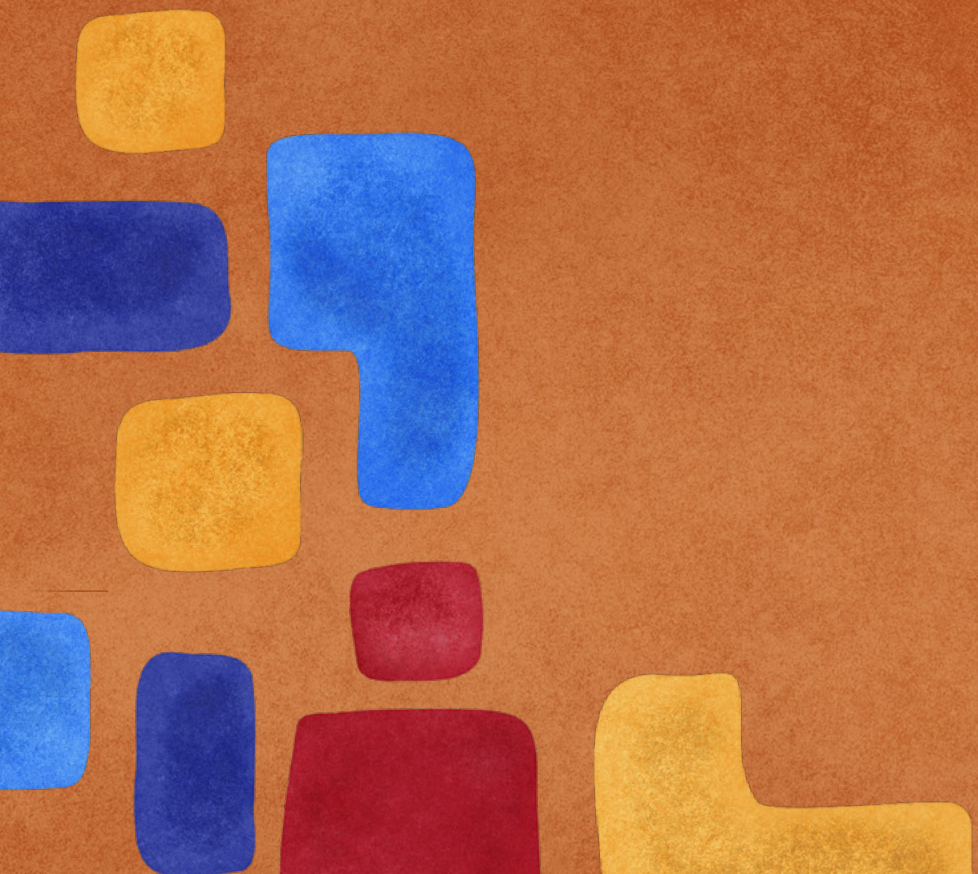
Standards, competencies and resources cannot go all the way to delivering quality education across the health disciplines. With the exception of self-directed learning programs, most education environments rely on educators to compile and deliver curricula. One of the challenges for educators in the dynamic area of health care is staying up-to-date with current knowledge and real-world practice.

Pain management theory and practice have changed significantly over the last 15 years and educators will need to be supported in the translation and integration of contemporary knowledge and thinking into their teaching program. They will also need support in the identification of, and access to, effective teaching and learning methods to ensure optimum outcomes for their learners.





Implementation plan



GOAL 1: Develop national standards for pain management education.

Timeframe: 2023 - 2024

Objectives / outcome measures	Recommended actions	Important considerations
There is a nationally consistent set of aspirational standards for health practitioner pain management education that: • are relevant across multiple disciplines and levels of education; • are underpinned by the values and principles of the National Strategy for Health Practitioner Pain Management Education; • set the minimum level of quality; and • provide guidance in the development and delivery of pain management education.	• Review a range of national and international standards and draw on these to inform the development of pain management education standards. • Establish governance and collaborative partnerships to lead extensive stakeholder engagement and co-design. *(Must include consumers at the highest levels).* • Incorporate an iterative consultation process in the development of the standards. High levels of engagement with the right stakeholders will ensure that the standards developed will be relevant in the Australian context of pain care and support their translation into education. Early engagement will also build consensus. • Obtain high-level government and regulatory endorsement of the standards. • Develop and implement a 'communication strategy' to accompany the release of the standards.	• There are currently a number of national and international standards that could be drawn from to inform the development of Australian pain management education standards. Ensure alignment with other existing national standards where relevant, e.g: National Safety and Quality Health Service Standards. • Collaborative partnerships with Aboriginal and Torres Strait Islander groups should be formed at the highest level and support their right to self-determination with genuine shared decision making and supporting the key elements of the *National Aboriginal and Torres Strait Islander Health Plan 2021–2031* (Commonwealth Government, 2021). • Stakeholder engagement should be broad and include: - health care consumers from across all sectors (aged care, Aboriginal and Torres Strait Islander health; disability; culturally and linguistically diverse (CALD) communities; and young people (12-24 years); - representation of health disciplines engaged in the management of individuals experiencing pain, including those working with Aboriginal and Torres Strait Islander and CALD communities, paediatric and emerging adults sector, aged care and the disability sector; and - educators and students from vocational education and training, higher education and specialist medical colleges as well as professional and clinical organisations (across entry-to-practice, postgraduate and continuing education). • The content of the standards should be underpinned by educational best practice and provide a high-level framework to guide organisations in the application of pain management education.

GOAL 2: Create a national pain management education competency/capability/practice framework.

Timeframe: 2023 - 2024

Objectives / outcome measures	Recommended actions	Important considerations
There is a national pain management competency framework that: • aligns with the national standards for pain management education; • is generic by nature but flexible enough that it can be translated across multiple health disciplines and community contexts; • is underpinned by the values and principles of the National Strategy for Health Practitioner Pain Management Education; • promotes a holistic and multidisciplinary approach to pain management through interprofessional education; • informs the development and delivery of pain management education; and • informs the assessment of pain management education.	• Give initial consideration as to whether it is a 'competency' or 'capability' framework that is required. • Review curricula and competency frameworks nationally and internationally for applicability in the Australian pain context. For example: IASP curricula. • Undertake extensive stakeholder engagement and incorporate an iterative consultation process in the development or refinement of the competencies. • Obtain high-level government and regulatory endorsement of the competencies. • Develop a self-assessment tool, against the competencies, for existing practitioners to identify their own learning needs. • Develop and implement a dissemination and communication plan to accompany the release of the competencies.	• It will be important to link with the concurrently funded project: *Commonwealth Grant for Health Professional Pain Education G02810* to build on work already underway in this competency space. • Other terms to consider may be 'practice framework' or 'critical work functions'. Consider what would foster acceptance across a broad range of health education areas. • The framework should be interdisciplinary and outcomes-based, cutting across all levels of a clinician's career. To achieve this, competencies need to be at a high enough level to be generic and adaptable across a range of discipline contexts. Very specific, detailed competencies will restrict their usability. • There should be alignment across regulatory bodies, industry and accreditation bodies to ensure the framework is accepted. The framework should also focus on what people learn, with an emphasis on individual reflection and life-long learning. • Develop 'champions' through the stakeholder engagement process. Champions can assist with dissemination of information and in building buy-in across health disciplines and education sectors once the competency framework has been developed.

GOAL 3: Develop educational resources that align with the standards and competency framework.

Timeframe: 2022 - 2024

Objectives / outcome measures	Recommended actions	Important considerations
Educational resources are developed in alignment with the national standards and competency framework to support the efficient and effective delivery of pain management education. They are: • based on contemporary evidence and best-practice principles; • accessible across geographical regions; • developed for a range of levels of learning across vocational education and training to higher education and specialist training; • flexible and adaptable to the curriculum and community context in which they are delivered; • cater to the needs of all learners, including those working within disadvantaged communities and with English as a second language; • affordable; and • enable education providers to rapidly implement pain management education within existing or new programs.	• Review the teaching resource needs of educators across sectors to enable the implementation / improvement of pain management education within their area. • Conduct a review of existing resources with a view to their: - adequacy in meeting the national standards and competencies for pain management education (above); - ability to be offered broadly and flexibly; - appropriateness for different education levels: VET, higher education, and specialist education; - ability to address the pain education needs of health workers providing care within disadvantaged community groups (e.g: Aboriginal and Torres Strait Islander, CALD, disability and aged-care sectors); and - educational quality and use of contemporary teaching and learning approaches. • Identify resource gaps. • Develop 'toolkits' for pain management education for: 1. entry-to-practice programs; 2. postgraduate courses; and 3. continuing education. • The toolkits should be aligned with the national standards and competencies for pain management and may include: simulation-based education scenarios; case-based learning exercises; stories from the consumer perspective; short online or written modules. Toolkits should allow flexibility in delivery and the application of individual creativity on the part of the educator.	• It will be important to link with the concurrently funded project: *Commonwealth Grant for Health Professional Pain Education G02810* to build on work already underway in this educational resource space. • Special consideration should be given to the issue of 'access' in the development of resources, particularly within: - rural, regional and remote environments where information technology infrastructure and resources may not be adequate; - Aboriginal and Torres Strait Islander communities; and - culturally and linguistically diverse communities. • In the entry-to-practice and postgraduate education spaces, it is recommended that education resources allow for appropriate integration within an existing curriculum in a way that allows for horizontal and vertical integration of concepts and promotes the scaffolding of learning across a program. This may mean multiple small learning resources rather than large discrete modules or units. • Contemporary teaching and learning approaches can include online and simulation-based learning. • Storytelling by health consumers can be an extremely powerful teaching tool. It will be important to ensure a co-design framework in the development and delivery of these includes stories from within priority populations such as: Aboriginal and Torres Strait Islander communities; culturally and linguistically diverse communities; the disability and aged care sectors; rural, regional and remote communities; and children and young people.

Continued on next page

GOAL 3: Develop educational resources that align with the standards and competency framework.

Timeframe: 2022 - 2024

Recommended actions	Important considerations
• The toolkit should contain resources developed with, and for educators within: Aboriginal and Torres Strait Islander communities; the disability and aged-care sectors; and culturally and linguistically diverse communities; and paediatric and emerging adult settings. • Incorporate funding and sustainability processes into toolkit development. • Guidelines will be required for educators on how to appropriately apply the resources in their own area to achieve optimal outcomes for learners in alignment with the standards and competency requirements (*see Goal 5 below*). • Establish an educational resource portal to accommodate ready access to the toolkit.	• A focus on 'interdisciplinary' resources is encouraged, including resources that can be applied in education settings where interprofessional education may not be possible due to availability or logistics. In the latter situation, interdisciplinary case-based scenarios and simulations can provide valuable learning tools. • Sustainability of toolkits will need to be considered from the outset in terms of the: lifespan of a resource; process for revision and updating; and outcome evaluation and effectiveness. • Ensure that the pain educator toolkits are accessible for educators for whom English is not their first language.

GOAL 4: Embed pain management education into entry-to-practice curricula.

Timeframe: 2023 - 2026

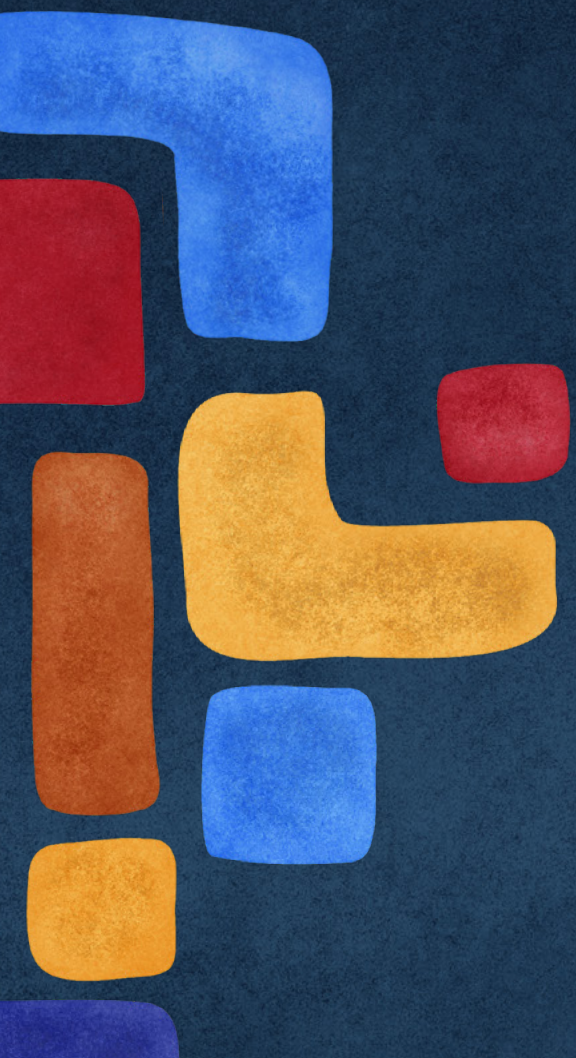
Objectives / outcome measures	Recommended actions	Important considerations
Entry-to-practice health students are equipped with the knowledge, skills and attitudes to deliver best-practice, evidence-based care for individuals experiencing pain at a beginning practitioner level.	• Form a high-level advisory group to guide the embedding of pain management education into entry-to-practice curricula in both VET and higher education programs. • Develop self-assessment tools for education providers (VET and higher education) to evaluate the pain management content within their individual curricula, in line with the national standards and competencies. • Connect education providers with a range of education resources that can be adapted to their curriculum. • Connect educators with the resources outlined in Goal 5 below.	• It will be essential that key regulatory bodies (VET and higher education) are engaged early in this process, whether on the high-level advisory group or in other stakeholder engagement activities. • Additionally, the high-level advisory group should include those who can speak to the educational needs of: Aboriginal and Torres Strait Islander peoples; culturally and linguistically diverse communities; the aged care and disability sectors; and paediatric and emerging adults sector. • Education institutions should be encouraged to: - take an 'integration and scaffolding' approach when positioning pain related program within existing curricula; - adapt the content of their pain management program to ensure that it is appropriate to the communities in which it is situated; and - incorporate an interprofessional approach to teaching and learning in this space where practicable.

GOAL 5: Equip educators to deliver pain management education.

Timeframe: 2023 - 2026

Objectives / outcome measures	Recommended actions	Important considerations
All educators engaged in the delivery of pain management education will have the knowledge, skills and available resources to facilitate best-practice, evidence-based pain management education.	• Develop pain educator toolkits that provide guidance in relation to: - the standards and competencies for pain management education; - available evidence-based education resources; and - appropriately introducing resources within their curriculum / program to maximise student learning outcomes. • Establish a 'community of practice' to support educators to enable: - networking; - joint resource development and sharing; - a platform for communication and dissemination of education, including webinars, podcasts and seminars; and - the targeted use of social networking platforms for information sharing and connecting educators. • Create a mentorship program and develop champions among educators.	• Engage incentives such as CPD points to encourage uptake.

Conclusion



The National Strategy for Health Practitioner Pain Management Education forms a high-level roadmap for action over the next five to ten years to improve the quality and consistency of Australian health practitioners' knowledge, attitudes, and skills in contemporary pain care. It addresses goal three of the *National Strategic Action Plan for Pain Management*.

Importantly, the strategy has been developed using an iterative, co-design approach and authentic partnerships with consumers, entry-to-practice students, and a wide range of other stakeholder groups focused on the needs of Australians living with pain. It is hoped that the strategy's values, principles and goals are shared by all who are committed to providing high-quality pain care for the Australian community.

The strategy is grounded in contemporary educational principles and well-informed by the pain management education literature. Research shows that many clinicians acknowledge the need to utilise biopsychosocial principles in providing pain care, but lack the confidence, knowledge and skills to implement them. This strategy puts forward a high-level plan for an Australia-wide coordinated approach to pain management education across health disciplines and throughout the health practitioners' career span, to address inconsistencies in approaches to pain management education, and lack of analysis of the impacts on clinical practice and consumer outcomes.

The strategy is wide-ranging. It should be read in conjunction with existing strategies (for example the *National Strategic Action Plan for Arthritis* and the *National Action Plan for Endometriosis*) and other initiatives focusing on framework development and benchmarking with a view to updating existing programs and customising training to address different health practitioners' needs and scopes of practice (for example the Commonwealth Funded Health Professional Pain Education (G02810) Grant). These activities provide the foundations for the development of new programs in the future.

The implementation plan has been formulated as a suite of targeted, achievable initiatives that can be taken up by different organisations on behalf of the health sector as a whole or targeted to particular learner groups. Funding from a range of sources including Commonwealth and state governments, and other community-based agencies, will be needed to support the delivery of the strategy to reach key target groups.

Project co-design with consumers is essential and evaluation of individual projects should include consumer-reported outcomes and be mapped against the objectives of the implementation plan, thereby measuring the progress of the strategy over time. Critically, concurrent high-quality research is needed on meaningful consumer outcomes and what models of interprofessional learning facilitate health practitioner engagement in optimal multi and interdisciplinary pain care.

Pain management education for health practitioners alone, however, will not be enough to address all the challenges facing Australians living with pain. This strategy intersects and supports broader health workforce plans. Appendix 1 provides a list of Australian health strategies and action plans.

Finally, pain awareness, health literacy, and pain management education are not the responsibilities of the healthcare and education systems alone. Well-established consumer-based organisations (Australian Pain Management Association, Chronic Pain Australia, Arthritis Foundation and many more) delivering the social support needed for healthy patient outcomes also have a clear role to play. This strategy is a living document and should be reviewed on a regular basis by all engaged in health practitioner pain management education in partnership with the Australian community.

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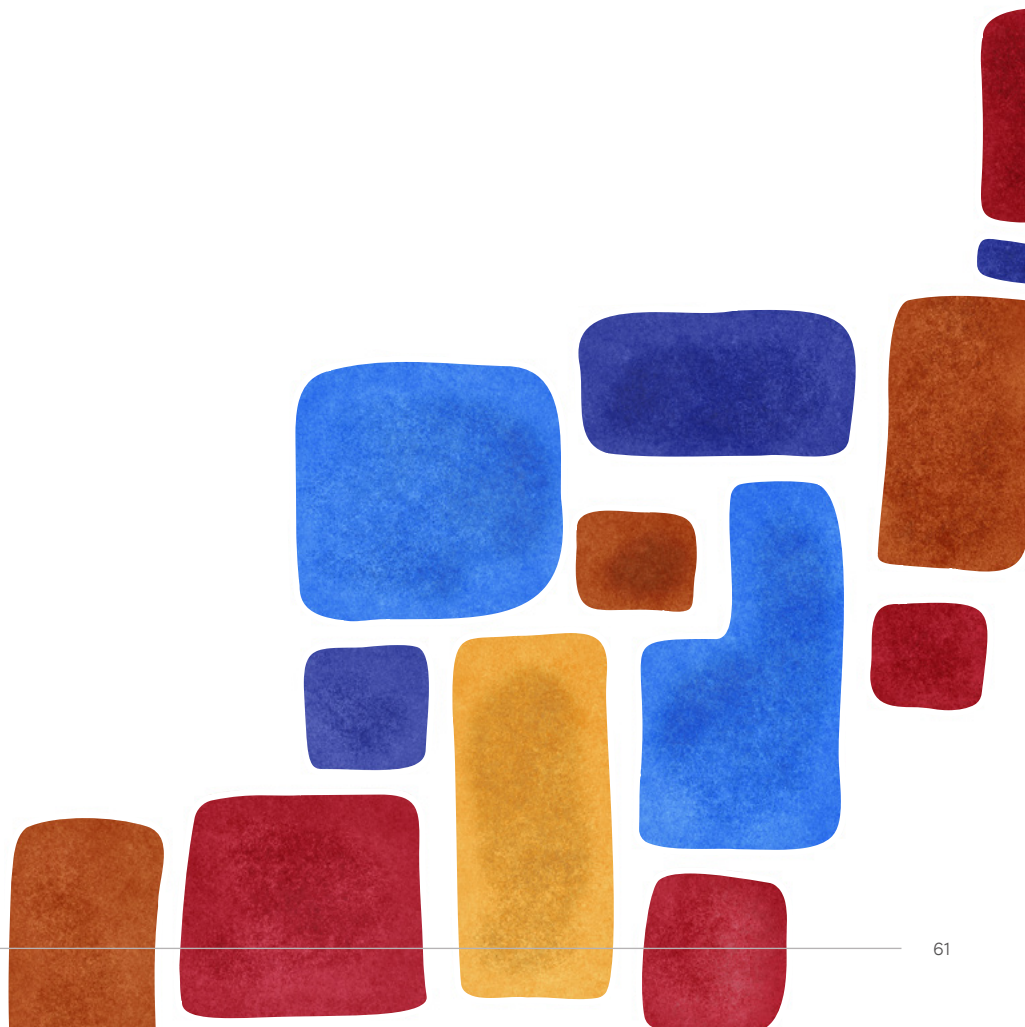


APPENDIX 1: Australian health strategies and action plans

The National Strategy for Health Practitioner Pain Management Education should be read in conjunction with existing health strategies and action plans covering a range of chronic conditions associated with experiencing pain and related health workforce plans including but not limited to those listed below. Relevant State and Territory strategies and action plans should also be considered, as should new strategies and action plans as they are developed over the timeframe of this strategy.

- A Matter of Care: Australia's Aged Care Workforce Strategy (https://www.health.gov.au/sites/default/files/a-matter-of-care-australia-s-aged-care-workforce-strategy.pdf)
- Australia's Disability Strategy 2021-2031 (https://www.ndis.gov.au/understanding/australias-disability-strategy-2021-2031)
- Fifth National Mental Health and Suicide Prevention Plan (https://www.mentalhealthcommission.gov.au/getmedia/0209d27b-1873-4245-b6e5-49e770084b81/Fifth-National-Mental-Health-and-Suicide-Prevention-Plan.pdf)
- Fourth Action Plan to Reduce Violence against Women and their Children 2010-2022 (https://www.dss.gov.au/sites/default/files/documents/08_2019/fourth_action-plan.pdf)
- Future focussed primary health care: Australia's Primary Health Care 10 Year Plan 2022-2032 (https://www.health.gov.au/sites/default/files/documents/2022/03/australia-s-primary-health-care-10-year-plan-2022-2032-future-focused-primary-health-care-australia-s-primary-health-care-10-year-plan-2022-2032.pdf)
- National Aboriginal and Torres Strait Islander Health Plan 2021–2031 (https://www.health.gov.au/sites/default/files/documents/2022/06/national-aboriginal-and-torres-strait-islander-health-plan-2021-2031.pdf)
- National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework and Implementation Plan 2021-2031 (https://www.health.gov.au/sites/default/files/documents/2022/03/national-aboriginal-and-torres-strait-islander-health-workforce-strategic-framework-and-implementation-plan-2021-2031.pdf)
- National Action Plan for Endometriosis (https://www.health.gov.au/sites/default/files/national-action-plan-for-endometriosis.pdf)
- National Action Plan for the Health of Children and Young People 2020-2030 (https://www.health.gov.au/resources/publications/national-action-plan-for-the-health-of-children-and-young-people-2020-2030)
- National Cultural Respect Framework for Aboriginal and Torres Strait Islander Health 2016-2026 (https://nacchocommunique.files.wordpress.com/2016/12/cultural_respect_framework_1december2016_1.pdf)
- National Drug Strategy 2017-2026 (https://www.health.gov.au/sites/default/files/national-drug-strategy-2017-2026.pdf)
- National Injury Prevention Strategy 2020-2030 (in development) (https://www.health.gov.au/our-work/national-injury-prevention-strategy#about-the-strategy)

- National Medical Workforce Strategy 2021–2031 (https://www.health.gov.au/sites/default/files/documents/2022/03/national-medical-workforce-strategy-2021-2031.pdf)
- National Medicines Policy (https://www.health.gov.au/sites/default/files/documents/2022/09/national-medicines-policy.pdf)
- National Men's Health Strategy 2020-2030 (the Men's Strategy) (https://www.health.gov.au/sites/default/files/documents/2021/05/national-men-s-health-strategy-2020-2030.pdf)
- National Mental Health Workforce Strategy (in development) (https://www.health.gov.au/committees-and-groups/national-mental-health-workforce-strategy-taskforce)
- National Palliative Care Strategy 2018 (https://www.health.gov.au/sites/default/files/the-national-palliative-care-strategy-2018-national-palliative-care-strategy-2018.pdf)
- National Road Safety Strategy 2021-2030 (https://www.roadsafety.gov.au/sites/default/files/documents/National-Road-Safety-Strategy-2021-30.pdf)
- National Strategic Action Plan for Arthritis (https://www.health.gov.au/sites/default/files/documents/2020/08/national-strategic-action-plan-for-arthritis_0.pdf)
- National Strategic Action Plan for Pain Management (https://www.health.gov.au/sites/default/files/documents/2021/05/the-national-strategic-action-plan-for-pain-management-the-national-strategic-action-plan-for-pain-management.pdf)
- National Strategic Framework for Chronic Conditions (2019) (https://www.health.gov.au/sites/default/files/documents/2019/09/national-strategic-framework-for-chronic-conditions.pdf)
- National Strategic Framework for Rural and Remote Health 2020 (https://www.health.gov.au/sites/default/files/documents/2020/10/national-strategic-framework-for-rural-and-remote-health.pdf)
- National Strategy for the Quality Use of Medicines https://www.health.gov.au/resources/publications/national-strategy-for-quality-use-of-medicines
- National Statement on Health Literacy (2014) (https://www.safetyandquality.gov.au/publications-and-resources/resource-library/national-statement-health-literacy-taking-action-improve-safety-and-quality)
- National Women's Health Strategy 2020-2030 (the Women's Strategy) (https://www.health.gov.au/sites/default/files/documents/2021/05/national-women-s-health-strategy-2020-2030.pdf)
- NDIS National Workforce Plan: 2020-2025 (https://www.dss.gov.au/sites/default/files/documents/06_2021/ndis-national-workforce-plan-2021-2025.pdf)

APPENDIX 2: Literature review

At the outset of the project in mid-2020 the project team conducted an environmental scan and literature review with the aim of providing a strong evidence-based foundation on which to build the national strategy for health practitioner pain management education.

PRISMA flow diagram

The process for inclusion of articles is outlined in Figure 16 below:

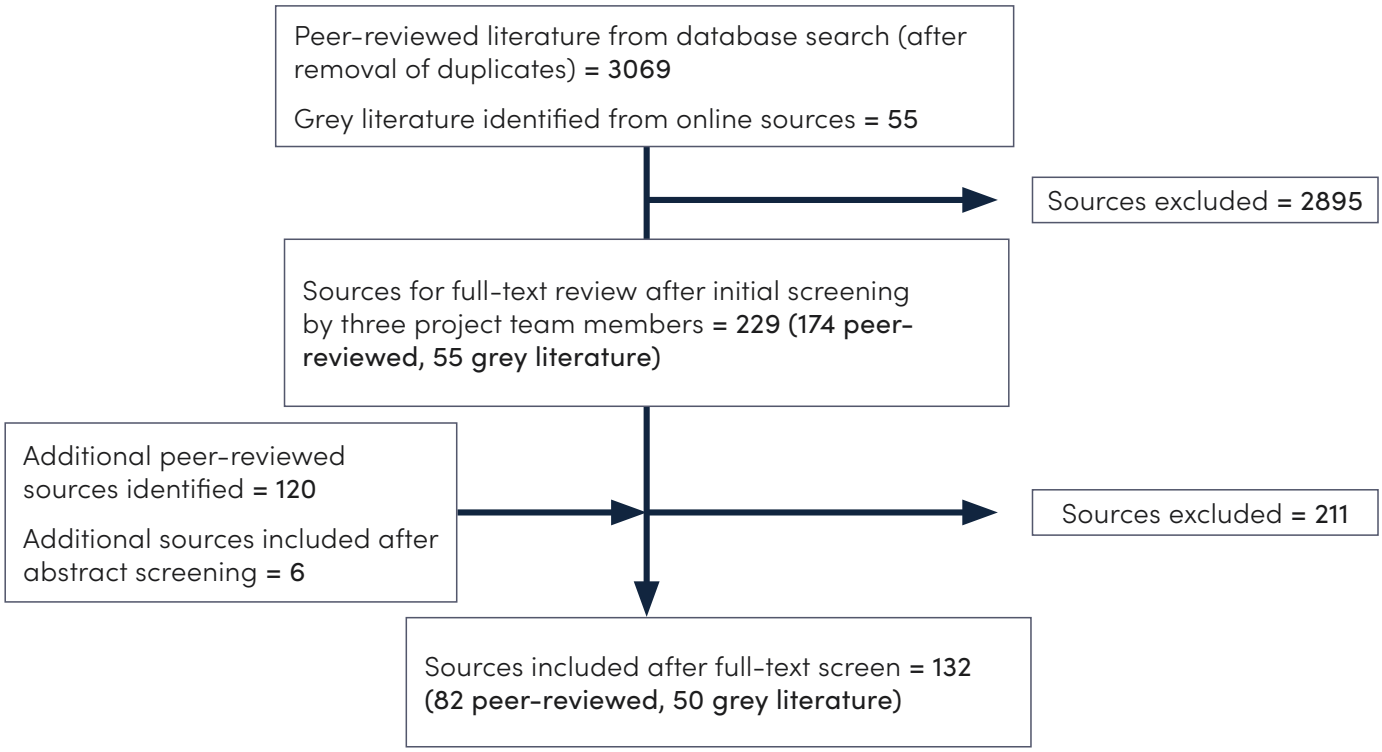


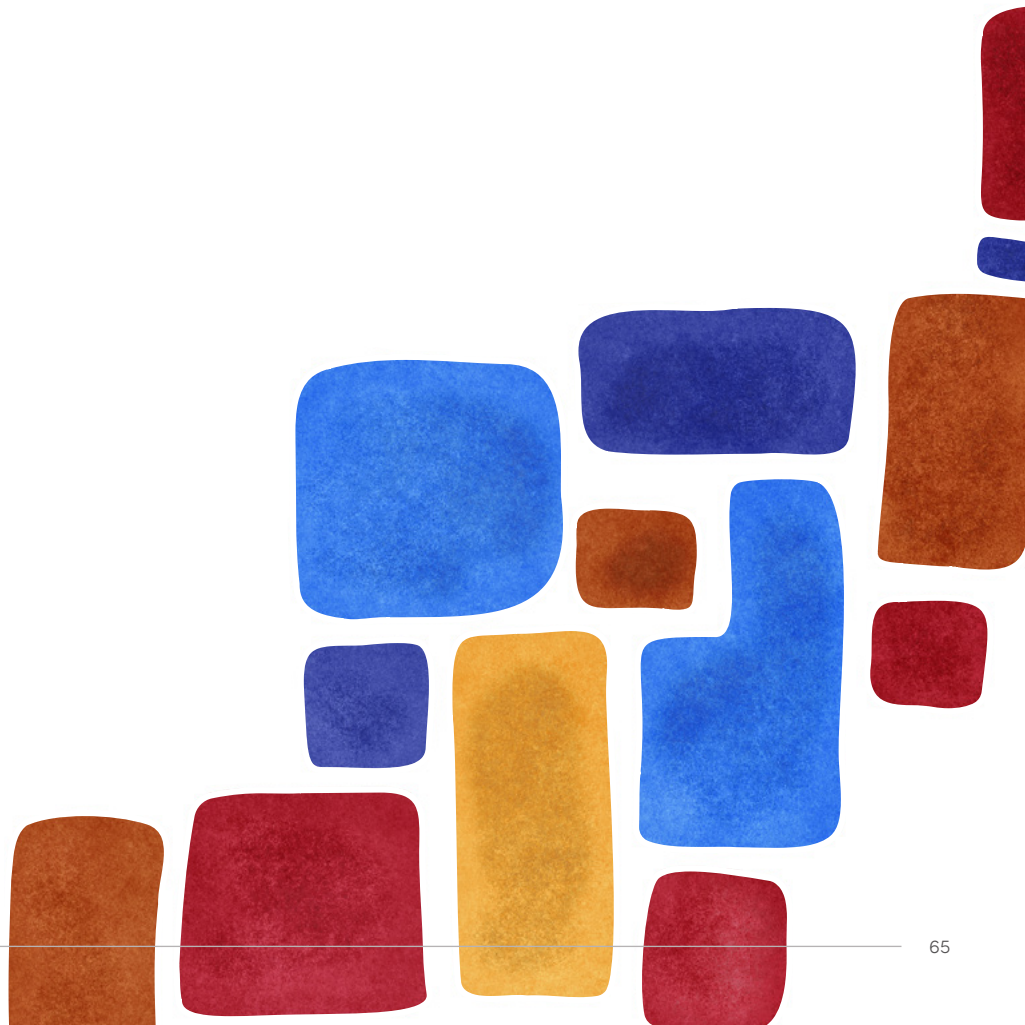
Figure 16: Literature search strategy

Inductive content analysis

Inductive content analysis was used to identify core themes running through the literature, with four core themes identified: i) International and national context; ii) core competencies and curricula; iii) education methods; and iv) change management and implementation. The data under each of these themes was synthesised to develop a picture of the national and international environment of pain management education for health practitioners.

Table 2: Breakdown of peer-reviewed and grey literature sources for the four core themes

	Peer-reviewed literature	Grey literature
International and national context	10	27
Core competencies and curricula	16	5
Education methods	46	7
Change management and implementation	31	11



APPENDIX 3: Stakeholder list

Organisations

ABSTARR Consulting
Adelaide Primary Health Network
Australasian College of Pharmacy
Australasian College of Rural and Remote Medicine
Australian and New Zealand Academy of Orofacial Pain
Australian Association of Consultant Pharmacy
Australian College of Nursing
Australian Commission on Safety and Quality in Healthcare
Australian Dental Association
Australian Government Department of Health and Aged Care
Australian Health Practitioner Regulation Agency
Australian Medical Council
Australian National University
Australian Nursing and Midwifery Federation
Australian Pain Society
Australian Pain Management Association
Australian Pharmacy Council
Australian Primary Healthcare Nurses Association
Australian Psychological Society
Australian Rheumatology Association
Australian Rural Health Education Network
Chronic Pain Australia
College of Intensive Care Medicine
Council of Deans of Nursing & Midwifery
Council of Presidents of Medical Colleges
Curtin University
Deakin University
Department of Veterans' Affairs
Edith Cowan University
Epworth Hospital
Exercise & Sports Science Australia
Faculty of Pain Medicine
Federation of Ethnic Communities Councils of Australia
Federation of Rural Australian Medical Educators
Federation University
Flinders University
GATE Victoria
Gold Coast Primary Health Network
Griffith University
Health Education Australia
Holmesglen
Hunter Integrated Pain Service
La Trobe University
LIME Network
Macquarie University
Medical Deans Australia & New Zealand
Murrumbidgee Primary Health Network
National Ageing Research Institute
National Rural Health Alliance
National Rural Health Student Network
Nepean Blue Mountains Primary Health Network
Notre Dame University
NPS Medicinewise
Occupational Therapy Australia
Pain Management Research Institute
Pain Revolution
Painaustralia
Palliative Care Australia
Pharmaceutical Society of Australia
Pharmacy Guild of Australia
Primary Health Tasmania
Queensland Children's Hospital
Queensland Health
Queensland University of Technology
ReturnToWorkSA
Royal Australian and New Zealand College of Psychiatrists
Royal Australian College of General Practitioners
Royal Hobart Hospital
Rural Doctors Workforce Agency
SA Health
Skills IQ
Society of Hospital Pharmacists of Australia
South Eastern NSW Primary Health Network
St Vincent's Hospital Melbourne
Swinburne University of Technology
TAFE Directors Australia
Tertiary Education Quality and Standards Agency
University of Adelaide
University of Melbourne
University of New South Wales
University of South Australia
University of Southern Queensland
University of Sydney
WA Primary Health Alliance
Western Australia Department of Health
Western Victoria Primary Health Network

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The Faculty of Pain Medicine, Australian & New Zealand College of Anaesthetists

The Faculty of Pain Medicine was formed in 1998 and it has been pivotal in developing and advancing the field of pain medicine throughout Australia, New Zealand and the Asia Pacific region.

The Faculty provides career-encompassing education and standard setting for the specialty practice of pain medicine. It plays a key role in advocating at state and national levels for the delivery of high-quality multidisciplinary, evidence-based, pain management for communities in Australia and New Zealand.

Fellows of the Faculty will have undertaken a 'primary' specialty across a range of disciplines including: general practice; anaesthetics; psychiatry; rehabilitation medicine; and surgery. They then complete a rigorous two-year post-specialty medical training program. The internationally recognised curriculum provides comprehensive training in pain medicine, with a holistic, socio-psycho-biomedical focus.

The Faculty plays a key role in fostering research activities that improve the evidence-base for pain medicine and continues to be an energising force in shaping the future of pain care delivery nationally and internationally.