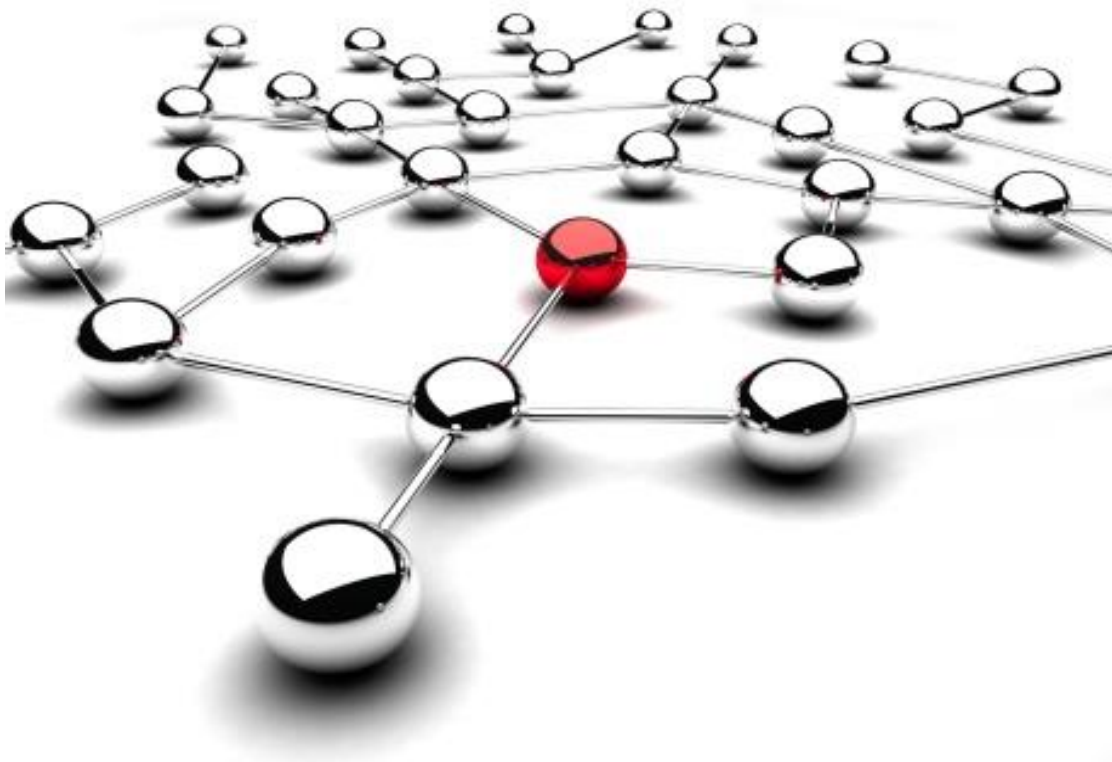




WA Framework for Persistent Pain 2016 - 2021

Improving the health of people with persistent pain



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1. Executive Summary

The *Western Australian Framework for Persistent Pain* (the *Framework*) was developed by the Musculoskeletal Health Network (MSK HN) in February 2014 as WA Health's response to requests to update the Spinal Pain Model of Care. The *Framework* is guided by evidence to inform and support persistent pain management within Western Australia (WA), in response to the National Pain Strategy.¹

The *Framework* provides direction for WA Health and its partners on policy development and service delivery to achieve improved health outcomes for people experiencing persistent pain, reducing the burden on individuals, families, communities and the health system. The experience of persistent pain is reflected in almost every area of health care.

Individuals, the community, researchers, non-government organisations, health service providers and other health sectors were involved in the development of the *Framework*, recognising the need for a consistent person-centred approach to:

- Facilitate an improved understanding of the burden and nature of persistent pain.
- Guide systematic provision of appropriate care and management for people experiencing persistent pain, as close to home as possible.

The vision of the *Framework* is to promote the best possible health and wellbeing outcomes for Western Australians experiencing persistent pain. To achieve this vision, the *Framework* provides a number of opportunities in the following priority areas:

1. Awareness and understanding.
2. Clinical management.
3. Navigation and access.
4. Integrated care.

Presented opportunities in these priority areas outlined in the *Framework* will increase the knowledge and understanding of the nature and extent of painful conditions, enhance tailored care to reduce service gaps, and improve service pathways for people experiencing persistent pain.

2. The WA Framework for Persistent Pain

2.1 Vision

Promote the best possible health and wellbeing outcomes for Western Australians experiencing persistent pain.

2.2 Aim

Identify opportunities to increase the awareness of the burden and complex nature of persistent pain within health care providers and the community.

2.3 Purpose

Provide direction for WA Health and its partners on policy development and service delivery to achieve improved health outcomes for people experiencing persistent pain, reducing the burden on individuals, families, communities and the health system.

2.4 Guiding Principles

- The lived experiences and preferences of the person with persistent pain, their family and carers.
- High-quality, current research evidence from diverse areas in practice and clinical expertise.
- Better understanding of the nature and burden of pain on individuals and society within health professions.
- Consideration of resource allocations and an integrated approach to ensure equitable access to health services for optimal care and management of persistent pain.

2.5 Objectives

The Vision is supported by four main objectives:

1. Increasing the awareness of the burden and impact of persistent pain in WA.
2. Improving clinical management of persistent pain.
3. Improving navigation of and access to persistent pain services.
4. Improving the integration of care for people with persistent pain.

3. Introduction

3.1 Defining Pain

The International Association for the Study of Pain (IASP) defines pain as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage”.² This definition has remained unchanged since 2008.³ The experience of pain is acknowledged as a mechanism to protect the body, evoking a complex physical and psychological response. Consequently, those who suffer persistent pain may develop both physical and mental comorbidities.⁴

The use of the term ‘persistent pain’ throughout this *Framework* is deliberate, to maintain an awareness of the need to relieve acute and ongoing episodes of pain to avoid the transition to chronic pain, a consequence more complex and costly to manage. A multimodal approach that combines effective treatments and care management of persistent pain will result in better health and wellbeing outcomes for people living with pain.

3.2 Prevalence of Pain

Pain is a global public health burden, and pain disorders have been ranked as the second leading cause of disability.⁵ In Australia, persistent pain affects one in five Australians and one in three Australians over the age of 65 years live with persistent pain. The prevalence of persistent pain is expected to increase due to Australia’s growing and ageing population. Pain has harmful consequences on an individual’s health and wellbeing, often negatively affecting their emotional and mental health, quality of life and daily activities. Data from the Australian Bureau of Statistics National Health Surveys indicate that the most common causes of persistent pain in adults include arthritis, back pain and osteoporosis.⁶ Survey data also show that nine in ten Australians with arthritis or back problems also experienced some level of body pain, as did 86% of people with osteoporosis who experienced severe or very severe pain.⁷ Persistent pain in adults is also significantly associated with female gender, older age, psychological distress and markers of social disadvantage.⁸

The prevalence of pain in children and adolescents has been shown to be similar to prevalence rates in adults. Children and adolescents report experiencing headaches, abdominal pain, back pain, musculoskeletal, and other types of pain with prevalence rates higher in girls and increased with age.⁹ Those with chronic pain conditions reported a worse quality of life, missed more days from school, were more likely to use pain medication, and seek medical care for pain relief.¹⁰ The impact of chronic pain in children and adolescents include:

- Loss of self-esteem, social connections, physical fitness.
- Poorer quality of life, school absences and loss of vocational potential.
- Disruption of family relationships.
- Disruption of parental paid work.
- Substantial risks of continued pain and disability into adulthood.

Evidence suggests that adolescents with persistent pain will display increased depressive symptoms and more disability¹¹ which may persist and determine future health status.

3.3 Economic and Social Impact

Persistent pain is Australia's third most costly health condition after cardiovascular diseases and musculoskeletal conditions (also associated with persistent pain).¹² In 2007, the total economic burden of pain was estimated at \$34 billion, including \$11 billion in productivity and \$7 billion in direct healthcare costs, attributed to limited earning capacity, through absenteeism or reduced workplace productivity.¹³ An Australian study estimated that decreased productivity equated to 36.5 million lost workdays at a cost of \$5.1 billion per annum.¹⁴

Persistent pain is overrepresented in populations that may already be socially disadvantaged or marginalised. They include older Australians (50% of older patients will experience persistent pain), individuals living with profound or severe disability, those from lower socioeconomic groups, individuals who are less educated, those with cognitive impairments or mental health conditions, those in receipt of government pension or benefits, and the unemployed.¹³ Work related or motor vehicle accident injuries resulting persistent pain can be difficult to manage, as there is no workers compensation code for 'pain'. While perceived injustice, anger and distress from adversarial situations as a consequence of work and accident incidents may not be obvious, they may further increase pain and disability.¹⁵

Families often suffer alongside the person experiencing pain. They may be inadvertently excluded from care planning, or consideration of the impact the person with pain may have on their lives. Carers' abilities to contribute to normal family life may also be compromised as their physical and mental health can be at risk while they focus their attention on the person with persistent pain.¹⁶ There is an underlying assumption that people with persistent pain only need education to resolve their pain issues. However, many factors contribute to suboptimal outcomes for people experiencing persistent pain including a lack of contemporary knowledge and information related to pain, and how to self-manage their pain or with the support of healthcare providers. Support networks are desperately needed for those with persistent pain to improve their ability to communicate so that they can ensure that they are receiving the best possible care and access to services.

3.4 Complexity of Pain

Persistent pain rarely occurs in the absence of other comorbidities¹⁷ and overlaps a number of national health priority areas including cancer, arthritis and diabetes.¹⁸ Experiencing significant pain can increase a person's reactivity to adverse events and can exacerbate or precipitate mental health issues such as anxiety, depression and suicide.¹ Evaluation into the psychological status of individuals with persistent pain shows a greater proportion of people develop mental health clinical syndromes (generalised anxiety disorder, somatisation disorder, and major depressive disorder) and that the prevalence of these disorders were significantly higher (55%) than those in a matched control group (24%).⁹ Studies have also reported an increased prevalence of Borderline Personality Disorder (BPD) in people with persistent pain (30%) compared to those who had been admitted to psychiatric services (20%).^{19,9} Generic mental health services struggle with managing people with persistent pain, as it is a specialist area requiring close collaboration with pain specialists. There are also barriers to collaborative care arrangements as pain medication reviews are not prioritised if mental issues are exacerbated by pain.

3.5 The National Pain Strategy

In March 2010, the National Pain Summit developed the National Pain Strategy to provide a framework that prioritises best practice assessments, treatment, and management of pain that focuses on improving access to interdisciplinary pain services at all levels of the health system.¹ Key goals of the strategy include:

- Recognising 'people in pain' as a national health priority.
- Improving the understanding and knowledge of pain to empower and support consumers.
- Educating and upskilling professionals to promote best-practice, evidence-based care.
- Increasing access to interdisciplinary care at all levels.
- Enhancing outcomes in pain management through evaluation.
- Supporting pain research.

A recent systematic investigation into the provision of persistent pain services in Australia highlighted that persistent pain management services are currently unable to meet service requirements adequately.²⁰ Furthermore, prolonged waiting times for those in pain is associated with worsening health; especially for people living in rural areas and publically funded services.²⁰ Current evidence supports the urgent need for Western Australia (WA) to review their approach to pain management and access to pain health services.

4. Priority Areas and Objectives

4.1 Priority One: Increasing the awareness of the burden and impact of persistent pain in WA

Pain is commonly classified as acute and chronic, and the terms ‘persistent’ and ‘chronic’ are generally interchangeable. Acute pain can lead to ongoing persistent pain²¹ however this transition is not well understood. New evidence suggests that changes take place in the peripheral and central nervous systems,²² and that these changes may affect how individuals perceive and respond to pain.²³ The shift to mainstream health providing services to people with persistent pain requires a health workforce with the knowledge and understanding of the burden and impact of pain to provide inclusive health care.

“We believe that investigations into the cause of pain are very important, and should not be avoided just because it is expensive. Many medical professionals still refuse to give a diagnosis of fibromyalgia for various reasons; they do not believe that the condition is ‘real’, they don’t understand the condition, or they think that if they diagnose it then they will be stuck with a patient that is too hard to treat. Too many medical professionals are telling our members that their pain is “all in their head”, and referring them to psychologists.” – President of the Fibromyalgia Support Network of WA Inc.

A significant gap exists in service delivery for the optimal treatment and co-management of pain due to variable knowledge and skills.²⁴ Reviews of current literature also suggest that education to health professionals is often delivered with a discipline-specific curriculum model, and may not capture the multidimensional aspects of pain.

Initiatives to increase the knowledge and understanding of persistent pain in healthcare providers through professional and community education should consider:

- Targeting pain health messages at an appropriate level of health literacy.
- Improving the awareness of the impact of health literacy and explanations targeted individually.
- Challenging incorrect beliefs regarding pain.

“People with a lived experience are a valuable resource in communicating the impact of both the experience of pain and their positive/negative experience with current models of service provision” – Carer consultant.

Education for health professionals would also benefit from consumer involvement wherever possible. Implications and insight for future pain services are that:

- Informed consumers have better health outcomes²⁵
- Person with pain, their family and friends should be recognised as active partners in their care
- Accessible, user-friendly information sources should be available including electronic applications and websites.

- Healthcare providers (especially prescribers) need appropriate education and preparation to optimally manage people with persistent pain.²⁶

Opportunities

1. Develop clinical and public education on best practice principles to improve the understanding and options for persistent pain management provided by established pain specialists (e.g. Australian Pain Society service directory).
2. Support education and skill development opportunities for healthcare professionals in evidence-based models for pain management to achieve optimal outcomes.
3. Engage and educate patients about their expectations for earlier multidisciplinary treatment and therapies to adopt and sustain an effective, proactive, self-managed approach for long-term persistent pain (e.g. goal setting, mood management, and exercise).
4. Promote awareness of the burden of pain and inform organisational stakeholders (e.g. managers, business units) to consider the benefits of pain management options to better understand pain management models.
5. Facilitate earlier access and sharing of information involving multidisciplinary care for Aboriginals, Torres Strait Islanders, culturally and linguistically diverse (CALD) populations, and people living in rural and remote area experiencing persistent pain.
6. Encourage cross-university and institutional collaboration efforts that implement interprofessional, multidisciplinary approaches to pain management (e.g. medicine, nursing, physiotherapy, occupational therapy, exercise physiology, pharmacy, chiropractic science and osteopathy).

4.2 Priority Two: Improving clinical management of persistent pain

4.2.1 Opioid Therapy

Opioid therapy is well-established in the management of acute and perioperative pain. However, treatment that consists solely of medication (addictive and non-addictive) is considered passive and can limit progress. Evidence supporting the long-term use of opioids for the relief of persistent pain is poor, and their use has been significantly associated with severe pain, poor self-rated health, higher healthcare utilisation, living alone and a lower quality of life.²⁷

While the majority of patients use their pain medication responsibly, inappropriate prescription and the misuse of opioids raise concern. It is common for this cohort to take co-prescribed, habit-forming antidepressants or anxiety relieving medications which can result in unwanted side effects such as memory loss, excess sedation and death. Managing these patients can be complex, and the interaction between pain medication and benzodiazepines (which are not analgesics) may have potentially serious consequences. Non-medical use of prescription opioids (NMUPO) is also a risk, particularly among younger cohorts where the most common reported reason for use is pain relief.²⁸

Although the use of opioids for chronic pain has resulted in a decrease in pain and an increase in the quality of life for some, patients who concurrently use opioids and benzodiazepines had more pain-related and behavioural management problems, and are at high risk for fatal/non-fatal overdose.²⁸ In WA, there have been 509 accidental deaths due to opioids among those aged between 15 – 54 years of age²⁹ and systematic reviews continue to confirm poor outcomes for the prescription³⁰ and use of long-term opioid therapy for pain management.^{31, 32, 33}

The Department of Health WA requires the authorisation of opioid prescribing by GPs and a specialist review after 60 days. However, due to long waiting lists to see pain physicians, patients stay on opioids longer than they need to, and suffer significant ramifications for the duration of inappropriate opioid prescribing and dose escalations.

“People with chronic pain often have newly developed pain put down to their syndrome without adequate investigation. This is less than optimal.” – Consumer.

Managing people who suffer from persistent pain and opioid use disorder can be complex as the mechanisms of pain and addiction are not well understood. Complications in pain management can arise if practicing clinicians lack training in pain education, or if patients are dismissed for voicing their concerns about increased doses or for ongoing prescriptions, leaving them in persistent disabling pain. Preventing and minimising opioid harm in this cohort can be achieved by limiting doses, real-time prescribing monitoring, and encouraging an interprofessional approach to managing pain for these individuals. Developing treatments should aim to balance the clinical implications of the prescription, use, and harmful outcomes of opioids to advance the field of persistent pain management.

4.2.2. Case Management

Case management is a primary type of community aftercare used to provide ongoing management of chronic or recurring illness. Considering the complexity of managing people with persistent pain, these individuals are most likely to benefit with care from a multidisciplinary team. There is a broad consensus around the need to use a multimodal approach that combines appropriate pharmacological and non-pharmacological treatments to achieve the best long-term clinical outcomes. Collaborative care approaches that included physician and patient education, and symptom monitoring have been found to significantly improve pain-related disability, reduce pain intensity and depressive symptoms in primary care patients during a 12-month period.³⁴

Healthcare providers that currently manage people with persistent pain include professionals in:

- Clinical care (General Practitioners, Pain Specialists, Nurse Practitioners and Consultants).
- Allied health (Physiotherapists, Occupational Therapists, Pharmacists and Psychologists).
- Complementary and alternative medicine (Chiropractors, Osteopaths, Massage Therapists and Acupuncturists).

Continuity of care between primary, secondary, tertiary, and community healthcare sectors are vital in improving access and provision of care for people experiencing persistent pain. In WA tertiary settings, multidisciplinary pre-assessment group interventions have significantly reduced waiting times to initial pain physician contact, encouraged engagement with self-management strategies, and provided a cost-effective path of entry to pain services,³⁵ and reduced the demand for more expensive and often less effective treatments.¹³ The development of multidisciplinary teams will promote early assessment, triage, care, and provider cost-effective services to aid the avoidance of chronic, persistent pain. Efforts should also be made to ensure that all teams offer a person-centred and coordinated approach to provide the person in pain with the best possible, evidence-based care in a consistent manner.

4.2.3 Evidence-based Care

Numerous systematic reviews and evidence-based clinical guidelines offer recommendations for a wide range of treatments from spinal pain to osteoarthritis, from acute to persistent pain. Evidence strongly supports multidisciplinary and multimodal management of people in pain having major, positive impact on clinical outcomes, patient satisfaction with care, and significant cost savings. Primary outcomes expected of evidence-based care include:

- Health System (reduced opioid use, improved access within metropolitan and rural services, reduced waitlist times and admissions, improved quality of appropriate care, cost efficiencies, increased staff satisfaction, retention and recruitment).
- Clinical (improved pain management, quality of life, function and return to work).
- Consumer (care satisfaction, timely access, affordability, ease of health system navigation).
- Prevention (education of healthcare stakeholders including primary care providers, surgeons, insurers).

Research has also demonstrated that a two-day pre-clinic program can:

- Half the unit cost of a newly, referred patient.
- Significantly reduce waiting times.

- Double the capacity of physicians to see new patients as patients are able to more readily engage and implement non-medically focused treatment options.³⁵

Therefore, improvements in pain management would require:

- A spectrum of pain services from hospital to community-based services with a view to improve access, engage with a wider relevant workforce, and contain costs.
- An interprofessional approach to care offering appropriate management with the best possible outcomes.
- Prevention of chronicity of pain and associated functional outcomes (e.g. mental health outcomes, occupational status, and disability).
- Dissemination of information to the public and healthcare professionals regarding self-management and evidence-informed care.
- Better and earlier access to care that is more streamlined and targeted; thereby reducing costs caused by multiple healthcare consultations and consequent delays in care.

Opportunities

1. Develop management plans that consider a range of non-opioid modalities with a focus on active rather than passive strategies.
2. Examine the use of non-medical prescription opioids and consider three-monthly reviews of opioid prescriptions, ongoing risk screening and harm reduction strategies to enable early identification of opioid misuse and concerns of health outcomes (e.g. early referral to drug and alcohol services).
3. Support single practice prescribing (to avoid multiple prescribers) including opioid 'contracts' with time limited opioid use and regular monitoring (e.g. pain function scores, urine drug testing, compliance with regulatory systems, assessment of adverse reactions, risk screening of NMUPO, and plan for weaning).
4. Support the role and function of professional case managers to address acute and persistent pain as part of a comprehensive case management process from assessment through to care delivery and between transitions of care.
5. Empower case managers to better understand the impact of pain and pain medication on daily functions by advocating for people experiencing pain, and by facilitating the sharing of information among members of multidisciplinary teams and those coordinating care.

4.3 Priority Three: Improving navigation of and access to persistent pain services

4.3.1 System Navigation

A key factor in poor pain health outcomes in WA currently relates to the constraints imposed by overall systems rather than the efforts of individual health professionals attempting to deliver care. Efforts to improve communication channels and education for all health professionals should be complemented by an evaluation of existing systems to take advantage of improvement opportunities. Current projects facilitating improved coordination of people requiring health services for persistent pain include the Central Referral System (Department of Health WA) and the transition of tertiary pain services to a state-wide service. It is envisaged that appropriate and improved linkages with community and primary care will occur as a consequence.

4.3.2 Triage and Emergency Department Referrals

The challenge of the delivery of timely, integrated, effective evidence-informed care can be improved by effective triage. In more complex cases, or where avoiding persistence of pain is a priority, GPs should refer patients to accessible pain services that are funded by public government (state and federal), privately-insured funded, and those funded by third party payers. A pain triage service using an appropriate pathway will access the referral and determine the most appropriate level of service and care. In the public sector, the WA Statewide Pain Service (SWPS) facilitates this triage service and directs the referral to the site that offers the applicable session or procedure type.

People in pain presenting to Emergency Departments (ED) for treatment of their conditions are generally not well managed. However, the SWPS will develop an ED management plan applicable across the state that will prioritise referrals to self-management or, where appropriate, outpatient clinics that will provide timely management plans for them. Therefore, individuals with persistent pain can be well managed by GPs and other healthcare providers in the community without the need for triage or ED referrals.

4.3.3 Telehealth and Health Navigator

Tertiary pain services use Telehealth to provide consultation and specialist services to people in rural and remote areas. A successful pilot of a Cognitive Behaviour Therapy (CBT) program from a tertiary site to a rural site paves the way for more innovative use of Telehealth. The SWPS recognises the need to formalise support for health professionals in rural centres in managing people with persistent pain.

As part of the Southern Inland Health Initiative, the 'Health Navigator' program is provided by the Western Australian Country Health Service (WACHS) and the Silver Chain Group as part of the Southern Inland Health Initiative. It is a half-billion dollar investment in health that has transformed access to medical and emergency care across a large part of inland WA, made possible by the State Government's Royalties for Regions program. Health Navigator is a free service assisting people in the Wheatbelt and Great Southern regions of WA to better manage their chronic conditions and coordinate their health planning. While it is currently available for people with diabetes, heart failure, or long-term lung conditions,³⁶ a similar program for people with persistent pain would facilitate more timely access and help direct the *right* person to the *right* service to receive the *right* care by the *right* person.

4.3.4 HealthPathways

HealthPathways is an example of a tool that will provide information to GPs to aid referral and management of people with persistent pain. While specific HealthPathways are not discussed in this *Framework*, the *Framework* may serve as an infrastructural guide and provide direction for their implementation. The SWPS will also work collaboratively with the development of HealthPathways to contribute to education of healthcare providers and people in the community, to facilitate the referral of patients back to their GPs.

HealthPathways are being adapted to a WA context in partnership with the Primary Health Networks (PHNs) and the Department of Health WA. Evidence-based questionnaires and flow charts will direct the referral of the person with pain to the appropriate service, be it medical and/or allied healthcare, or tertiary pain service.

4.3.5 Paediatric to Adolescent Transition

Within WA, there is a lack of a contemporary, evidence-based model of appropriate care for those experiencing persistent pain, especially for paediatric and adolescent patients in their transition from adolescent to adult services. Transition is the purposeful, planned movement of adolescent and young adults with chronic health conditions from child-centred to adult-orientated healthcare systems. Early identification of an appropriate adult service, GP and a nominated care coordinator are key elements of a successful transition.

The paediatric complex pain unit at Princess Margaret Hospital (PMH) is currently restricted to children under the age of 16 years at time of referral. However, the allied healthcare management of older adolescents and the transition of their care to adult centres have been identified as gaps in the tertiary setting. In terms of paediatric pain and resultant disability, the highest rate of incidence occurs during adolescence. For example, abdominal and musculoskeletal pain rates peak at 14 – 15 years of age, coinciding with major personal physical, emotional and social changes³⁷ and traditional models of care do not adequately meet the needs of adolescents and young adults.

The provision of a more consistent medical therapeutic and supportive care approach that address the unique educational, psychosocial, and emotional needs of this cohort in an age-appropriate facilitate will translate into better outcomes. An example of where a successful transition model has been established is the 'Trapeze' service which was developed by the Sydney Children's Hospital Network in New South Wales (NSW). Support is provided for young people between the ages of 16 – 25 years and includes telephone support, health coaching, case management, and Telehealth services.

Local policy developed to guide improvement of transition services for young people experiencing persistent pain should also consider the following frameworks:

- Department of Health, Western Australia. Paediatric Chronic Diseases Transition Framework. Perth: Health Networks Branch, Department of Health, Western Australia; 2009.
- Review of adolescent transition to adult health services at Princess Margaret Hospital (PMH) for Children – Current situation and opportunities for the future. February 2014. Perth: Child and Adolescent Health Service.

Opportunities

1. Support the development and implementation of system navigation tools to improve the 'journey' of people experiencing persistent pain.
2. Promote the establishment of effective triage processes within primary, tertiary, and community care and at all points of care when people access services for persistent pain.
3. Encourage appropriate triage and optimised allocation through the Central Referral System for patients to clinics that understand current models of treatment as well as acute and persistent pain issues.
4. Assist in the development of HealthPathways to include evidence-based triage components of established questionnaires and the ability to filter to appropriate care facilities (e.g. reducing complex care in community settings and better integrated care in secondary and tertiary centres).
5. Investigate the development of appropriate transition models for adolescents with persistent pain to improve the experience of transferring paediatric and adolescent patients to adult pain services.

4.4 Priority Four: Improving the integration of care for people with persistent pain

4.4.1 Benchmarking

The electronic Persistent Pain Outcomes Collaborative (ePPOC) supports continuous clinical improvement through national benchmarking of the quality and effectiveness of management of persistent pain in Australia. The ePPOC collects an agreed dataset to provide national benchmarking and quality improvement opportunities for pain medicine services within Australia and New Zealand. All WA tertiary hospital pain medicine centres have either joined, or are in the process of joining the ePPOC. Ongoing support of the Collaborative is an important step towards providing evidence supporting best practice models for effective management of people with persistent pain.

4.4.2 Resourcing

To ensure that existing resources are allocated and used appropriately to improve outcomes for people suffering from persistent pain, a number of approaches have been shown to be effective. These include:

- Providing clear links between resource provision and better health outcomes;
- Combining existing pain services into a state-wide service;
- Facilitating the integration of primary care services with tertiary services by increasing the involvement of PHNs and localised services to support community evidence-based pain management care plans;
- Coordinating care involving interprofessional, multidisciplinary teams from the primary care sector through to tertiary settings;
- Building partnerships between public and private healthcare services through active engagement of private medical/healthcare insurers;
- Promoting active self-management of pain (e.g. PainHEALTH website) that provide best-practice, evidence-based care for improving clinical and economic outcomes; and
- Eliminating pain management strategies that are not based on evidence such as:
 - Routine imaging, invasive interventional procedures and blood tests that are often not useful; and
 - Limited prescription of opioid medications that have limited therapeutic impact and utilisation of non-opioid medications which have a higher benefit to harm ratio.

Clarity around efficient and effective financial models will ensure that existing resources are allocated appropriately and optimised to improve outcomes for people suffering from persistent pain. Cultivating the relationship between public and private health insurers will also increase their awareness and understanding of the burden of persistent pain and its impact of society. Improved coverage for services would facilitate better access to the most appropriate care, potentially avoiding chronicity of pain, and provide cost savings with efficiency dividends.

4.4.3 The *Framework*

The MSK HN will support the opportunities outlined in the *Framework* by communicating it broadly across WA Health and to all relevant external stakeholders. The *Framework* will be available via the Health Networks website in accessible formats, and will be reviewed at intervals no longer than five years.

“The Framework has a clear vision and structure to fulfil its set goals.” – Clinical Co-Lead of the MSK HN

The *Framework* can be used as a practical tool, and a reminder of priorities used to ensure that people with persistent pain in WA are able to achieve the best possible health and wellbeing outcomes throughout their lives. Opportunities from the *Framework* should be guided by the *WA Health Networks Strategic Direction 2015 – 2020* to ensure that people with persistent pain are appropriately engaged in the process.

Potential uses for the *Framework* include:

- Advocacy at an individual and organisational level to promote a shared understanding of the importance of healthcare for people with persistent pain.
- Promotion of key messages and use as an aspirational document.
- Inform education, training and skill development for professionals and consumers.
- Support policy, legislation, program and service design and provision.
- Direct, prioritise and drive relevant research.

Users of the *Framework* can aim to review their activity and progress under the four priority action areas.

Opportunities

1. Increase the awareness and delivery of timely, accessible, evidence-based, cost-effective treatments.
2. Support collaboration between public and private health sectors in working together to integrate care, provide high-quality safe care, and management of people with persistent pain.

5. Acronyms and Terms

Acronym/Term	Definition
Active/Passive Care Strategies	<p>Active care strategies are tasks, activities, or self-care performed by the patient without direct involvement of a clinician or therapist, requiring volitional effort by the patient.</p> <p>Passive care strategies are treatments, activities or procedures performed/implemented by a clinician or therapist, without any patient volitional efforts.³⁸</p>
Carer	<p>A carer is someone who provides unpaid care and support to family members and friends who have disability, chronic condition, mental or terminal illness or general frailty.³⁹⁻⁴⁰</p> <p>It should be recognised that family and friends may still be in a caring role even when the people they support do not live with them or live in supported accommodation.</p>
FSH	Fiona Stanley Hospital
Health Literacy	Health literacy is the ability to obtain, read, understand, and use healthcare information to make appropriate health decisions and follow instructions for treatment.
Healthcare Providers	A range of health professionals providing health care for consumers which may include doctors, nurses, physiotherapists, occupational therapists, psychologists, psychiatrists, pharmacists, chiropractors, osteopaths, acupuncturists.
KEMH	King Edward Memorial Hospital
Non-Medical Use of Prescription Opioids (NMUPO)	Taking of prescription medications, whether obtained by prescription or otherwise, other than in the manner or for the reasons or time period prescribed, or by a person for whom the drug was not prescribed. ⁴¹
Persistent/Chronic pain	The terms 'persistent' and 'chronic' pain are interchangeable, with much of the literature referring to 'chronic' pain. Persistent or chronic pain is pain that lasts beyond the time expected for healing following surgery or trauma, or other condition. It can occur as a disease in its own right without being a symptom of an injury or disease. ⁴²
Prescribers	An authorised health professional who has authority to prescribe. For Schedule 8 (controlled drugs), an authorised health professional includes Medical Practitioners and Nurse Practitioners.
PMH	Princess Margaret Hospital for Children

Acronym/Term	Definition
RPH	Royal Perth Hospital
SCGH	Sir Charles Gairdner Hospital
UWA	The University of Western Australia
WA	Western Australia

6. Acknowledgements

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Greg Parkin-Smith	Chiropractor/Registrar, GP Training Program
Hebe Thomas	Health Interventions Coordinator, Fremantle Medicare Local
Helen Slater	Specialist Musculoskeletal Physiotherapy/Clinical Researcher, Curtin University
Jacintha Bell	Principal Occupational Therapist, Lifeworks Occupational Therapy
Jenny Goh	Consumer
Julia Sutton	Carer, Joint Pain Relief
Kato Matthews	Senior Physiotherapist, WACHS Allied Health
Katrina Liddiard	Clinical Consultant Occupational Therapist, Surgical Synergies
Kim Watkins	Pharmacy Proprietor, High Wycombe Pharmacy
Lesley Oliver	Carer
Marianne Phillips	Paediatric & Adolescent Oncologist/Palliative Care Physician, PMH
Matt Jones	Occupational Therapist
Nicholas Cooke	WA Specialist Pain Services, Painless Clinic
Penny Tuffin	Pharmacist, FSH, RPH Acute Pain Service
Peter O'Sullivan	Specialist Musculoskeletal Physiotherapist, Curtin University
Phillip Kriel	Specialist Pain Medicine Physician & Anaesthesiologist, KEMH

Name	Summary
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Shadreck Tozana	Occupational Therapist, Aged Care
Stephan Schug	Director of Pain Medicine, RPH
Stephanie Davies	Pain Physician, Painless Clinic
Stephanie Dowden	Clinical Nurse Consultant, PMH
Thomas Woodage	Nurse, Aged Care
Valerie Colgan	Staff Development Educator, WA Cancer & Palliative Care Network
Vanessa Watson	Consumer, Nurse
Victoria Corkish	Clinical Nurse Consultant, PMH
Yvonne Page	Carer, Paediatric to Adult Health Care Transition

7. References

1. Australian and New Zealand College of Anaesthetists. National pain strategy: pain management for all Australians. Melbourne: Australian and New Zealand College of Anaesthetists; 2010.
2. IASP Task Force on Taxonomy. Part III, Pain terms: a current list with definitions and notes on usage. In: Merskey H, Bogduk N, editors. Classification of Chronic Pain. Seattle: IASP Press; 1994. P.209-14.
3. Loeser JD, Treede RD. The Kyoto protocol of IASP Basic Pain Terminology. Pain. 2008; 137(3):473-7.
4. Castillo RC, Wegener ST, Heins SE, et al. Longitudinal relationships between anxiety, depression, and pain: results from a two-year cohort study of lower extremity trauma patients. Pain. 2013; 154(12):2860-6.
5. Vos T, Flaxman AD, Naghavi M, et al. Years lived with disability (YLDs) for 1160 sequelae of 289 diseases and injuries 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet. 2012; 380(9859):2163-96.
6. Australian Institute of Health and Welfare. Leading types of ill health [Internet] Australian Institute of Health and Welfare; 2016 [cited 2016 Jul 20]. Available from: <http://www.aihw.gov.au/australias-health/2014/ill-health/>
7. Australian Bureau of Statistics. National Health Survey, Australia 2011: Characteristics of bodily pain in Australia [Internet] Australian Bureau of Statistics, National Health Survey 2011; 2016 [cited 2016 Jul 20]. Available from: <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4841.0Chapter12011>
8. Blyth FM, March LM, Brnabic AJ, et al. Chronic pain in Australia: a prevalence study. Pain. 2001; 89(2-3):127-34.
9. King S, Chambers CT, Huguet A, et al. The epidemiology of chronic pain in children and adolescents revisited: a systematic review. Pain. 2011; 152(12):2729-38.
10. Huguet A, Miro J. The severity of chronic pediatric pain: an epidemiological study. The journal of pain: official journal of the American Pain Society. 2008; 9(3):226-36.
11. Lewandowski AS, Palermo TM. Parent-teen interactions as predictors of depressive symptoms in adolescents with headache. Journal of clinical psychology in medical settings. 2009; 16(4):331-8.
12. MBF Foundation (2007) The high price of pain: the economic impact of persistent pain in Australia – Pain Management Research Institute, University of Sydney.
13. Access Economics. The high price of pain: the economic impact of persistent pain in Australia. Sydney: AccessEconomics; 2007.
14. van Leeuwen MT, Blyth FM, March LM, et al. Chronic pain and reduced work effectiveness: the hidden cost to Australian employers. European journal of pain. 2006; 10(2):161-6.
15. Schofield DJ, Callander EJ, Shrestha RN, et al. Association between co-morbidities and labour force participation amongst persons with back problems. Pain. 2012; 153(10):2068-72.
16. Carers NSW. 2014 Carer Survey Main Report [Internet]. Sydney: Carers NSW; 2014 [cited 2015 Nov 2]. Available from:

<https://www.carersnsw.org.au/Assets/Files/Carers%20NSW%202014%20Carer%20Survey%20Main%20Report.pdf>

17. Whitson HE, Landerman LR, Newman AB, et al. Chronic medical conditions and the sex-based disparity in disability: the Cardiovascular Health Study. *The journals of gerontology Series A, Biological sciences and medical sciences*. 2010; 65(12):1325-31.
18. Australian Bureau of Statistics. National Health Survey, Australia 2004-5 [Internet]; 2005; ABS cat. No. 4364.0 [cited 2015 Nov 2]. Available from: <http://www.abs.gov.au>
19. Hussain S. Personality characteristics and chronic pain: why some people feel pain worse than others. 2015, Aug; 2(2):22-24. *Pain Management Today* 2015; Aug; 2(2):22-4.
20. Hogg MN, Gibson S, Helou A, et al. Waiting in pain: a systematic investigation into the provision of persistent pain services in Australia. *The Medical journal of Australia*. 2012; 196(6):386-90.
21. Young Casey C, Greenberg MA, Nicassio PM, et al. Transition from acute to chronic pain and disability: a model including cognitive, affective, and trauma factors. *Pain*. 2008; 134(1-2):69-79.
22. Kyranou M, Puntillo K. The transition from acute to chronic pain: might intensive care unit patients be at risk? *Annals of intensive care*. 2012; 2(1):36.
23. Grace PM, Hutchinson MR, Maier SF, et al. Pathological pain and the neuroimmune interface. *Nature reviews Immunology*. 2014; 14(4):217-31.
24. Speerin R, Slater H, Li L, et al. Moving from evidence to practice: Models of care for the prevention and management of musculoskeletal conditions. *Best practice & research Clinical rheumatology*. 2014; 28(3):479-515.
25. Australian Commission on Safety and Quality in Health Care. Consumers, the health system and health literacy: taking action to improve safety and quality. Consultation Paper. Sydney: Australian Commission on Safety and Quality in Health Care; 2013.
26. Slater H, Briggs AM, Smith AJ, et al. Implementing evidence-informed policy into practice for health care professionals managing people with low back pain in Australian rural settings: a preliminary prospective single-cohort study. *Pain medicine*. 2014; 15(10):1657-68.
27. Holliday S, Hayes C, Dunlop A. Opioid use in chronic non-cancer pain--part 1: known knowns and known unknowns. *Australian family physician*. 2013; 42(3):98-102.
28. Dunn KM, Saunders KW, Rutter CM, et al. Opioid prescriptions for chronic pain and overdose: a cohort study. *Annals of internal medicine*. 2010; 152(2):85-92.
29. Roxburgh A. and Burns, L. Accidental drug-induced deaths due to opioids in Australia, 2011. Sydney: National Drug and Alcohol Research Centre 2015.
30. Roxburgh A, Bruno R, Larance B, et al. Prescription of opioid analgesics and related harms in Australia. *The Medical journal of Australia*. 2011; 195(5):280-4.
31. Blanch B, Pearson SA, Haber PS. An overview of the patterns of prescription opioid use, costs and related harms in Australia. *British journal of clinical pharmacology*. 2014; 78(5):1159-66.
32. Ray WA, Chung CP, Murray KT, et al. Prescription of Long-Acting Opioids and Mortality in Patients With Chronic Noncancer Pain. *Jama*. 2016; 315(22):2415-23.
33. Von Korff M, Kolodny A, Deyo RA, et al. Long-term opioid therapy reconsidered. *Annals of internal medicine*. 2011; 155(5):325-8.

34. Dobscha SK, Corson K, Perrin NA, et al. Collaborative care for chronic pain in primary care: a cluster randomized trial. *Jama*. 2009; 301(12):1242-52.
35. Davies S, Quintner J, Parsons R, et al. Preclinic group education sessions reduce waiting times and costs at public pain medicine units. *Pain medicine*. 2011; 12(1):59-71.
36. Silver Chain WA. Silver Chain Health Navigator [Internet]; 2015 [cited 2015 Nov 2]. Available from: <http://healthywa.wa.gov.au/Healthy-WA/Articles/FI/Health-Navigator>
37. Stanford EA, Chambers CT, Biesanz JC, et al. The frequency, trajectories and predictors of adolescent recurrent pain: a population-based approach. *Pain*. 2008; 138(1):11-21.
38. Timm KE. *Journal of Orthopaedic & Sports Physical Therapy*, 1994, 20(6), 276-286).
39. *WA Carers Recognition Act 2004*. [cited 2016 2 Sept]. Available from: http://www.austlii.edu.au/au/legis/wa/consol_act/cra2004197/
40. *Australian Carers Recognition Act 2010* [cited 2016 2 Sept]. Available from: <https://www.legislation.gov.au/Details/C2010A00123>
41. United Nations Office on Drugs and Crime [UNODC], *World Drug Report 2011* [cited 2016 2 Sept]. Available from: https://www.unodc.org/documents/data-and-analysis/WDR2011/World_Drug_Report_2011_ebook.pdf
42. PainAustralia™ [Internet] [cited 2016 2 Sept]. Available from: <http://www.painaustralia.org.au>