

Needs Assessment Summary

PERSISTENT PAIN



*“Building one world class
health system for the Gold Coast.”*

phn
GOLD COAST

An Australian Government Initiative

Persistent Pain

Local health needs and service issues

- High rates of musculoskeletal conditions in Gold Coast North and Coolangatta
- Ageing population means more musculoskeletal conditions projected
- Pain-related GP treatments frequently focus on prescribing medication
- High levels of opioid dispensing across region, particularly Southport
- Need for more awareness and support for prevention and self-management
- Focus on multidisciplinary and coordinated care



Key findings

Persistent pain refers to pain that persists beyond the normal healing time, typically considered to be around three months. It can be the result of a surgery, trauma or health condition, or pain that exists without a clear reason. It is categorised differently to acute pain or pain related to the effects or treatments of cancer.

While prevalence data on persistent pain at a regional level is limited, it is estimated that 20-25% of the Australian adult population suffers from persistent pain. Persistent pain is often linked to chronic musculoskeletal conditions, which have a slightly lower prevalence in the Gold Coast PHN region compared to state or national rates. However, an ageing Gold Coast population combined with predictions that the prevalence of musculoskeletal conditions will rise in Australia over the next few decades means that there is likely to be increasing cases of persistent pain in the Gold Coast region.

Health system costs associated with the treatment of persistent pain are significant, estimated to be around \$7 billion each year. Concerns exist that sufferers are missing out on potentially beneficial treatment whilst also being directed to treatments that are potentially unnecessary and costly with limited benefit. There are increasing concerns about the trend in prescribing opioid medications, dependency and addiction issues and possible long term adverse effects. Rates of opioid medication prescriptions in the Gold Coast region are slightly higher than the national average, with rates particularly high in the Southport region.

Recommended treatment for persistent pain promotes self-management and involves an integrated multidisciplinary approach. There are several specialist pain clinics on the Gold Coast and a range of primary care providers, but consultation indicates issues exist with service access and coordination. An initiative delivered by the Gold Coast PHN found that an integrated self-management model of care can lead to improved perceptions on pain, health service access, safe and effective medication use, ability to perform everyday activities and coping, as well as a reduction in hospitalisations.

Evidence

Prevalence

In 2001, it was estimated that around one in five adult Australians live with persistent pain¹. This prevalence rises to one in three for people aged over 65 years. If this rate were to remain stable today, a crude estimate would be that 114,000 Gold Coast residents are living with persistent pain based on 2016 census population.

More recent estimates of the prevalence of persistent pain at a national or regional level have been difficult to come by. Persistent pain is often not categorised as a health condition in its own right. Persistent pain is not a National Health Priority Area (NHPA), but is directly linked to at least three of the nine NHPAs. It is also not an item covered in the National Health Survey conducted every few years.

The Bettering the Evaluation and Care of Health (BEACH) study² provides an indication of the prevalence of persistent pain in a sample of patients treated by general practitioners (GPs) in Australia. In 2014-15, it found that 25.4% of patients presented with either chronic musculoskeletal or neural pain. The most commonly reported causes of persistent pain were osteoarthritis and lower back problems. This same study found that demand for treatment for persistent pain had increased significantly between 2006-07 and 2015-16. It was estimated that MBS-claimed GP treatment occasions increased by 400,000 for chronic back pain and a further 400,000 for unspecific chronic pain over the decade.³

There are many conditions that cause persistent pain, with most being chronic musculoskeletal conditions such as osteoarthritis, back and neck pain, osteoporosis and fibromyalgia. In Australia, the burden of disease attributed to musculoskeletal conditions is ranked second amongst all chronic health conditions in terms of years of healthy life lost due to disability⁴. Modelling conducted by Arthritis and Osteoporosis Victoria⁴ in 2013 on the prevalence of arthritis and other musculoskeletal conditions in Australia predicted that:

- As Australia's population ages over the next two decades, the prevalence of musculoskeletal conditions will rise substantially.
- By 2032, it is projected that the number of cases of arthritis and other musculoskeletal conditions will increase by 43% to 8.7 million, affecting 30.2% of the population.
- The number of people with osteoarthritis and osteoporosis is projected to increase the fastest (58% and 50% growth respectively), however back problems will remain the most prevalent condition.
- The age group with the most cases of arthritis and other musculoskeletal conditions is currently 55-64 years, however this will change to the 75+ age group by 2032.

1 Blyth FM, et al. (2001) Chronic pain in Australia: a prevalence study, *Pain*, 89:127-134

2 Family Medicine Research Centre, University of Sydney (2015) SAND abstract No. 234 from the BEACH program: Chronic musculoskeletal/nerve pain in general practice patients

3 Britt H, et al. (2016) A decade of Australian general practice activity 2006-07 to 2015-16. General practice series no. 41

4 Arthritis and Osteoporosis Victoria (2013). A problem worth solving

In 2011-12, there were almost 150,000 Gold Coast adult residents living with a musculoskeletal condition at a rate of 26.8 per 100 people, slightly lower than the rates across Queensland and Australia. A regional breakdown of the number and rate of people living with musculoskeletal condition can be seen in Table 1.

Table 1: Estimated number of people with musculoskeletal system diseases, 2011-12

Region	Number	Age-standardised rate per 100 persons
Broadbeach - Burleigh	18,087	26.8
Coolangatta	16,000	27.6
Gold Coast - North	19,797	27.7
Gold Coast Hinterland	5,255	26.6
Mudgeeraba - Tallebudgera	8,287	26.7
Nerang	17,294	27.4
Ormeau - Oxenford	23,659	27.0
Robina	11,862	25.2
Southport	14,768	26.1
Surfers Paradise	10,783	26.4
Gold Coast	145,793	26.8
Queensland	-	27.2
Australia	-	27.7

Source: Public Health Information Development Unit (PHIDU), Torrens University. Social Health Atlas of Australia: Primary Health Networks (online). Extracted 26/08/17

Of the 145,793 Gold Coast residents living with a musculoskeletal condition, 73,586 or about 50% of cases have a form of arthritis.

There are a number of risk factors associated with the onset and management of chronic musculoskeletal conditions that cause persistent pain. These include age, obesity, physical inactivity and co-morbidities such as cardiovascular disease and mental health conditions. Persistent pain is also more likely to be experienced by people in low socioeconomic groups. Due to the complex nature of persistent pain, it is often unclear whether persistent pain is the cause or the result of socioeconomic disadvantage.⁵ In the Gold Coast PHN region, there is a relatively older age profile and higher rates of obesity compared to national averages⁶, which could indicate that levels of persistent pain could increase in the region in the coming years.

Persistent pain has a significant negative effect on quality of life and contributes to wide economic costs. Financial modelling conducted in 2007⁵ estimated that the total cost of persistent pain was \$10,846 per person with chronic pain. It is reasonable to assume these costs have increased over the last decade due to the increase in the average age of the population. Around 20% of costs impact the health system, including inpatient or outpatient hospital services, primary care, pharmaceuticals and residential aged care.

Over half of the cost of chronic pain is borne by individuals and their families and friends, with loss of productivity being a significant contributory factor. Over 90% of people with severe or very severe pain report some level of interference with the ability to work in both paid employment and housework⁷. Rates of paid employment for people with arthritis and other musculoskeletal conditions are 3.5% lower than the general population⁴. Back pain and arthritis are the most common causes for people aged 45-64 years to leave the workforce, accounting for around 40% of forced retirements⁸.

5 MBF Foundation (2007) *The high price of pain: the economic impact of persistent pain in Australia*. Report conducted by Access Economics in collaboration with the Pain Management Research Institute - The University of Sydney/Royal North Shore Hospital

6 Public Health Information Development Unit (PHIDU) Social Health Atlas of Australia: Primary Health Networks (online). At: <http://www.phidu.torrens.edu.au/social-health-atlases/data> (accessed 23 August 2017).

7 ABS (2011), 4841.0 Facts at your fingertips: Health: Characteristics of bodily pain in Australia

8 Schofield et al. (2012) Quantifying the productivity impacts of poor health and health interventions, Health Economics, University of Sydney

Persistent pain has been shown to lead to depression, anxiety spectrum disorders and suicide⁷. The nature of persistent pain means that it can restrict self-management, particularly a person's capacity to manage their weight through physical activity. This can lead to co-morbidities such as type 2 diabetes and cardiovascular problems. Older people experiencing persistent pain with co-morbidities are likely to be taking multiple medications, which places them at a greater risk of an adverse drug event.

Service utilisation

Pain Australia, the peak advocacy body for pain-related conditions in Australia, estimates that less than 10% of people with persistent non-cancer pain gain access to effective care, despite the fact that current knowledge would allow 80% to be treated effectively if there was adequate access to pain services⁹.

On the Gold Coast during 2009–2013, 5% of GP consultations were specifically for the management of arthritis or chronic back pain, compared to 6% for a cardiovascular condition and 7% for anxiety or depression. The most common treatments resulting from consultations for arthritis or chronic back pain were:

- medication prescribed (69%)
- imaging ordered (18%)
- referred to a health professional (13%)

Data from the BEACH study of general practice in Australia found that persistent pain affects around 1 in 5 patients attending GP consultations and increases with age, which is consistent with broader population estimates. Around 86% of patients managed persistent pain with at least one medication, with that rate increasing to 93.4% of patients in the 65 years and over age group. In this age group, about a third of those prescribed medications for management of persistent pain included opioids (including low dose combination products).

Opioids such as codeine and oxycodone are often prescribed to relieve and treat pain symptoms. According to a report published by Australian Commission on Safety and Quality in Health Care¹⁰ into the prescribing and dispensing of opioid medicines:

- current evidence does not support using opioid therapy for chronic pain
- the prescribing of opioids for chronic pain is increasing
- evidence is growing of the adverse effects of long-term use of opioids.

This report found considerable variation in the levels of prescribing opioids across regions of Australia with no apparent explanation for the cause. A 2016 report by the Alcohol and Drug Foundation¹¹ stated that the number of fatalities from drug overdoses by pharmaceutical opioids in Australia has risen significantly over the past decade. The report suggests that opioids are overused and overprescribed, and is causing increases in the rates of drug dependency, injury and death.

Statistics from the Pharmaceutical Benefits Scheme (PBS) indicate that 263,714 prescriptions for opioids were filled across the Gold Coast PHN region in 2014-15, up from 250,745 prescriptions in the preceding year, an increase of over 5%. The rate was higher in the Gold Coast region than the national average, but slightly lower than the state average. Table 2 below provides a breakdown of opioid prescriptions dispensed across sub-regions of the Gold Coast. The three regions with the highest rates of opioid use were Southport, Gold Coast North and Ormeau-Oxenford.

9 Pain Australia (2016). Prevalence and the Human and Social Cost of Pain, Pain Australia Fact Sheet 2

10 Australian Commission on Safety and Quality in Healthcare, The First Australian Atlas of Healthcare Variation.

11 Alcohol and Drug Foundation (2016) Is there a pill for that? The increasing harms from opioid and benzodiazepine medication, Prevention Research

Table 2: Age-standardised rate of PBS prescriptions dispensed for opioid medicines per 100,000 people, by SA3 region, 2013–14

Region	ASR per 100,000 people
Broadbeach - Burleigh	55,050
Coolangatta	59,592
Gold Coast - North	64,000
Gold Coast Hinterland	60,279
Mudgeeraba - Tallebudgera	60,082
Nerang	59,844
Ormeau - Oxenford	62,761
Robina	51,875
Southport	73,571
Surfers Paradise	52,337
Gold Coast	59,939
Queensland	61,115
Australia	55,126

Source: ACSQHC, Australian Atlas of Healthcare Variation

Concerns have also been raised about potentially ineffective and unnecessary treatments, such as medical imaging for chronic back pain and surgical interventions for osteoarthritis¹¹. Table 3 shows the rate of CT scans performed for low back pain was higher in all Gold Coast regions than Queensland and Australian averages.

Table 3: Age-standardised rate of MBS-funded services for CT imaging of the lumbar spine per 100,000 people, by SA3 region, 2013–14

Region	ASR per 100,000 people
Broadbeach - Burleigh	1,597
Coolangatta	1,786
Gold Coast - North	1,879
Gold Coast Hinterland	1,798
Mudgeeraba - Tallebudgera	1,641
Nerang	1,683
Ormeau - Oxenford	1,841
Robina	1,598
Southport	1,935
Surfers Paradise	1,584
Queensland	1,381
Australia	1,282

Source: ACSQHC, Australian Atlas of Healthcare Variation

The Australian Commission on Safety and Quality in Health Care (ACSQHC) suggests that the rate at which GPs refer patients with low back pain for diagnostic imaging, particularly CT scans, may be excessive based on current guidelines and potentially exposing patients to radiation unnecessarily. Modelling done by PriceWaterhouseCoopers¹² predicted annual savings to the MBS as a result of disincentivising unnecessary imaging for chronic low back pain to be over \$100 million.

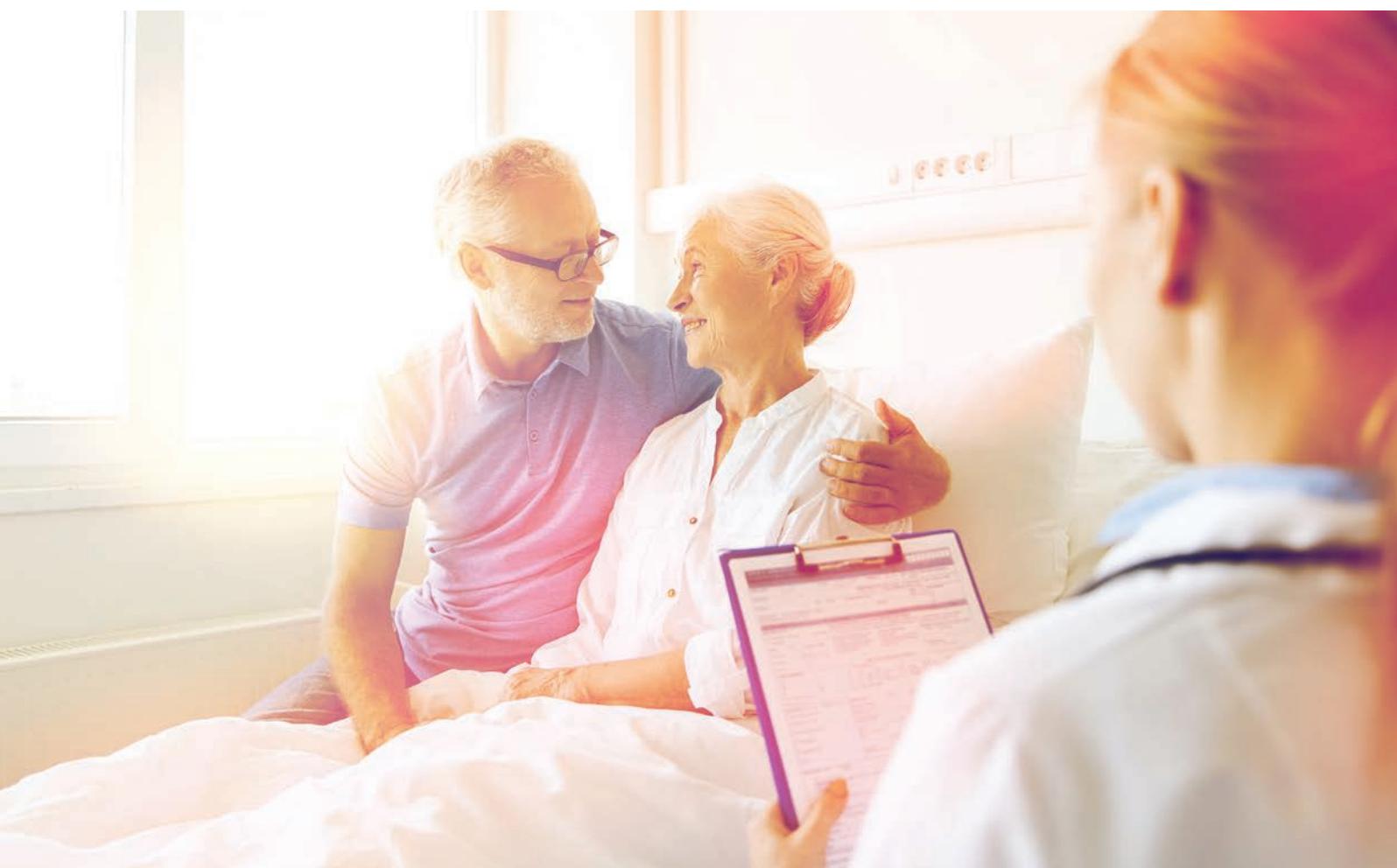
¹² MOVE and PwC (2017). Everybody MOVE: Improving outcomes in musculoskeletal health

Similarly, ACSQHC has identified that the rates at which some surgical interventions are being used to treat conditions associated with persistent pain vary widely across locations, indicating possible over-reliance in lieu of conservative treatments. Such interventions include lumbar spinal fusion and spinal decompression for low back pain, and knee arthroscopy or replacement for osteoarthritis. Table 4 below shows that rates of hospitalisations for these procedures are generally higher than national averages across the Gold Coast.

Table 4: Age and sex-standardised rate of hospitalisations for selected surgical interventions per 100,000 people aged 18 years and over, by SA3 region, all data 2014-15 except knee arthroscopy (2012-13)

Region	Knee arthroscopy (55 years and over)	Knee replacement	Lumbar spinal decompression	Lumbar spinal fusion
Broadbeach - Burleigh	562	217	67	37
Coolangatta	663	268	67	37
Gold Coast - North	578	293	70	43
Gold Coast Hinterland	501	238	104	38
Mudgeeraba - Tallebudgera	685	267	70	37
Nerang	460	293	74	48
Ormeau - Oxenford	573	298	73	43
Robina	511	285	70	35
Southport	604	252	62	37
Surfers Paradise	589	257	71	43
Queensland	496	266	75	30
Australia	560	257	81	26

Source: ACSQHC, Australian Atlas of Healthcare Variation



Service System

Services	Number in the GCPHN region	Distribution	Capacity discussion
Turning Pain Into Gain program, Gold Coast PHN	1	Physical service at Varsity Lakes Education sessions mobile across various locations including Southport, Robina and Kirra.	<ul style="list-style-type: none"> • No cost but limited places in each program • Must be referred by a GP • Previous increases in funding led to an increase in patients able to access program and decreased cost per person • 252 participants enrolled in 2015-16 • There is currently a wait time of around 3 weeks • Increasing demand—more GPs referring into the program each year • Evaluation shows positive outcomes in ability to perform everyday activities and self-management, and 78% reduction in hospitalisations
Interdisciplinary Persistent Pain Centre, Gold Coast Health	1	Physically located at Robina	<ul style="list-style-type: none"> • No cost to access • Eligibility criteria include impairment, no ongoing investigations or claims, no acute psychiatric condition and residing within catchment area • GCH specialist wait list is long and approximately 8 – 12 months • GCH no longer have an in-house pain specialist—currently contracting.
Persistent Pain and Rehabilitation Clinic, Griffith University	1	Physically located at Southport	<ul style="list-style-type: none"> • Fee-for-service, rebate available through private health or chronic disease management plan • Multi-disciplinary team care approach involving physiotherapy, exercise physiology, dietetics and psychology
The Pain Centre of Excellence, based at Spindelove Private Hospital	1	Physically located at Southport	<ul style="list-style-type: none"> • Multi-disciplinary approach including pain and rehab specialists, OTs, pharmacists and physios • Treatment available as either a day patient or inpatient • Program completed over 2 weeks • Cost fully covered by private insurance • Anyone experiencing pain for more than 3 months can apply
Chronic Pain Rehabilitation Unit, Pindara Private Hospital	1	Located at Benowa Also services John Flynn Private Hospital (Tugun) and Gold Coast Private Hospital (Southport)	<ul style="list-style-type: none"> • 11-bed chronic pain inpatient service • Pain specialists and rehabilitation consultants work with allied health services including physio, OT and exercise physiology
Arthritis Queensland Infoline	State-wide	Phone service	<ul style="list-style-type: none"> • Free call—Mon-Fri, 8.30am-4pm • Can arrange free, individualised information pack for self or family

Anglicare Better Health with Self-Management	1	Delivered at Southport and Robina	<ul style="list-style-type: none"> • Self-referral or a GP referral • Free to any HACC eligible individuals/or their partner or carer • Course teaches participants skills in day to day management of chronic conditions • Two and half hour workshops run once a week, over a period of six weeks • Not specific to persistent pain
Pain Management Network, NSW Agency for Clinical Innovation	National	Online resource	<ul style="list-style-type: none"> • Focus on self-management for chronic pain • Tailored content for youth and spinal cord injury pain • Information available for health professionals
Supporting Kids in Pain (SKIP) program	1	Not-for-profit organisation Based in Brisbane with outreach held on Gold Coast	<ul style="list-style-type: none"> • Free program for children under 14 • Requires GP or paediatrician referral • Self-management program involving assessment, education and follow-up • Multidisciplinary approach including paediatricians, psychologists, physios, OTs



Consultation

Attendees at the Collaborating for Better Pain Management event for general practitioners and allied health professional held by Gold Coast PHN in June 2017 expressed a desire for more training related to pain, specifically:

- developing integrated care systems in primary care
- referral pathways
- back pain
- role-specific evidence-based treatment practices.

The GCPHN Clinical Council (Oct 2017) provided the following feedback:

- Wait time for the Gold Coast Health multidisciplinary service and private service is very long.
- Pain specialists are an important component of any multidisciplinary team and there are limited specialists.
- People who feel they have run out of options to manage chronic pain often present to the emergency department and, if admitted, as chronic pain does not ever fully resolve, patients are reluctant to be discharged.
- Changes to make codeine prescription only is likely to increase demand for primary care which could lead to better overall management for people.
- Inadvertent overdose for pain relief medication including codeine and paracetamol are quite regular presentations at emergency department.
- Limited system infrastructure to feed back to general practice of people who are potentially doctor shopping and being prescribed high doses of pain relief medication

The GCPHN Community Advisory Council (Oct 2017) provided the following feedback:

- Confirmed persistent pain is seen as a significant issue
- There is a perception general practitioners focus a lot on medication to manage persistent pain, rather than a more holistic approach. This was seen to pose significant risks of addiction to medications for people with persistent pain
- Persistent pain required a multidisciplinary approach, focussed on holistic care of the patient including mental health as there is a strong link between depression and pain
- Complex and perhaps inconsistent language across different service providers leads to confusion for consumers (what is chronic, acute, persistent, episodic)
- Importance of existing programs like Active and Healthy and other exercise options
- Long wait times for some services and limited benefit once seen

Gold Coast Primary Health Network

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