



The cost of pain in Australia

Report for PainAustralia

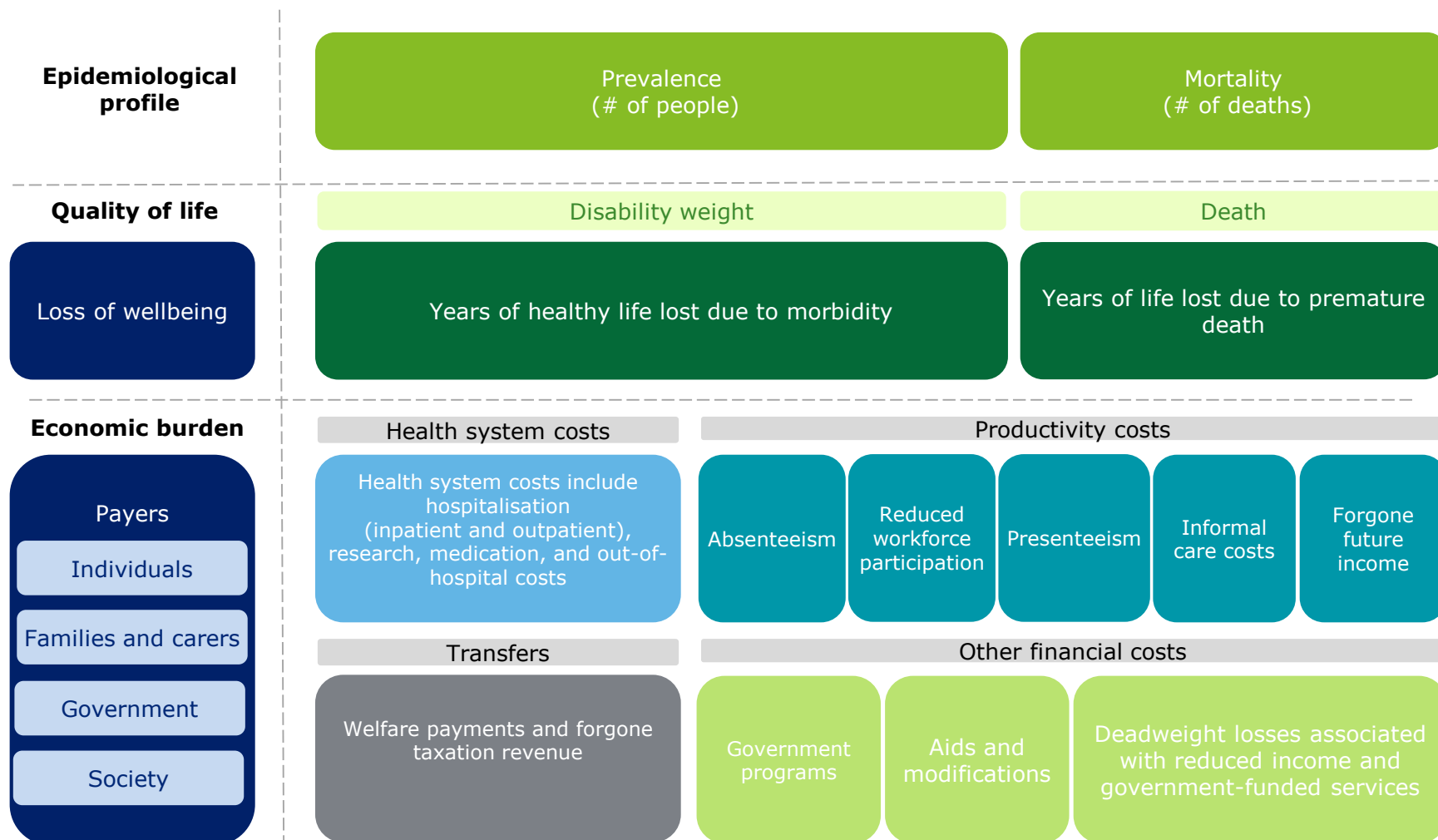
Lynne Pezzullo
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Disease Cost Burden Analysis

A standard methodology used to estimate financial costs and the disease burden (wellbeing costs) of a condition



Prevalence of chronic pain in Australia

3.24 million Australians are living with chronic pain



53.8% of Australians living with chronic pain are women



For the majority (56%) of Australians living with chronic pain, their pain restricts what activities they are able to undertake (e.g. mobility, self care).



68.3% of Australians living with chronic pain are of working age (aged 15-64).



The prevalence of chronic pain will increase to 5.23 million Australians by 2050.

Figure 1: Prevalence of chronic pain (%)

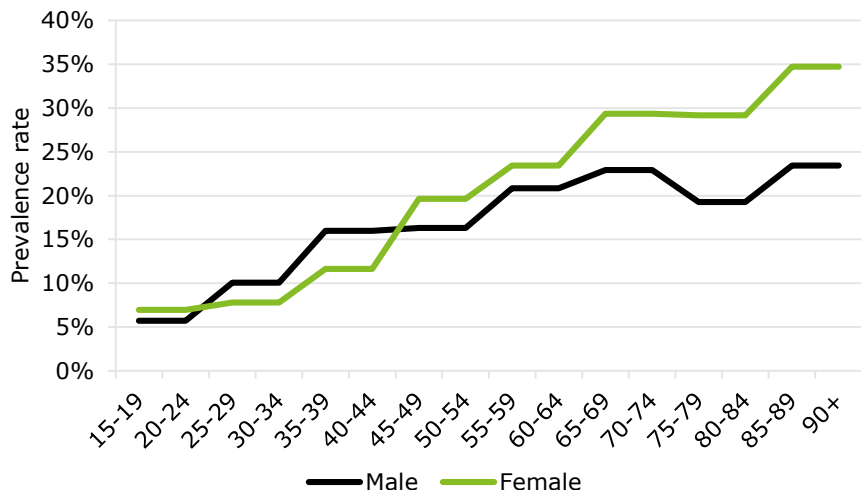
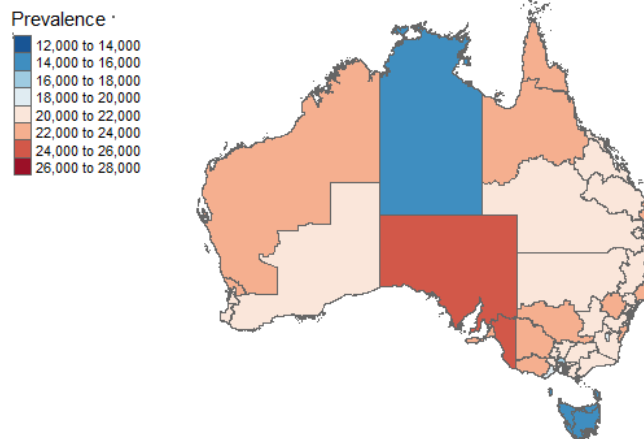


Figure 2: Prevalence heat map (cases per Federal electorate)



Cost of chronic pain

The total costs of chronic pain were \$139.3 billion in 2018

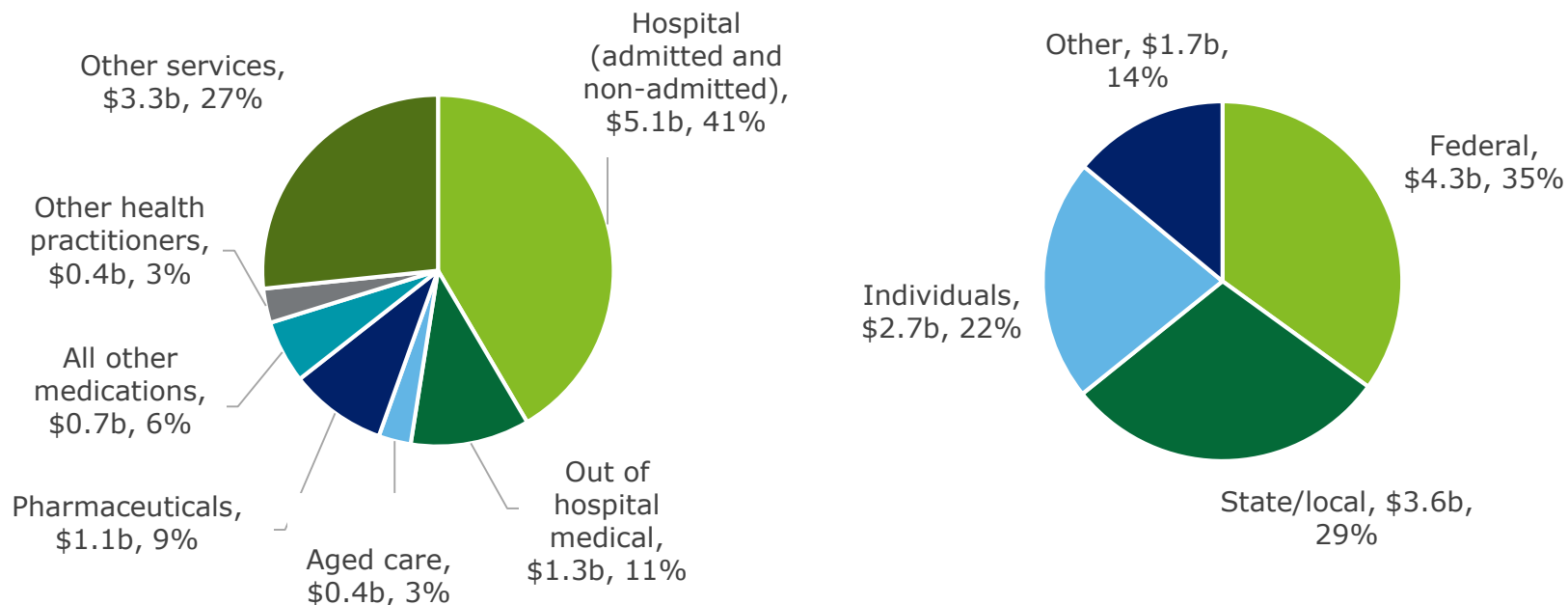
The total financial costs of chronic pain in Australia were \$73.2 billion in 2018. This consists of health system, productivity and other costs. The loss of wellbeing was valued at an additional \$66.1 billion.



Health system costs

Pain causes 6.5% of total health system costs, \$12.2bn in 2018

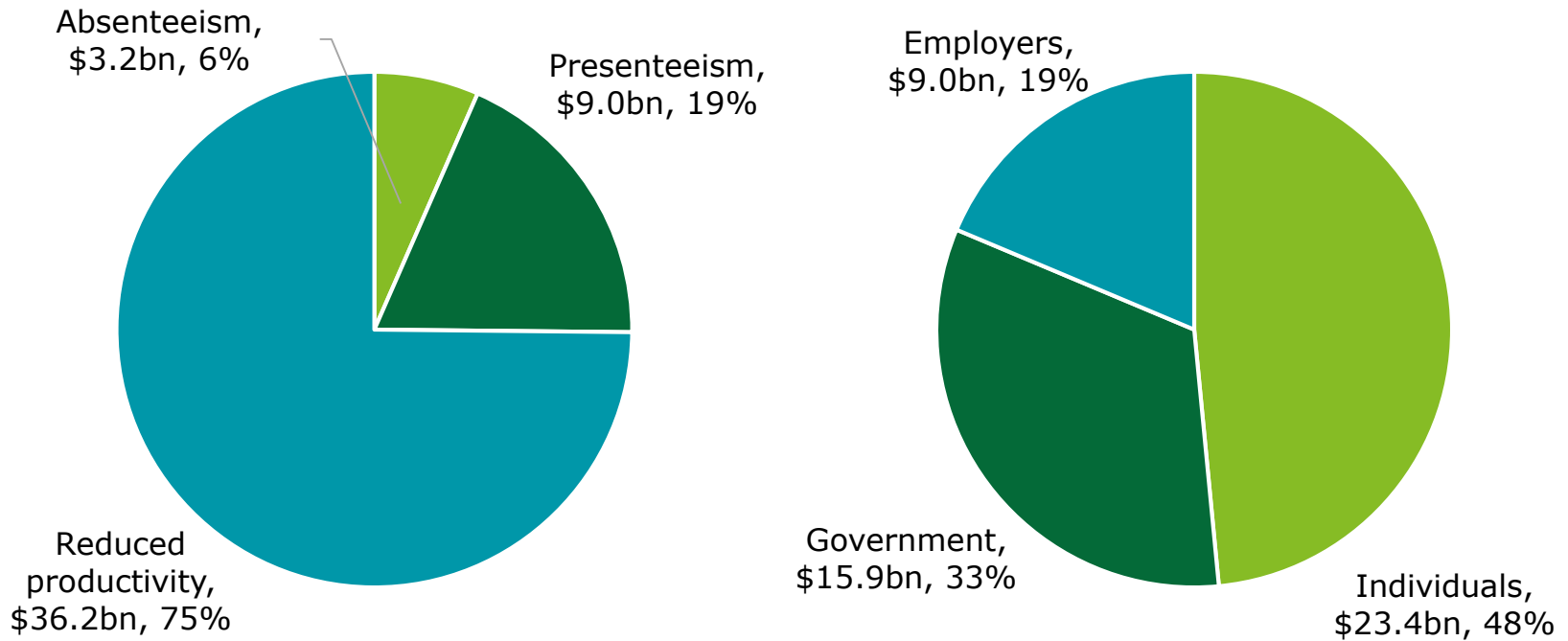
Figure 3: Health costs by type (LHS) and payer (RHS)



Productivity costs

Pain cost **\$48.3bn** in lost productivity in 2018

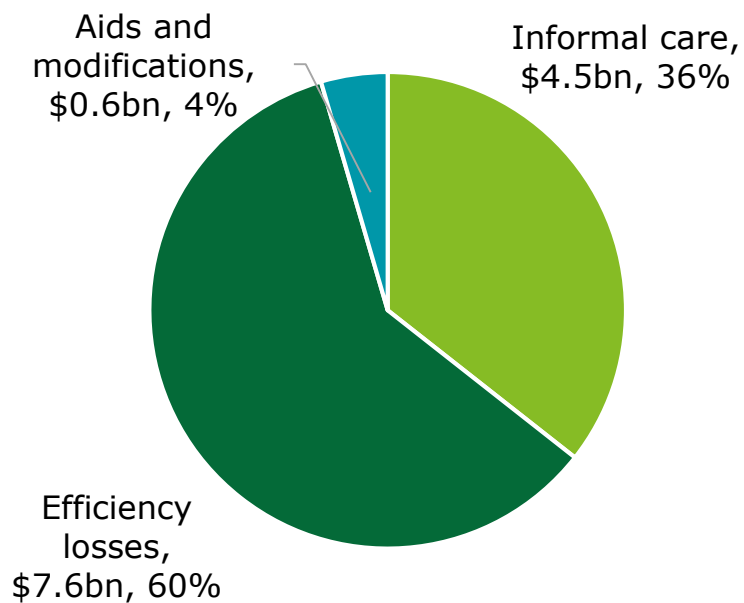
Figure 4: Productivity costs by component (LHS) and payer (RHS)



Other financial costs

Pain cost **\$12.7bn** in informal care, aids/modifications and efficiency losses across Australia in 2018

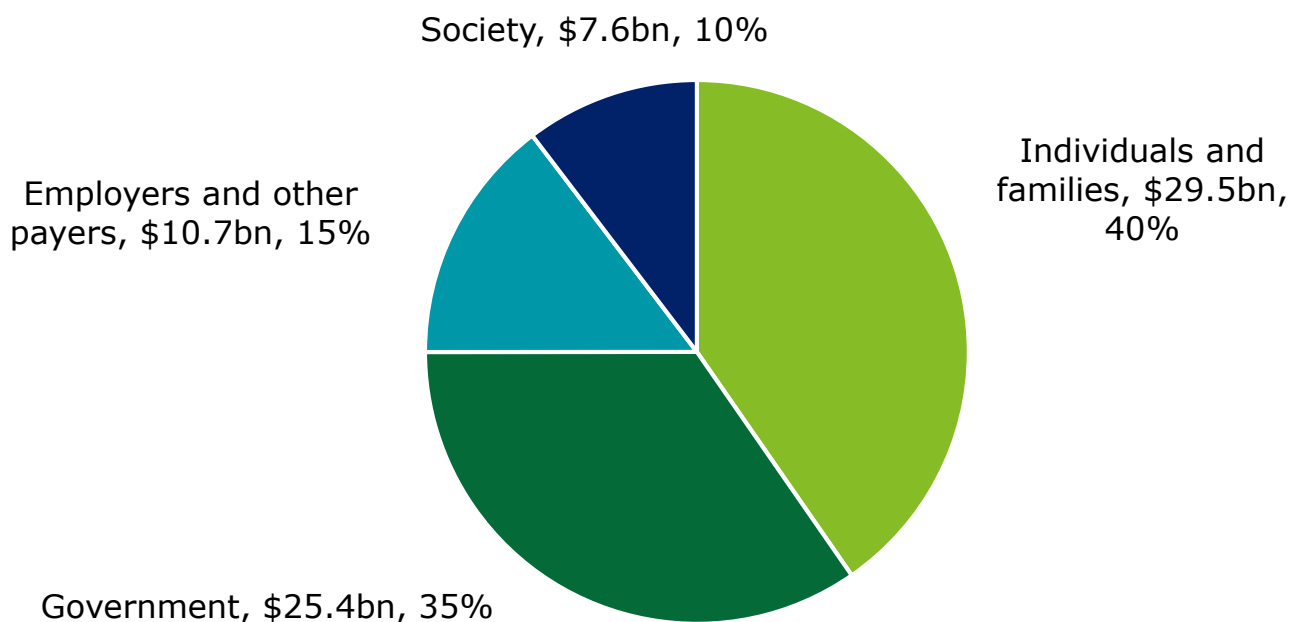
Figure 5: Other costs by type



Who bears the cost?

Individuals bear the largest share of the financial costs of chronic pain

Figure 6: Productivity costs by component (LHS) and payer (RHS)



Wellbeing costs

Total wellbeing costs were estimated at **\$66.1 billion** in 2018

- Chronic pain leads to substantial wellbeing losses e.g. lower back pain is the leading cause of disability in Australia.
- We use the “burden of disease” methodology of the World Health Organization and AIHW to estimate the disability adjusted life years associated with chronic pain as 340,384 DALYs in 2018. This is based on a disability weight of 0.105 per case on average across prevalent cases in Australia.
- We multiply DALYs by the official estimate of the value of a statistical life year, \$194,200, to calculate the total wellbeing costs of \$66.1bn.



Regional analysis

The cost distribution reflects prevalence of chronic pain and, in turn, demographics

Table 1: Costs by type and location

Location	Financial (\$bn)	Wellbeing (\$bn)	Total cost (\$bn)	% of total
State/territory				
NSW	23.2	21.2	44.4	32%
VIC	18.6	16.8	35.5	25%
QLD	14.7	13.2	27.8	20%
SA	5.2	4.9	10.1	7%
WA	7.9	7.0	14.9	11%
TAS	1.6	1.5	3.1	2%
NT	0.7	0.6	1.3	1%
ACT	1.2	1.1	2.3	2%
Remoteness area				
Urban	48.9	43.4	92.2	66%
Regional	24.3	22.7	47.1	34%
Total	73.2	66.1	139.3	100%

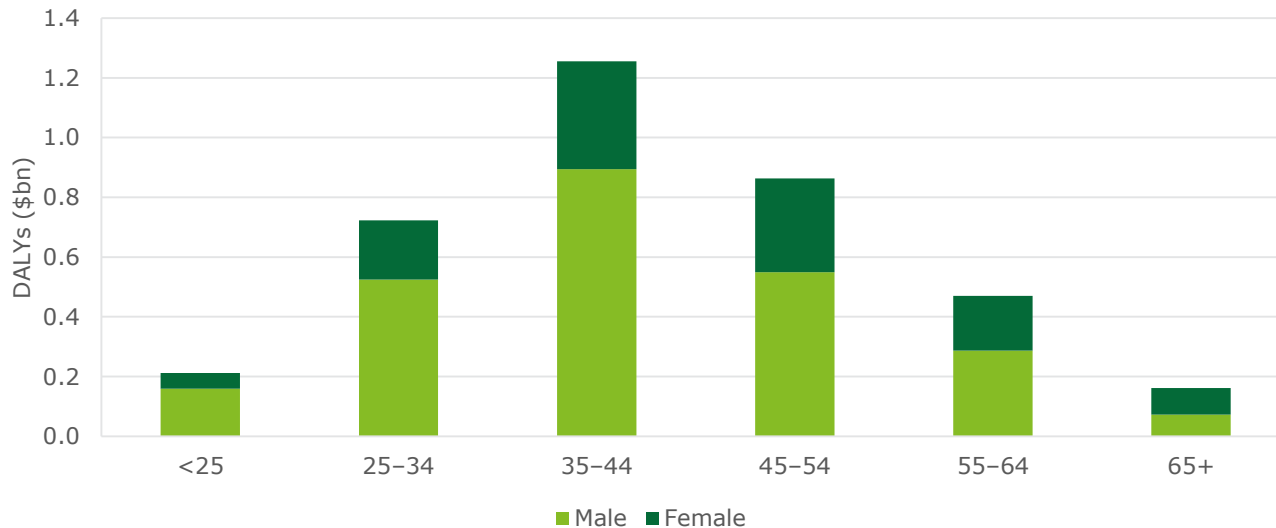
Components may not sum to totals due to rounding.

Opioid harm

Commonly prescribed pain management medications can cause harm and have side effects¹

- Hospitalisations and pharmacotherapy from prescription opioid misuse cost \$73.6 million in 2018.²
- Prescription opioid misuse caused an estimated 823 deaths in 2018.²
- Overall, these deaths cost Australia \$4.7 billion, comprising \$964.5 million in productivity losses, \$79.0 million in deadweight losses and \$3.7 billion in reduced wellbeing.

Figure 7: Loss of wellbeing from opioid misuse in 2018 (\$bn)



1. Schug, S., (2018a). Not all opioids are the same. *Medicine today*, 19(9), pp. 2-4.

2. Australian Institute of Health and Welfare (2018). Opioid harm in Australia and comparisons between Australia and Canada. Cat. no. HSE 210. Canberra: AIHW.

Looking ahead

An extension of best practice care to Australian patients could lead to substantial savings and better health outcomes

- Doubling current levels of access to multidisciplinary care could deliver **\$3.7 million in savings** to the health system, while reducing absenteeism and improving wellbeing.
- A nationwide roll out of a pain specialist-designed and led GP training program could be delivered for \$45 million a year, and could result in a **25% improvement** in best practice chronic pain management by GPs.
- The program could **save \$209 million** in overdose related costs for **\$45 million in upfront costs**.
- While more research is still required, prescribing atypical opioids, rather than conventional opioids, has the potential to save as many as 249 lives per year in Australia, and **save Australia \$1.4 billion** in financial and wellbeing costs.





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