

Effect of a pharmacist-partnered opioid tapering intervention before total hip or knee arthroplasty: A randomised clinical trial

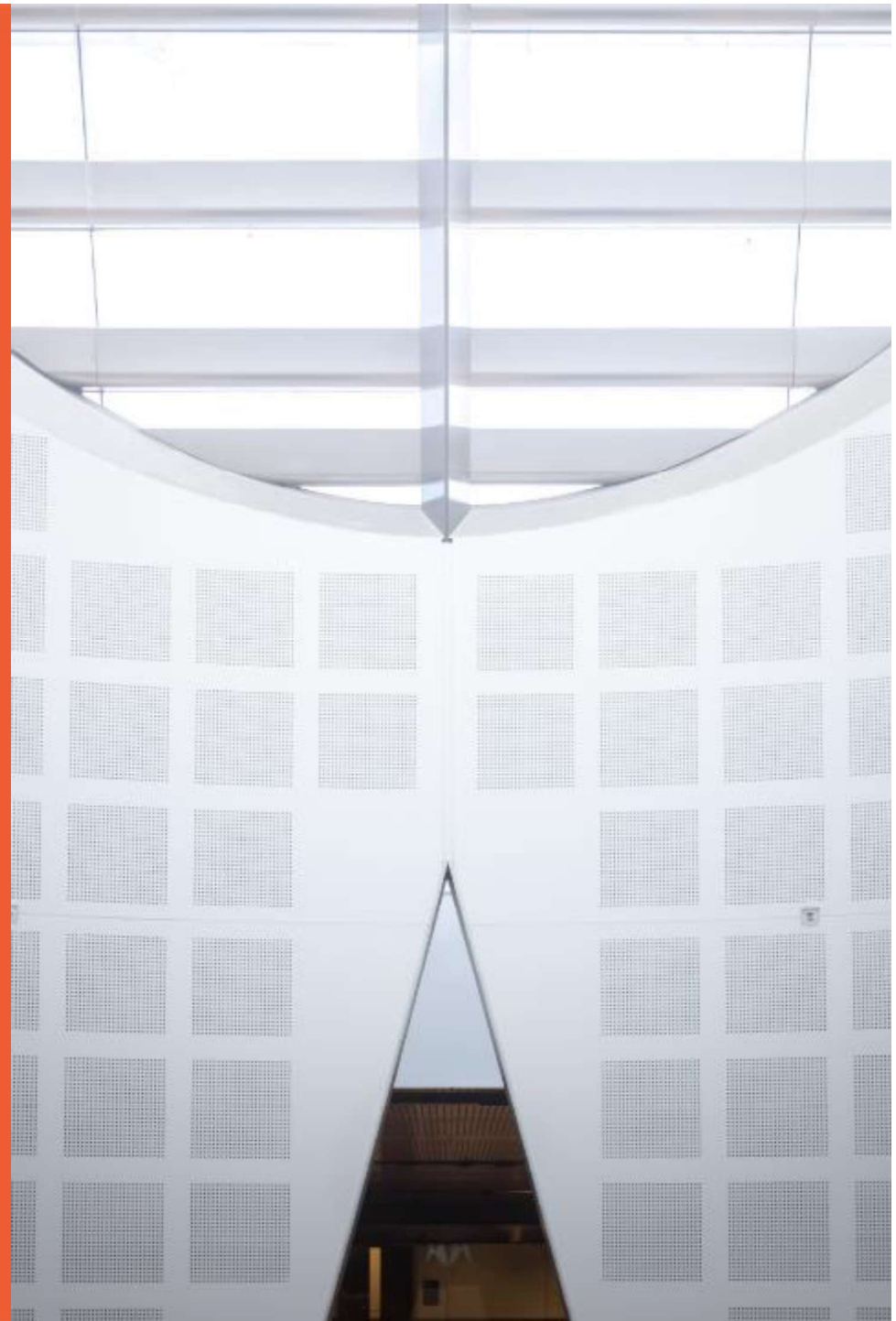
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Funding

- Funded by AVANT Foundation
- NHMRC PhD Scholarship
- International Pharmaceutical Federation Hospital Pharmacy Section

The 'Opioid Crisis'



Opioids are strong analgesics commonly used for Acute Pain

Australian Institute of Health and Welfare found:
> 1.9 million Australian adults initiate opioids annually



80% taking regular opioids experience adverse effects



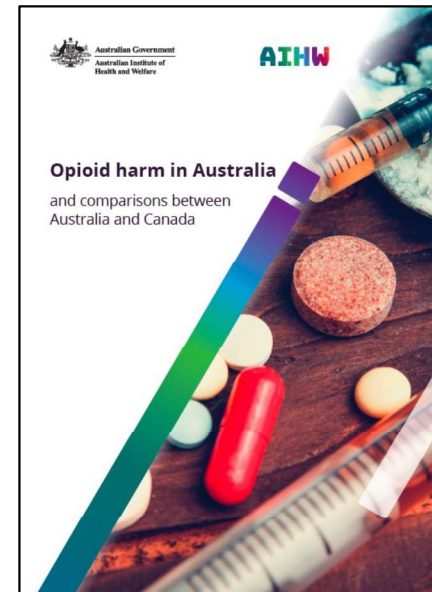
150 hospitalisations each day

14 emergency department visits each day

3 opioid-induced deaths each day



Primarily from **prescription** opioids



Policy to improve opioid use

World Health Organization Global Patient Safety Challenge – Medication without harm (2020).

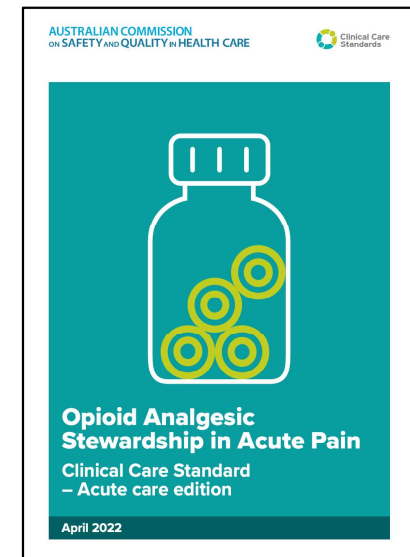
One of Australia's priority action focussed on opioid analgesics

Australian Commission on Safety and Quality in Healthcare

Quality statement 3 –

– Risk–benefit analysis

To ensure that analgesia is optimised, and that the appropriate assessment of risk factors is completed and documented to identify the need for specific risk-modification strategies.



Persistent opioid use

Original Article

*Anaesthesia
and Intensive Care*

Prevalence and predictors of long-term opioid use following orthopaedic surgery in an Australian setting: A multicentre, prospective cohort study

Anaesthesia and Intensive Care
0(0) 1–9
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Methods:

- Multicentre, prospective study (2017-19) in 5 hospitals
- Elective orthopaedic surgery patients followed up at 3 months

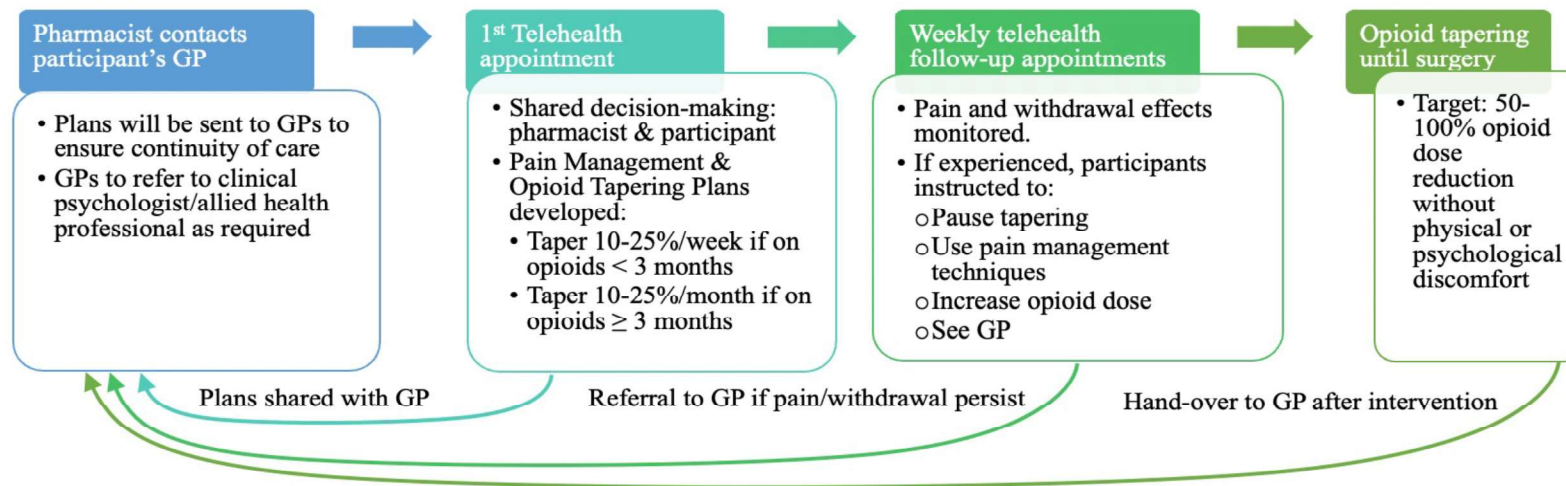
– N=361

Variable [†]	Adjusted OR (95% CI)
Hospital Area	
Metropolitan hospital	[Reference]
Inner regional hospital	12.26 (2.2 - 68.24)*
Outer regional hospital A	2.8 (0.55 - 14.26)
Outer regional hospital B	5.46 (1.09 - 27.50)*
Rural hospital	3.21 (0.63 - 16.41)
Anxiety	2.8 (1.09 - 7.18)*
Pre-operative opioid use	6.96 (3.26 - 14.86)*
Postoperative pain score 3+	6.81 (2.89 - 16.01)*

Pharmacist-partnered opioid tapering program

- Randomised controlled pilot study (8 sites)
- To establish the feasibility and effect of an opioid tapering program before elective knee and hip replacements
 - Responsible pre-operative Opioid use for Hip and knee ArthroLasTy (OpioidHALT1) Study
 - Pharmacist-partnered service via telehealth/telephone
 - Co-designed with consumers and resources from NPSMedicineWise
 - all tapering plans approved by Pain Medicine Specialist

3 months before surgery:



Opioid tapering program

Primary outcome:

Feasibility

- 19% (109/575) eligible (on opioids before surgery)
- 64% recruitment rate (70/109)
 - Study stopped before all could be followed up
 - None withdrew
 - No pharmacist prepared opioid tapering plan required alteration by the Pain Medicine Specialist

	Intervention (n = 35)	Control (n = 35)
Age, years, mean (SD)	62.6 (10)	63.7 (11)
Female	24 (69%)	22 (63%)
Body mass index, kg/m², mean (SD)	34.8 (8)	32.9 (7.8)
Primary total hip arthroplasty	16 (46%)	18 (51%)
Primary total knee arthroplasty	19 (54%)	17 (49%)

Opioid tapering program

Efficacy (n=30 vs 30)

Tapered 50-100% opioid 1-3 days before surgery

- 90% Intervention vs 17% control (p<0.001)

	Intervention (n = 30)	Control (n = 30)
Opioid adverse events (total)	5 (16%)	19 (63%)
Constipation	3 (10%)	12 (40%)
Sleepiness or drowsiness	3 (10%)	14 (47%)
Opioid Withdrawal Symptoms (total)	15 (50%)	7 (23%)
Aches and pains	10 (33%)	2 (7%)
Muscle spasms/twitching	4 (13%)	2 (7%)
Total opioid adverse effect or withdrawal effect	17 (57%)	22 (73%)

Acknowledgement

- | | | | |
|---------------------|-----------------------|--------------------|--|
| - Shania Liu | - Claire O'Reilly | Sites | Organisations |
| - Asad E Patanwala | - Carl Schneider | - Frances Page | - Australian Orthopaedic Association |
| - Jennifer Stevens | - Kylie Bailey | - Mary Keehan | - Australian Pain Society |
| - Justine Naylor | - Michelle Penm | - Cheng Fai Hui | - Arthritis Australia |
| - Furkan Genel | - Claire Ashton-James | - Shaniya Ogul | - Australian Commission on Safety and Quality in Health Care |
| - Sam Adie | - Danijela Gnjidic | - Anders G Jansson | - Chronic Pain Australia |
| - Bernadette Brady | - Stephanie Mathieson | - Amy Archer | - Pharmaceutical Society of Australia |
| - Geraldine Hassett | - Furkan Genel | - Andrew Sefton | - The Society of Hospital Pharmacists |
| - Kate Luckie | - Christine Lin | - Erica Morgan | - SPHERE MSK CAG |
| - Gilbert Whitton | Statistics | - Emily Mayze | |
| - Chi Tran | - Joseph Descallar | - Clare Eastment | |
| - Joseph Descallar | - Lei Si | - Karin Sylvester | |
| - Rebekah Moles | Consumers | - Mitchell Fung | |
| - Betty Chaar | - Carol Vleeskens | - Thomas Byrnes | |
| - Lei Si | - Frank Schaper | - Geoffrey Murphy | |



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