

Reducing prescription opioid harm: What is the role of prescription monitoring, risk screening and harm reduction?

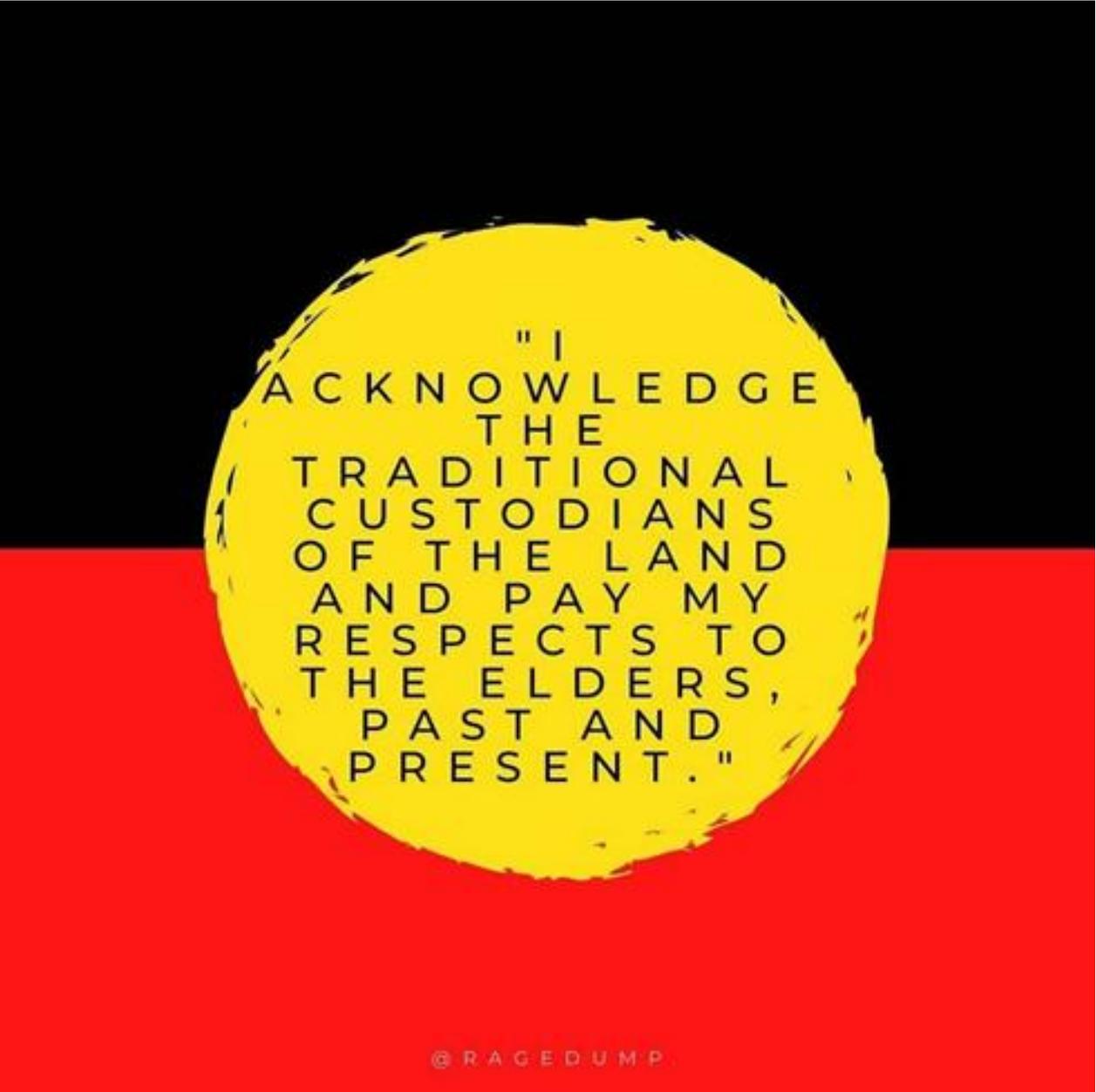
Louisa Picco
Monash Addiction Research Centre (MARC)

APSAD Conference, 12th November 2025



Disclosures

No disclosures to declare



"I
ACKNOWLEDGE
THE
TRADITIONAL
CUSTODIANS
OF THE LAND
AND PAY MY
RESPECTS TO
THE ELDERS,
PAST AND
PRESENT."

@RAGEDUMP

Acknowledgements

Collaborators

Researchers

Partner organisations

Research participants

Funding

NHMRC Postgraduate Scholarship (#1189975)

NHMRC EL1 (#2016909)

Dept Aged Care (Consumer Health Literacy)



Background

Opioid related harms are a complex global public health concern



Real-time prescription monitoring



Clinical screening

Routine Opioid Outcomes Monitoring (ROOM) Tool

We are asking a few questions to assist with the safe use of opioids for pain. Opioids are strong pain medication such as codeine, tramadol, oxycodone, morphine, or fentanyl.

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Please indicate how often you have been bothered by the following problems over the past three months. There are no right or wrong answers. Do not spend too much time on any one statement.

	Not at all	A little	Quite a bit	A great deal
4. In the past three months, did you use opioid medicines for other purposes, for example to help you sleep or to help with stress or worry?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. In the past three months, did opioid medicines cause you to feel drowsy, sluggish or sedated?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. In the past three months, did opioid medicines cause you to lose interest in your usual activities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. In the past three months, did you worry about your use of opioid medicines?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Chronic pain and opioid use can both affect mental health. We want to ask you a few questions to see how you are feeling.

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	Not at all	Several days	More than half days	Nearly every day
8. Little interest in doing things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Feeling down, depressed or hopeless	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. How many times in the past year have you had 4 (for women) or 5 (for men) or more drinks in a day?
We are asking about your alcohol use because it can interact with your medication.
- 11a. Are you experiencing constipation?
If symptoms are current, speak to healthcare professional. Yes / No
- 11b. If yes: Are you taking any of the following medication or supplements for constipation? (prescribed or OTC)

<input type="checkbox"/> Lactulose (Lacidol)	<input type="checkbox"/> Colony and Senne	<input type="checkbox"/> Fiber supplement (eg. Metamucil, Fybogel)
<input type="checkbox"/> Movicol	<input type="checkbox"/> Stalke	<input type="checkbox"/> Unsurge
<input type="checkbox"/> Miralax	<input type="checkbox"/> Normacol	<input type="checkbox"/> Other _____
<input type="checkbox"/> Cabeyl	<input type="checkbox"/> Nula	

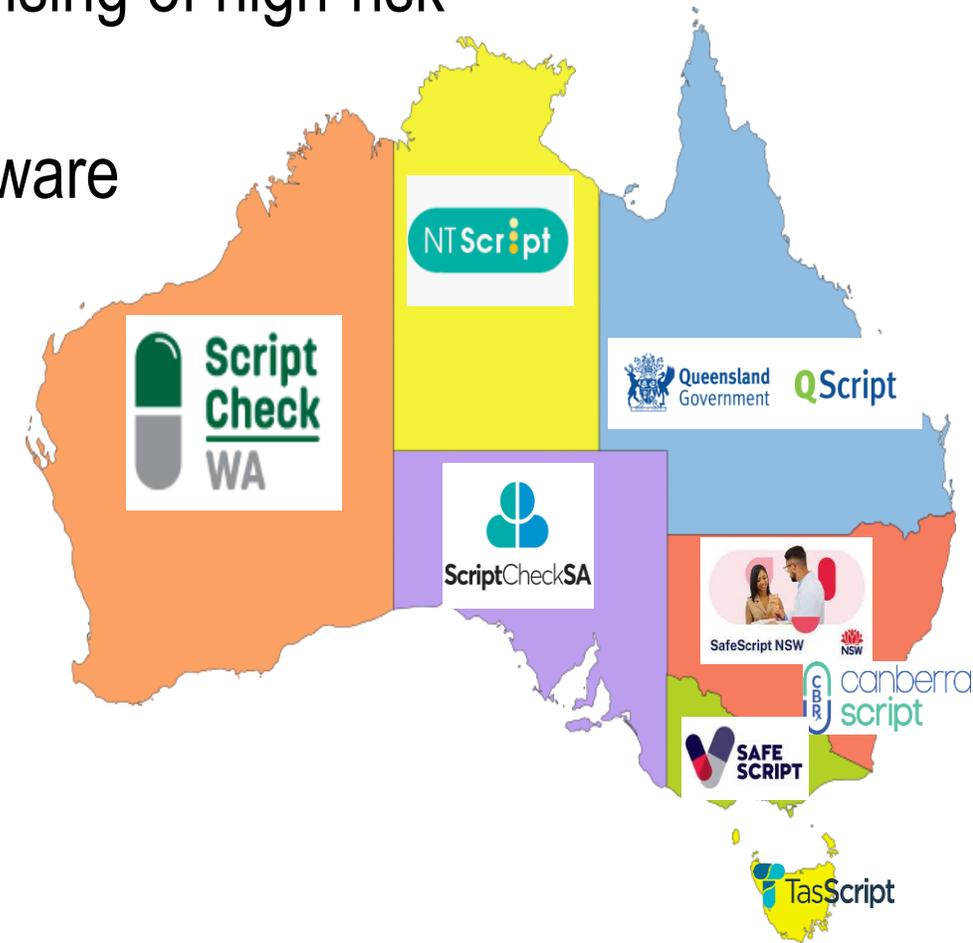
Harm reduction



Real-time prescription drug monitoring

Real-time prescription monitoring (RTPM)

- Electronic database that tracks prescribing and dispensing of high-risk medicines in real time
- Commonly integrated into prescribing/dispensing software
- Support clinical decision-making
- Traffic light alert system to indicate medication risks
- Jurisdiction-based = considerable variability
- Implemented between 2019 and 2024



Impact of RTPM implementation on pharmacy practice

Online anonymous surveys

2020

- VIC*
- n=265

2023

- VIC, NSW, QLD and WA*
- n= 690

2025

- National
- n=730

Explore RTPM experiences, frequency and reasons for use, barriers etc
Impacts on clinical decision making
Signs of unintended consequences

Experiences of RTPM in pharmacy practice

International Journal of Clinical Pharmacy (2023) 45:421–429
<https://doi.org/10.1007/s11096-022-01523-3>

RESEARCH ARTICLE

Factors associated with prescription drug monitoring program utilisation: a cross-sectional survey of community pharmacists

Louisa Picco¹  · Tina Lam¹ · Ting Xia¹ · Suzanne Nielsen¹ 

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journal homepage: www.japha.org



RESEARCH

Australian community pharmacists' experiences of prescription drug monitoring programs: Comparisons between mandated and nonmandated states

Rose Laing **, Pei Ying **, Ting Xia, Suzanne Nielsen, Louisa Picco*



Greater/more frequent use
Check RTPM in response to alerts



Refuse supply 3-16%
Significantly less likely in WA



Increased use over time



Not common
View these as useful resource

Real-time prescription monitoring is used here.

Capital cities, pharmacy chains, stock naloxone

Impact of RTPM implementation on pharmacy practice

Contents lists available at [ScienceDirect](#)

ELSEVIER International Journal of Drug Policy journal homepage: www.elsevier.com/locate/drugpo

DRUG POLICY

Research Paper

How do patient, pharmacist and medication characteristics and prescription drug monitoring program alerts influence pharmacists' decisions to dispense opioids? A randomised controlled factorial experiment

Louisa Picco*, Paul Sanfilippo, Ting Xia, Tina Lam, Suzanne Nielsen

Monash Addiction Research Centre, Eastern Health, Clinical School, Monash University, 47-49 Moorooduc Hwy Frankston, Melbourne, Victoria 3199, Australia

Received: 2 October 2024 | Revised: 6 January 2025 | Accepted: 16 January 2025

DOI: 10.1111/dar.14009

ORIGINAL PAPER Drug and Alcohol REVIEW APSAD WILEY

What influences Australian pharmacists' decisions to supply opioids? Results from a survey and randomised controlled factorial experiment

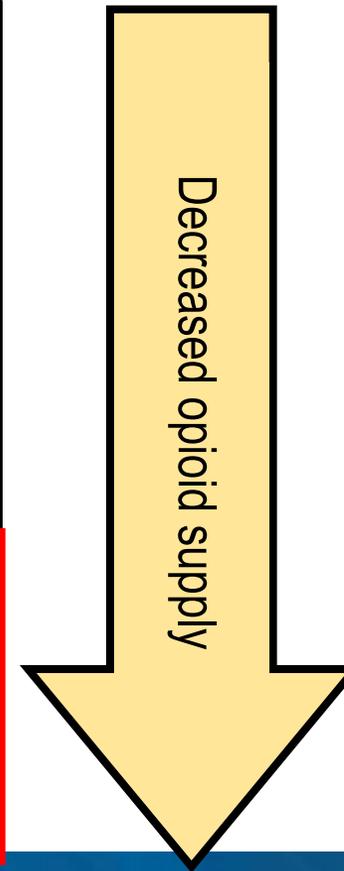
Louisa Picco | Ting Xia | Rose Laing | Elizabeth Grist | Jana Dostal | Suzanne Nielsen

Not at all likely 0 1 2 3 4 5 6 7 8 9 10 Extremely likely

Unemployed (0.4 unit)
Higher opioid dose (0.2 -0.3 unit)
Opioid + Benzo (0.5 unit)
Hep C comorbidity (0.3 unit)
Depression comorbidity (0.3 unit)

RTPM high dose alert **2.8 unit**
RTPM multiple prescriber alert **3.8 unit**

Decreased opioid supply



RTPM: real-time prescription monitoring

Limitations and gaps of RTPM

RTPM programs are great:

Provide prescribing and dispensing information in real time

Aid clinical decision-making

Perceived as useful

BUT...

- Rely on computerised algorithm
- Only identify medication related risks
- What about other risks for people prescribed opioids?
- Possible unintended consequences following implementation
- Impact of implementation for patient outcomes



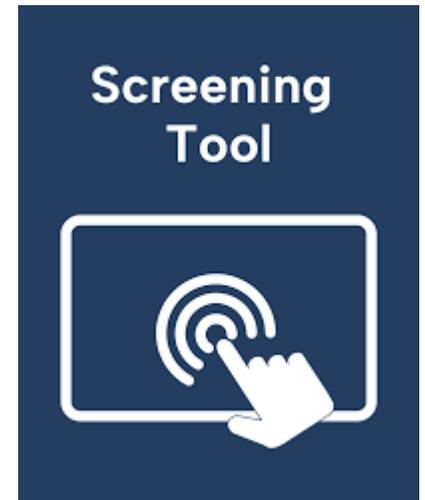
Screening and risk identification

Screening and risk identification

- Broad range of tools to measure opioid related risks
- Existing screening tools for opioid use disorder/dependence not suitable for people prescribed opioids
- GAP: quick screening tool specifically for people prescribed opioids



- Validation and implementation 2 tools:
 - Prescription opioid use disorder
 - Broader opioid related risks



Screening and risk identification



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Opioid Risk Indicator

This tool asks 4 questions about your use of opioid medicines. Please answer them as truthfully as you can, to help you decide what to do next. There are no right or wrong answers.

Question 1

In the past 3 months, did you use your opioid medicines for other purposes, for example, to help you sleep or to help with stress or worry?

Not at all

A little

Quite a lot

A great deal

Screening and risk identification

Pain Medicine, 21(12), 2020, 3645–3654
 doi: 10.1093/pm/pnaa297
 Advance Access Publication Date: 23 October 2020
 Original Research Article



Validity and Reliability of the Computer-Administered Routine Opioid Outcome Monitoring (ROOM) Tool

Louisa Picco , MPH,* Melissa Middleton, MBIostat,* Raimondo Bruno, PhD,^{†,‡} Michala Kowalski, MQHR,[†] and Suzanne Nielsen, PhD*.[†]

*Monash Addiction Research Centre, Monash University Peninsula Campus, Frankston, Victoria, Australia; [†]National Drug and Alcohol Research Centre, University of New South Wales, Sydney, NSW, Australia; [‡]School of Medicine, University of Tasmania, Hobart, Tasmania, Australia

Broader range of outcomes based on 4A's framework:

- Analgesia
- Activities of daily living
- Adverse effects
- Aberrant drug-related behaviours
- (+Affect and Alcohol)

Routine Opioid Outcomes Monitoring (ROOM) Tool

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Please indicate how often you have been bothered by the following problems over the past three months. There are no right or wrong answers. Do not spend too much time on any one statement.

- | | | | | |
|----------|--|----------|-------------|--------------|
| | Not at all | A little | Quite a lot | A great deal |
| 4 | In the past three months, did you use opioid medicines for other purposes, for example, to help you sleep or to help with stress or worry? | | | |
| 5 | In the past three months, did opioid medicines cause you to feel slowed down, sluggish or sedated? | | | |
| 6 | In the past three months, did opioid medicines cause you to lose interest in your usual activities? | | | |
| 7 | In the past three months, did you worry about your use of opioid medicines? | | | |

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- | | | | | |
|------------|--|--|---|-----------------|
| | Not at all | Several days | More than half days | Nearly everyday |
| 8 | Little interest in doing things | | | |
| 9 | Feeling down, depressed or hopeless | | | |
| 10 | How many times in the past year have you had 4 (for women) or 5 (for men) or more drinks in a day? _____
We are asking about your alcohol use because it can interact with your medication. | | | |
| 11a | Are you experiencing constipation?
If symptoms are current, speak to healthcare professional. | | | Yes / No |
| 11b | If yes: Are you taking any of the following medication or supplements for constipation? (prescribed or OTC) | | | |
| | <input type="checkbox"/> Lactulose / Lacidol | <input type="checkbox"/> Coloxyl and Senna | <input type="checkbox"/> Fibre supplement (e.g. Metamucil, fybogel) | |
| | <input type="checkbox"/> Movicol | <input type="checkbox"/> Bisalax | <input type="checkbox"/> Unsure | |
| | <input type="checkbox"/> Microlax | <input type="checkbox"/> Normacol | <input type="checkbox"/> Other _____ | |
| | <input type="checkbox"/> Coloxyl | <input type="checkbox"/> Nulax | | |

Screening and risk identification



ELSEVIER

Contents lists available at [ScienceDirect](#)

Research in Social and Administrative Pharmacy

journal homepage: www.elsevier.com/locate/rsap

Routine opioid outcome monitoring in community pharmacy: Outcomes from an open-label single-arm implementation-effectiveness pilot study

Suzanne Nielsen^{a,b,*}, Louisa Picco^a, Michala Kowalski^b, Paul Sanfilippo^a, Pene Wood^c, Sarah Larney^b, Raimondo Bruno^{b,d}, Alison Ritter^e

International Journal of Clinical Pharmacy (2021) 43:420–429

<https://doi.org/10.1007/s11096-020-01074-5>

RESEARCH ARTICLE



What predicts pharmacists' engagement with opioid-outcome screening? Secondary analysis from an implementation study in community pharmacy

Suzanne Nielsen^{1,2}  · Paul Sanfilippo¹ · Louisa Picco¹ · Raimondo Bruno^{2,5} · Michala Kowalski² · Pene Wood^{3,4} · Sarah Larney^{2,6}

Recruitment

- 23 pharmacies
- 64 pharmacists

Procedures

- Baseline survey
- 1 hr training webinar

Screening

- Target 20 ROOM screens
- Follow up survey

N=152

Screening, risk identification and implementation

- 20 of the 23 pharmacies implemented the ROOM tool
- Only 4 pharmacies completed 20 ROOM screens (mean 8 screens)
- 44 of 64 pharmacists completed follow up survey
- More experienced pharmacists: lower knowledge, confidence, less screening



- Significant improvements in confidence to identify and respond to unmanaged pain, depression and opioid dependence
- Implementation of ROOM was feasible and acceptable to pharmacists and patients

Lessons learnt

- Pharmacy/pharmacist recruitment is tough!
- Can develop and validate tools but need to consider implementation
- Healthcare professionals reluctant to initiate conversations about opioid harms, even with resources to support this



So now what????!



Harm reduction

Harm reduction and health literacy

Around half of the patients prescribed opioids are concerned about their opioid use, <5% have sought help



Empower and support **consumers** to engage in opioid safety behaviours:

- Understanding their risk factors
- Accessing naloxone
- Talking to health professional



Australian Government
Department of Health
and Aged Care

pain
australia

 Pharmaceutical
Society of Australia

Opioid Safety Toolkit



Welcome to the Opioid Safety Toolkit

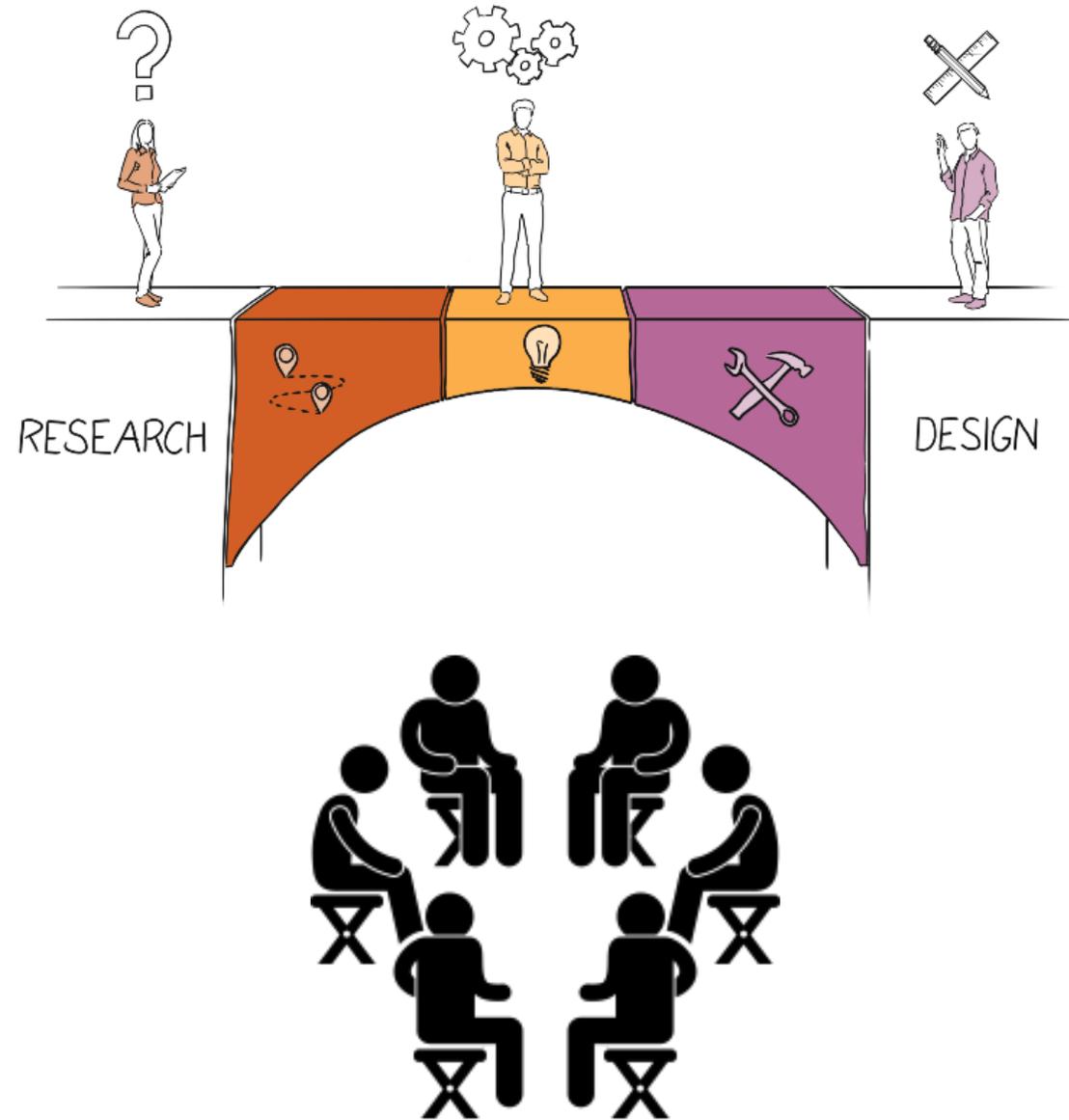
This toolkit is your comprehensive guide to safer opioid use when taking opioids for pain relief. Find out how the Opioid Safety Toolkit can help you create a safety plan and support you to make the best decisions about your health. **Let's make safety a priority, together.**

[Let's get started →](#)



The power of co-design

- Extensive co-design phase with consumers (people prescribed opioids) and medicines experts e.g. pharmacists, GPs, pain specialists
- Tailored and personalised information based on individual responses
- Role of opioids to support function and fear of having opioids taken away
- In-depth input on messaging, language, look, feel, images, and flow of this digital toolkit



Opioid Safety Plan

Prioritising safety: Your opioid safety plan

What is an opioid safety plan ?

An opioid safety plan supports safer opioid use, includes information on severe opioid side effects and includes a plan for emergencies such as having naloxone, an opioid antidote, in the home.

Why do I need an opioid safety plan?

While opioids can be important to manage pain, they are also strong medicines which can have severe side effects. Having an opioid safety plan that has been developed in advance with health care professionals means that key steps to prevent an opioid emergency can already be in place, and in the event of an emergency, people in your home will know what symptoms to look for and, and what to do.



On this page: [Create opioid safety plan](#) [Recognising symptoms](#) [What is naloxone](#) [In case of emergency](#) [ROOM Tool](#)

Recognising the symptoms

Knowing what to look for can be life-saving. Let's learn what to watch for:



Being extremely drowsy/veryhard to wake up (like a deepsleep) or being



Struggling to breath, snoring or gurgling



A blue tinge to the lips or nails



Pinpoint pupils



Being cold and clammy

Opioid Safety Plan

Share this plan with your family, friends or carer

Make a plan

1. Keep naloxone in an accessible place at home
2. Ensure that others in your home know what naloxone is, where it is stored and how to use it
3. Familiarise yourself and others with the symptoms that might indicate severe opioid side effects (or an 'overdose')
4. Make sure your opioids are stored safely and out of reach of children and/or pets.

My naloxone is kept:

My naloxone expires on:

Reduce your risk



Do not mix opioids with alcohol or other sedative medicines



Always stick to your prescribed dose



Use strategies to remember when you have taken your medicines (e.g. webster packs, marking off on a calendar)



Stick to the same doctor and pharmacist for your treatment



Ask your pharmacist or doctor about other ways of managing pain

Recognise the symptoms



Extreme drowsiness. Someone is very hard to wake up (like a deep sleep), not responsive or slumped over



A blue tinge on lips and/or nails with lighter skin or greyish/ashen colour with darker skin



Someone is struggling to breathe or if they are snoring or gurgling



The eyes have pinpoint pupils



The skin is cold and clammy to the touch

In case of emergency

1 Call an ambulance (000). Naloxone only works temporarily (for around 20 minutes), so make sure the ambulance is on the way.

2 Administer naloxone
Spray one dose into the nostril
If using the injection, inject one dose into the outer shoulder or thigh muscle.

Note the time of administration
If no response after 2-3 minutes, repeat the dose.

3 Place in the recovery position and stay until help arrives. Ensure the airway is clear and the person is on their side.

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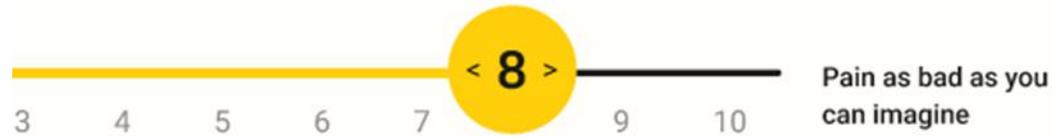
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<input type="checkbox"/> Microlax	<input type="checkbox"/> Normacol	<input type="checkbox"/> Other _____
<input type="checkbox"/> Coloxyl	<input type="checkbox"/> Nulax	

few questions to assist with the safe use of opioids for pain

What number best describes your pain on average over past 7 days?



Next →

Home > ROOM Tool

← Go Back

Thank you for completing the Routine Opioid Outcome Monitoring (ROOM) Tool

Below is a summary of what you reported. Download, print, and take this with you to your next doctor's appointment. You can also email yourself the filled copy or download a blank version to fill yourself.

Here's a summary of what you told us



Download a filled-in copy or a blank one that you can fill out later

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Download blank copy →

Start again

Email it to yourself for easy and quick access.

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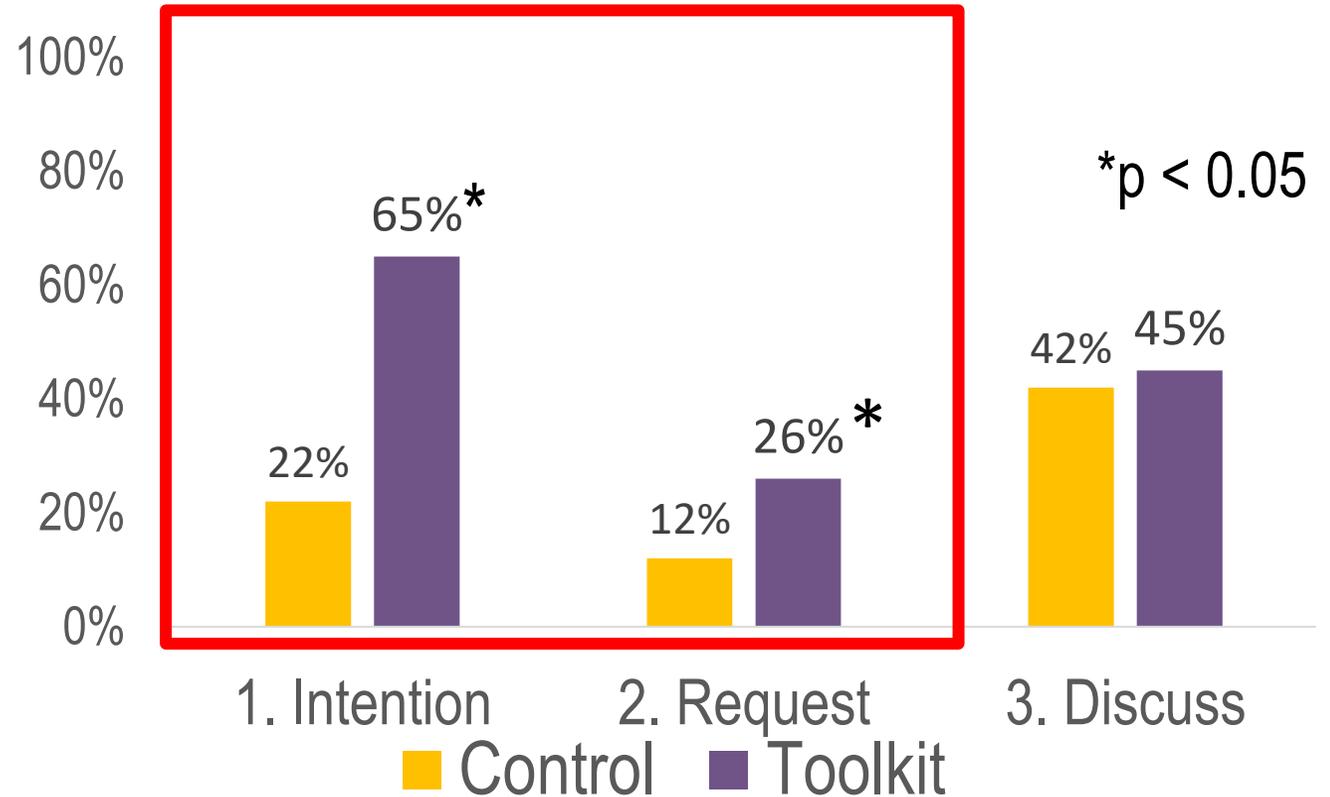


Does the Toolkit support behaviour change?

1 3x as many intend to get naloxone compared to control ($p < 0.05$)

2 >2x as many requested naloxone ($p < 0.05$)

3 Difference in discussing opioid safety not significant ($p=0.730$)



Intervention group also had higher knowledge and satisfaction scores

Key take-away messages

- Mitigating and reducing prescription opioid harms is complex
- Adoption of multiple approaches is needed to reduce risk and support people prescribed opioids
- No single approach is perfect – a combined approach will have the biggest impact
- Need to consider the strengths and limitations of various approaches- how one approach can supplement another
- Things don't always go to plan – need to pivot
- The power of co-design and having consumers at the forefront is imperative



Thank you

Louisa.picco@monash.edu

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WORKING IN PARTNERSHIP
TO CHANGE THE WAY WE
THINK ABOUT AND RESPOND
TO ADDICTION

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