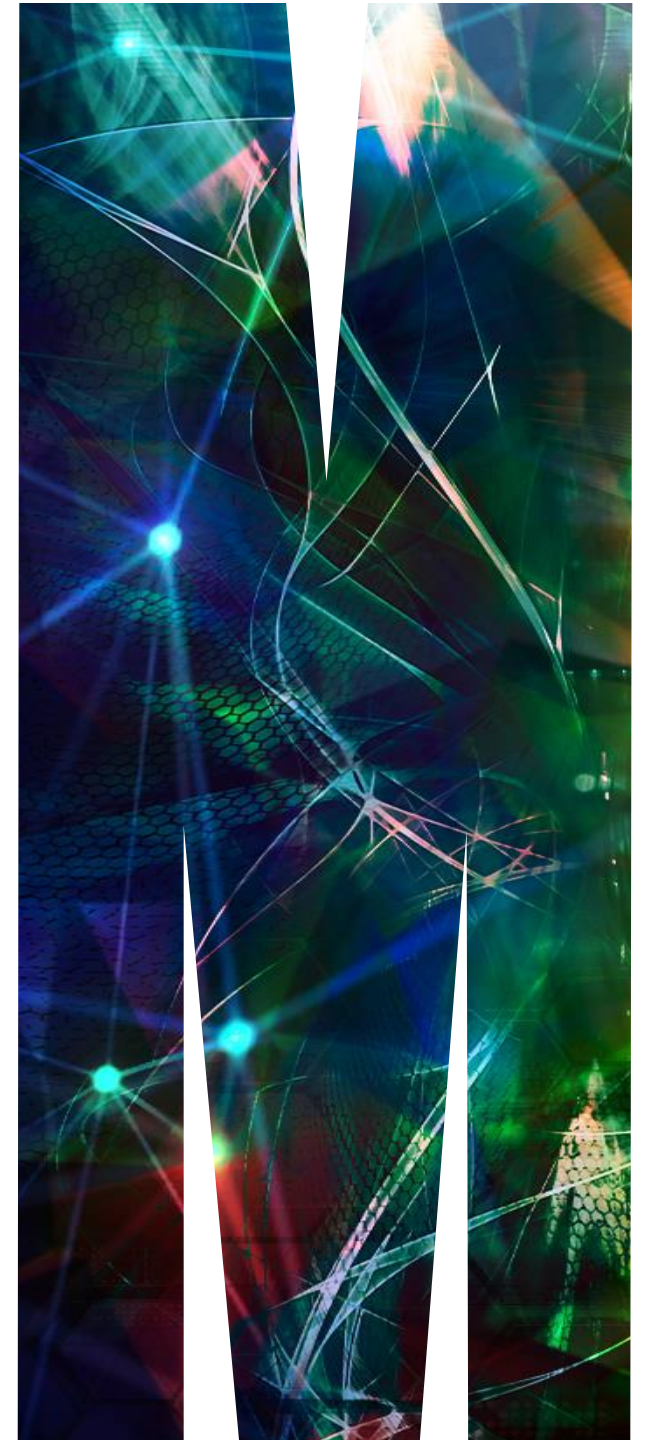


Take-home naloxone models for different populations and settings

Suzanne Nielsen BPharm BPharmSc(Hons) PhD MPS

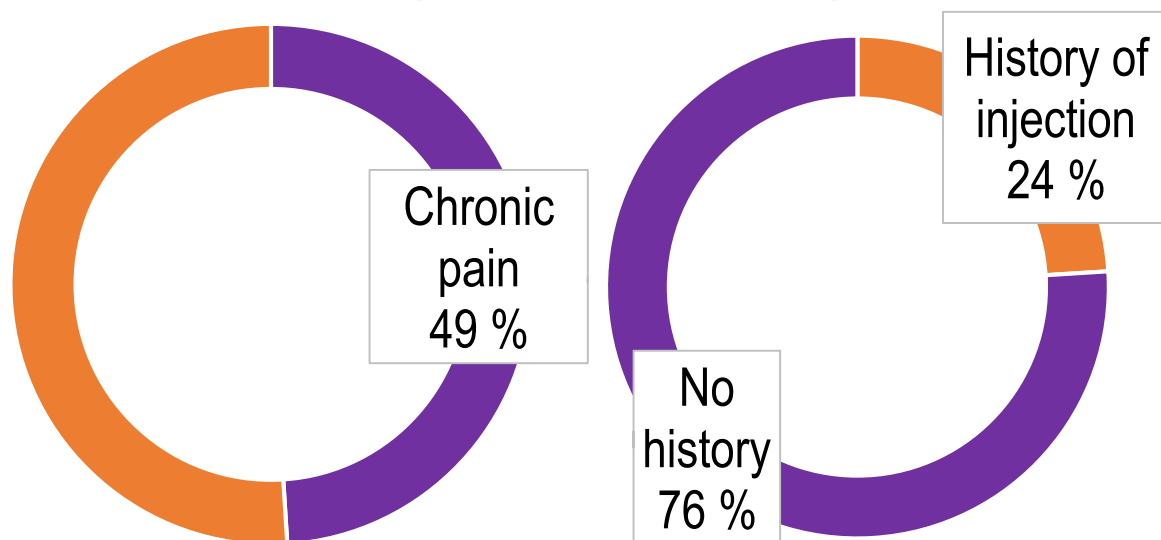
Professor and Deputy Director
Monash Addiction Research Centre

September 1, 2023



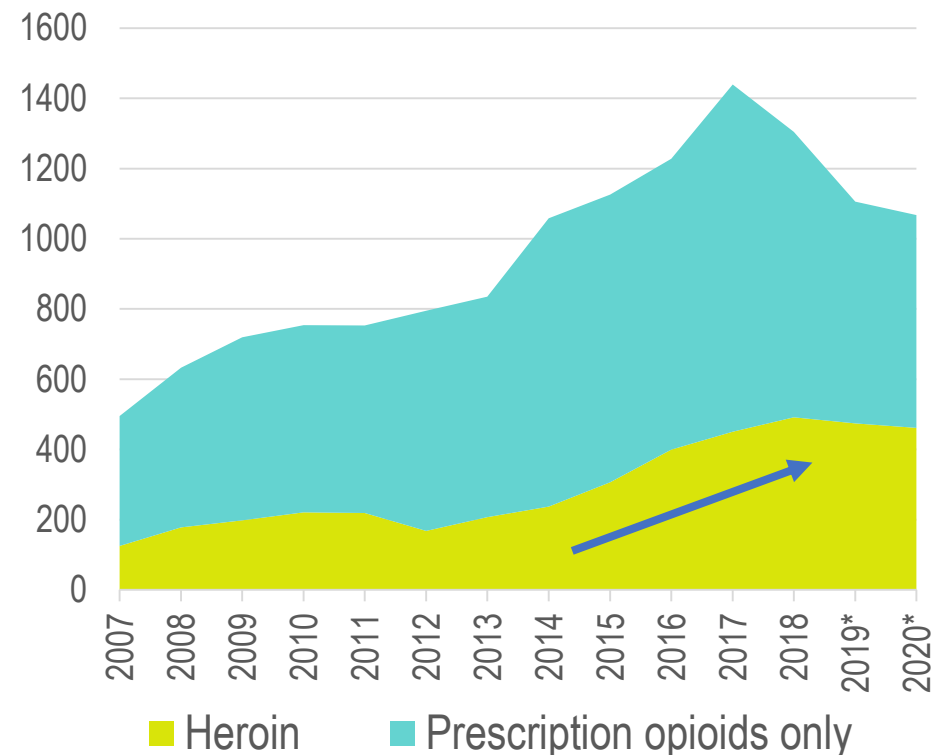
Opioid harm in Australia

- Since 2014 >1000 deaths per year
- Rx opioid deaths declining
- Steady increase in heroin deaths
- Deaths from *opioids used for pain*:



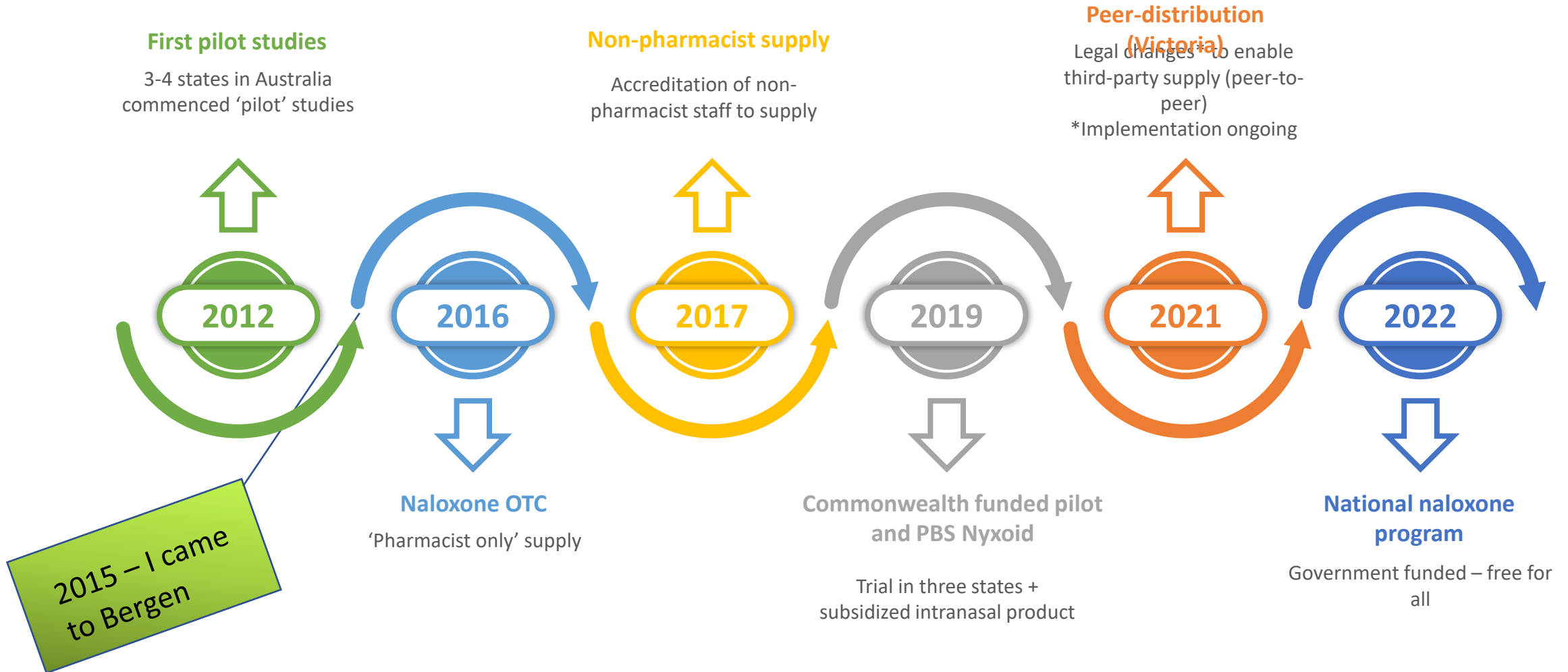
Opioid-related deaths in Australia

(Chrzanowska et al 2022)



*preliminary data (to be revised)

Evolution in naloxone models in Australia



2012: First pilot studies in Australia

- Mostly peer-led & aimed at people who inject drugs
- Overdose training, 2-4h
- Doctor prescribed naloxone
- Increased knowledge among people who use drugs in states where pilots occurred



Drug and Alcohol REVIEW



Drug and Alcohol Review (May 2018), 37, 457–463
DOI: 10.1111/dar.12644

BRIEF REPORT

Knowledge of naloxone and take-home naloxone programs among a sample of people who inject drugs in Australia: Variations across capital cities

PAUL M. DIETZE^{1,2}, MARK STARE³, SHELLEY COGGER¹, DHANYA NAMBIAR^{1,2}, ANNA OLSEN⁴, LUCINDA BURNS⁵ & SIMON LENTON⁶

¹Centre for Research Excellence into Injecting Drug Use and Burnet Institute, Melbourne, Australia, ²School of Public Health and Preventive Medicine, Monash University, Melbourne, Victoria, ³University of Sydney, Sydney, Australia, ⁴Australian National University, Canberra, Australia, ⁵National Drug and Alcohol Research Centre, Sydney, Australia, and ⁶National Drug Research Institute, Curtin University, Perth, Australia

2016: 'Pharmacist only' naloxone down scheduling

Requirement for prescription removed in 2016

- Little uptake from pharmacies
- Cost and knowledge barriers
- (lack of) implementation process negatively impacted suppliers/supply

Research

Community pharmacy naloxone supply, before and after rescheduling as an over-the-counter drug: sales and prescriptions data, 2014–2018

Wai Chung Tse^{1,2} , Paul Sanfilippo¹, Tina Lam¹, Paul Dietze^{1,3}, Suzanne Nielsen¹

The known: Take home naloxone programs are effective for preventing opioid overdose deaths. Most overdoses in Australia involve pharmaceutical opioids, but little is known about how much naloxone is supplied in primary care, where most pharmaceutical opioids are prescribed.

The new: The volume of naloxone supplied on individual prescriptions accounted for less than 3% of all naloxone supplied to pharmacies. Further, despite the 2016 scheduling change that permits naloxone supply without prescription, the over-the-counter supply of naloxone did not increase between 2014 and 2018.

The implications: Although prescriptions are no longer a barrier to obtaining naloxone, further strategies are required to increase the supply of take home naloxone.

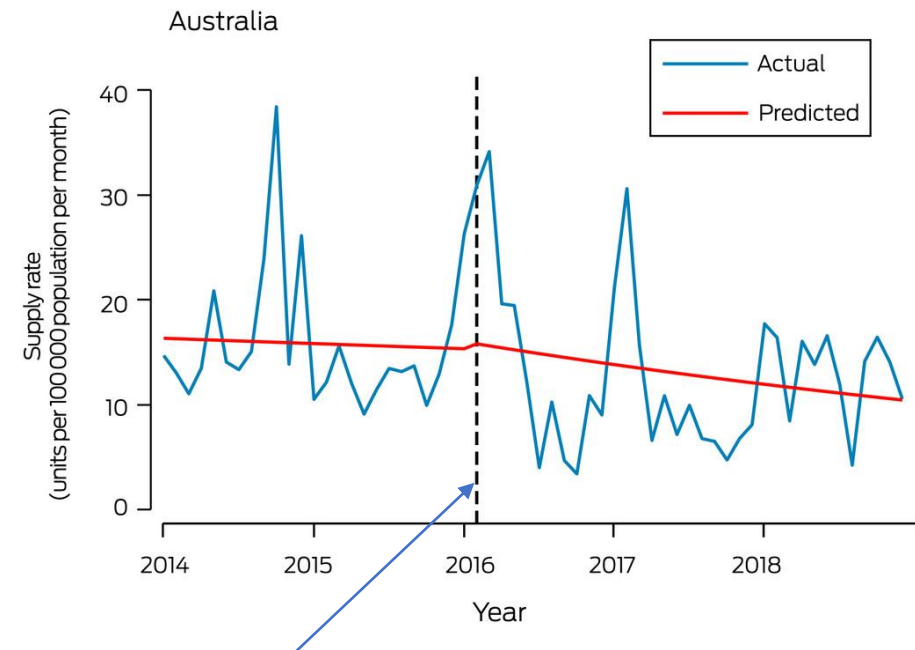
Abstract

Objectives: To characterise the community pharmacy supply of naloxone by supply type — individual prescription, prescriber bag, and non-dispensed (supplied over the counter or expired) — during 2014–2018; to examine whether the 2016 rescheduling of naloxone as an over-the-counter drug influenced non-dispensed naloxone supply volume.

Design, setting: Analysis of monthly naloxone prescriptions (Pharmaceutical Benefits Scheme) and sales data (IQVIA), 2014–2018, for Australia and by state and territory; time series analysis of non-dispensed naloxone supply to assess effect of rescheduling on naloxone supply.

Major outcomes: Total naloxone supply to community pharmacies; prescribed and non-dispensed naloxone supply.

Results: During 2014–2018, 372 351 400 µg units of naloxone were



Pharmacist
naloxone supply
enabled

2016: Commencing pharmacist supply

At the time of rescheduling

- High pharmacist support for a role in overdose prevention (almost half of provide OAT)
- Low knowledge about naloxone
- Unclear on who to supply it to or how
- Considerable stigma towards people who use drugs (identified as key target)
- Lack of confidence in how to raise with people prescribed opioids

ADDICTION **SSA** SOCIETY FOR THE STUDY OF ADDICTION

Research Report |  Full Access

Community pharmacist knowledge, attitudes and confidence regarding naloxone for overdose reversal

Suzanne Nielsen  Nadia Menon, Sarah Larney, Michael Farrell, Louisa Degenhardt

First published: 01 July 2016 | <https://doi.org/10.1111/add.13517> | Citations: 55

International Journal of Drug Policy 69 (2019) 46–52

Contents lists available at ScienceDirect

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International Journal of Drug Policy

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



Research Paper

Why aren't Australian pharmacists supplying naloxone? Findings from a qualitative study

Anna Olsen^{a,*}, Belinda Lawton^b, Robyn Dwyer^c, Meng-Wong Taing^{d,e}, Ka Lai Joyce Chun^d, Samantha Hollingworth^d, Suzanne Nielsen^{f,g}

^a National Centre for Epidemiology and Population Health, Australian National University, Acton ACT, 0200, Australia

^b Crawford School of Public Policy, Australian National University, Acton ACT, 0200, Australia

^c Centre for Alcohol Policy Research, LaTrobe University, Bundoora Vic, 3086, Australia

^d School of Pharmacy, University of Queensland, Brisbane St Lucia, Queensland, 4072, Australia

^e Centre for Optimising Pharmacy Practice-based Excellence in Research, The University of Queensland, Brisbane, Queensland, Australia

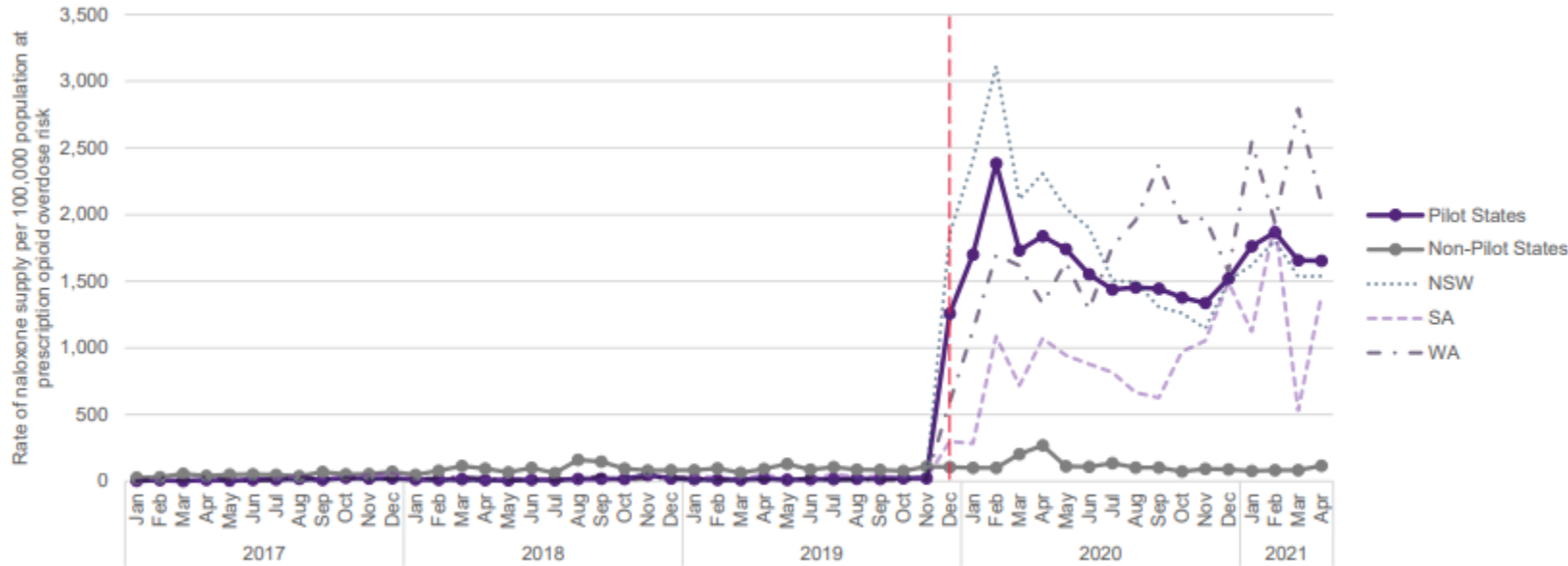
^f National Drug and Alcohol Research Centre, University of New South Wales, Randwick New South Wales, 2031, Australia



2019-2022: National government funded naloxone supply

- Large increases in naloxone supply (>43000 units)
- 80% of naloxone supplied through pharmacies (but only 7% of pharmacies regularly supply → room for improvement)
- <2% of people on high doses estimated to receive naloxone

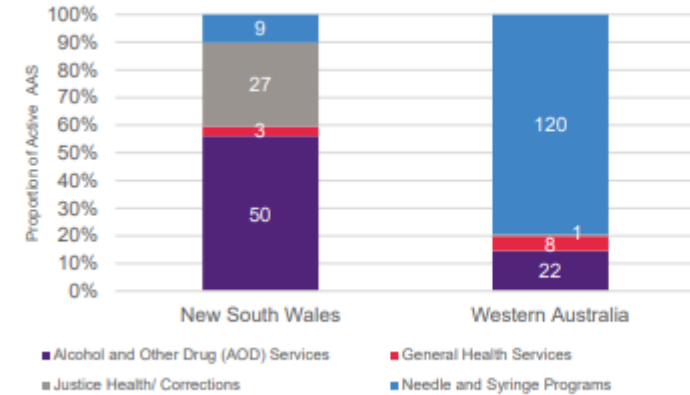
Figure 13. Changes in the naloxone access rate for individuals at risk of prescription opioid overdose in Australia² during the THN Pilot



Note: Vertical red line indicates start of THN Pilot

Source: PBS and PPA data

Figure 10. Participating Authorised Alternative Supply sites in NSW and WA³, by setting type



NR: Numbers represent the number of active AAS in each setting type



Increasing pha

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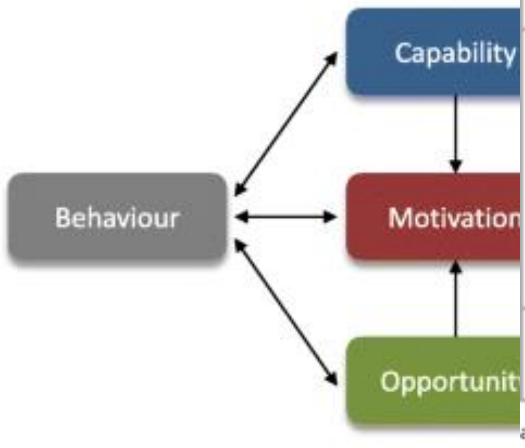
journal homepage: ww

Research Paper

Using the behaviour change wheel to understand pharmacy naloxone supply in Australia

Suzanne Nielsen^{a,b,*}, Anna Olsen^c

^a Monash Addiction Research Centre, Monash University, 47-49 Moorooduc Hwy, Frankston 3
^b National Drug and Alcohol Research Centre, UNSW Sydney, 22-32 King St, Randwick 2031
^c Medical School, The Australian National University, Florey Building 54 Mills Road, Acton 26



Commonwealth pilot: take advantage of it	Naloxone is NOW available free in WA. Pharmacists are remunerated for supply with a dispensing fee. Five simple steps. Funded federal government initiative. \$10 million dollars provided to pharmacy. ^a
Public health issue	All patients on S8 opioids for longer than 2 weeks are at risk. Half of opioid overdoses are by chronic pain patients. 70% of opioid overdoses are from prescription opioids. WA has the highest rate of accidental deaths related to opioid use.
Pharmacists' role	Pharmacists have a key public health and harm reduction role, lead the country forward, be part of the change. Provision is part of pharmacy practice. Language is an addressable barrier. ^a Provision of naloxone is simple. Patients are relying on you—there are many reasons for overdose; patients are unaware. ^a
Myth busters	Does not increase drug use or risk-taking behaviour, but saves lives. No potential for abuse, available since 2004. Systems are changing—part of first aid courses and kits and 000 protocol. Life-saving medication like glucagon and Epipens [®] .
Dispensing process education	How to receive naloxone and be reimbursed (Steps 1–5).

^aNew messages from expert advisory group.

icipatory and design-thinking-
ted workshop with pharmacists

veloped communication
ages to address barriers

video significantly increased
nacists' intentions, skill,
dence, perceptions that THN
easible, appropriate, and
otable

ession
mentation
ne by
sts using
inking

Jren¹, Lexy Staniland²,

University, Bentley, WA, Australia,
Design and the Built Environment,
Monash Addiction Research Centre, Monash
Curtin University, Bentley, WA, Australia



@DrSuziNielsen

Addressing barriers for people prescribed opioids



- Of 208 people prescribed opioids for pain:
- 11 (5%) endorsed that they had had an 'overdose',
 - 30 (14%) endorsed overdose based on description of overdose
 - Correctly identified few overdose symptoms (mean score = 4.5) of the 10 questions on opioid overdose symptoms correctly
 - 60% would expect/appreciate naloxone being offered (25% neutral)

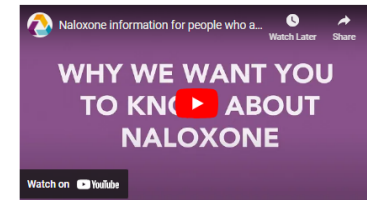
1. Volpe, Nielsen et al Overdose prevention information for people prescribed opioids for chronic pain. Enhancing community pharmacists' capacity to respond. Turning Point Report. June 2020 [Credit to P Coffin for inspiration];
2. Nielsen et al. Knowledge of Opioid Overdose and Attitudes to Supply of Take-Home Naloxone Among People with Chronic Noncancer Pain Prescribed Opioids. Pain Med. 2018 Mar 1;19(3):533-540.

Co-design resources with people using opioids for pain

- Estimated <2% of at risk population receiving it in the pilot
- Low knowledge about 'overdose'
- Developed animations & leaflets to support better conversations
- Persistent (unfounded) concern about offending people

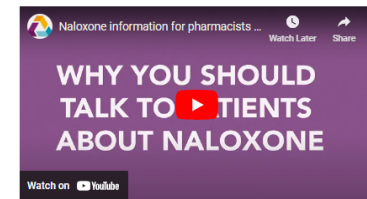
Naloxone information for people who are prescribed opioids

This animation has been created for people prescribed opioids for chronic pain, or anyone interested in learning more about prescription opioid safety. Naloxone is a life-saving medicine that reverses the effects of opioids in case of an emergency, while you wait for an ambulance. If you'd like to know more about opioid safety or naloxone, speak with your pharmacist or GP, and download the ["maximising opioid safety"](#) leaflet.



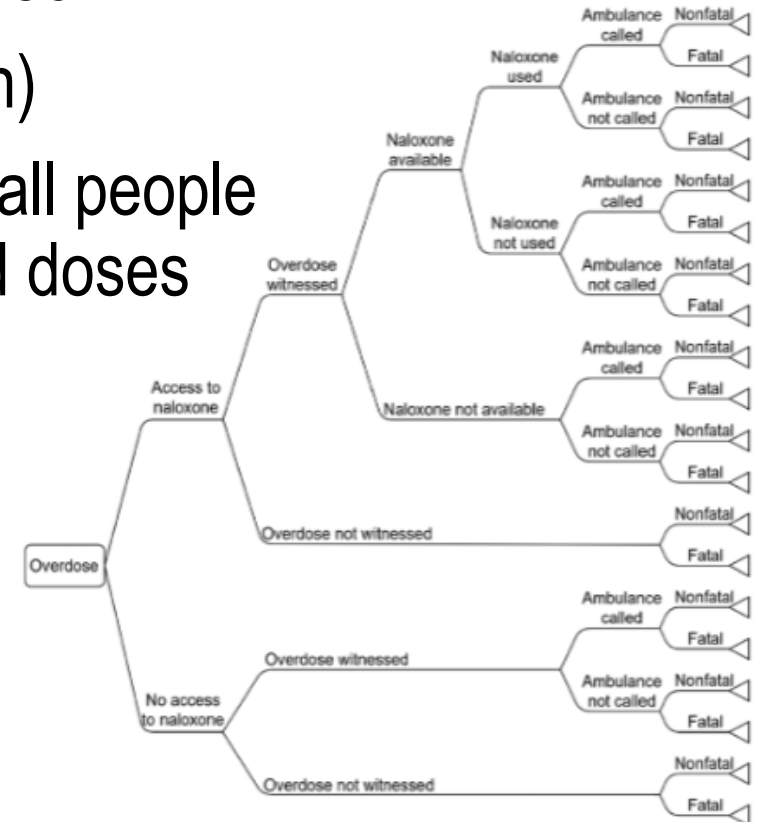
Naloxone information for pharmacists who dispense prescription opioids

This animation has been created for pharmacists who dispense prescribed opioids for chronic pain. Naloxone is a life-saving medicine that reverses the effects of opioids in case of an emergency, while you wait for an ambulance. For more information, please see the ["maximising opioid safety"](#) leaflet and ["naloxone"](#) poster for pharmacists.



Is it cost effective to provide naloxone for people prescribed opioids?

- Large population with unclear risk
- Modelled four scenarios (upscaling to 30 or 90% of people prescribed ≥ 50 or ≥ 100 mg oral morphine equivalent (OME) daily dose)
- Used estimates from existing research (largely Australian)
- Demonstrated to be cost effective to supply naloxone to all people prescribed at least medium (50mg OME or above) opioid doses (around AUD\$40K per life saved)



Received: 8 June 2021 | Accepted: 11 October 2021

DOI: 10.1111/add.15727

RESEARCH REPORT

ADDICTION

SSA

The cost and impact of distributing naloxone to people who are prescribed opioids to prevent opioid-related deaths: findings from a modelling study

Suzanne Nielsen^{1,2} | Nick Scott¹ | Tom Tidhar¹ | Maria del Mar Quiroga^{1,4} | Simon Lenton³ | Paul Dietze^{1,2,3}

Summary

- Diversity in supply settings is important
- Enormous potential to continue to upscale
- Progress in targeted approach for people prescribed opioids (complimenting existing work for people who use drugs)
- Challenge now is rising heroin deaths (threat of fentanyl looms)

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Naloxone
It takes 5 minutes
to save a life

