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Aim: To de elop a Decision Aid for deprescribing or con in ing ChEIs This is designed o complement an elidence based deprescribing glideline for ChEIs and memantine hich includes an algorithm of help clinicians deprescribe, hese medicalions

We developed a decision aid for consumers to facilitate shared decision-making with their healthcare professional about continuing or stopping their Cholinesterase inhibitor (ChEI)



Design and methods:

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Evaluating the impact of new prescribing restrictions for proton pump inhibitors in Australia: an interrupted time series analysis

# Are we using Australian routinely collected data to its full potential? An analysis of published research on medicine use and health related outcomes

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#### Background and aims

- Routinely collected data on prescribed medicines is used increasingly to evaluate real-world medicines effectiveness and safety
- CE dæ Auharmaceutical Benefits Scheme (PBS) dispensing data can be leveraged for post-market surveillance of medicines
- Here, we catalogue published literature using PBS dispensing claims to assess medicine use and health related outcomes

#### Methods

- Peer-reviewed studies published between 1987 and 2020
- Independent reviewers screened abstracts and full-text manuscripts and extracted data in duplicate
- We characterised publications according to:

Study population

Medicine group

#### Results

- 107 studies published; 48 between 2016 and 2020
- 28 used aggregated data (ecological designs), 12 used medicines dispensed as a proxy of health-related outcomes and 67 linked PBS data to other health datasets

Aggregate Individualdata level data (N = 28) (N = 79)n (%) n (%)

Study Population: Age profile
No age restrictions

#### Results

#### Medicine groups evaluated:

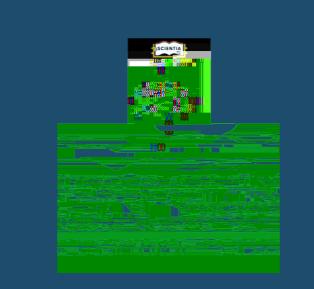
- " 45% nervous system (e.g. opioids, psychotropics)
- 18% cardiovascular system (e.g. statins, antihypertensives, antithrombotics)
- " 16% alimentary tract and metabolism (e.g. anti-diabetics, PPIs)

#### Conclusions

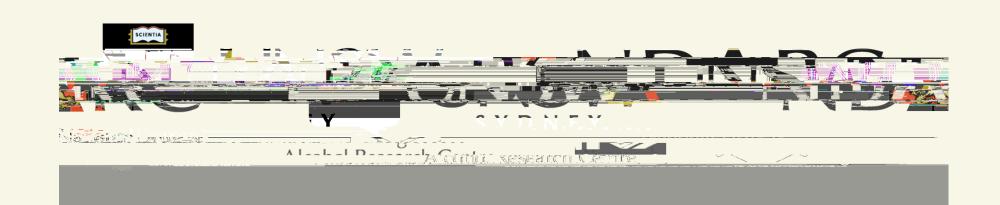
Studies using PBS data to assess medicine-related outcomes is growing albeit slowly and likely reflects the challenges of developing fit-for purpose collections to explore these issues

#### Impact

- There are significant gaps in our understanding of medicine related outcomes in Australia
- Developing a linked dataset that is reflective of the Australian population will help address significant gaps in our understanding of the outcomes of medicine use in populations underrepresented in clinical trials







### POPPY II Cohort Profile – a population-based linked cohort examining the patterns and outcomes of prescription opioid use in NSW, Australia, 2003-2018

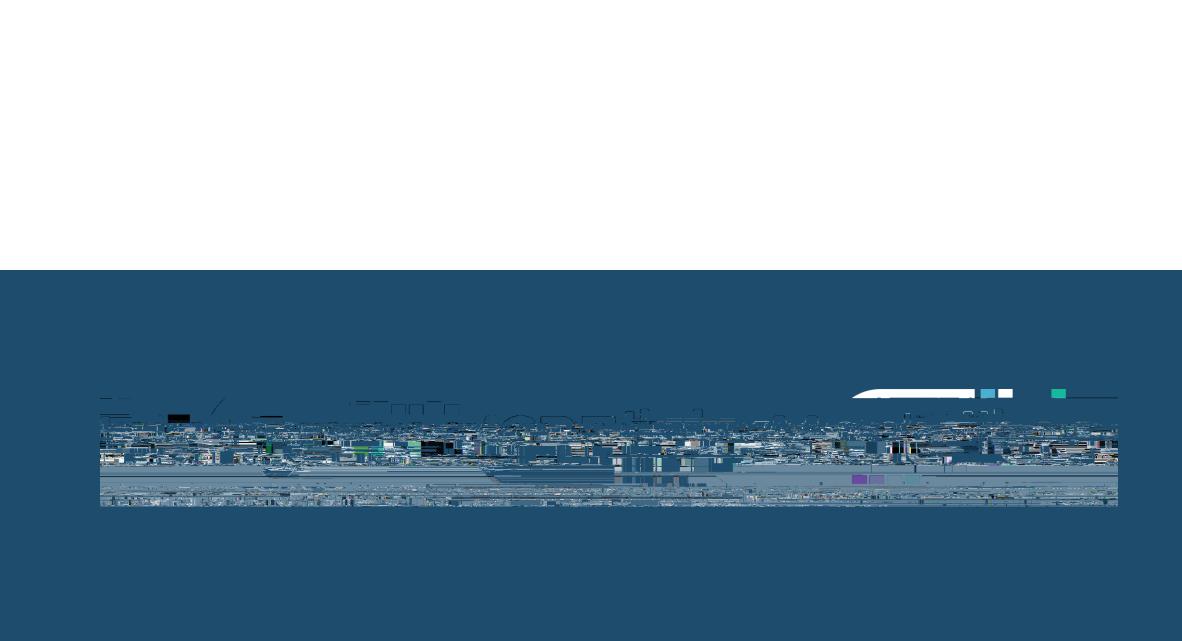
Natasa Gisev<sup>1</sup>, Sallie-Anne Pearson<sup>2</sup>, Timothy Dobbins<sup>3</sup>, Luke Buizen<sup>1</sup>, Tom Murphy<sup>1</sup>, Andrew Wilson<sup>1</sup>, Fiona Blyth<sup>5</sup>, Adrian Dunlop<sup>6,7</sup>, Sarah Larney<sup>6</sup>, David C. Currow<sup>9</sup>, Louisa Degenhardt<sup>1</sup>

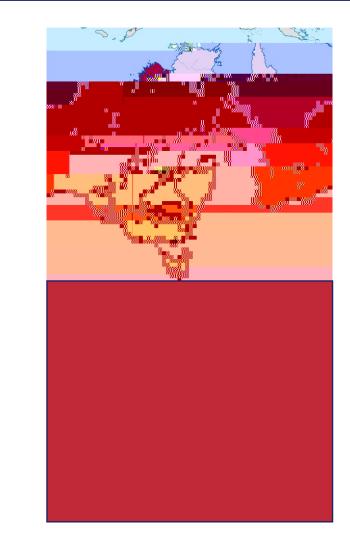
#### Background

- There is significant concern about the increased use of prescription opioids over recent years in several countries including the US, Canada, the UK and Australia.<sup>1</sup>
- In Australia, opioid dispensing increased almost four-fold between 1990 and 2014.<sup>2</sup>
- There are no population-based Australian studies examining the long-term patterns and outcomes of people prescribed opioids.

#### References

1. Berterame S et al. Use of and barriers to access to opioid



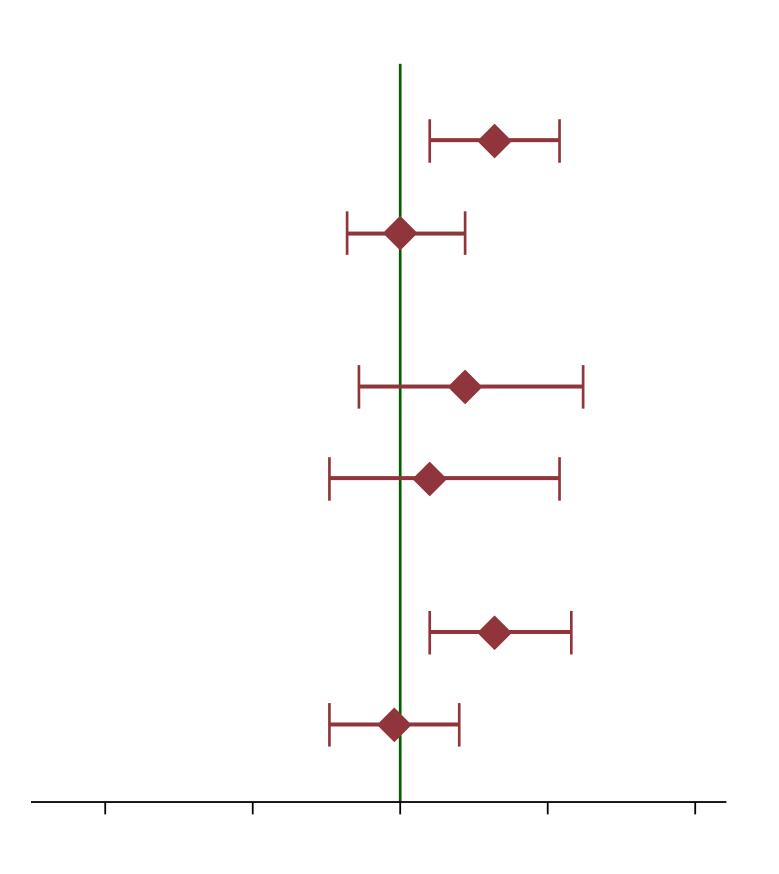


### Consumer and clinician questions about quality use of medicines in people living with dementia: what are the priorities for future research?

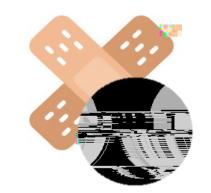
Research Team: Emily Reeve<sup>1,2</sup>, Tuan Anh Nguyen<sup>1</sup>, Lisa Kalisch Ellett<sup>1</sup>, Julia Gilmartin-Thomas<sup>3</sup>, Edwin Tan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup>4</sup>, Lyntara S. Quirke (condumer representative), Julia Gilmartin-Thomas<sup>3</sup>, Edwin Tan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup>4</sup>, Lyntara S. Quirke (condumer representative), Julia Gilmartin-Thomas<sup>3</sup>, Edwin Tan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup>4</sup>, Lyntara S. Quirke (condumer representative), Julia Gilmartin-Thomas<sup>3</sup>, Edwin Tan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup>4</sup>, Lyntara S. Quirke (condumer representative), Julia Gilmartin-Thomas<sup>3</sup>, Edwin Tan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup>4</sup>, Lyntara S. Quirke (condumer representative), Julia Gilmartin-Thomas<sup>3</sup>, Edwin Tan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup>4</sup>, Lyntara S. Quirke (condumer representative), Julia Gilmartin-Thomas<sup>3</sup>, Edwin Tan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup>4</sup>, Lyntara S. Quirke (condumer representative), Julia Gilmartin-Thomas<sup>3</sup>, Edwin Tan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup>4</sup>, Lynn Chenoweth<sup>5</sup>, Mouna Sawan<sup></sup>













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Since the emergence of COVID, there have been increasing ncerns about delays and/or discontinuations in cancer care. In Australia in 2020, there were relatively low COVID9 infection rates, with the first wave of infections occurring in March 2020 and a second wave in July 2020. It is unclear to what extent systemic cancer therapy was impacted by CCIVID-Australia in the context of low rates of COVID9 transmission in 2020.

- March to December 2020: no decrease in antineoplastic dispensing
   March 2020: temporary increase in dispensing (39/100,000 population) and initiation of all antineoplastic medicines (3/100,000 population)
- April 2020: temporary increase in discontinuation of antineoplastic medicine (35/1,000 people treated)

COVID-19 cases, hospitalisations and restrictions in Australia in 2020

• April 2020: temporary decrease in chemotherapy initiation (00,000 population) and temporary increase in chemotherapy discontinuation (52/1,000 treated)

Dispensingsreported per 100,000 population

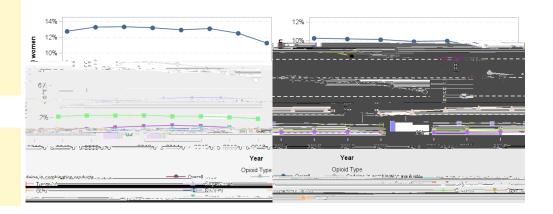
Initiations defined as a dispensing of a cancer medicine where no cance

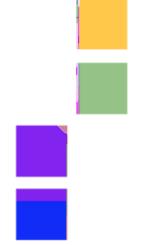
Discontinuations defined as a gap of 90 days between cancer medicines dispensingsor following the last observed dispensing, reported per 1,000 peop average (ARIMA) models to quantify changes in these utilisation measures. We modelled temporary changes in March, April and July 2020 and level s

Black line = March 2020, Grey line = July 2020

#### Background

- ‡Prescription opioid use in pregnancy has been linked to congenital malformations in infants and adverse perinatal outcomes. <sup>1</sup>
- ‡The limited and conflicting evidence regarding the safety of opioids in pregnancy underscores the importance of the quality use of opioid medicines in women who might become pregnant.
- ‡As around half of all pregnancies are unplanned <sup>2</sup>, prescription opioid use among women of reproductive age may result in exposure in unplanned pregnancies.
- ‡Thus, an understanding of prescription opioid use among women of reproductive age is crucial.
- To examine trends in the prevalence and incidence of prescription opioid use in Australian women aged 15 to 44 years.





to entry;

#### Changing general practitioner when entering residential aged care: impact on polypharmacy in 2,250 Australians with dementia psychotropic medicine use and

1st Annual Research Symposium and Policy Forum

Heidi Welberry, Louisa Jorm, Sebastiano Barbier, Benjumin Hst Andrea Schaffer, Mark Harrist, John Haff, Henry Brodat , <sup>1</sup>Centre for Big Data Research in Health, UNSW Sydoentre for Healthy Brain Agein (CHeB), UNSW Sydne)Dementia Collaborative Research Centre, School of Psychiatry, UNSW Sydney<sup>4</sup>Centre for Primary Health Care and Equity, UNSW Syd Sethool of Population Health, UNSW Sydney

#### Outcomes—six months after entry to RAC

- 1. Number of unique medicine ispensing sbased on 7 digit ATC code)
- 2.Proportion with polypharmacy (>=5 medicines) and hyper-polypharmacy (>=10 medicines)
- 3.Proportion with an antipsychotic/benzodiazepine/antidepressant dispensing

#### Statistical Analysis

We calculated Inverse Probability of Treatment (IPT) weights to balance group characteristics using a range of covariates from the 45 and Up Baseline Survey, and health and social care use based on administrative datasets. The main analyses use weighted regression Logistic for binary outcomes and Poisson for count data to asses relative differences between groups. These additionally controlled for prior medicine in the six month period before entry to RAC and prior hospitalisation (using the "surve package in R).



