

## Designing an Informatics Infrastructure for a National Aged Care Medication Roundtable

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# Collaboration between researchers, aged care providers, consumers and policy makers



**AUSTRALIAN COMMISSION  
ON SAFETY AND QUALITY IN HEALTH CARE**

Common objective to improve medication management and outcomes in residential aged care

# Medication Issues in Residential Aged Care (RAC)

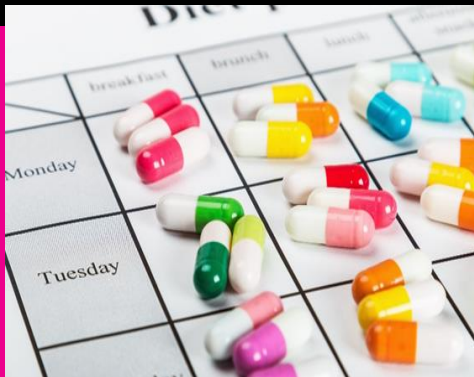


- 80% residents  $\geq$  5 medications daily; 40%  $\geq$  10

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- RAC accounts for nearly 10M PBS scripts each year
- 30% all issues reported to the Aged Care Royal Commission about poor medication management; greatest source of complaint to the Aged Care Quality and Safety Commission
- Royal Commission identified the absence of data to monitor quality of care issues across the sector
- Electronic medication administration systems present new opportunities

# July 2021 National Medication Indicators Introduced



Polypharmacy

Antipsychotic use

- Reporting required quarterly
- No adjustments for potential confounders
- Benchmark national average

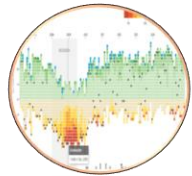


# National Aged Care Medication Roundtable

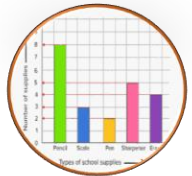
## Benchmarking for innovation



- **Aim:** To co-design, implement and evaluate an Aged Care Medication Roundtable underpinned by a learning health systems model



Use routinely collected aged care data to monitor medication management in aged care.



Co-design tailored data presentation formats for reporting to the Roundtable to facilitate benchmarking and evidence-based actions – nudge interventions design for IT systems.



Evaluate the economic outcomes feasibility, scalability and incremental costs and benefits of the Roundtable.

# Vision for the Roundtable



*“To facilitate consumer-focused improvement in the safe and quality use of medications in aged care”*

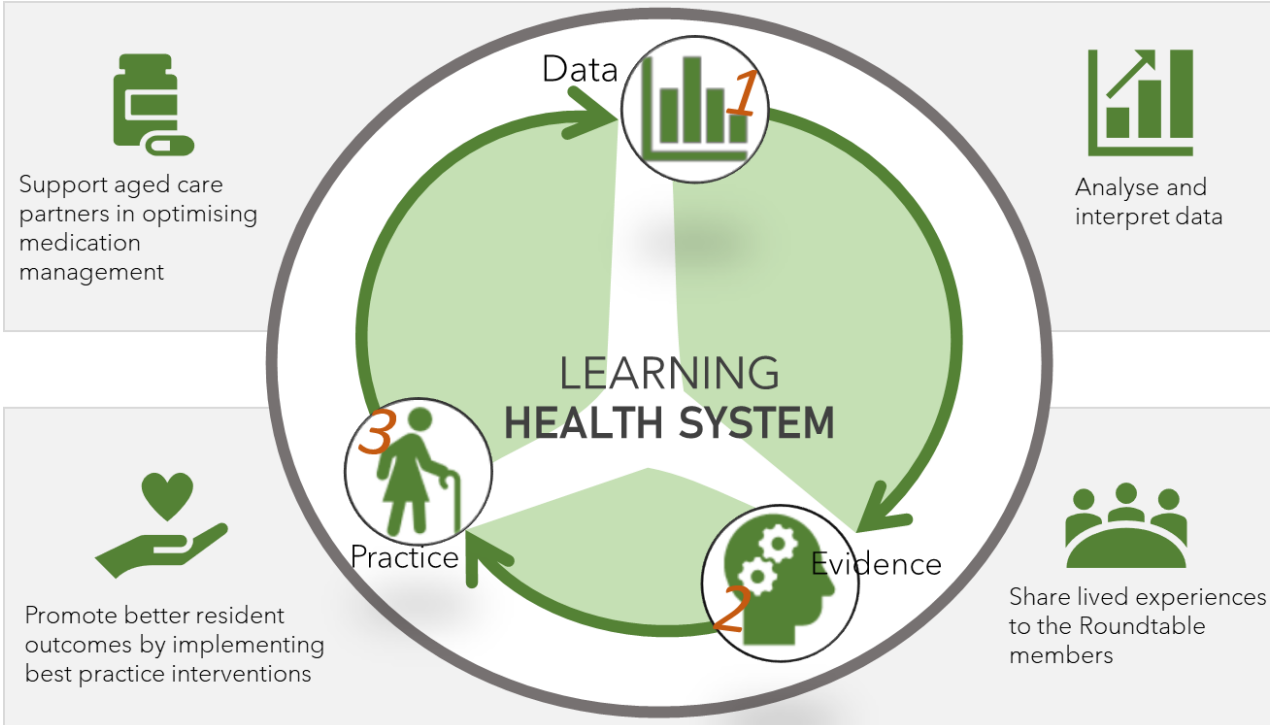
Participants with a common purpose in a safe, supportive environment.

# APPLYING A LEARNING HEALTH SYSTEMS (LHS) MODEL



- Create an informatics infrastructure - persists beyond single project – utilising existing electronic medication data & statistical processing – generate quarterly reports
- Data combined with knowledge of everyday decision-making and local contexts – meaningful comparisons
- Learning from others – studying and explaining variation to see ‘what works’ and why
- Rapid testing & evaluation

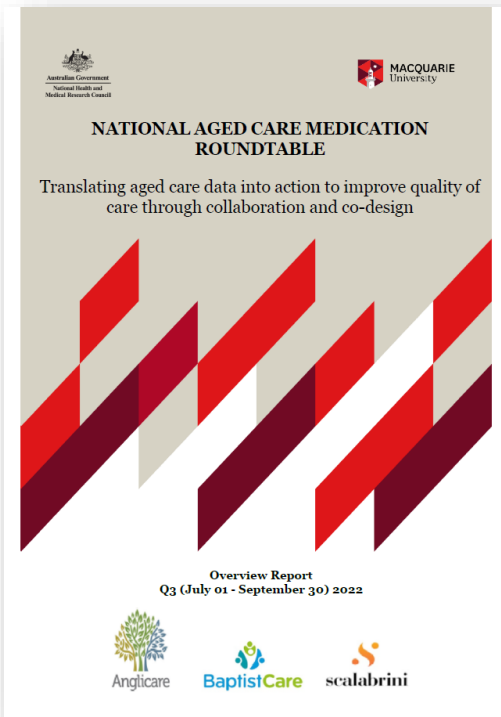
# LEARNING HEALTH SYSTEMS (LHS)



- Each quarterly Roundtable LHS cycle will build on previous cycles
- Sequence of continuous improvement and review

# Report development

## SUMMARY FOR ALL PROVIDERS



### Contents

- 1 March 2023 Roundtable Report
  - 1.1 Indicator definitions . . . . .
  - 1.2 Data analysis: adjusted and unadjusted rates . . . . .
  - 1.3 How to read the graphs . . . . .
- 2 Overview of all providers' facilities
  - 2.1 Antipsychotic use . . . . .
  - 2.2 Polypharmacy including PRN . . . . .
  - 2.3 Antibiotic use . . . . .

Indicators adjusted for age, resident conditions,

SEX

### 2 Overview of all providers' facilities

This section includes indicators for 42 facilities managed by Anglicare, BaptistCare, and Scalabrini. The results relate to medication administration in 2022 Q3.

To maintain consistency with methods used to calculate national quality indicators, antipsychotic use was reviewed over a seven-day period (in this report 9–15 August) and polypharmacy was reviewed on a single day (15 August). For antibiotics, we recorded any use of anti-infectives for systemic use in the quarter.

Table 2.1: Summary of the indicators and comparison with National Quality Indicators

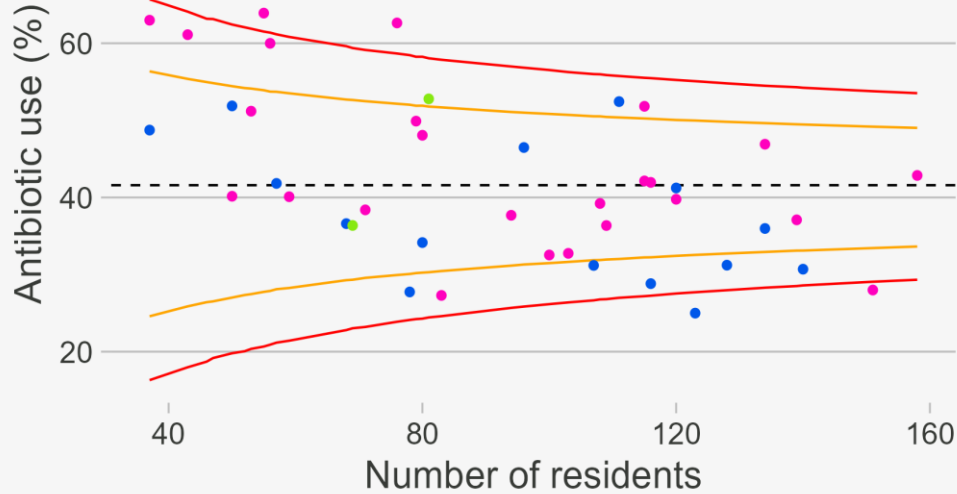
Indicator	Version	All Roundtable providers <sup>a</sup>	National <sup>b</sup>
Antipsychotic use	Adjusted		
	Unadjusted		18.4
Polypharmacy <sup>c</sup>	Adjusted		
	Unadjusted		36.7
Antibiotic use <sup>d</sup>	Adjusted		
	Unadjusted		

<sup>a</sup>Numbers are mean (95% confidence interval).

<sup>b</sup>Residential Aged Care Quality Indicators – July to September 2022, <https://www.gen-agedcaredata.gov.au/Topics/Quality-in-aged-care/Residential-Aged-Care-Quality-Indicators-latest-release>. Only unadjusted rates are available for the national indicators.

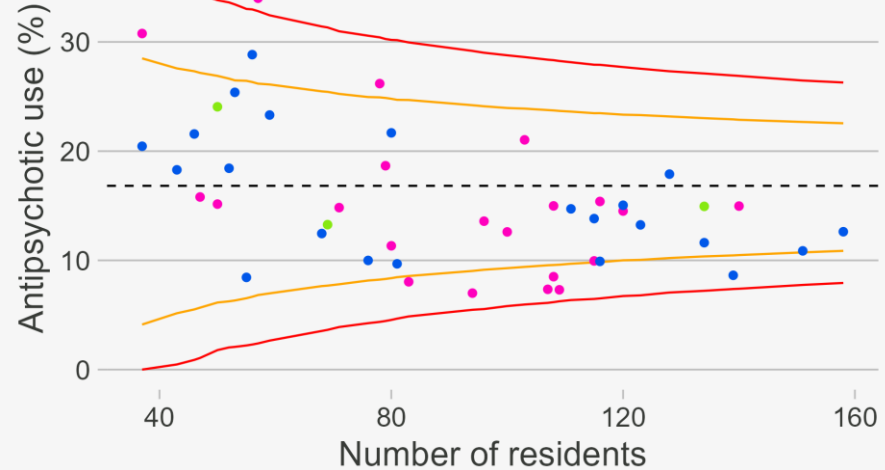
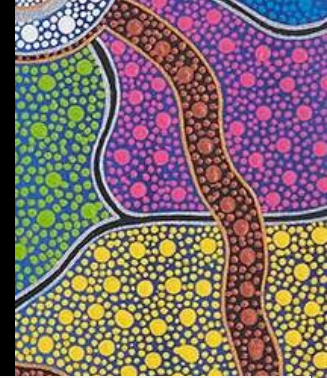
<sup>c</sup>Polypharmacy indicator in the report includes PRN medications, whereas national indicator does not.

<sup>d</sup>Antibiotic use is not a National Quality Indicator.



Adjusted for age, sex, dementia status, stroke, hypertension, Parkinson disease, and diabetes

Dummy exemplar data  
Each dot represents a facility



Adjusted for age, sex, dementia status, stroke, hypertension, Parkinson disease, and diabetes

**Design and test nudge interventions using the eMeds systems e.g. requirement to specify duration of antipsychotic use**

# Roundtable in Action!

Continuing to refine reports  
and processes





Interested in joining the  
Roundtable?

Contact us:

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Thank you