



NETPHARM collaboration

Professor Lisa Pont

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Professor of Pharmacy

International Society of Pharmacoepidemiology
President



NETPHARM

*New Technologies for Translational
Research in Pharmaceutical Sciences*





University of Technology Sydney (UTS)

Australia



NETPHARM

*New Technologies for Translational
Research in Pharmaceutical Sciences*

UTS CRICOS 00099F

UTS at a glance



More than
45,000
students in 2021,
including
12,000
international
students



3,789
Full-time
equivalent
staff



Established
in **1988**



#1 young
university in
Australia.

2021 QS
Top 50
Under 50
Ranking and
2022 Times
Higher Education
Young University
Rankings



150+
undergraduate
and **240+**
postgraduate
courses across
traditional and
emerging
disciplines



260,000+
alumni living in
140+
countries



**Graduate
School of
Health**
Pharmacy
Physiotherapy
Psychology
Orthoptics
Speech pathology
Genetic
Counselling



International Society of Pharmacoepidemiology (ISPE)

An international association dedicated to advancing the health of the public by:

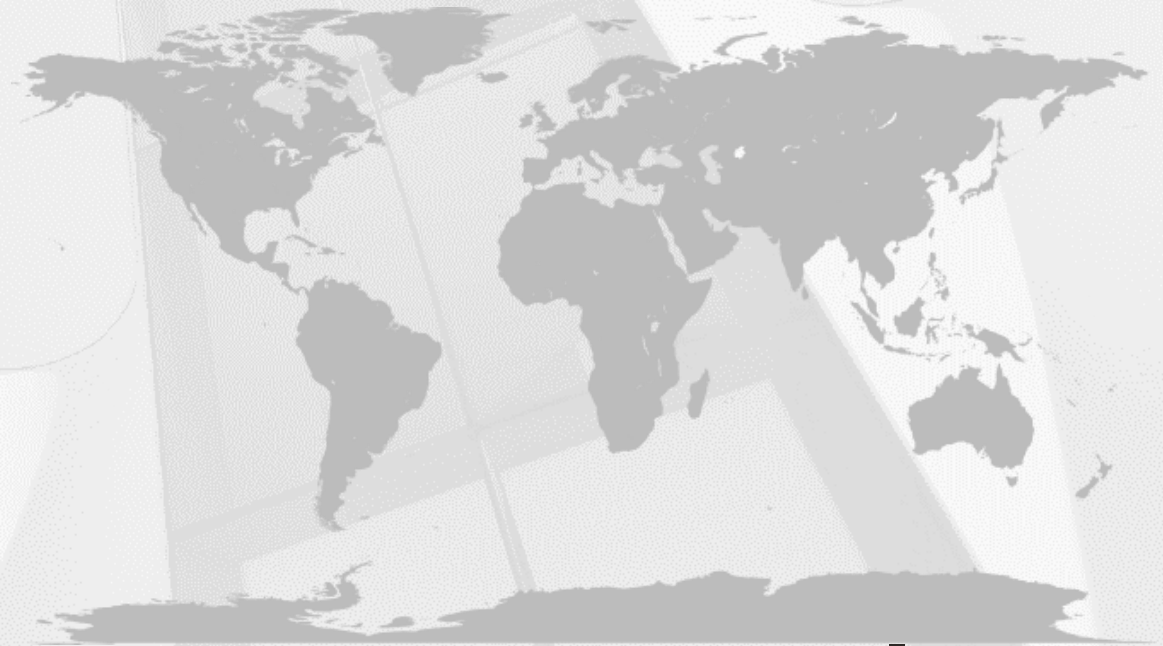
1. Providing a global forum for the open exchange of scientific information on drugs, biologics, and devices; delivery, use, costs and value; adverse and beneficial effects; and therapeutic risk management
2. Sponsoring educational opportunities
3. Advocating for pharmacoepidemiology, including research in pharmacovigilance, drug utilization, comparative effectiveness, and therapeutic risk management





International Society of Pharmacoepidemiology (ISPE)

- 2,261 members from 58 countries
- We work in regulatory affairs, drug research and development, medicine, public health, drug safety, risk management, epidemiology and related fields
- Members come from:
 - Academia
 - Industry
 - Government, regulatory science
 - Consulting firms, CROs, public health





International Society of Pharmacoepidemiology (ISPE)

- 4 Regional Interest Groups
- 21 Special Interest Groups

Geriatric pharmacoepidemiology
Drug Utilization/Health Services
Research



Professor Lisa Pont

Measuring the quality and safety of
medicine use in older populations



Medicines Use Research in Aged Care (MURAC)



Professor Lisa Pont
Research Team Lead



Ms Chloe Smit
PhD Candidate



Mr Brett Anderson
PhD Candidate



**Dr Ramesh Sharma
Poudel PhD**



Mr Yohanna Avong
PhD Candidate



Mr Kimble Webb
Data analytics



Ms Jessica Chen
Visiting Researcher
(Utrecht University)



Mr Maarten Lambert
Visiting Researcher
(Groningen University)

Medicines Use Research-UTS

Research themes



Measuring the quality of medicines use



Understanding the safety of medicines use



Improving quality and safety of medicines use in health systems



Australian Government
National Health and Medical Research Council

BUILDING
A HEALTHY
AUSTRALIA

1

10
OF THE BEST



NHMRC
RESEARCH
PROJECTS

FOURTEENTH EDITION

IMPROVING QUALITY USE OF MEDICINES IN RESIDENTIAL AGED CARE

PHOTO:
Dr Lisa Pont from
Macquarie University.



MACQUARIE
UNIVERSITY

Translating Research into
Practice (TRIP) Fellowship



PROGRAM GRANT

\$178,158
2016-2018

Next steps



The research identified significant variations between facilities in the frequency of usage for certain types of medicine. Dr Pont is now investigating the variation to better understand its drivers.

As the incoming President of the International Society of Pharmacoepidemiology*, Dr Pont is collaborating with colleagues around the globe on the use of real world data in pharmacy research.

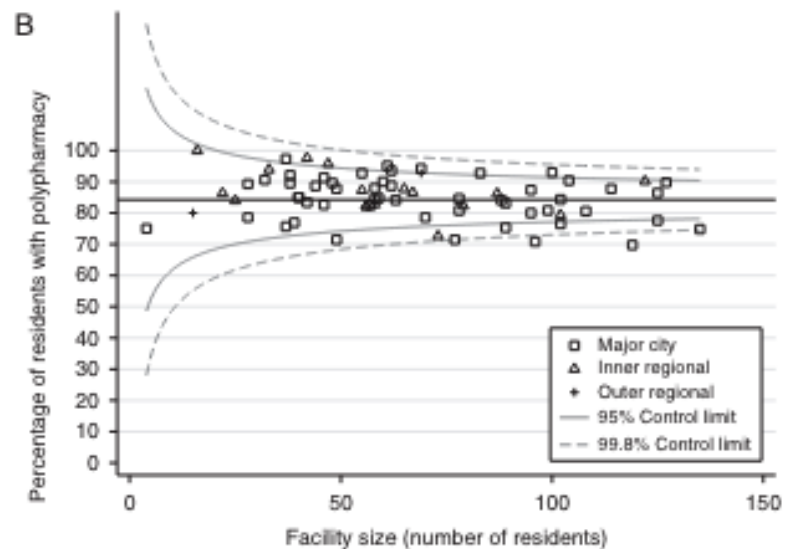
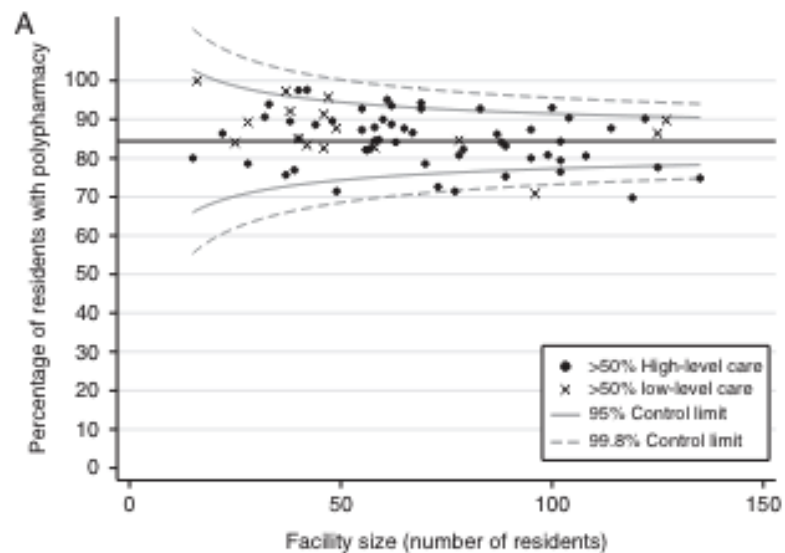


Figure 1 Variation in polypharmacy between facilities by level of care (A) and geographical remoteness (B).

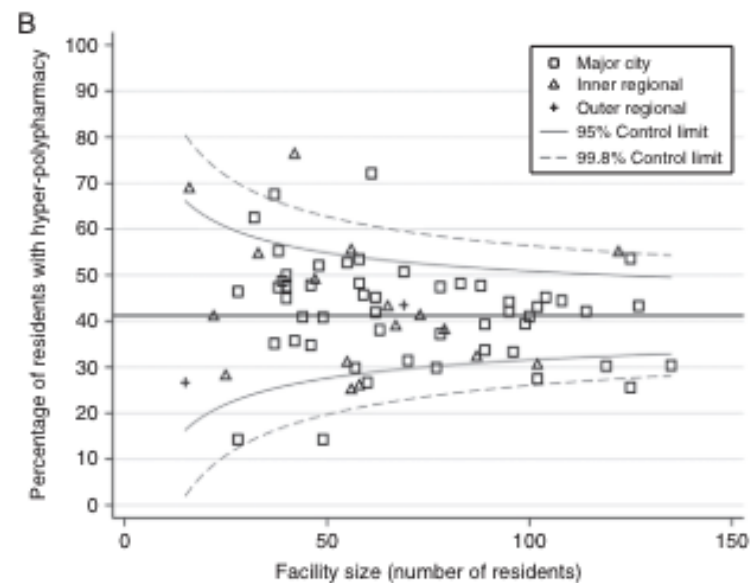
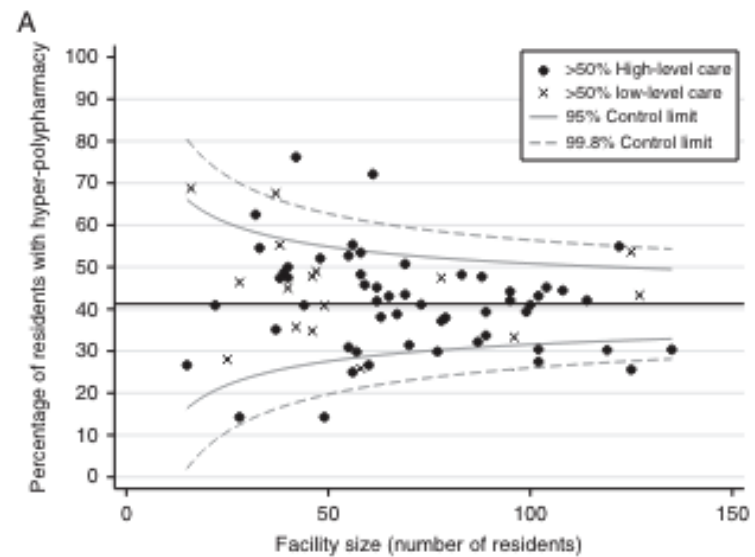


Figure 2 Variation in hyper-polypharmacy between facilities by level of care (A) and geographical remoteness (B).

Can we stop the rise of superbugs?

Here's how we're tackling one of the biggest threats to global health today

[Contact us](#)

Tackling antimicrobial resistance with OUTBREAK

OUTBREAK (One Health Understanding Through Bacterial Resistance to Antibiotics Knowledge) is a research-based network taking a One Health approach – integrating data from humans, animals, plants and the environment – to address the location- and person-specific threat of an antibiotic resistant infection now and for generations to come.

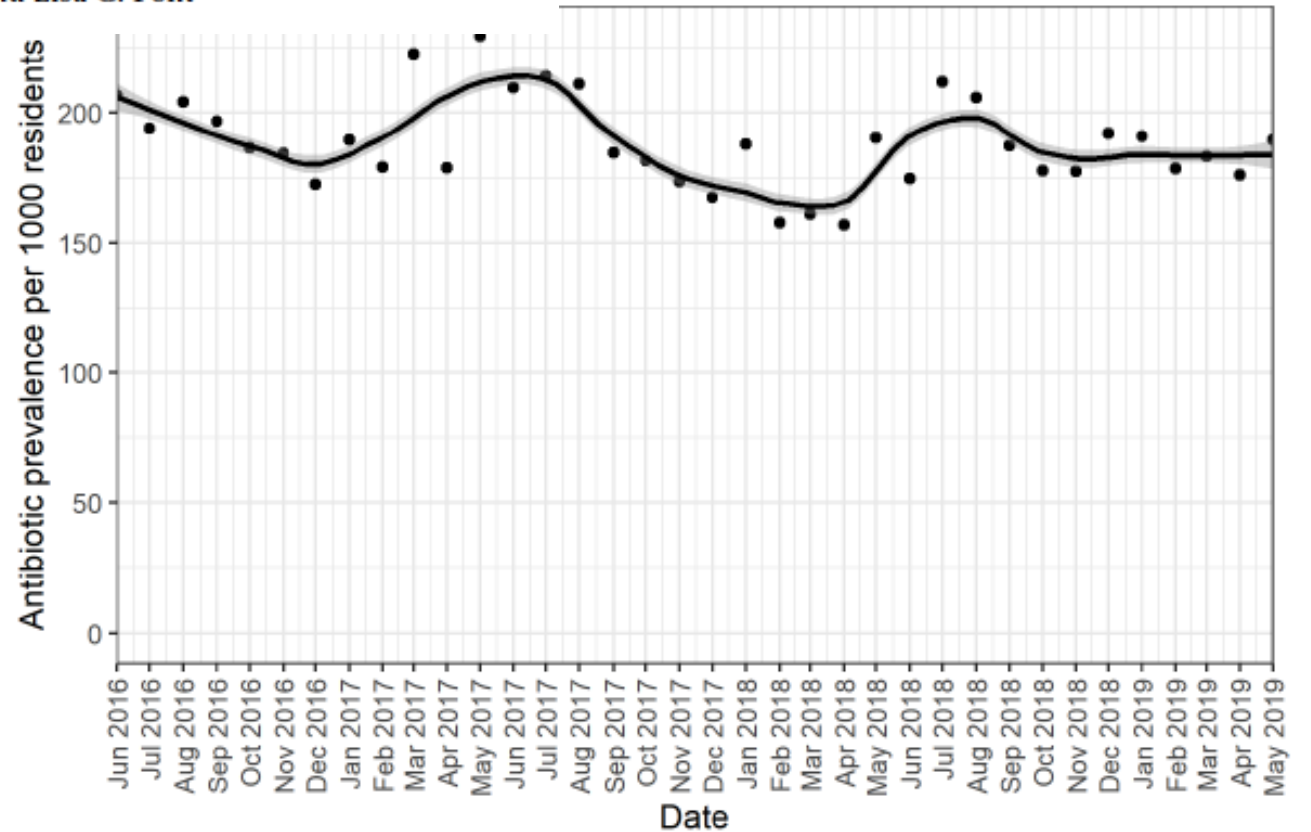
OUTBREAK network members use a multi-disciplinary approach and connect experts from a range of organisations who together are uniquely skilled to generate, collate and deliver trusted and scientifically defensible insights on drug resistance.



Article

Real-World Data about Commonly Used Antibiotics in Long-Term Care Homes in Australia from 2016 to 2019

Chloé C. H. Smit ^{1,*}, Kris Rogers ¹, Hamish Robertson ², Katja Taxis ³ and Lisa G. Pont ¹





Article
**Real-
Long**

Chloé C. J.



Smit et al, Antibiotics (2023)

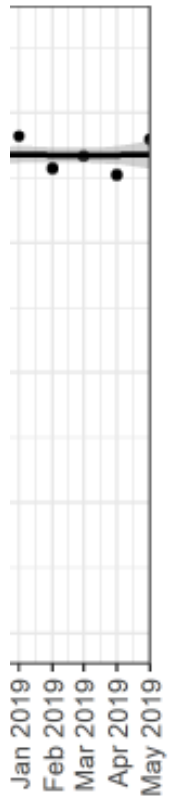
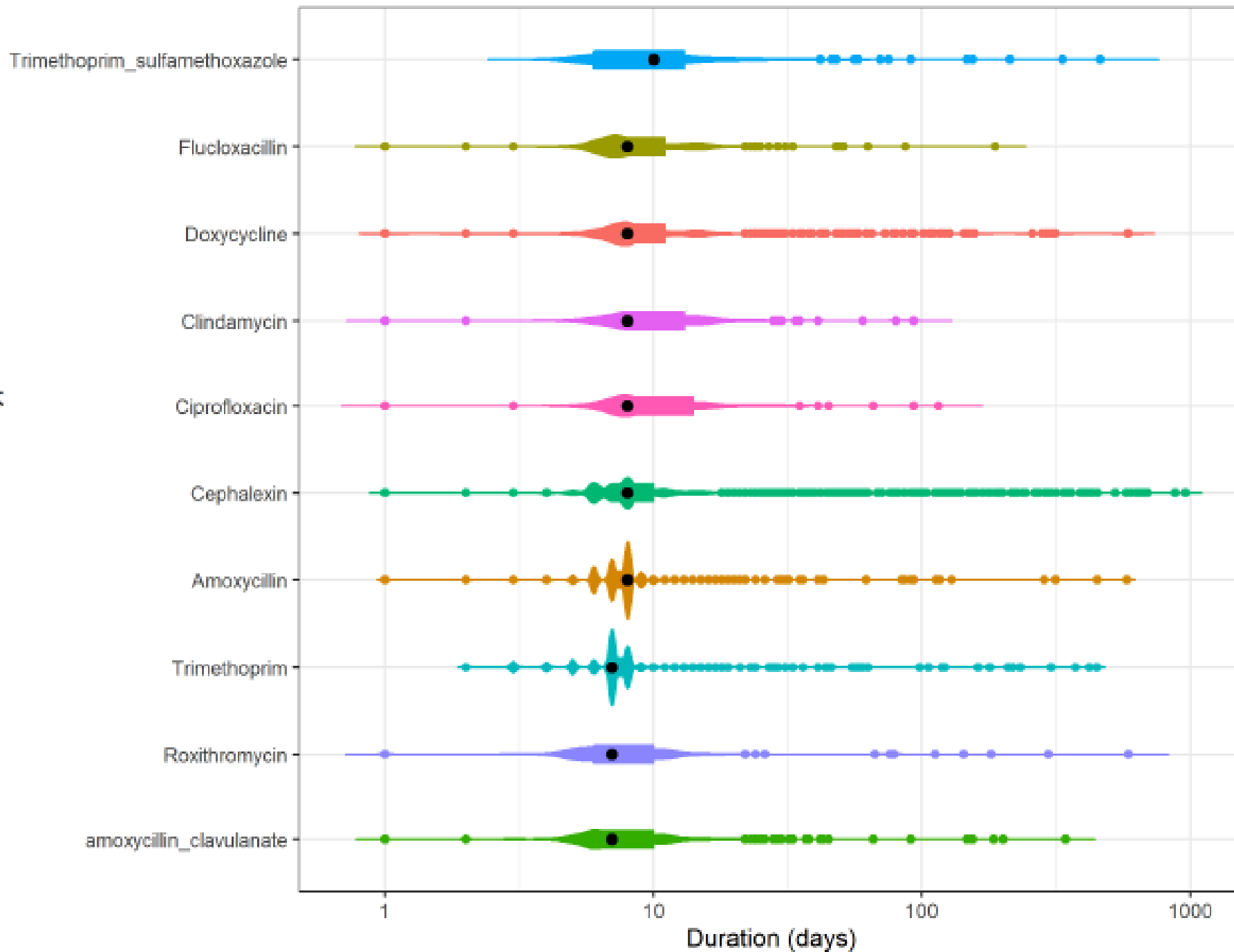


Figure 2. Monthly prevalence of antibiotic episodes per 1000 residents of the 10 most frequently used antibiotics.

Antibiotic Type



Challenges in measuring quality and safety in older populations

- Accessing real world data for older populations
- Development of robust definitions of quality and safety for medicine use
- System level solutions to improve quality and safety of medicines use

Thank you for your attention

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**Co-funded by
the European Union**

