Infection Prevention Challenges and Priorities in Aged Care

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Acknowledgement of Country

I would like to begin by acknowledging the Whadjuk people of the Noongar nation as the Traditional Custodians of the land on which we meet today. I pay my respects to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples here today.

Aim

- To examine key challenges in infection prevention and control in Australian aged care and identify practical priorities to strengthen IPC systems and improve resident outcomes.

Learning outcomes

- To describe the burden and impact of healthcare-associated infections in aged care
- To examine some key challenges in infection prevention and control in the Australian aged care context
- To analyse the underlying factors contributing to these challenges
- To identify practical priorities and strategies to strengthen IPC practices and improve resident outcomes

Conflict of Interest Disclosure

- I, Luis Mata-Mendz, have no actual or potential conflict of interest in relation to this presentation.

Introduction

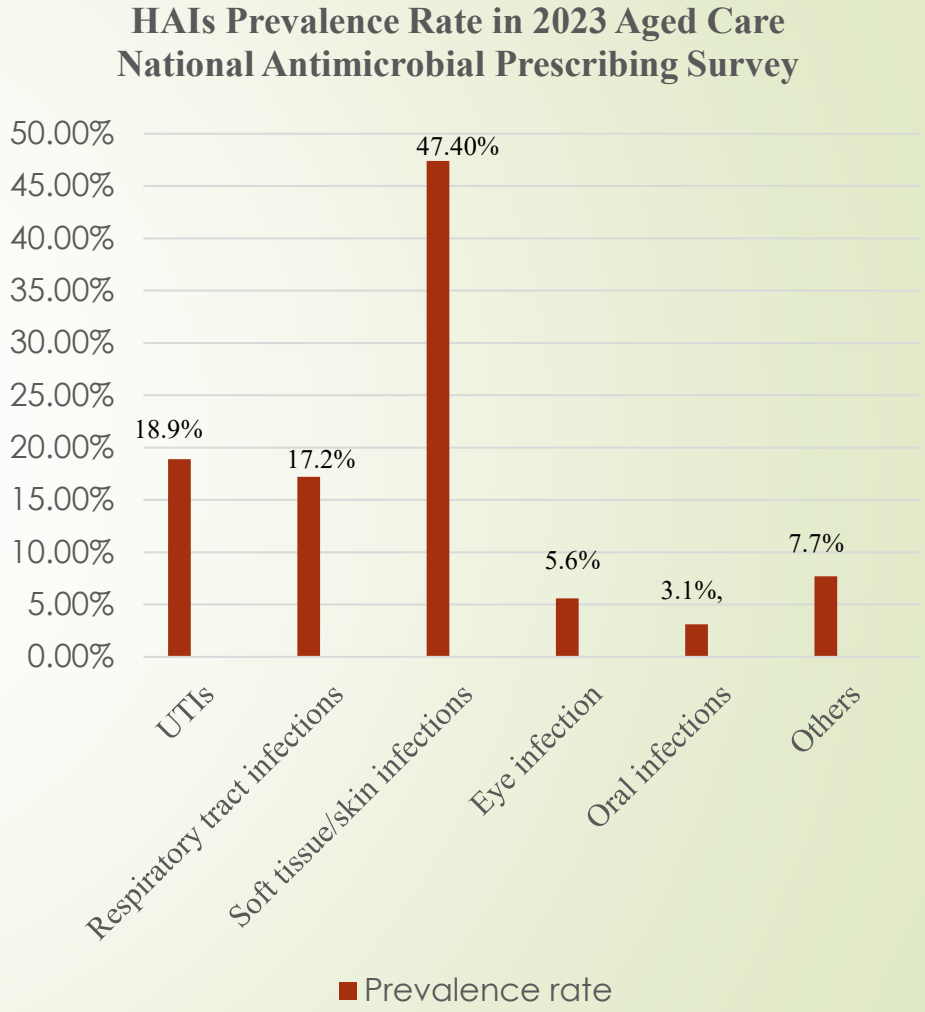
Why IPC?

- To protect the vulnerable older adults from HAIs associated with increased hospitalisation, mortality, and morbidity.
- No data HAIs costs: Lack of standardised surveillance and consistent IPC structures
- Data from other healthcare settings (hospitals)
  - Prolong hospital stays by 181.1 days
  - National average cost is $2,074 per acute overnight stay and $37,539 in extra costs.

Australian Commission on Safety and Quality in Health Care (ACSQHC), 2018

Why IPC Matters in Aged Care

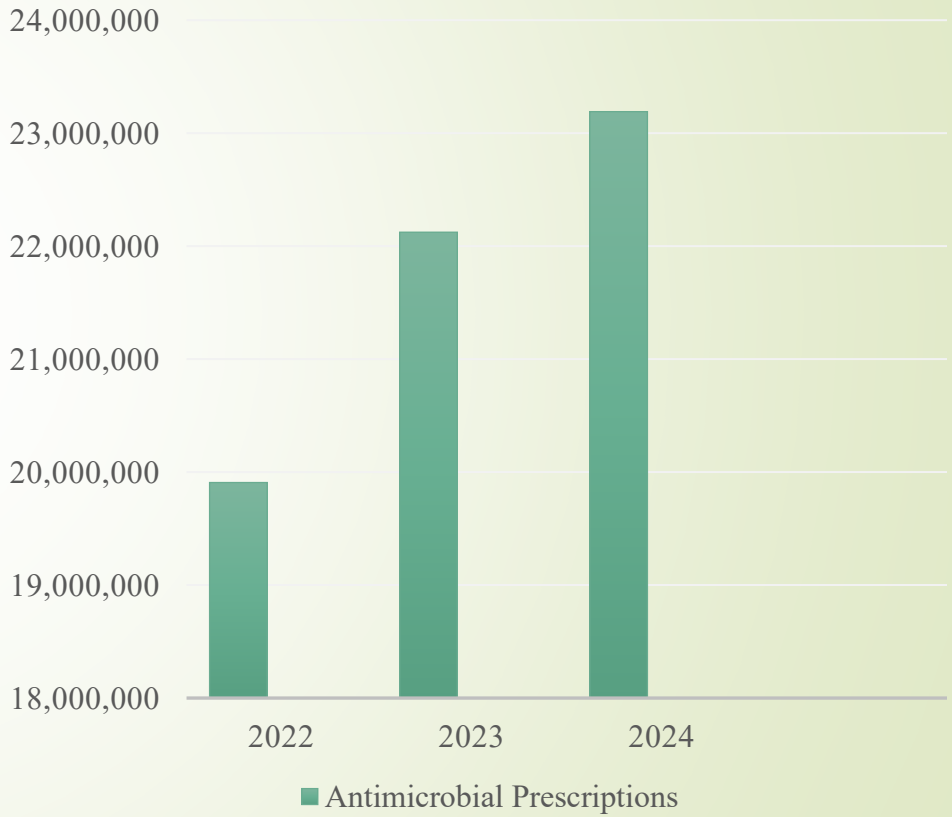
- IPC = safe, high-quality aged care.
- IPC prevents (HAIs)
- 2023 Aged Care National Antimicrobial Prescribing Survey in 852 RCFs shows prevalence of HAIs 3.6%



Aged Care National Antimicrobial Prescribing Survey (AC NAPS), 2023

- IPC reduce economic/financial burden of HAIs.
- Costs of Antimicrobial therapy
- Antimicrobial prescription has steadily rose between 2022 and 2024 as Figure 2 shows.

Figure 2
Antimicrobial Prescription in Australian RACFs 2022-2024



Australian Commission on Safety and Quality in Health Care (ACSQHC) (2025) antimicrobial use report

Budget Constraints and Competing Priorities

- In 2024, $3.7 million for research to improve IPC.
- Competing priorities in 2025-2026 $2.9 billion budget.
  - $2.6 billion -Wages
  - $30.1 million- home support program
  - $109 million-Assessment for access to right services
  - $3.1 million-innovation in remote locations
  - $5.7 million-Continuous quality improvement
  - $116.1 million- best practice regulation
  - $4.0 million -Workforce support (Tropical Cyclone Alfred response

Australian Government aged care budget data (2025–2026) Schults et al., 2025

Challenge 1: The IPC Lead Role—Capacity and Resourcing

Mandated IPC Leads Roles

- Observing, assessing and reporting
- Developing IPC procedures
- Advising on the best practice
- Oversighting, auditing, and reviewing routine IPC process
- Assessing the staff education and capability
- On-site outbreak management
- Service-specific outbreak preparation, planning, and readiness

Key Barriers

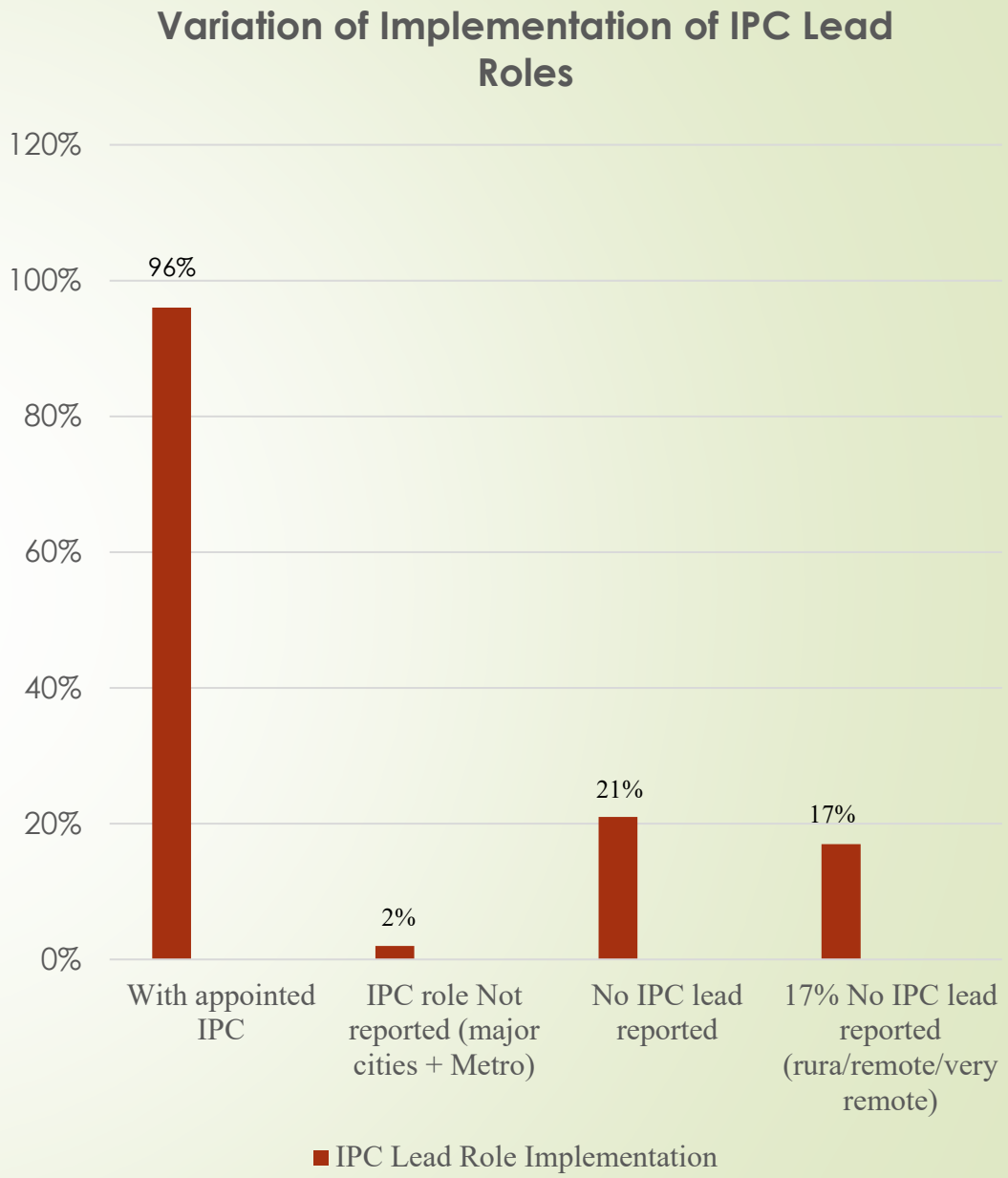
Inconsistent guidance and tailored training.

- Lack of guidance: IPC leads struggle and may switch recommendations
- Insufficient time allocated, heavy workload and burnout: 63% of aged care staff and Evidence-practice gap
- Transitional challenges: Initially ACIPC course content not tailored to the aged care context, now a great improvement
- Role clarity and description
- Site-specific operational variability

Lee et al., 2025, Tropea et al., 2022/2026, Baswa et al., 2022

Variation in Implementation and Uptake of IPC Lead Roles

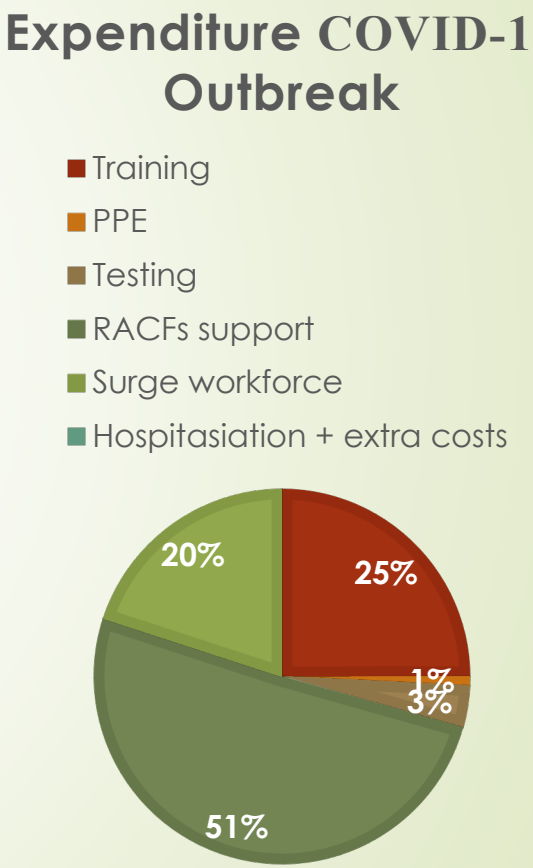
- There is variation in the implementation and uptake of IPC lead roles in Australian aged care settings as Figure 4 shows.



Department of Health, Disability and Ageing (2024)

Challenge 2: Financial impact of outbreaks and IPC Measures

- Limited data on the cost of an outbreak.
- Example COVID-19 outbreak:
  - More than $1.6 billion was invested in the aged care
  - PPE- $3.3 billion
  - Workforce training- $101.2 million
  - Testing $145.9 million
  - residential aged care providers support- $205.3 million
  - Surge workforce- $81.0 million
- ACSQHC (2018) national average: $2,074 per acute overnight stay and $37,539 in extra costs.
- Lee et al. (2020) $250.0 per bed day and infection attributed cost $96.7 per infection.



Australian Government COVID-19 aged care response funding, Australian Commission on Safety and Quality in Health Care (ACSQHC) (2018), Lee et al., 2020

Reimbursement Schemes

- RACFS lack adequate reimbursement for vaccinations
- Renumeration directed to practices not individual GPs
- Inadequate budget: $39.8 billion ($7,895.4 per older person); $3.7 million towards IPC research .
- 2014-2023- 0.19% of research funding dedicated to IPC.
- 2020 no IPC despite COVID-19
- No funding means inadequate focus on research
- Up to 40% of IPC guideline recommendations in Australia are based on low quality evidence

Prevention is more cost-effective than managing outbreaks.

- Prevention through research= $3.7 million yet outbreak management can cost $1.6 billion (e.g. COVID-19).
- Consequences and financial burden of outbreak are adverse
- IPC prevent hospitalisation/costs, but & improve aged care quality

Schults et al., 2025, McGregor et al., 2025

Challenge 3: Vaccination Uptake

Barriers

Barriers	Potential solutions
Operational barriers	Shift towards nurse-led vaccinations Cold chain management of vaccines (uninterrupted storage and supply of vaccines)
Communication barriers	Translation of vaccine information, use CALD services. On-site education of residents and families.
Coordination barriers	Use of electronic documentation systems Collaboration of aged care facilities for policy development
Financial barriers	More budget allocation and government-driven incentives/better reimbursement schemes. 33% of the lack payment and experience confusion over government reimbursement

Recommended Vaccination Schedule

Age bracket	Vaccination type	Barrier
50 years+ (ATSI)	Pneumococcal Shingles (herpes zoster)	Language/cultural barriers, mistrust, consent difficulties, fear of side effects , access to vaccines
65 years+	Influenza (annually)-non-ATSI Shingles (herpes zoster)-non-ATSI	Family influence Limited knowledge, mistrust
70 years +	Pneumococcal-non-ATSI	Family influence Limited knowledge, mistrust
65 years + in residential aged care homes	RSV (Starting in mid-May 2026)	Family influence Limited knowledge, mistrust

McGregor et al., 2025

Cross-Cutting Priority: Strengthening IPC programs

Findings from a multi-methods cross-sectional study:

- Australian IPC Programs are robust:
- All have IPC committee
- 60% have IPC lead position description
- All have standard transmission-based precautions.
- 99% have HAIs surveillance
- 98% have antimicrobial stewardship policy
- 100% of RACFs provide staff training

Systemic enablers

- Research: To develop evidence-based resources for the staff.
- Structured training programs:
- Positive/supportive workplace culture
- Adequate staffing

Tropea et al., 2026

Recommendations/Priorities for action

Challenge	Recommendations
IPC Lead role	Clear roles as per the Aged Care Quality and Safety Commission, supported transitional programs and resourcing.
Financial constraints	More fundings, better renumeration and reimbursement schemes
Vaccination	Education, streamlining communication and cold chain management of vaccines
Coordination challenges	Use of electronic documentation systems, collaboration and innovative IPC models
Policy and training	Consistent & training programs, supportive leadership culture
Staffing	Cross-sector collaboration between local learning institutions and RACFs for talent acquisition, staff training, better wages and remunerations
Antimicrobial stewardship	Training and education on safe and optimal use of antibiotics, prospective audit and feedback or preauthorisation

Houghton et al., 2020 (Cochrane review), Lee et al., 2025, Tropea et al., 2026

Conclusion and Call to Action

- ACFs are high-risk environment for HAIs.
- HAIs contribute to mortality, hospitalisation, and reduced quality of life.
- Prevention is cost-effective than outbreak management.
- Effective IPC require three interconnected pillars:
  - strategic financial investment,
  - Skilled staff,
  - Community-centred vaccination approaches.
- Leadership ties these pillars together by creating an enabling environment with positive IPC culture.

Call to Action

You are the guardians of safety, dignity and quality in aged care; be the infection prevention leaders and change agents that your residents and team needs.

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