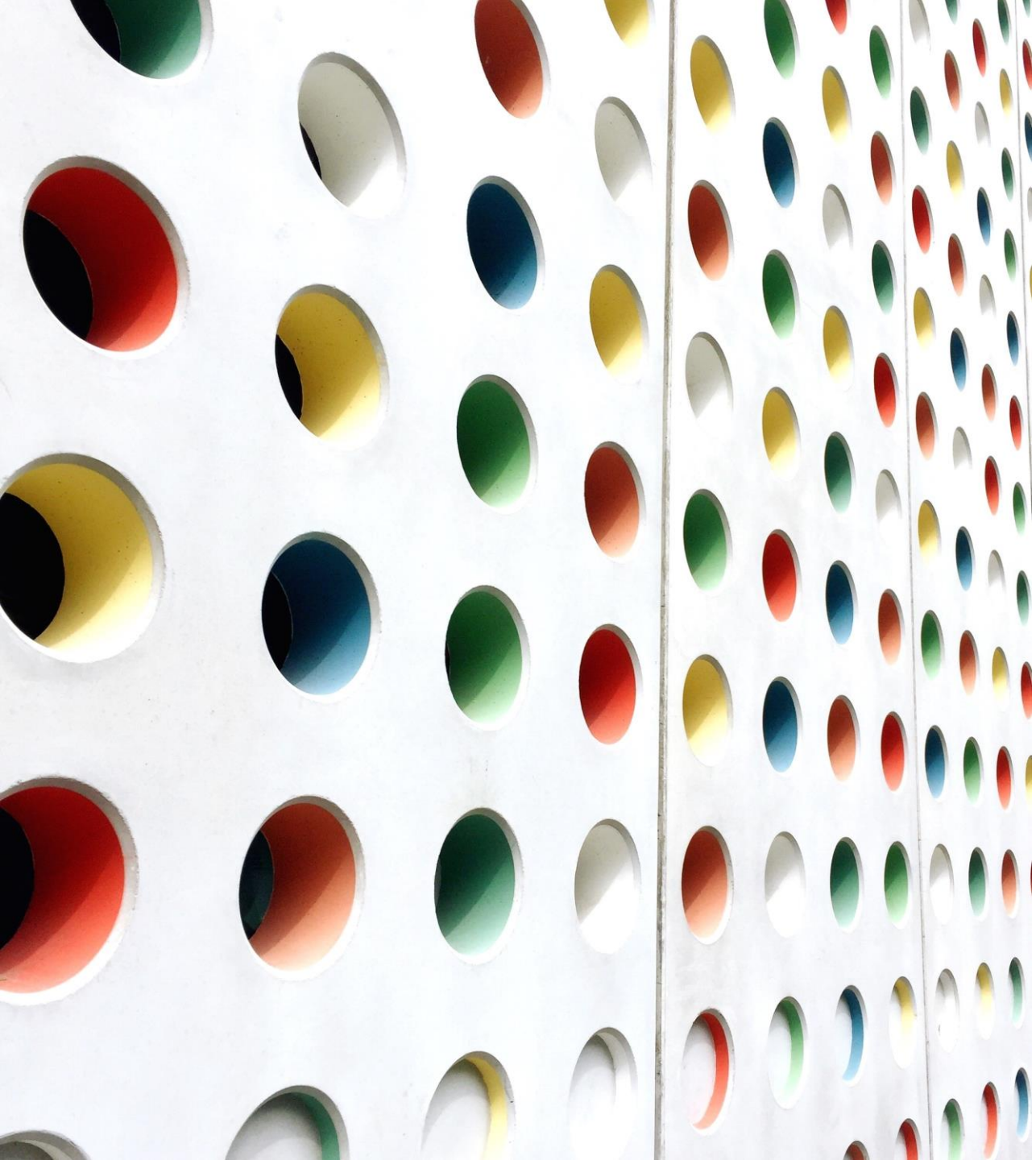


SUCCESSION, SUSTAINABILITY, AND THE ADVANCEMENT OF INFECTION PREVENTION AND CONTROL

in Aged Care

PROFESSOR LISA HALL

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA
CREATE CHANGE

GUIDANCE

NCAS

Disclosures

Nothing to declare.

Viewpoints are not those of my employers!

Infection Prevention & Control in Aged Care

“The Good, The Bad and the Ugly”

1966 Italian epic spaghetti Western film

“a situation or a group of things where there are elements of both good and bad, often with an added sense of complexity or moral ambiguity” [Quora – 2024]

Complexity– funding context

- In 1997, the Australian Government transformed the system under the Aged Care Act into a free-market model.
- Predominantly publicly funded but largely outsourced to the private and not-for-profit sectors
- Aged care and health care treated as two different separate industries.
- Packaged as a social model of care - reduced regulation
- "By turning aged care into social care, the sector has been able to justify not having good infection prevention and control measures, sufficient staff ratios, and adequately trained staff."

Prof Kathy Eager, University of Wollongong – October 2020

A disaster waiting to happen….


THE LANCET

Experts criticise Australia's aged care failings over COVID-19

Three-quarters of deaths from COVID-19 in Australia have been in aged care homes. Experts say that the pandemic is only exposing systemic weaknesses. Sophie Cousins reports.

WORLD REPORT | VOLUME 396, ISSUE 10259, P1322-1323, OCTOBER 24, 2020

"There were not enough workers to start with; the workforce that exists doesn't have the training for a contemporary aged care system. They're not equipped to manage disease complexity and they're not equipped to deal with ethical human rights issues. So, then COVID-19 arrives and there are not enough staff,……there are staff who don't know what they're doing, staff who haven't been trained in infection control…."

Professor Joseph Ibrahim, head of the Health Law and Ageing Research Unit at Monash University

75% of all COVID-19 deaths in the first year of the pandemic were in residential aged care facilities

Complexity - The people

The typical aged care recipient is very frail, elderly, with multiple health conditions.

In 2023/4:

- More than half of people entering permanent residential care were aged 85 and over
- Just over half of people in permanent residential aged care have dementia
- One third of people using aged care were born overseas, have a parent who was born overseas, or have a preferred language other than English.

https://www.aihw.gov.au/reports-data/health-welfare-services/aged-care/overview

Workforce – the good

2023 budget: a new funding model, mandated minimum staffing and a pay rise for aged care workers

- Every aged care home is now required to have:
  - at least one Registered Nurse on-site and on duty 24 hours a day, 7 days a week.
  - 215 minutes of care per resident per day, including an average of 44 minutes of care from a Registered Nurse. -------- but only 13% of homes have a 5 star rating on this indicator
- All residential aged care homes must have an ongoing infection prevention and control (IPC) Lead on site.
- ACIPC playing a key role!

Workforce – the bad

The retirement cliff (AIHW data)

Aged care workforce	% aged 55-64	% aged 65+
Registered Nurse	19	6
Carers	20	5

Retention (DoHAC data)

Table 2.1B National quality indicator data, workforce indicators, April to June 2024

Return to contents

Quality Indicator	Number of staff employed at the start of the quarter	Number of staff who stopped working during the quarter	Proportion of staff who stopped working during the quarter
Workforce			
All eligible staff	173,270	9,007	5.2%
Service managers	5,304	346	6.5%
Nurse practitioners or registered nurses	29,946	2,120	7.1%
Enrolled nurses	12,245	651	5.3%
Personal care staff or assistants in nursing	125,775	5,890	4.7%

Department of Health and Aged Care, data extracted 22 August 2024, published on GEN-agedcaredata.gov.au

Workforce – the ugly

- implemented in haste (in response to COVID-19)
- challenging to section time for staff to complete the required IPC training.
- Aged care nurses nominated to complete the IPC training were not always the most appropriate nurses to undertake the training and/or it was difficult to find an appropriate nursing staff member.
- The aged care nurse workforce profile -less experienced nursing staff, staff for whom English is a second language, and/or staff who may have completed a Vocational Education and Training level qualification. As a result, not all IPC course participants were prepared for or fully engaged to complete the postgraduate level training course.
- Attracting and retaining IPC Lead roles were also impacted by existing workforce challenges (particularly those experienced in rural and remote locations)

Data – the good

Watson E, Rajkhowa A, Dunt A, Bull A, Worth LJ, Bennett N for the NISPAC Advisory Group
Evaluation of an infection surveillance program in residential aged care facilities in Victoria, Australia BMC Public Health 2024 Open Access DOI:10.1186/s12889-023-17482-x

Watson E, Dowson L, Dunt D, Thursky K, Worth L, Sluggett JK, Appathurai A, Bennett N for the NISPAC Advisory Group
Identifying barriers and enablers to participation in infection surveillance in Australian residential aged care facilities
BMC Public Health 2024 Open Access DOI:10.1186/s12889-023-16891-2

In 2023 the NAPS involved:

- 53,843 residents
- 852 facilities (30.4% of all aged care facilities: 64.5% of public, 23.8% of not-for-profit, 26.6% of private)

Aged Care NAPS

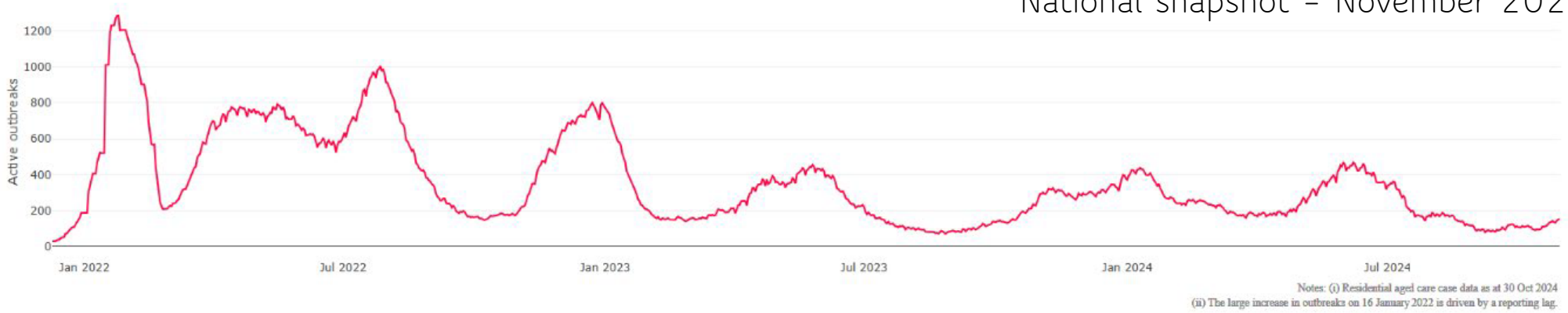
Measurement	Prevalence			
	2021	2022	2023	HALT 2016-17*
Residents with signs and/or symptoms of **at least one suspected infection**	3.1	3.0	**4.0**	**2.1**
Residents prescribed **at least one antimicrobial**	14.6	13.6	**13.2**	**-**
Residents prescribed at least one antimicrobial (excluding PRN orders not administered in the last 7 days)	10.4	10.5	**10.7**	**-**
Residents prescribed at least one antimicrobial (excluding topical antimicrobials)	7.3	7.7	**7.8**	**4.9**

Crude comparison with 3rd HALT study (2016-17) -2,232 LTCFs
Note: **Antiviral (systemic use**), topical and antiseptic agents excluded.
Reference: European CDC PPS of HAIs and AM use in European LTCFs: 2016-2017, Stockholm: ECDC; 2023.

Data – the bad & the ugly

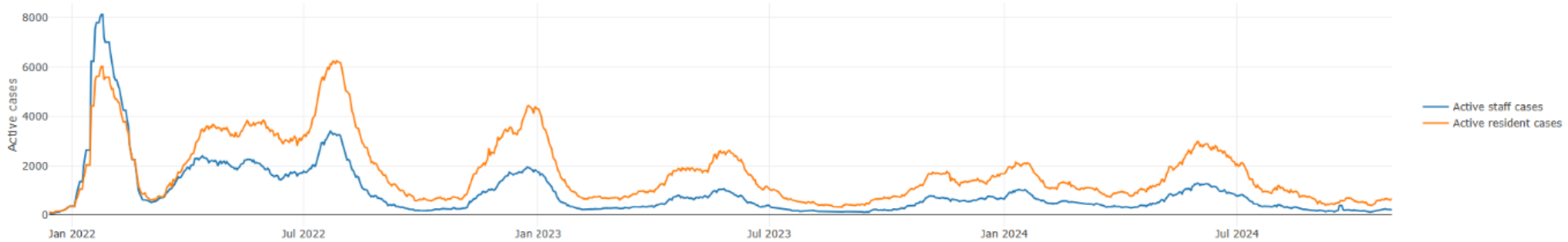
COVID-19 outbreaks in Australian residential aged care homes
National snapshot – November 2024

Figure 1: National outbreak trends in aged care



Notes: (i) Residential aged care case data as at 30 Oct 2024
(ii) The large increase in outbreaks on 16 January 2022 is driven by a reporting lag.

Figure 2: Trends in aged care cases – December 2021 to present



Notes: (i) Residential aged care case data as at 30 Oct 2024
(ii) The large increase in active cases on 16 January 2022 is driven by a reporting lag.
(iii) Cases are considered active for 14 days from the date they are reported.

Figure 3: COVID-19 deaths in RACHs overlaid with community deaths

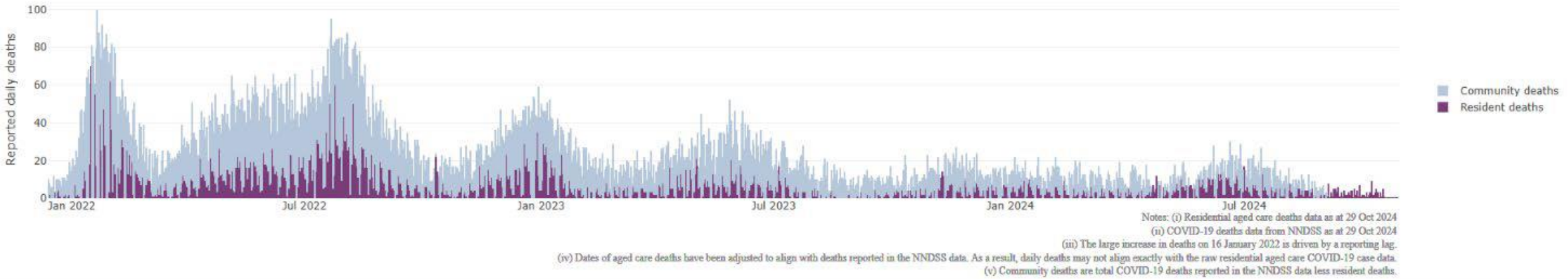


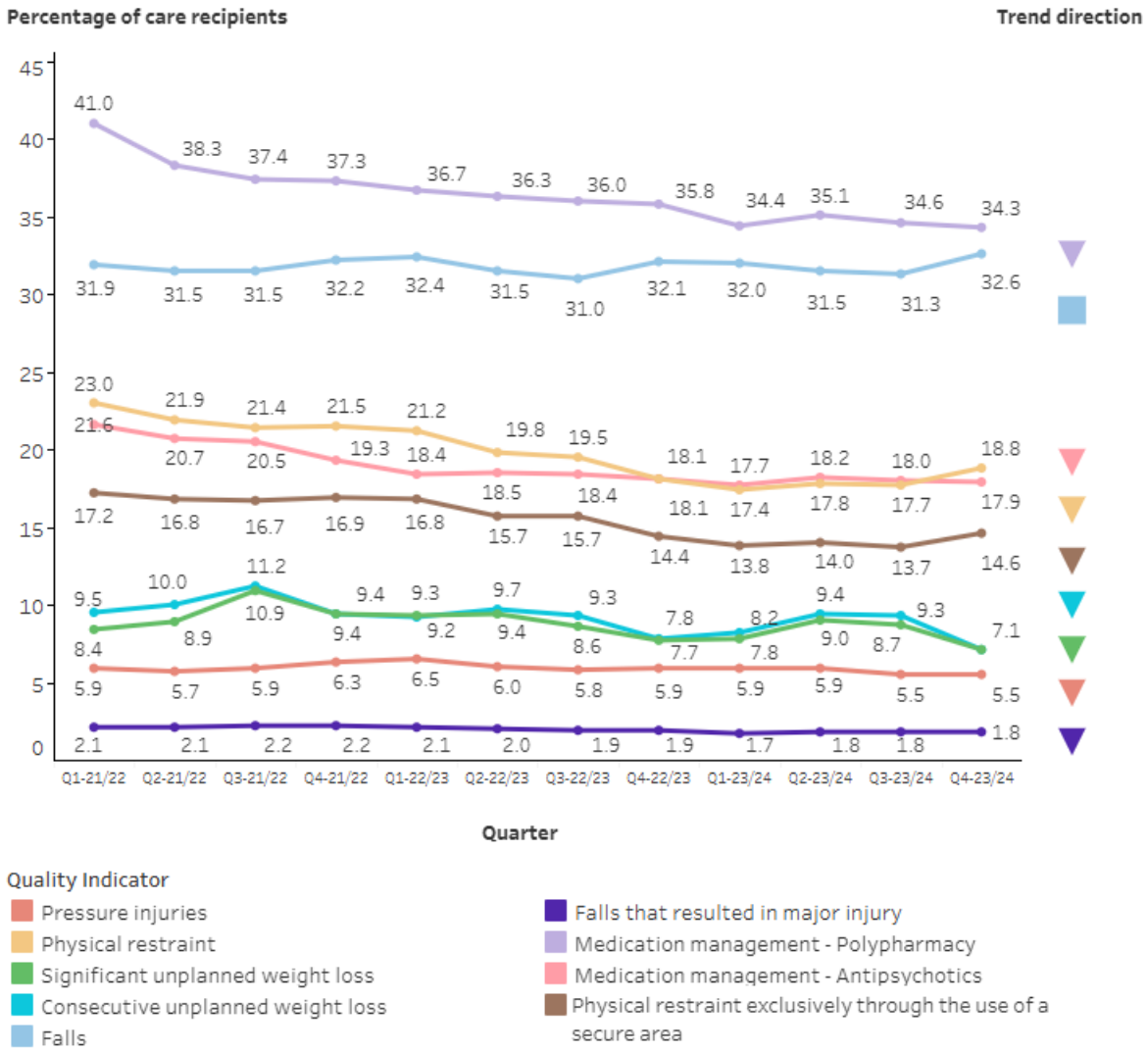
Table 1: Aged Care COVID-19 data as at 8.00am 31 October 2024[1]

Category	Active[2]	Change in active (7 days)	Cumulative Total	Cumulative increase (7 days)
Outbreaks[3]	157	22	23,387	78
RACHs affected	157	22	2,898	0
Resident cases[4]	668	31	227,281	640
Resident deaths	N/A	N/A	7,108	12
Staff cases	230	-15	122,047	278

Residential aged care homes with active outbreaks are included in Appendix.

There has been a decrease year on year for the rate of case fatality, from a 33% case fatality rate in resident COVID-19 cases in 2020 to 3.3% in 2022 and 2.3% since 1 July 2024.

Trends in quality indicator performance over time, Q1 2021–22 to Q4 2023–24



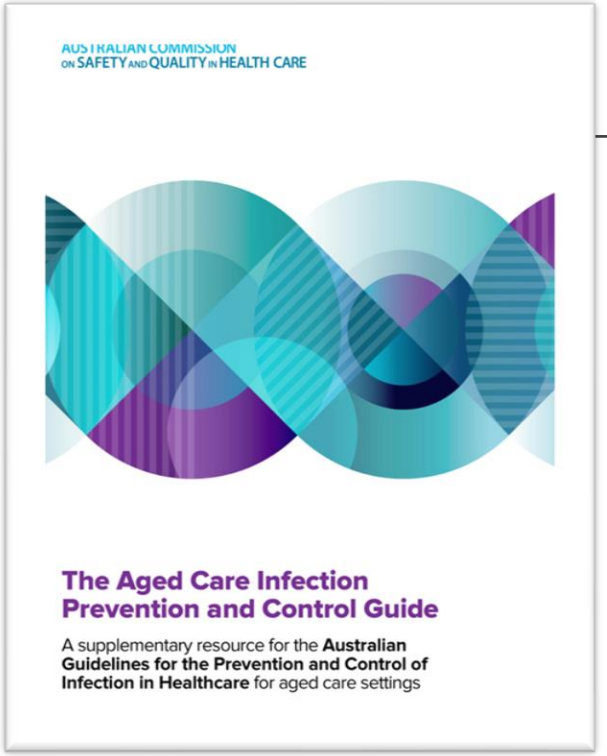
Note: Down arrow icon (▼) indicates a statistically significant downward trend at $p < .05$. Square icon (■) indicates a statistically non-significant trend ($p \geq .05$).
GEN-agedcaredata.gov.au

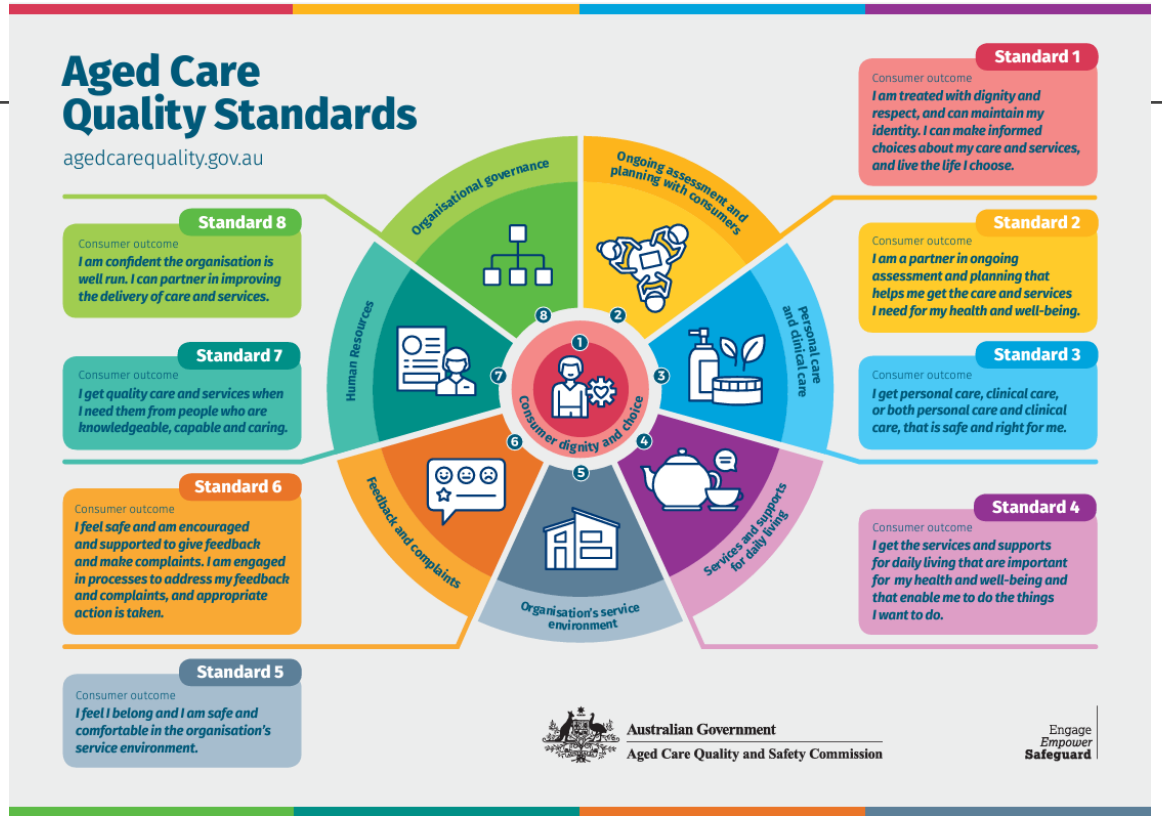
<u>New indicators from 2023</u>

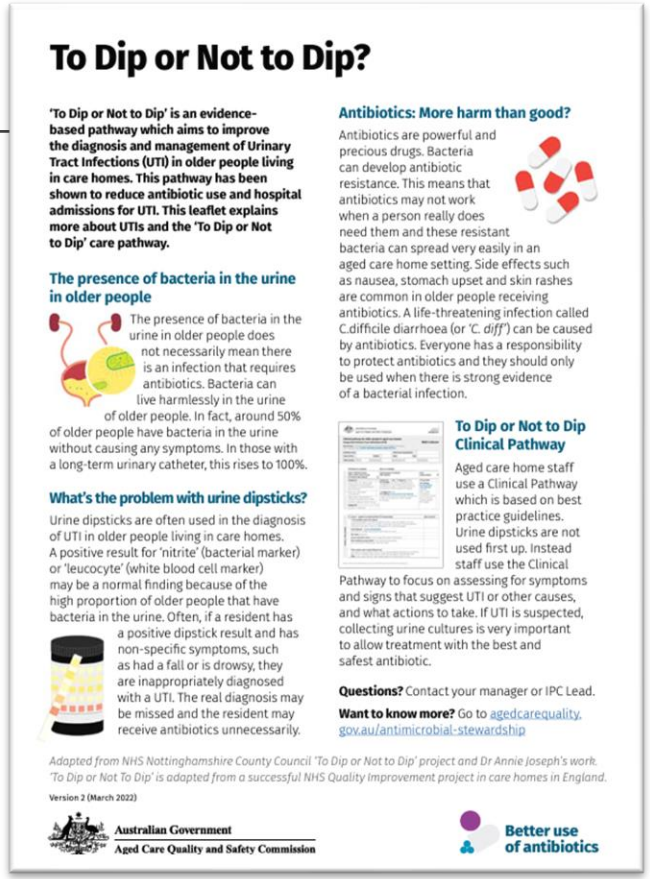
- activities of daily living – the percentage of care recipients who experienced a decline in activities of daily living
- incontinence care – the percentage of care recipients who experienced incontinence associated dermatitis
- hospitalisation – the percentage of care recipients who had one or more emergency department presentations
- workforce – the percentage of staff turnover
- consumer experience – the percentage of care recipients who report 'good' or 'excellent' experience of the service
- quality of life – the percentage of care recipients who report 'good' or 'excellent' quality of life.

Where are the infection control and AMS indicators?

Guidelines – the good







Make sure to attend talks from government agencies during this conference!

Are they implementable?

O28

How actionable are infection prevention and control guidelines in residential aged care? A document analysis based on a behaviour specification framework

Joanne Tropea[1,2], Jill Francis[3], Lyn-li Lim[4], Noleen Bennett[4], Kwang Lim[1,2], Kirsty Buising[1,2], Deirdre Fetherstonhaugh[5], Sanne Peters[3]
[1]Royal Melbourne Hospital, Melbourne, VIC, Australia; [2]Department of Medicine, Royal Melbourne Hospital, University of Melbourne, VIC, Australia; [3]School of Health Sciences, University of Melbourne, Melbourne, VIC, Australia; [4]VICNISS, Peter Doherty Institute, University of Melbourne, VIC, Australia; [5]Australian Centre for Evidence Based Aged Care, La Trobe University, VIC, Australia

Implementation Science 2023, **18(2):**O28

"national guideline recommendations are open to interpretation and are not specific or actionable".

Guidelines – the bad and the ugly

Research article | Open access | Published: 23 January 2024

The quality of care delivered to residents in long-term care in Australia: an indicator-based review of resident records (CareTrack Aged study)

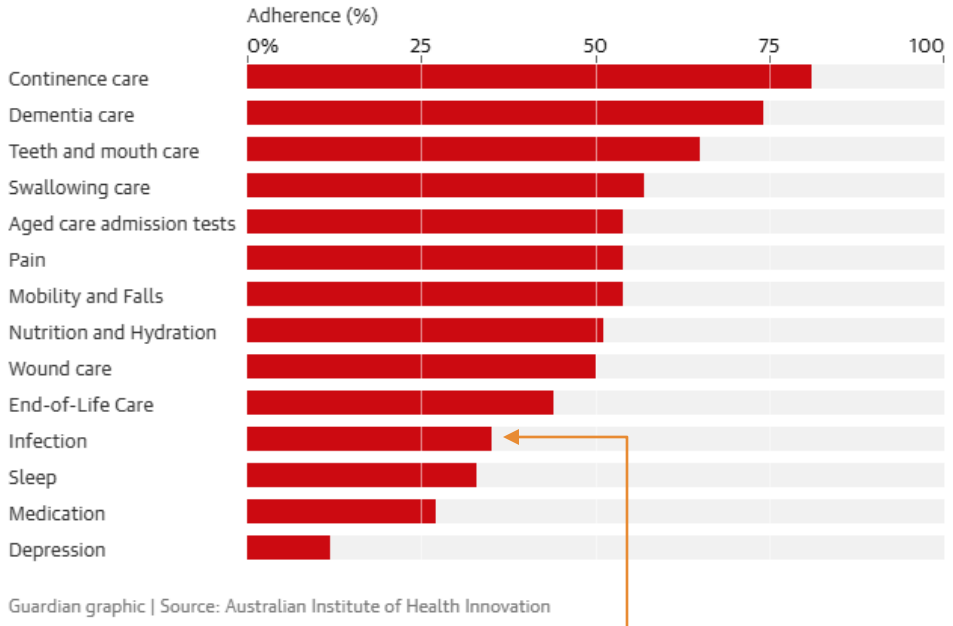
Peter D. Hibbert, Charlotte J. Molloy, Ian D. Cameron, Leonard C. Gray, Richard L. Reed, Louise K. Wiles, Johanna Westbrook, Gaston Arnolda, Rebecca Bilton, Ruby Ash, Andrew Georgiou, Alison Kitson, Clifford F. Hughes, Susan J. Gordon, Rebecca J. Mitchell, Frances Rapport, Carole Estabrooks, Gregory L. Alexander, Charles Vincent, Adrian Edwards, Andrew Carson-Stevens, Cordula Wagner, Brendan McCormack & Jeffrey Braithwaite

BMC Medicine **22**, Article number: 22 (2024) | Cite this article

Aged care residents only receiving appropriate care half the time, world-first Australian study finds

Research finds residents receive care in line with guidelines 53.2% of the time on average and just 12% of the time for depression

How often is evidence based care being delivered?



Guardian graphic | Source: Australian Institute of Health Innovation

So how else do we advance aged care IPC in a sustainable way?

1. A move from control to prevention

"Infection prevention should focus on supporting older people to maintain and improve their physical and mental health, so that their immune system is better equipped to fight off infections if they occur. Preventive health strategies for older people should focus on education and promotion of:

· Immunisation · Skin care · Mental health · Diet, nutrition and hydration · Oral care · Falls prevention · Maintaining psychosocial health and wellbeing during outbreaks · Palliative care · Participation in advance care planning. "

ACSQHC Aged Care IPC Guide – Chapter 8

Time for new bundles and implementation strategies??

Realist review

Prieto J, Wilson J, Tingle A, Cooper E, Handley M, Rycroft-Malone J, *et al*. Strategies for older people living in care homes to prevent urinary tract infection: the StOP UTI realist synthesis. *Health Technol Assess* 2024;28(68)

"Nine context-mechanism-outcome configurations provided an explanation of how interventions to prevent and recognise urinary tract infection might work in care homes".

1. recognition of urinary tract infection is informed by skills in clinical reasoning
2. decision-support tools enable a whole care team approach to communication
3. active monitoring is recognised as a legitimate care routine
4. hydration is recognised as a care priority for all residents
5. systems are in place to drive action that helps residents to drink more
6. good infection prevention practice is applied to indwelling urinary catheters
7. proactive strategies are in place to prevent recurrent urinary tract infection
8. care home leadership and culture fosters safe fundamental care
9. developing knowledgeable care teams.

2. A systems approach

"Esther lived alone and one morning developed breathing difficulties. After contacting her daughter, who did not know what to do, Esther sought medical advice.

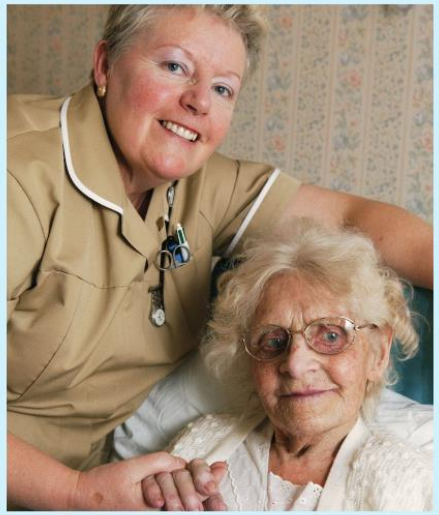
She was seen by a district nurse and told to visit her general practitioner, who said that she needed to go to hospital and called an ambulance. After being admitted to emergency care she retold her story to a variety of clinicians at the hospital during a five-and-a-half- hour wait.

Esther saw a total of 36 different people and had to retell her story at every point, while having problems breathing. A doctor finally admitted her to a hospital ward."

Case study 1

The Esther model

Health and care integration in Jönköping, Sweden – a collaborative approach to systems design



Care coordination in Sweden is complicated by a legal structure that gives the country's 21 counties responsibility for funding and providing hospital and physician services while the 290 municipalities are responsible for funding and providing community care.

Home health care (nursing services for sick patients) and home care (assistance with activities of daily living) are also provided by different professionals.

https://reports.raeng.org.uk/engineering-better-care/annex-1-study-of-the-esther-model

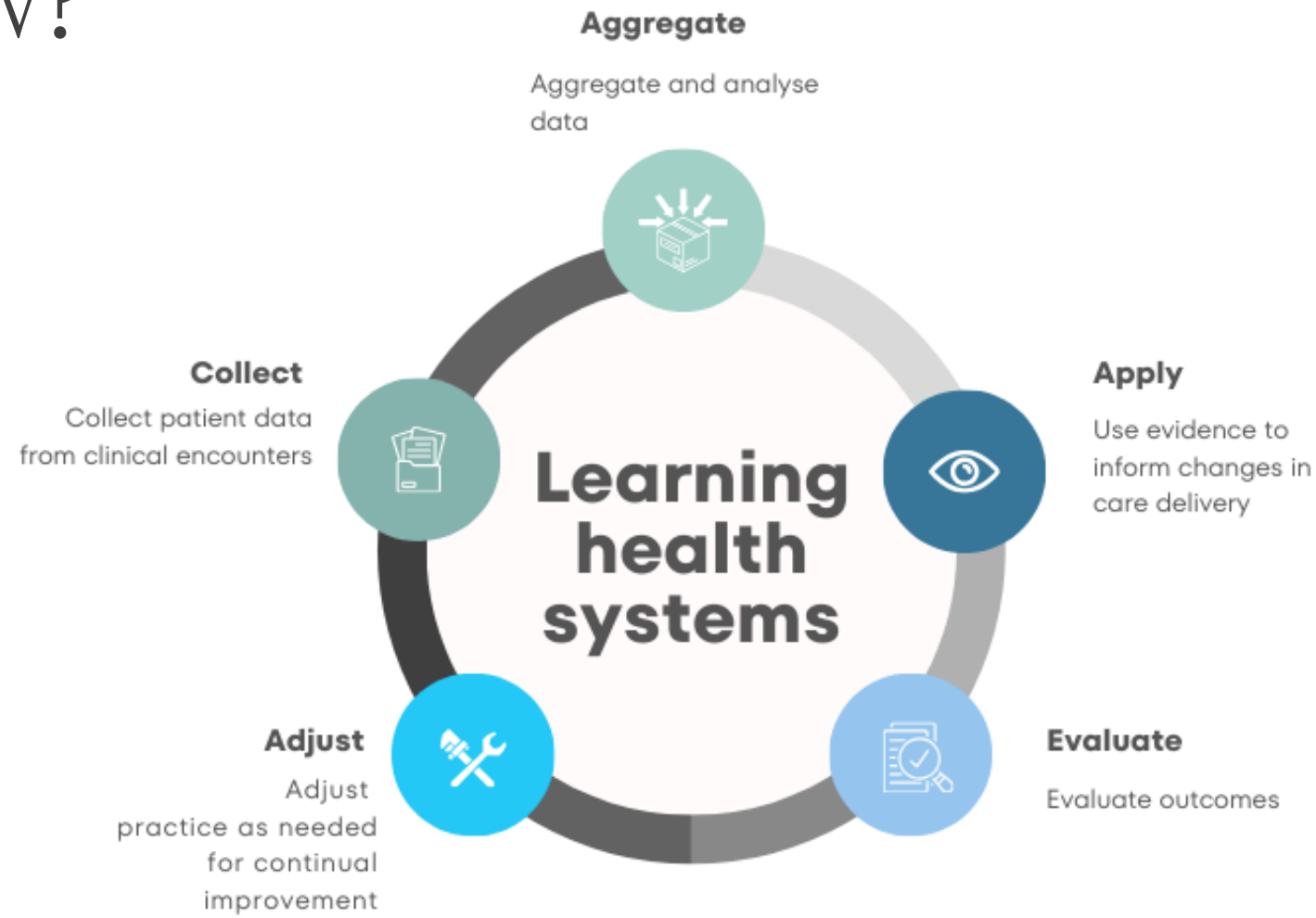
Person-centred care

- ‘Esther’ came to represent elderly persons who have complex care needs that involve a variety of providers.
- The idea was that care should be guided by the following questions:
  - What does Esther need?
  - What does she want?
  - What is important to her when she is not well?
  - What does she need when she leaves the hospital?
  - Which providers must cooperate to meet Esther’s needs?

The now widely adopted Esther model uses continuous quality improvement, cross-organisational communication, problem-solving, and staff training to provide the best care for elderly patients with complex care needs.

- A steering committee of the community care chiefs from municipalities, hospitals and primary care centres to address challenges across organisations.
- Four ‘Esther cafés’ in municipalities each year, which were cross-organisational, multiprofessional meetings for sharing and learning from the experiences of specific patients who were hospitalised in the past year and have continued on to home care or other services.
- Interorganisational training workshops on palliative care, nutrition and fall prevention, among other topics.
- An annual ‘strategy day’ for nurses and other staff, physicians, managers, as well as ‘Esthers’ themselves to come together to team build and generate priorities and ideas for addressing problems in care.
- In 2006 coaches were introduced to the model to promote the Esther Network vision and values and to support ongoing improvement.

How?



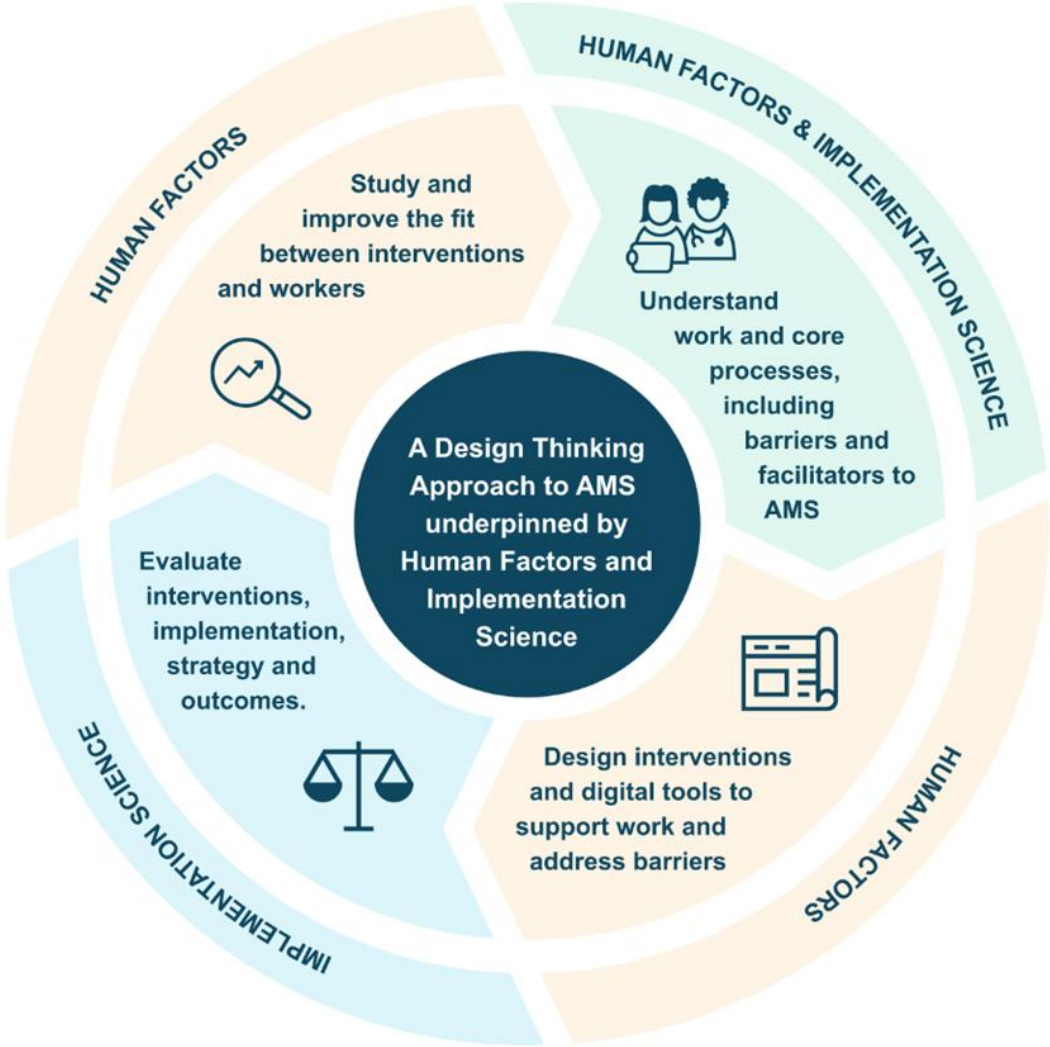
- Provide clinicians with strong, actionable data & tools., identifying the right performance metrics to hold them & their teams accountable for their patients' care.
- Reward providers & health systems for results & not activities.
- Real-time data capture & analysis enable rapid learning & adaptation.
- Interoperable health information systems facilitate data exchange among stakeholders.
- Promotion of continuous quality improvement optimises patient care & safety.
- Help to break down silos between clinical groups to prevent disease before it occurs.
- Strong emphasis on patient engagement, allowing patients to be active participants in decision making & research.

The Learning Health System toolkit…

RADAR
One Health

Redesign of Antimicrobial Stewardship Programs in the Digital Era across One Health (RADAR – 1H)

NCAS
National Centre for Antimicrobial Stewardship



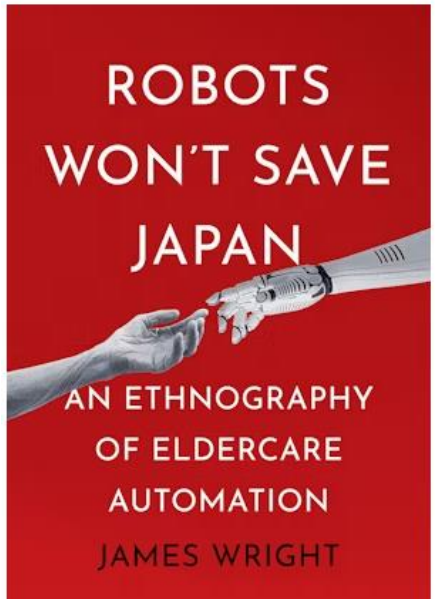
Human Factors and Ergonomics

Human Factors and Ergonomics (HFE) is the scientific discipline concerned with understanding and improving the interactions among humans and other elements of a system. HFE practitioners and researchers apply "theory, principles, data, and methods to design in order to optimise human well-being and overall system performance". (38) HFE focusses on human-centred design and uses a systems approach to ensure the health and wellbeing of workers and the safety of those impacted by work (i.e. patients, families and carers). (39, 40)

Implementation Science

Implementation science is the scientific study of methods and strategies to promote the systematic uptake of evidence-based practices and research into regular use by practitioners and policymakers. It draws on several frameworks to inform design of interventions and process evaluations to understand how the interventions are working, as well as guide effective research translation for sustained practice and policy change.

3. Robots?



MIT Technology Review

HUMANS AND TECHNOLOGY

Inside Japan's long experiment in automating elder care

The country wanted robots to help care for the elderly. What happened?

By James Wright January 9, 2023

"Existing social and communication-oriented tasks tended to be displaced by new tasks that involved more interaction with the robots than with the residents.

Instead of saving time for staff to do more of the human labor of social and emotional care, the robots actually reduced the scope for such work."

Paro, a fuzzy animatronic seal, is intended to provide a robotic form of animal therapy.

KIM KYUNG HOON/REUTERS/ALAMY

"One resident kept trying to "skin" Paro by removing its outer layer of synthetic fur, while another developed a very close attachment, refusing to eat meals or go to bed without having it by her side.

Staff ended up having to keep a close eye on Paro's interactions with residents, and it didn't seem to reduce the repetitive behavior patterns of those with severe dementia."

Where to from here?

- Stay engaged with ACIPC
- Advocate for better surveillance and reporting
- Bridge the disconnect between policy & practice through co-design and better implementation
- Take part in national projects – more prevention means less need for control!
- Engage with research findings from NHMRC and MRFF grants (expected 2025-2026)

Thank you!