Australian Commission on **Safety and Quality** in Health Care

NATIONAL MEDICINES SYMPOSIUM 2026

Medicines Stewardship

Dr Jay Ramanathan
Senior Staff Specialist, Clinical Pharmacology and General Medicine
Liverpool and Royal Prince Alfred Hospital

The state of medicines use, harm, and opportunities for improvement

Medicines Stewardship

What is Medicines Stewardship?

Structured, ***collaborative*** program of strategies and interventions that address challenges within a specific therapeutic area and ensure appropriate and efficient use of resources.

Goals:

- promote quality use of medicines (QUM)
- minimise harm to the individual and society
- improve health outcomes for the whole population
- avoid waste and manage medicine costs

QUM & Medicines Safety – Australia's 10th National Health Priority (2019)

BURDEN OF HARM

Medication harm is common, costly, & largely preventable

50%

of all preventable harm in health care worldwide is medication-related

14th

leading cause of death and injury globally is now attributed to unsafe care = TB and malaria

1.5M+

Australians are estimated to experience an adverse medicine event every year

250,000

hospital admissions a year in Australia are medication-related (2–3% of all admissions)

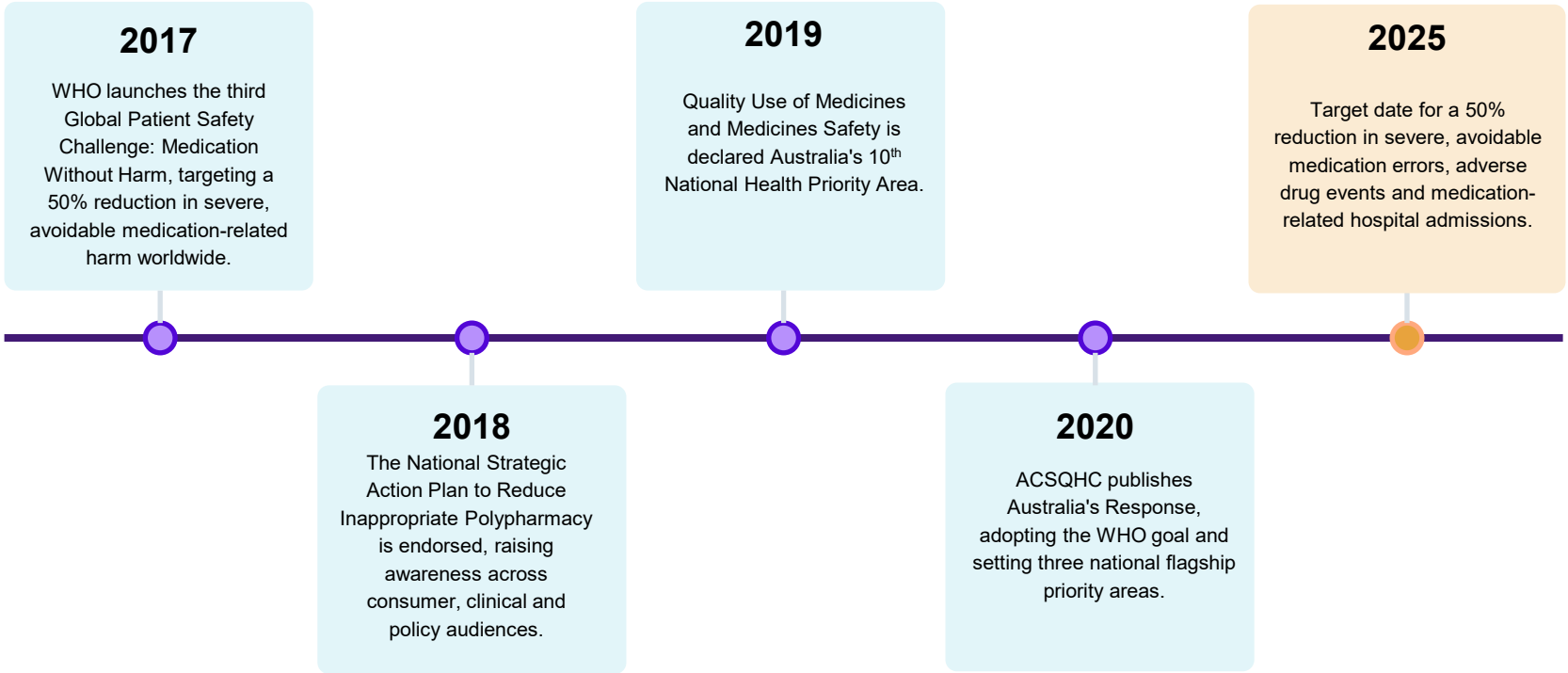
The cost of harm

Medication-related harm costs the Australian health system more than **$1.4 billion per year** = 400,000 GP visits and 190,000 hospital admissions annually. Up to 30% of unplanned admissions among older people are linked to an adverse medicine event, and about half of those are considered potentially avoidable.

Sources: WHO (2022); ACSQHC / NSQHS Standards; RACGP Silver Book — Medicines and Older People

POLICY CONTEXT

Australia’s National Response



Source: Australian Commission on Safety and Quality in Health Care, Medication Without Harm — Australia's Response (2020)

Elements of Medicines Stewardship – CATAG Principles

Stewardship is essentially about ***relationships***

- **Communication** is more important than technology

  "Technology scales care, trust enables care"

- Guidelines, alerts, formularies and dashboards are important but rarely sufficient on their own

Patient engagement – core pillar of Medicines Safety



Profile of Priority Populations: ***Equity*** Lens

People living with disability

First Nations people

People living in rural and remote areas

People living with mental health illness

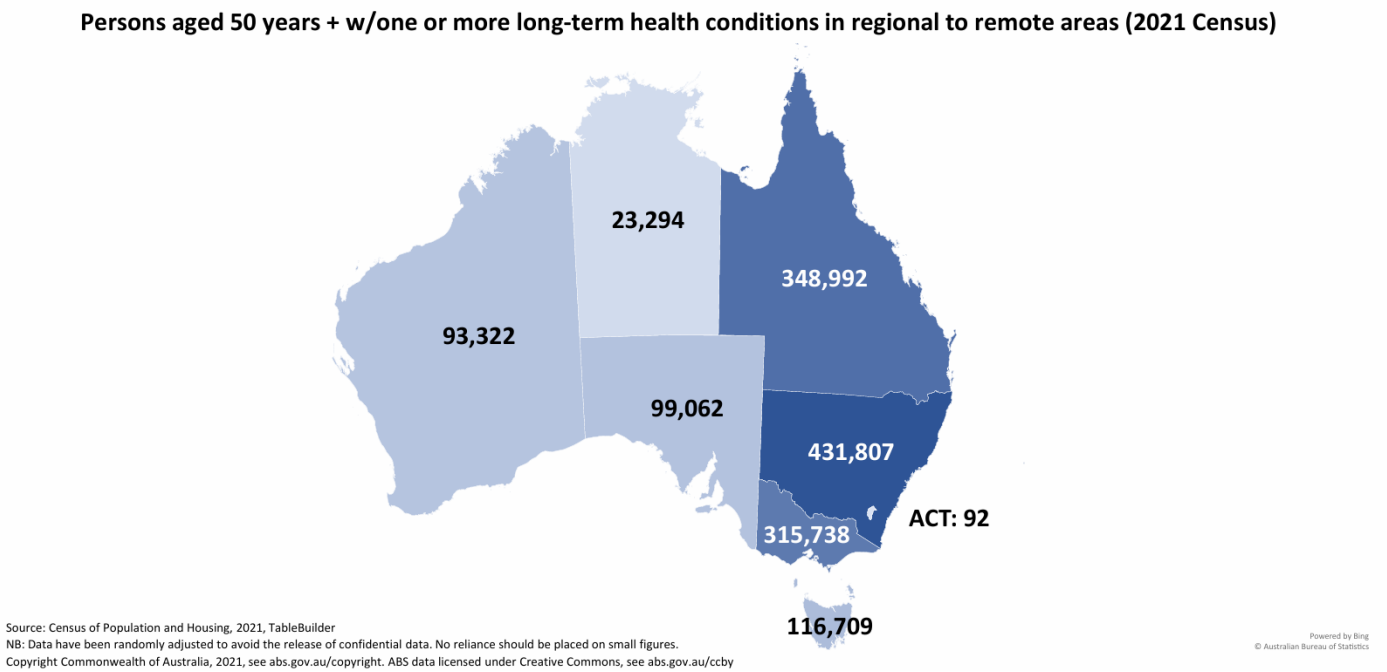
People living with intellectual disability

Culturally & linguistically diverse (CALD) populations

Pediatric and Youth populations

Older people

Australia's Population 50+ years



Challenges – Multimorbidity & Polypharmacy (*NMS 2024*)



UK study

- 133 serious medicine – medicine interactions for medicines recommended in the type 2 diabetes guideline and guidelines for 11 other conditions

•DOI: 10.1136/bmj.h949

Challenges – Care at Home

Caring for the vulnerable at home

- Hospital in the Home (HITH) service
- Aged Care at home
- Disability & Mental Health support



How well are these services supported in the community?

Challenges – Changing Services Delivery

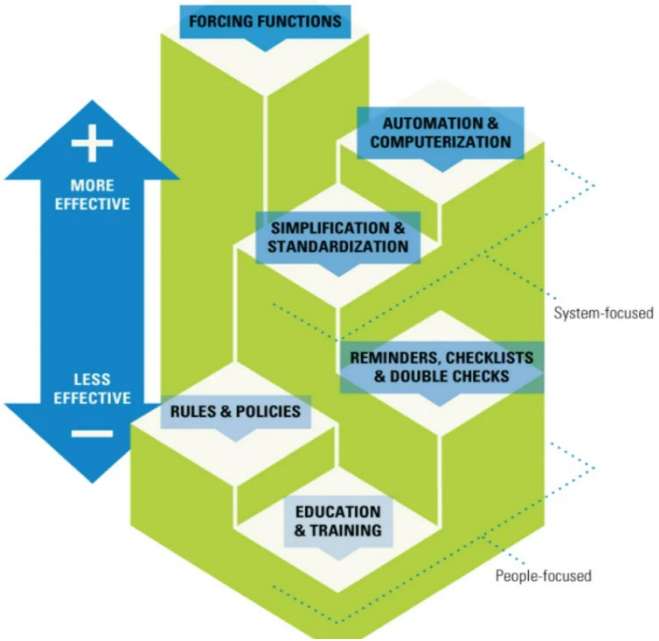
- Expanded prescribing – Pharmacist, Nurse Practitioners
- New models of practice – Virtual care, Pharmacist vaccination
- Digital health - Automation, remote monitoring, digital biomarkers



How engaged are Hospital Specialists in QUM compared with Primary Care?

How to promote dialogue, collaboration and coordination?

Implementation Issues



Policy vs Practice

Policies assume adoption will follow availability, but adoption, reach and maintenance are separate problems

Barriers

Clinician-level: Inertia, fear of deprescribing

Patient-level: health literacy, fear of withdrawal

System-level: fragmented records, HMR referral friction

Who is responsible for Medicines Stewardship?



Natalie



SHARED RESPONSIBILITY

Everyone in the system has a Stewardship role

Clinicians

Prescribe and review medicines against current evidence; document indication and review dates; deprescribe when benefit no longer outweighs risk.

Pharmacists

Provide medication reviews, reconcile medicines at every handover, and flag interactions or high-risk combinations before dispensing.

Health Services

Implement standardised charting, independent checks for high-risk medicines, and digital medicines-management systems.

Consumers & Carers

Keep an up-to-date medicines list, ask about the purpose of each medicine, and raise concerns about side effects early.

Policymakers

Fund national reporting systems for medicine errors and near misses and fast-track shared digital health records.

Researchers

Generate the evidence base for deprescribing, monitor national indicators, and evaluate stewardship interventions and outcomes.

Source: adapted from ACSQHC, Medication Without Harm — Australia's Response (2020)

NATIONAL FRAMEWORK

Australia's Response to the WHO Challenge: *3 Focus Areas*

01

Polypharmacy

Monitoring and responding to the inappropriate use of five or more concurrent medicines

02

High-Risk Medicines

Reducing harm from insulin, opioid analgesics, anticoagulants and antipsychotics

03

Transitions of Care

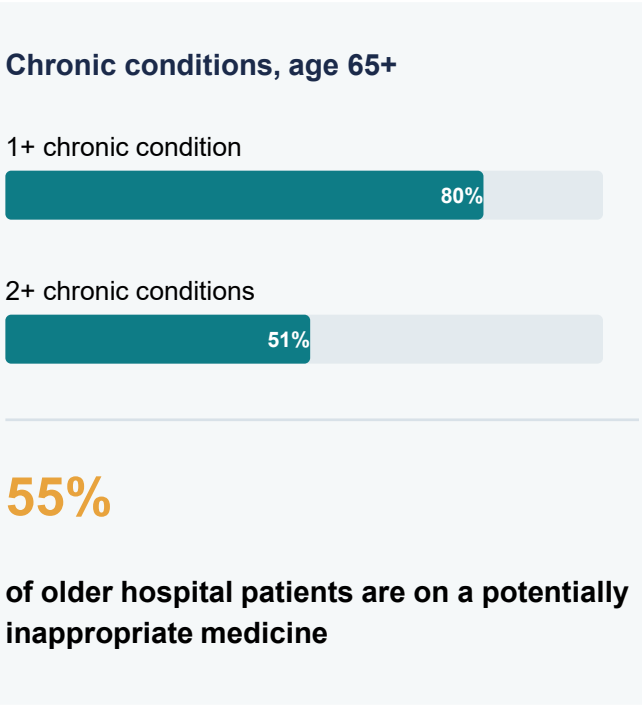
Ensuring an accurate, shared medicines list follows the patient across every handover

FLAGSHIP AREA 1

Polypharmacy: More medicines means more risk

Defined as the concurrent use of five or more medicines — prescription, over-the-counter and complementary by the same person (WHO / OECD).

- About 80% of Australians aged 65+ live with one or more chronic conditions, and 51% have two or more — polypharmacy is the norm
- Risk of adverse drug reactions and drug interactions rises with every additional medicine taken (PK, PD interactions)
- Among older people admitted to hospital, **55%** are on a potentially inappropriate medicine, and **6%** of all admissions are caused by one.
- Regular medication review — and deprescribing when a medicine no longer helps — is the **primary tool** for managing inappropriate polypharmacy.



Sources: ACSQHC Fourth Atlas of Healthcare Variation (2021); RACGP Silver Book — Polypharmacy

FLAGSHIP AREA 2

High-risk medicines: Four classes, foreseeable harm

These four medicine classes are prioritised nationally because of how frequently they are involved in serious, preventable harm.

IN

Insulin

Dosing errors can cause severe, rapid-onset hypoglycaemia — a leading cause of medicine-related emergency presentations.

OP

Opioid Analgesics

Risk of respiratory depression, dependence and accidental overdose, particularly with concurrent sedatives.

AC

Anticoagulants

Narrow therapeutic window; bleeding risk rises sharply with interacting medicines or missed monitoring.

AP

Antipsychotics

Associated with falls, sedation and cardiovascular risk, especially when used off-label in older people.

National focus: standardised charting, independent double-checks, and structured monitoring protocols for these four classes across acute, primary and aged care settings.

Source: ACSQHC, Medication Without Harm — Australia's Response (2020)

Deprescribing in Rural Communities (*NMS 2024*)

Clinician/Service Factors

- Logging into software (digital connectivity)
- Access to eTG, AMH
- Time constrained consultations
- Limited supports and unfamiliar systems
- Continuity of care

Patient Factors

- Health literacy
- Limited trust and rapport
- What if re-starting needed?
  - Management of withdrawal
- Multiple sources of advice
- Continuity of care

FLAGSHIP AREA 3

Transitions of care → *Lost in transition*

Every handover — admission, transfer, discharge, or a change of prescriber — is a point where a medicines list can become incomplete, outdated or inaccurate. Medication reconciliation closes that gap.

1

Admission

Obtain the most accurate medicines history from the patient, carer and all available records

2

In Care

Reconcile any changes against the admission list and document the reason for each change

3

Discharge

Generate a current, accurate medicines list and a clear discharge summary for the next provider

4

Follow-up

Confirm the receiving GP, pharmacist and patient all hold the same, current medicines list

Rationale

More than 200 million PBS subsidised prescriptions are dispensed in Australia each year. A shared, digitally accessible medicines list — supported by My Health Record — is central to closing communication gaps between hospitals, general practice, pharmacy and aged care.

Source: ACSQHC, Medication Without Harm — Australia's Response (2020)

Stewardship – Lost in transition

TOC are often characterised by poor communication and information sharing between clinicians and health service organisations

More than
50%
of medication errors occur at TOC

Between
10%
and
67%
of medication histories have at least one error, and up to
33%
of these errors have the potential to cause patient harm

Up to
1 in 3
patients discharged to residential aged care miss doses of their prescribed medicines in the 24–72 hours after discharge

Involving the individual, their carer and/or family in decision making resulted in the detection of
1,100
(9.5%)
medication errors out of a total of
11,540
medication errors reported

Individuals with one or more medicines missing from their discharge information are
2.3
times more likely to be readmitted to hospital than those with correct information at discharge

The complete absence of a discharge summary at TOC was associated with a
79%
increase in the risk of readmission within 7 days and a
37%
increased risk of readmission within 28 days

THE EVIDENCE BASE

Interventions with a demonstrated evidence base

✓ **Structured medication review**	**OUTREACH Models:** Regular, systematic review (e.g. HMR, RMMR) identifies medicines to stop, reduces inappropriate polypharmacy, and improves outcomes for older people.
✓ **MDT Deprescribing pathways**	Planned, supervised withdrawal of medicines no longer providing benefit — supported by national polypharmacy toolkits released for Australian hospitals.
✓ **Medication reconciliation**	Structured comparison of medicines at every transition point substantially reduces discrepancies carried through to discharge.
✓ **Digital shared medicines lists**	A single, current medicines record accessible across hospital, general practice, pharmacy and aged care — supported by My Health Record.
✓ **Antimicrobial stewardship programs**	Prospective audit and feedback, and restricting reserve antimicrobials, are proven to reduce inappropriate prescribing without harming patient outcomes.

Sources: ACSQHC (2020); NSW TAG Polypharmacy Toolkits (2022); RACGP Silver Book

What else is actually working in Medicines Stewardship?

- Cultural matching: Aboriginal Health Workers embedded in hospitals
- Co-design: Priority population representatives shaping services
- Time & Funding: Protected pharmacist time in RACH
- Digital tools – improve communication and continuity

What connects successful models is relational continuity, flexibility and responsivity.

“ Right medicine for the right person with the right supports in place.”

EXEMPLAR

Antimicrobial Stewardship

Antimicrobial resistance (AMR) occurs when bacteria, viruses, fungi and parasites evolve to resist treatment — driven substantially by the overuse and misuse of antimicrobials. Stewardship — prescribing the right antimicrobial, at the right dose, for the right duration — is the frontline defence.

4.95M

deaths globally in 2019 were associated with drug-resistant infections

1.27M

of those deaths were directly attributable to antimicrobial resistance

1,600

deaths directly attributable to AMR in Australia in 2019

5th

lowest AMR mortality rate of 204 countries — Australia is comparatively well placed

Globally, AMR is now a leading cause of death — exceeding the annual toll of HIV/AIDS or malaria.

Sources: GRAM / The Lancet, Global burden of bacterial AMR (2022); IHME, The Burden of AMR in Australia (2023)

PRIORITIES TO 2025 AND BEYOND

What the evidence tells us to do next

1. Extend medication review and high-risk medicine protocols into surgical and perioperative care, where harm is still rising
2. Fast-track shared, digital medicines lists across hospital, general practice, pharmacy and aged care
3. Build a national reporting system for medicine errors and near misses to close current data gaps
4. Sustain antimicrobial stewardship programs to protect Australia's comparatively strong AMR position

Target: 50% reduction in severe, avoidable medication-related harm by 2025

Resources


Patient Safety
World Health Organization
Global burden of preventable medication-related harm in health care
A systematic review
MEDICATION WITHOUT HARM
Global Patient Safety Challenge
World Health Organization
Medication without harm
Policy brief
Australian Commission on Safety and Quality in Health Care
Medication Management at Transitions of Care Stewardship Framework
Overview
September 2025
safetyandquality.gov.au
Getting It Right
Guiding Principles for Medicines Stewardship Programs
VERSION 01
DECEMBER 2022
GETTING IT RIGHT
MEDICINES STEWARDSHIP TOOLKIT
CATAG

Stewardship: Advance Australia where?



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Thank you

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