



Australian Government
Australian Institute of
Health and Welfare

Improving aged care through data insights: The AIHW's vision for the future of aged care

Dr Zoran Bolevich

Chief Executive Officer

Australian Institute of Health and Welfare



Stronger evidence,
better decisions,
improved health and welfare



The AIHW acknowledges the Traditional Owners of Country throughout Australia and recognises their continuing connection to lands, waters, and communities.

We pay our respect to the people, the cultures, and Elders past and present.

About us

AIHW



An independent national information and statistics agency within the health portfolio; established under the AIHW Act 1987.



Develops, maintains and administers specialised data standards, classifications, national data sets, indicator and outcomes frameworks.



Publishes more than 400 data products a year.



At the forefront of cross-jurisdictional data linkage since the 1980s.



Deep partnerships with state, territory and Commonwealth agencies.



Collaborates on data projects, provides data and information to support policies, decision making and research.

Outcomes supported by AIHW's data and services

- Informing the policy-making cycle
- Guiding and supporting planning and delivery of services
- Monitoring and assessing performance
- Informing workforce planning
- Evaluating outcomes and identifying improvement opportunities
- Informing the public
- Enabling research

150+ datasets across:





Outline

- The role of data in aged care reforms
- The AIHW's current efforts in the aged care data space
- Future possibilities
- Opportunities for collaboration
- Interoperable data that reduce reporting burden and deliver usable feedback loops to services

Aged care data – a key enabler of reform

The Royal Commission into Aged Care Quality and Safety highlighted the importance of data in policy.

Recommendations included improving:

- data quality
- data coverage
- availability of aged care data.

Aged care data needs to:

- be person-centred
- be interoperable, standardised and accurate
- reduce collection burden
- fill gaps (particularly care needs and provision, aged care workforce and diversity).

3. Recommendations

Chapter 1: Foundations of the New Aged Care System

Recommendation 1: A new Act

1. The Aged Care Act 1997 (Cth) should be repealed and replaced by a new Act, to be in force by no later than 1 July 2023.
2. The new Act should define aged care as:
 - a. support and care for people to maintain their independence, including support and care to assist in their social, mental and physical capabilities;
 - b. supports, including respite for informal carers;
3. The objects of the new Act should be to:
 - a. provide a system of aged care based on safety and timely support and care to:
 - i. assist older people to live an active life, and
 - ii. ensure older people receive high quality care in a safe environment for dignified living in old age;
 - b. protect and advance the rights of older people to be free from mistreatment and neglect, or unsafe care, and to continue to enjoy their lives and to be accessible to members of society generally;
 - c. enable people entitled to aged care to exercise choice in the planning and delivery of their care;
 - d. ensure equity of access to aged care;
 - e. provide advocacy and complaint mechanisms;
 - f. provide for regular and independent review of aged care;
 - g. promote innovation in aged care based on evidence;
 - h. promote positive community attitudes towards aged care and participation by people receiving aged care;
4. Unless indicated otherwise, the new Act should have the same effect as the Aged Care Act 1997 (Cth) in relation to the operation of the Aged Care Act 1997 (Cth) and the Aged Care Act 1997 (Cth) in relation to the operation of the Aged Care Act 1997 (Cth).



Royal
Commission
into Aged
Care Quality
and Safety

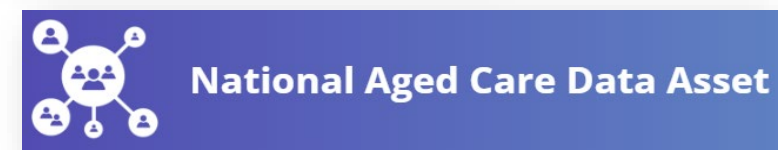
Final Report:
Care, Dignity
and Respect

Volume 1
Summary and
recommendations

Aged care data progress

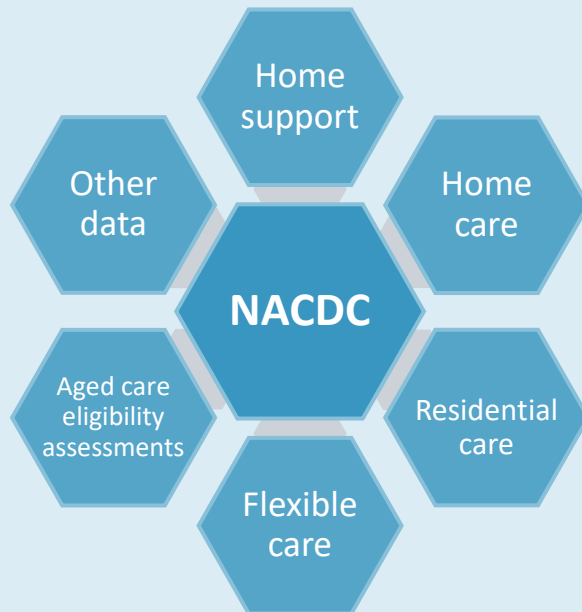
Progress since royal commission

- Aged Care Data and Digital Strategy
- National Minimum Data Sets (NMDS)
- researcher access to National Aged Care Data Asset (NACDA)
- New assessment tools (ANACC, IAT), Quality Indicators and Star Ratings
- Improving interface with providers via Government Provider Management System (GPMS)
- Sparked program (ADHA & CSIRO) considering aged care interoperability standards



AIHW's role in aged care data

National Aged Care Data Clearinghouse (NACDC)



GEN reporting & analytics program

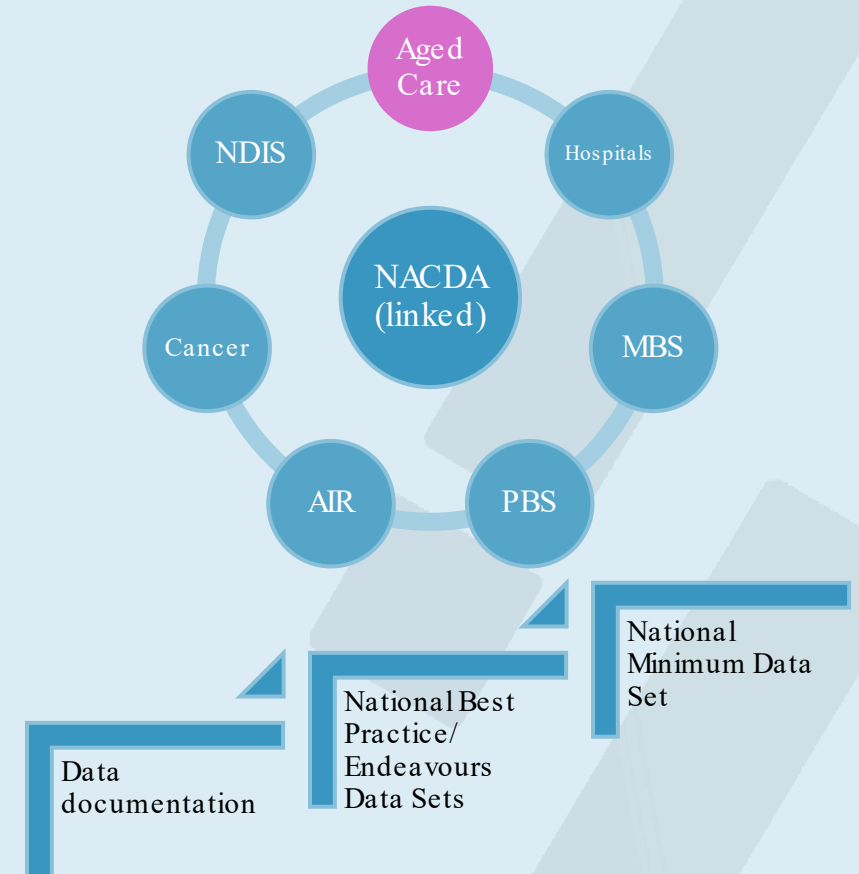
GEN
AGED CARE DATA

Residential Aged Care Quality Indicators

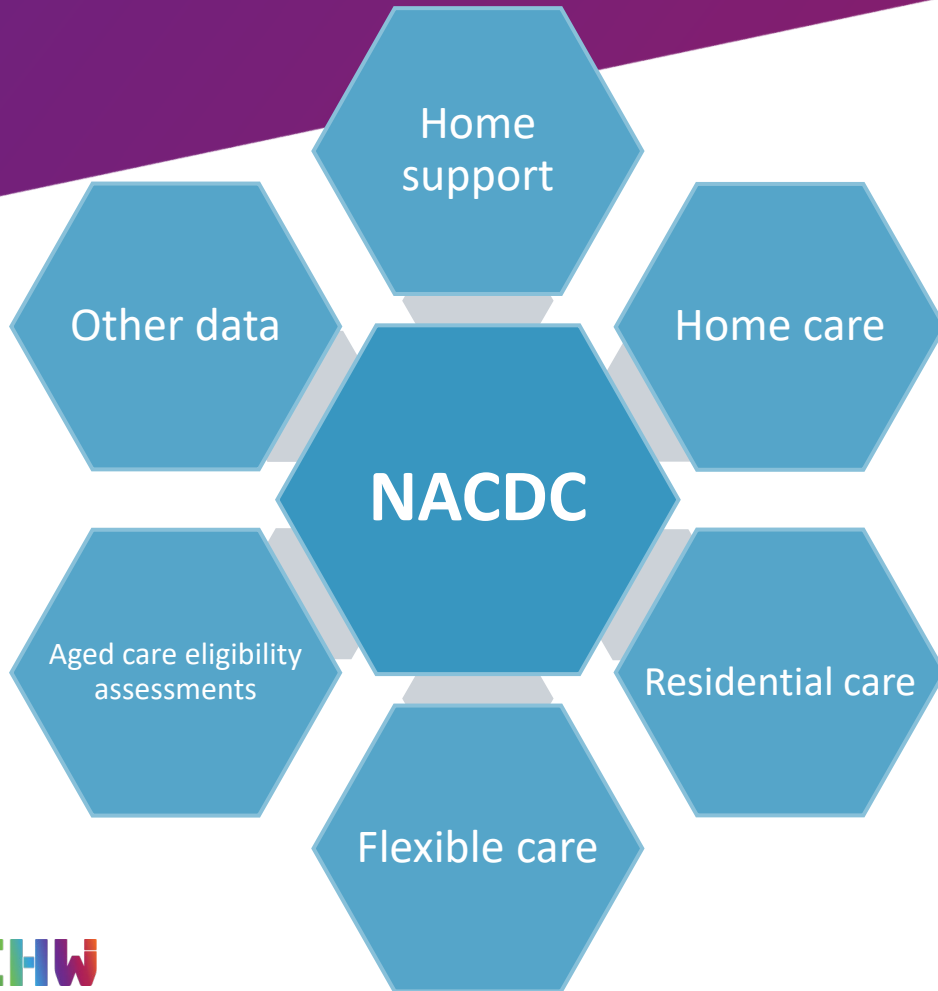
Quality indicators measure aspects of service provision that contribute to the quality of care given by residential aged care services (RACS). Since 1 July 2019, participation in the National Mandatory Quality Indicator Program (QI Program) has been a requirement for all Australian Government-subsidised RACS. Until 30 June 2021, the QI Program included 3 QIs (pressure injuries, physical restraint, and unplanned weight loss). This suite has since been expanded twice, with 2 additional indicators added in July 2021 and a further 6 indicators added in April 2023. The current 11 quality indicators include:



Data improvement program



AIHW's role in aged care data: data collection



National Aged Care Data Clearinghouse (NACDC)

- Established at the AIHW in 2013.
- Independent and central repository of national aged care data from 1997 onwards.
- Mostly administrative data from the Department of Health, Disability and Ageing (DHDA).
- Ad hoc data request service available to external researchers.
- For more information, see the [NACDC user guide](#) on the GEN website.

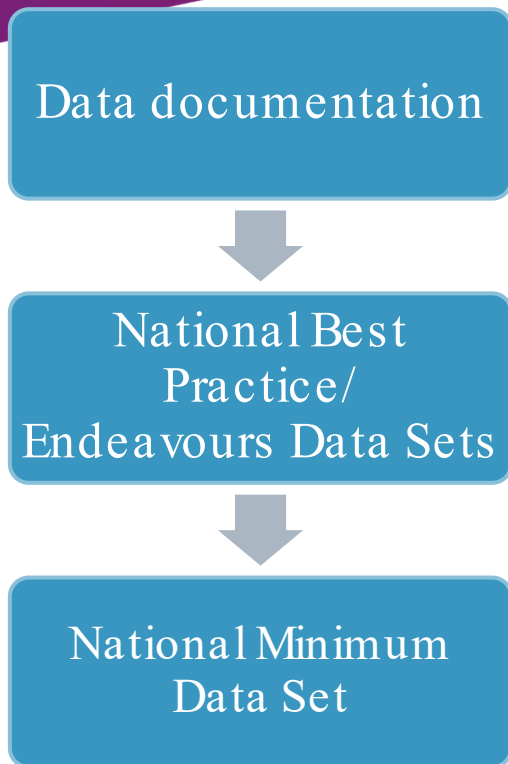
AIHW's role in aged care data: reporting & analysis

- **GEN Aged Care Data** is a one-stop-shop for data and information on aged care in Australia
- Launched in 2017
- Topic pages updated annually
- Searchable data, publications, dashboards, and factsheets
- Includes AIHW analytical releases and DHDA releases

GEN
AGED CARE DATA



AIHW's role in aged care data: data improvement

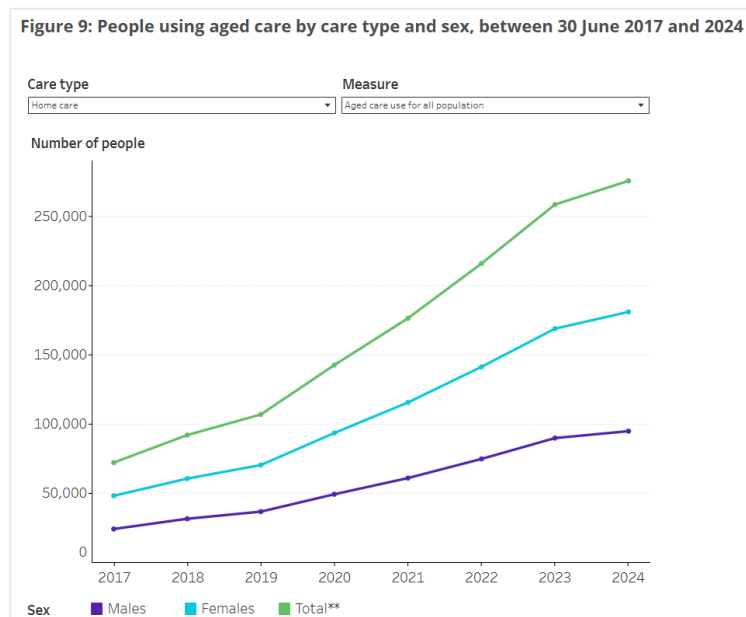


The **Aged Care National Minimum Data Set** data standards specifications aim to standardise collection and reporting of a core set of aged care data.

The **National Aged Care Data Asset** aims to bring together de-identified person-level data collected across aged care, health and other settings for researchers to analyse.

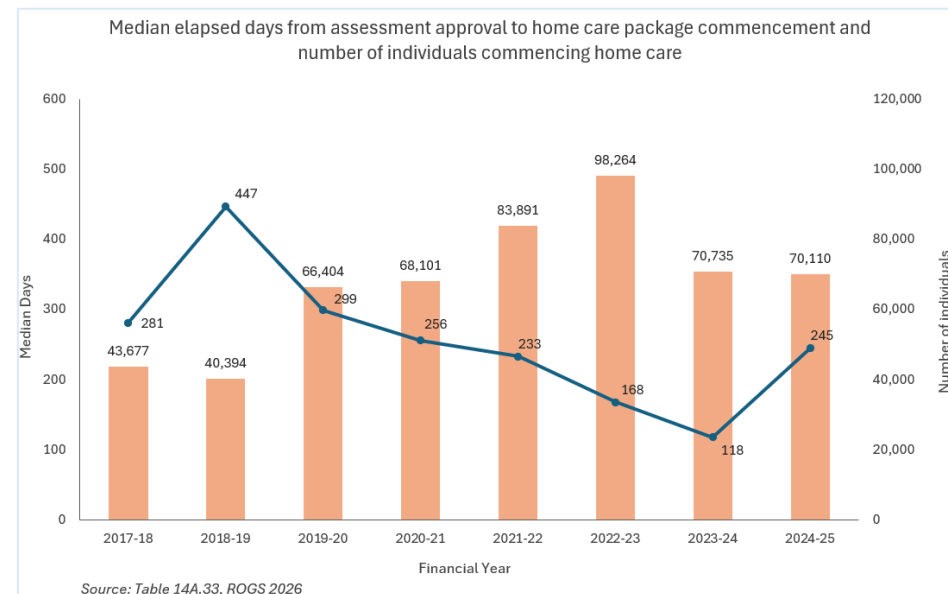
Increasing demand and changing service use patterns

Number of people using home care has more than tripled since 2017



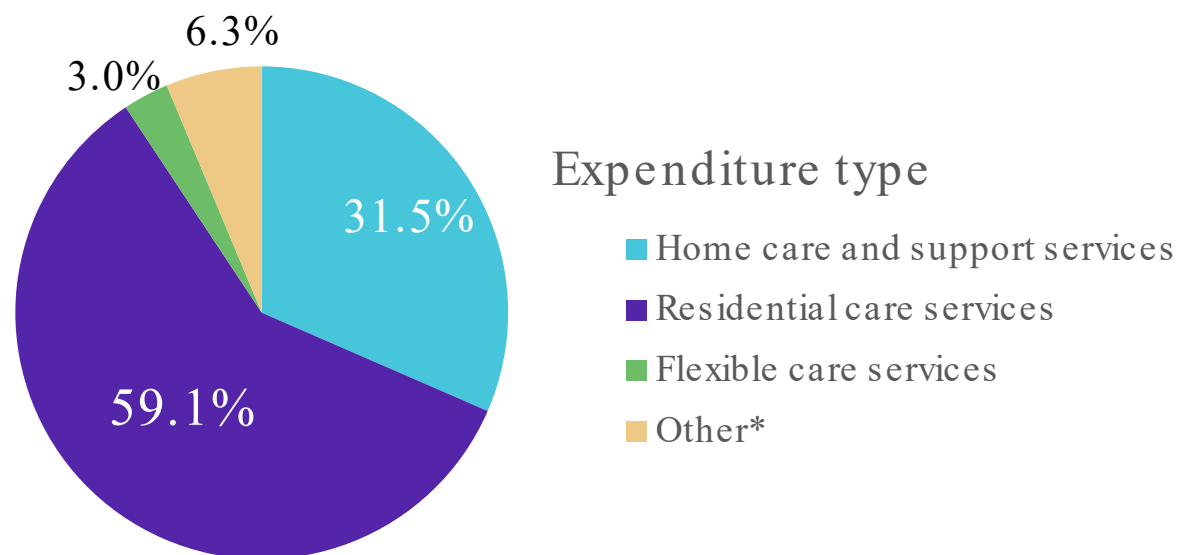
Source: AIHW (2025) *People using aged care*, GEN Aged Care Data, Australian Government.

Median elapsed days from assessment to home care commencement increased in 2024-25

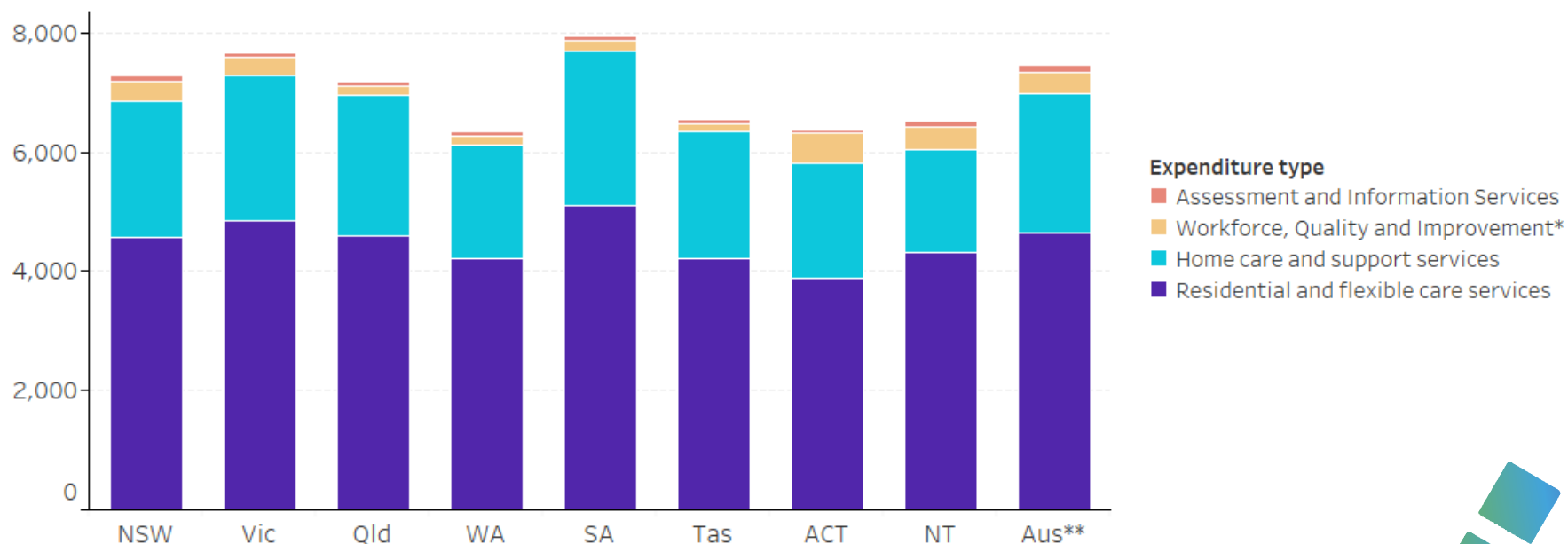


Aged care expenditure (Government spending)

AIHW



Expenditure per person in the target population (\$)



Source: AIHW (2025) *Spending on aged care*, GEN Aged Care Data, Australian Government.

National Aged Care Mandatory Quality Indicator Program

Mandatory program for all government-subsidised residential aged care services in Australia from 1 July 2019, reported quarterly by AIHW

Objectives of the program are to provide:

- nationally consistent quality measures across residential care services in Australia
- robust, valid data to measure and monitor performance
- transparent information about quality in aged care.



Pressure injuries



Restrictive practices



Unplanned weight loss



Falls and major injury



Medication management



Activities of daily living



Incontinence care



Hospitalisation



Workforce



Consumer experience



Quality of life



Enrolled nursing

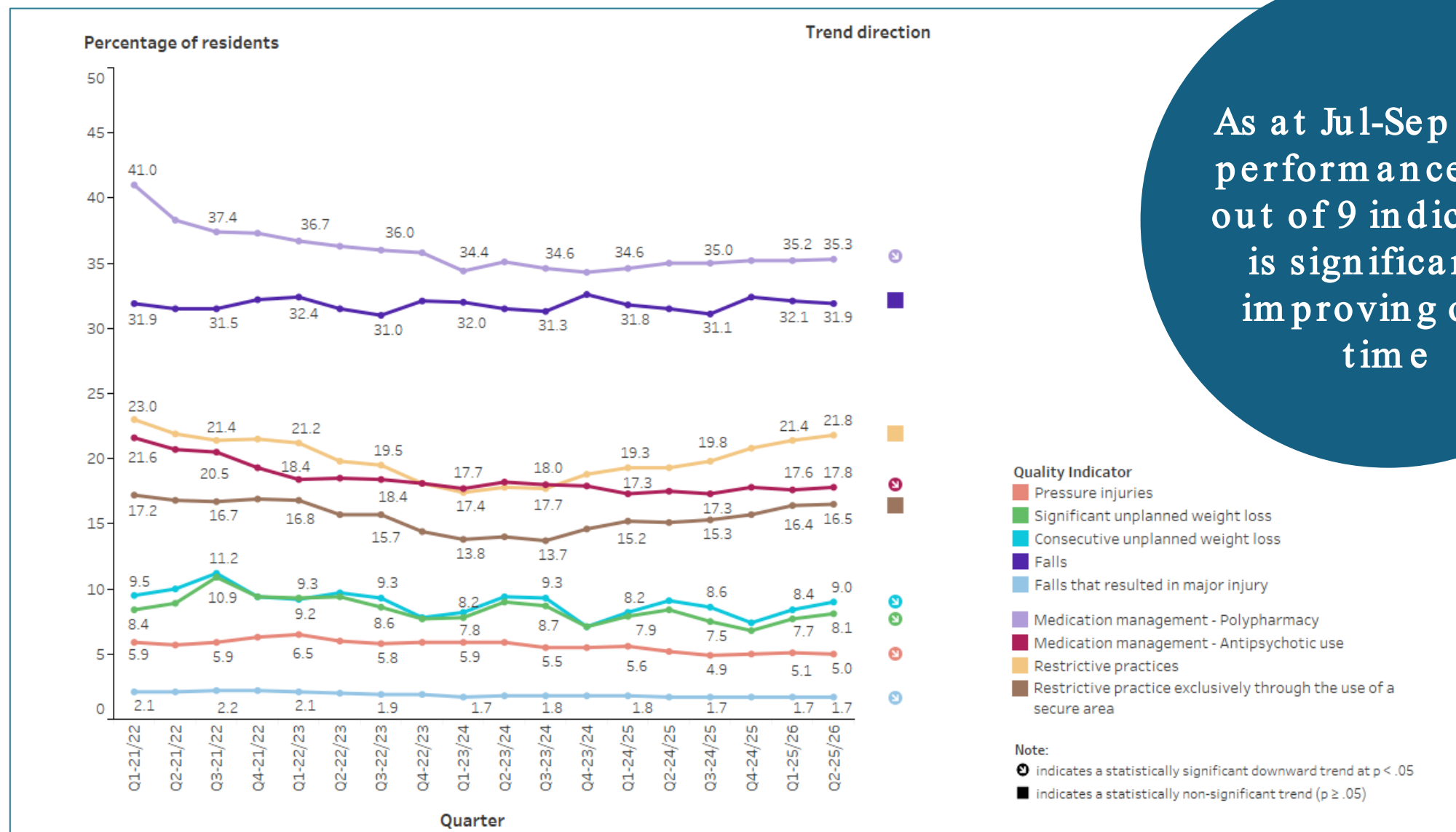


Allied health

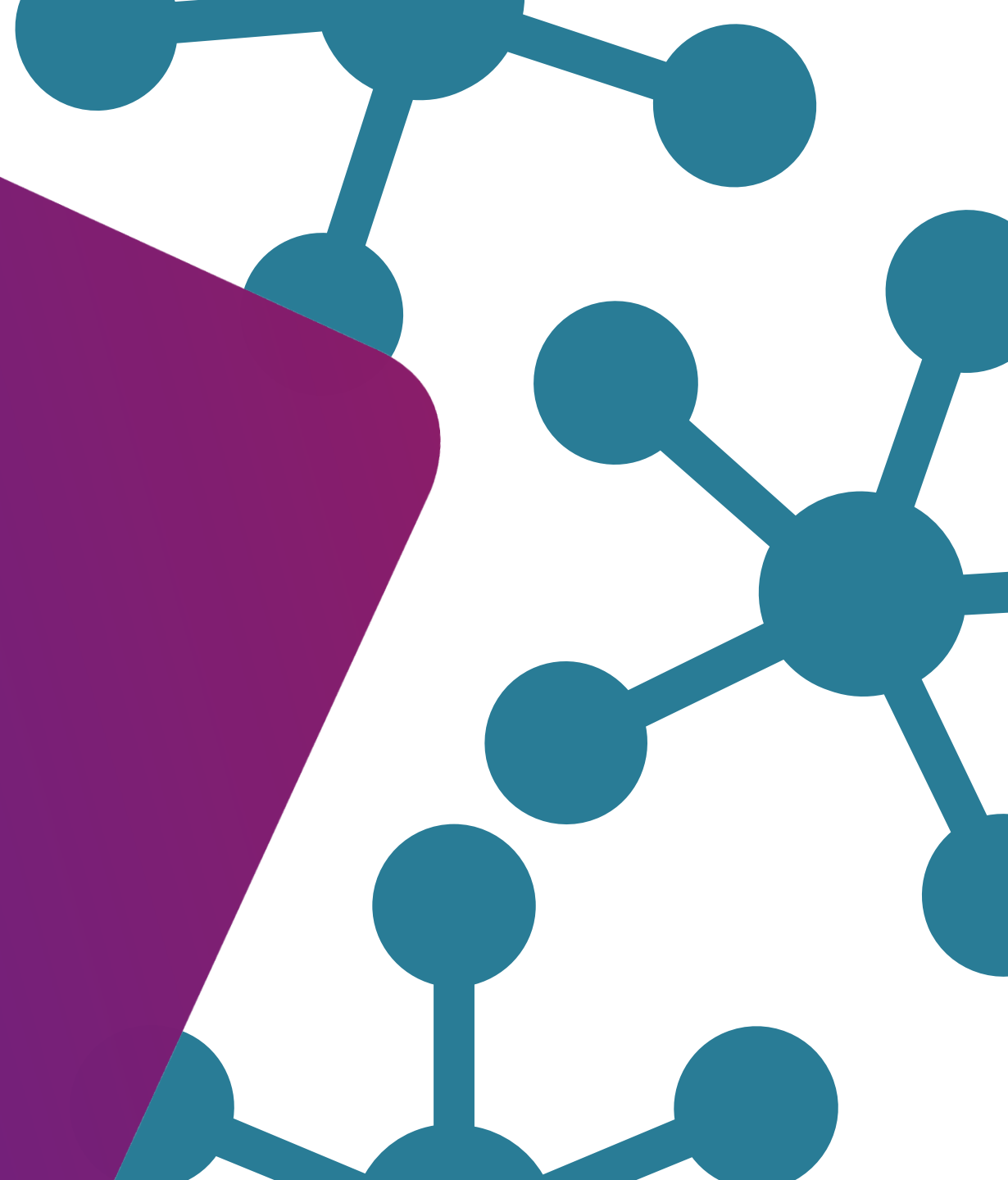


Lifestyle officer

Trends in quality indicator performance over time: Q1 2021-22 to Q1 2025-26

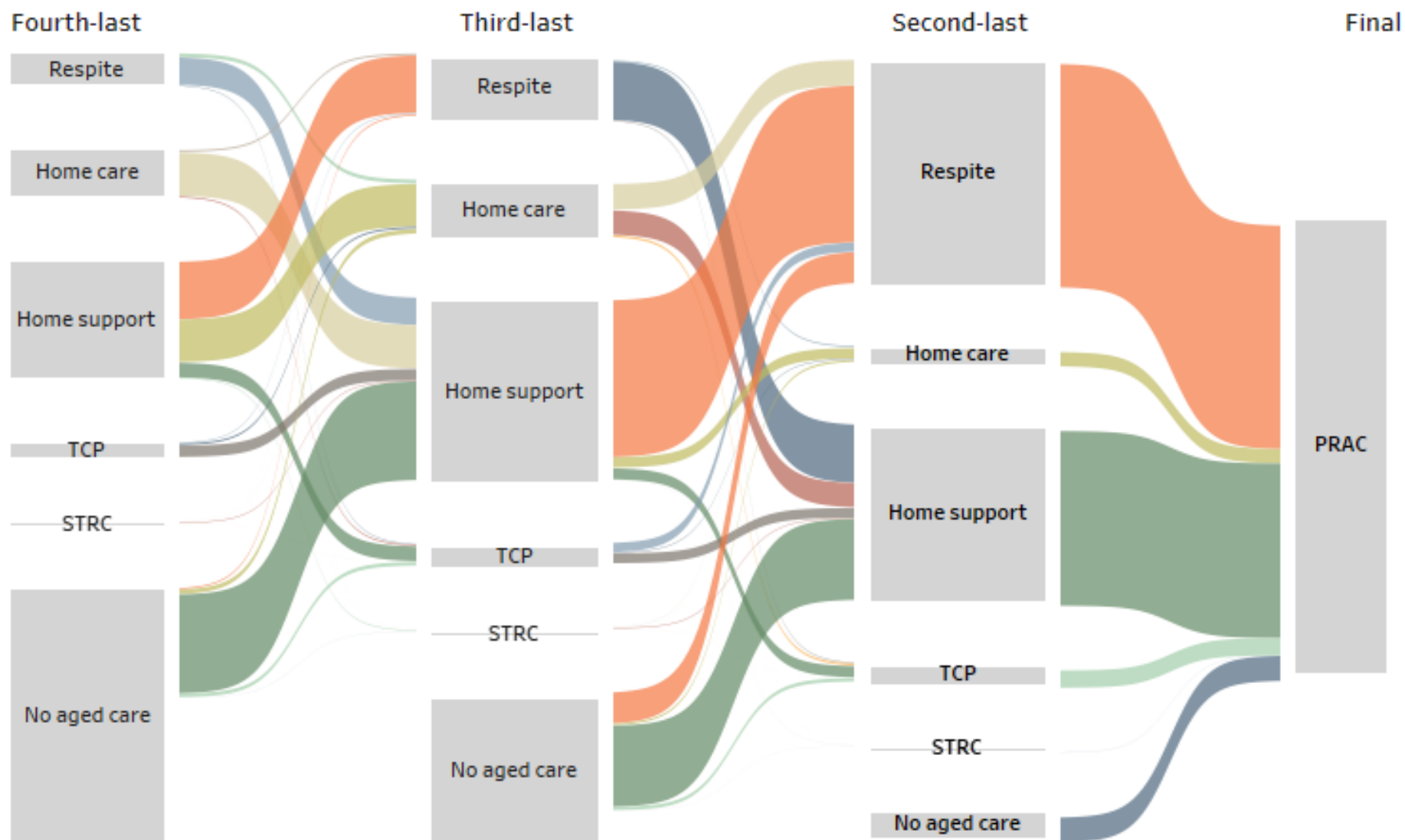


As at Jul-Sep 2025,
performance on 6
out of 9 indicators
is significantly
improving over
time

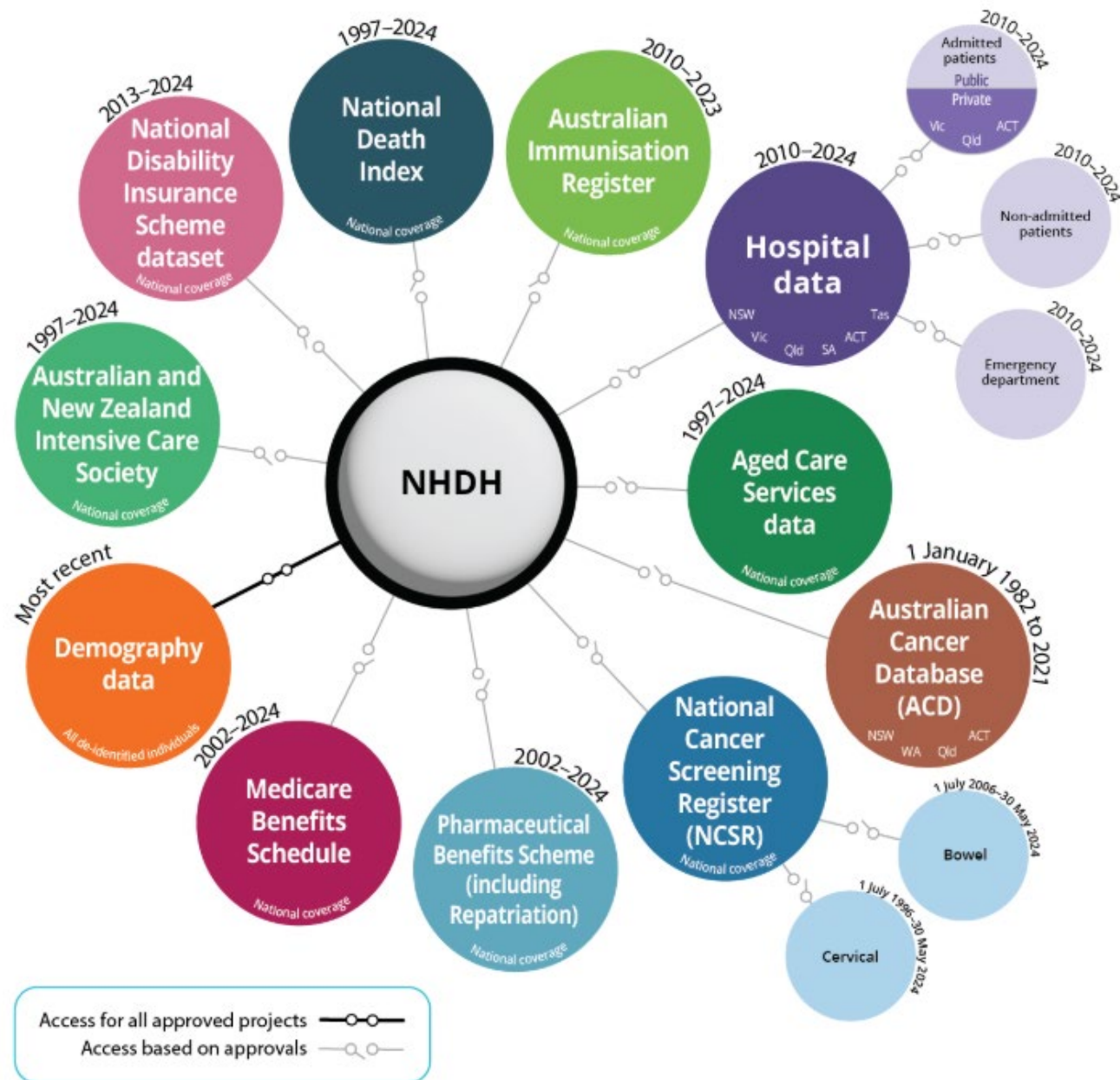


Linking data to understand consumer pathways

Pathways to permanent residential aged care



The National Health Data Hub



Source: AIHW n.d.

Interfaces between the aged care and health systems

The AIHW examined **health services accessed by people aged 65 and over**, receiving permanent residential care, home care or no aged care services during 2021–22:

- Nearly all people living in permanent residential care (96%) or using home care (99%) had at least one **GP attendance**.
- 39% of people living in permanent residential care had a **specialist attendance** compared with 69% of those using home care.
- People living in permanent residential care had higher rates of **antipsychotics, benzodiazepines and opioids** dispensed to them compared with people using home care.
- The rate of **antibiotic dispensing** was similar for people living in permanent residential care and those using home care.

Data update
soon to
2023–2024



Future data flows (conceptual framework)

Enabling performance insights that reflect consumer journeys

Supply once



Data supplied once,
ideally directly from
systems of record



AIHW linkage system



AIHW managed
integrated data access



Interoperable
linkage spines for
external integration

Use many times

Dependent on new approvals for each purpose

Current challenges and limitations

- High data burden and fragmentation through multiple reporting portals
- Limited clarity on data collection rationale and value
- Limited success with clinical insights and actionable comparative intelligence
- Variation in data maturity
- Variable understanding of public reporting outputs used by consumers
- Data gaps in key areas (e.g. quality, outcomes, patient reported measures)
- Unclear path from data analytics to financial viability and investment confidence

Providers report feeling far from a 'collect once, use many times' model

Trends which are increasing availability and use of data in aged care



Digital advances

- Digital 'systems of record' more prevalent and more integrated
- Interoperability agenda (including the use of national identifiers)

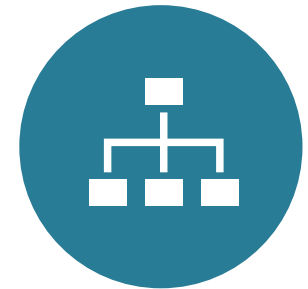


Advances in data management and analytics

- Data extraction tools / capabilities
- Modern data analytics platforms
- Machine learning and AI/LLM



Maturing of data linkage capabilities



'Five Safes' and other contemporary data governance models

Our vision: partnership with the aged care sector

AIHW



Capability building

Improving clinical insights and data maturity through **'Data Capability Uplift'** projects.



Data infrastructure

Nationally consistent and comparable data, based on a **national common data model for health and aged care**.



Adoption and impact

Co-design with the sector – solving real service delivery and business problems (rather than high level policy and research).

What this could look like...

AIHW



Two-way data flows

Providers to AIHW to providers



Benchmarking and continuous improvement

*Sector's clinical and business expertise
augmented by AIHW's data analytics expertise*



Purpose-built reports

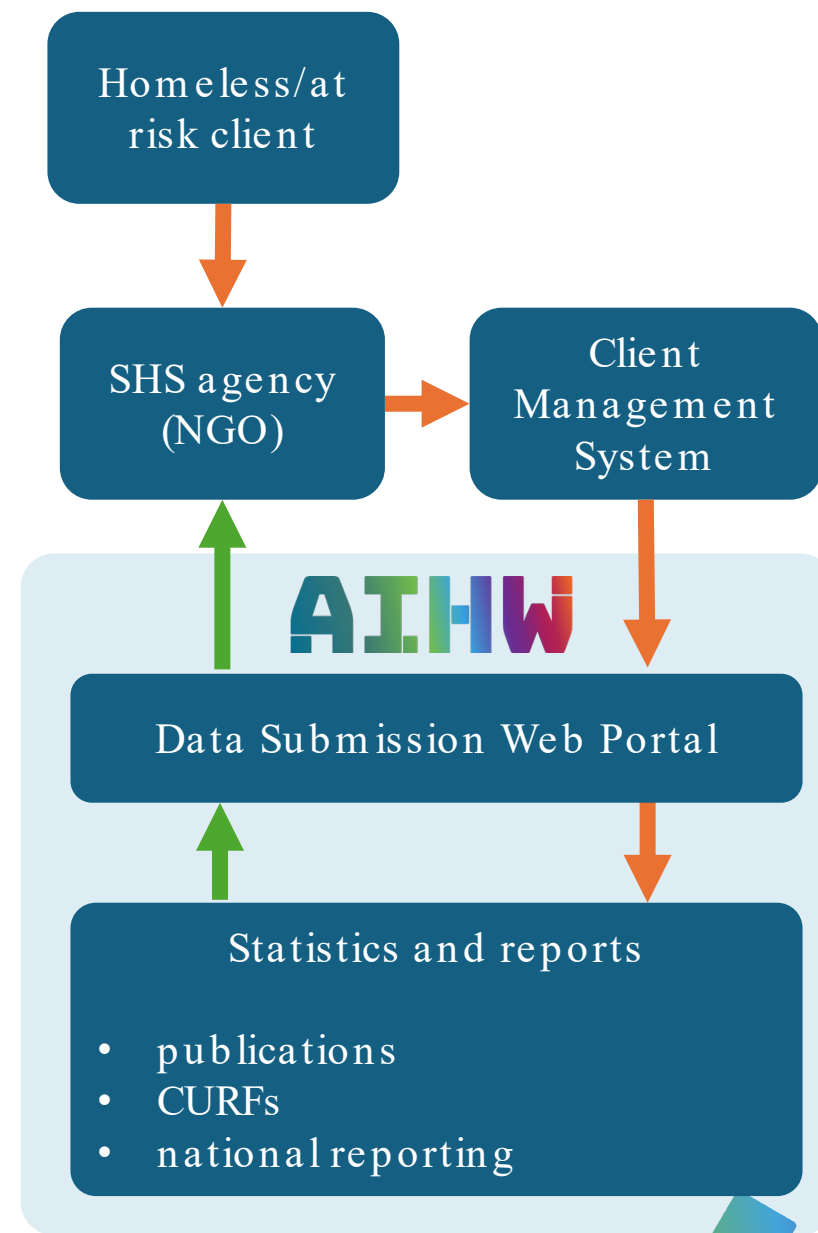
*Sector and consumer-led reporting
outputs measuring what matters*

Example 1: Specialist Homelessness Services (SHS) Data Collection

Return-to-source reporting

Since commencing in 2011, the SHSC has captured information on 1.8 million people assisted by around **1,800 SHS agencies**, providing insight into service use and client pathways.

SHS agencies **provide** client data directly to AIHW through a data submission web portal and **receive** de-identified, confidential unit record files and reporting from the AIHW.



Example 2: Primary Health Care Data Collection

Challenge

- Limited understanding of primary health care and its impact on the health of Australians
- Major data gap
- Complex primary health care environment
- AIHW tasked with developing approach to **National Primary Health Care Data Collection**



27 million patients



Many clinical information systems, free text and non-standard coding



39,000 GPs, 98,000 Primary Care Nurses and unknown Allied health and other primary care professionals



3 GP Extractors, many versions used



6,000 General practices, unknown number of Other practices



31 Primary Health Networks

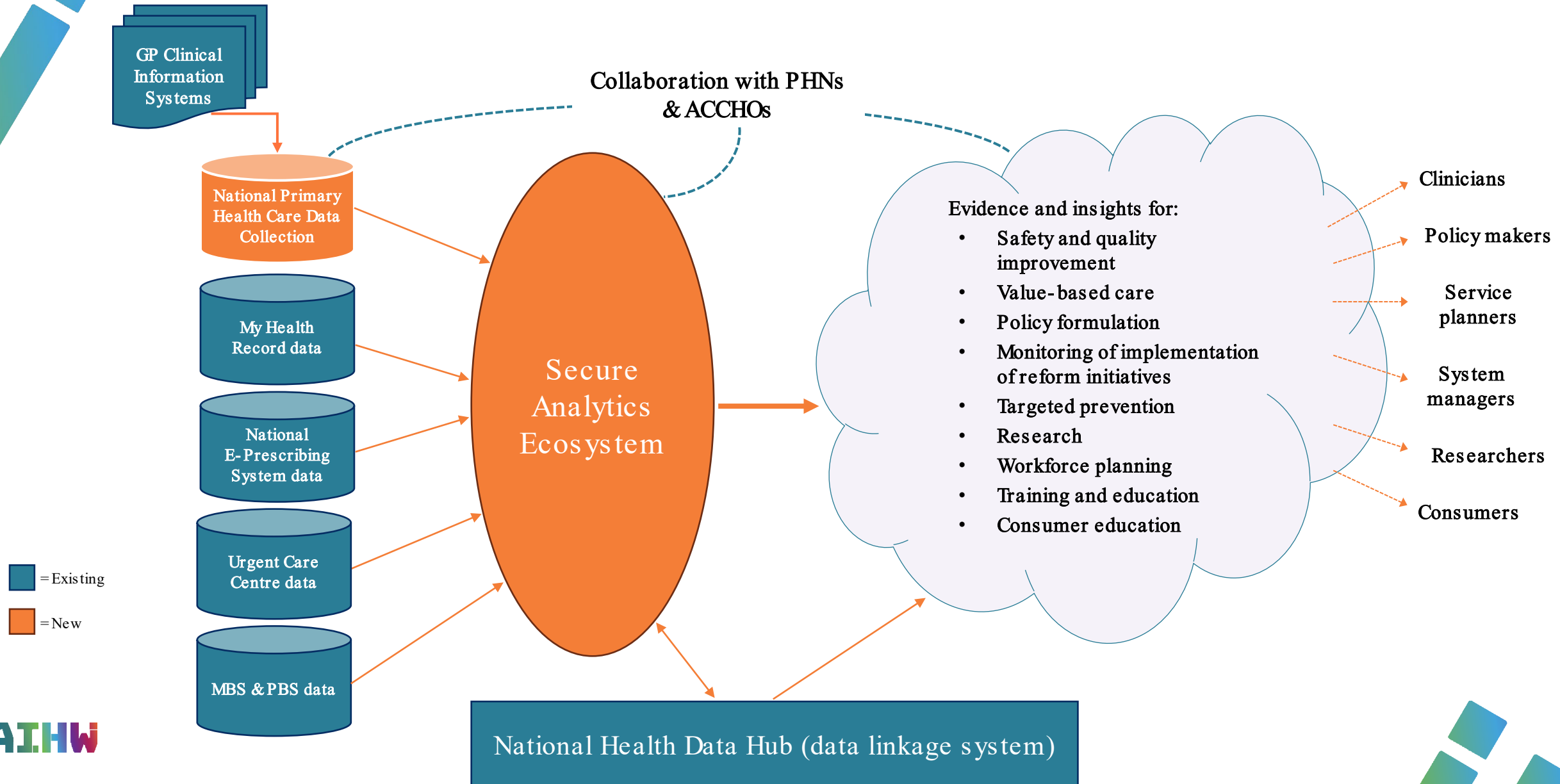


Multiple funding sources, including MBS, GP Incentives & Patients



National primary health care data collection

Future state concept: National Primary Care Analytics Ecosystem



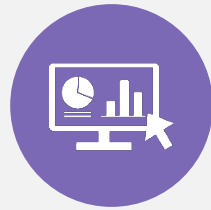
National Health Reform Agreement (NHRA)



Deliver safe, high-quality care in the right place at the right time.



Prioritise prevention, and help people manage their health across their lifetime.



Drive best-practice and performance using data and research.



Improve efficiency and ensure financial sustainability.

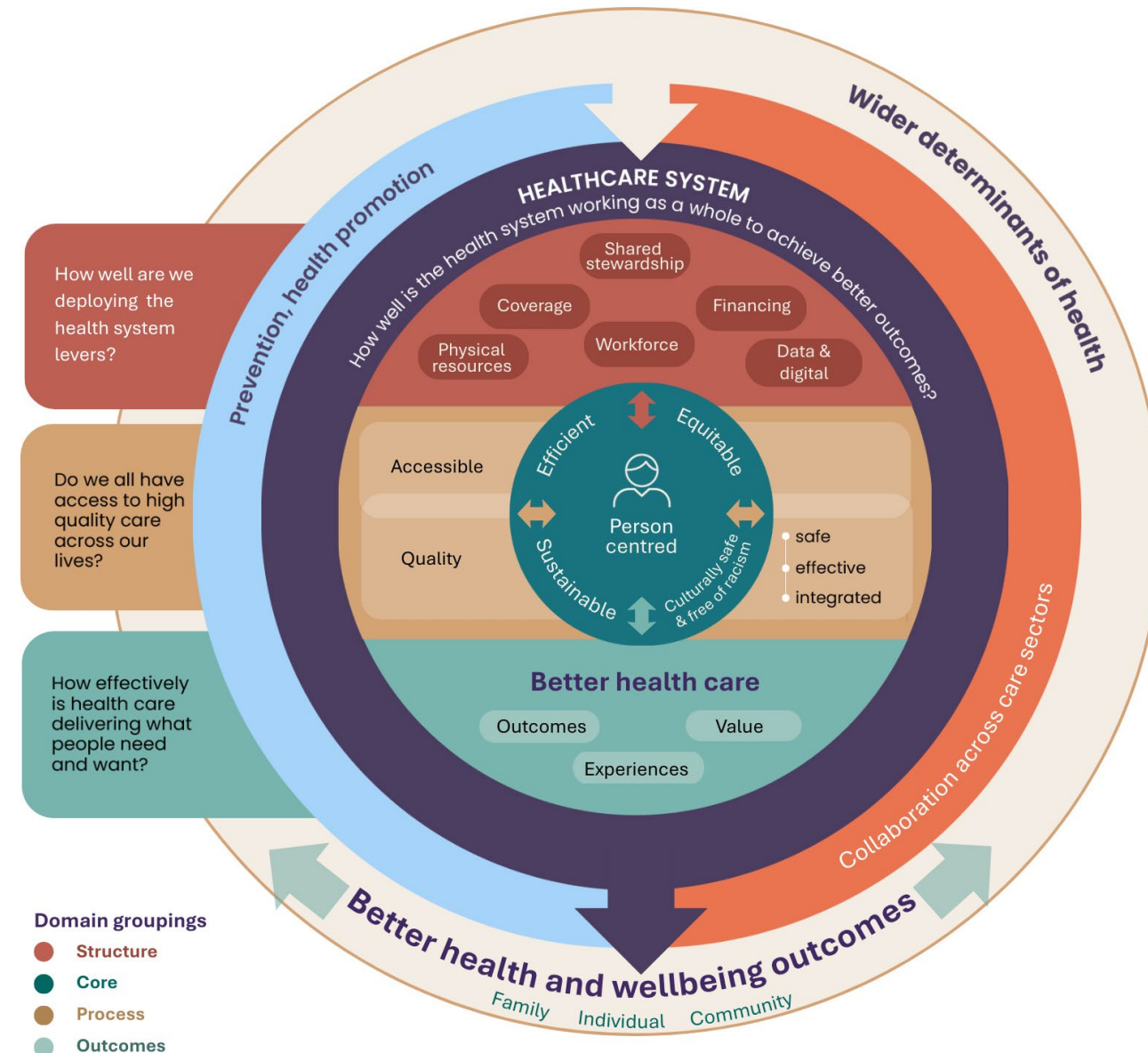
System Performance Assessment (SPA) Framework

Purpose

- Structure and guide assessment
- Support shared stewardship and joint action on matters no sector or jurisdiction can solve alone
- Support evidence-based decision-making
- Drive continuous improvement and innovation

Scope

- Whole of life:
 - All cohorts and all health conditions
- Whole of health system:
 - All health sectors
 - Public and private
 - **Interactions with other care sectors**



Example: Delayed discharge of older patients



The AIHW is supporting the work of governments to develop a nationally consistent definition of *Delayed Discharge of Older Patients* (DDOP), including reasons for delayed hospital discharge.

While definitional work is underway, an analytical workstream has been set up to provide insights based on historical data.

AIHW's linked data set is being used to analyse **characteristics of patients aged 65+** who have experienced **prolonged hospital stays**.

Role of industry partners

National data standards and the common data model will provide **foundational certainty** to builders of digital solutions:

- Aligning early with national data standards **lowers long-term build costs**.
- Standards-based systems attract aged care providers and governments, who want **confidence** that their technology will remain compliant and future-proof.
- Interoperability and integration with other critical systems (e.g. My Health Record, hospital EMRs, and practice management systems) is **accelerated**.
- Time to value is shortened and benefits of digital investments are more demonstrable – unblocking the **investment pipeline**.

Digital industry are not just ‘tech vendors’ – they are **co-creators** of a better aged care system for Australians:

- National and global best practice
- Process innovation
- Business optimisation
- Vehicle for AI adoption in the sector

Imagine an aged care system where...



Policy makers, funders and decision-makers have a complete and current understanding of access to and the utilisation of aged care services in all regions



Providers receive regular, relevant, consistent and meaningful information about the health and wellbeing of older people, and the quality of services they provide



New policy initiatives can be evaluated for their effectiveness as a by-product of routine activity



Research teams have secure access to de-identified, linked data sets for advanced research projects



Data is shared and reused securely to deliver a sustainable and continually improving aged care system



Aged care workers, service providers and health professionals are digitally empowered to provide higher quality, connected care; digital industry is an active partner to the sector



Let's keep the
conversation going,

and work together to shape
the future of aged care.



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Thank you



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www.aihw.gov.au



ceo@aihw.gov.au