

Performl

AI analytics for preventive care

SUBMISSION

September 2024

Australian Government the Treasury consultation on revitalising national competition policy

Executive summary

Australia's \$350 billion care system is growing unsustainably, yet too many Australians still face preventable disadvantages. Experts agree preventive care addressing the social determinants of health is crucial for creating an effective and sustainable system. But the delivery of preventive care is complex, involving over 300,000 competing service providers and millions of consumers making daily choices about care services.

Providers need data to target care, and consumers need information to make informed choices. Open access to these critical knowledge assets is essential for the care system's success. However, widespread information asymmetry undermines Australia's care system, leading to inefficiencies and poor outcomes. Systemic issues with open data prevent providers and consumers from fully using the information currently available. Moreover, government agencies too often withhold essential care data, which could be used to help improve decision-making. The 2017 Productivity Commission *Data Availability and Use Inquiry* estimated that billions in potential savings are lost due to the poor use and limited availability of open data in care systems.

Performl's experimental product has analysed over 250 million cells of open data on the needs of people with disabilities and their service providers. This technology is now used by government, researchers, philanthropy, and disability care providers covering 10% of the NDIS market by payments. Performl's technology helps direct more than \$3 billion in preventive care for over 35,000 people with support needs. For example, one experiment identified a gap in speech therapy services for rural children, leading to new services that improve wellbeing, create economic benefits, and reduce future care costs. Performl is now advancing collaborative R&D to expand this proof-of-concept into an AI analytics platform for the broader care industry. We aim to support government to safely release more useful open data and promote open access to critical market information currently withheld by government to drive competition, productivity, and sustainability.

Improvements in open data for care systems have been limited since the 2015 Competition Policy Review recommended changes. Systematic action is needed. The potential benefits are too great to allow for another decade of slow progress. We recommend introducing a National Competition Principle for care markets to promote open access to key government data for providers and consumers. As a first step, we propose establishing a minimum open dataset for care markets. Additionally, we recommend the development of an intergovernmental framework and stakeholder forum to accelerate open-data-driven market stewardship by government in care systems.

A generous but ineffective care system threatens both our economy and our lives

Government spending on Australia’s market-driven and consumer-directed care systems is estimated to reach \$153.9 billion by 2025-26.¹ Australia’s wider \$350 billion health and social support system grew by 15% last year, while GDP increased by only 2.2%.² Despite this growing investment, too many Australians face persistent and preventable disadvantages.³

Experts agree that preventive care is essential to make our care systems effective. Preventive care tackles the social determinants of health, addresses unmet needs, improves quality of life, and ultimately reduces future care costs, making our care system sustainable.⁴ However, with over 300,000 competing service providers and millions of consumers making daily choices about care services, the delivery of preventive care is highly complex. Australia’s market-driven and consumer-directed care systems are set out in Table 1 below.

Table 1: Australia’s market-driven and consumer-directed care systems

	2025-26 budget forward estimate	Consumers	Providers
Aged care			
Commonwealth Home Support Programme (CHSP)	\$3.86 billion ⁵	816,000 people ⁶	1,334 providers ⁷
Residential Aged Care (RAC)	\$20.13 billion ⁸	193,000 people ⁹	764 providers ¹⁰
Home Care Packages (HCP)	\$7.87 billion ¹¹	258,000 people ¹²	923 providers ¹³
Total for aged care	\$31.9 billion¹⁴	1,267,000 people¹⁵	1,437 providers and 5,295 services¹⁶
National Disability Insurance Scheme (NDIS)	\$52.3 billion¹⁷	661,267 people¹⁸	215,779 providers¹⁹
Veterans’ care			
Veterans’ Home Care (VHC)	\$157.1 million ²⁰	34,018 people ²¹	144 providers ²²
Community Nursing Program (CNP)	\$193.3 million ²³	9,472 people ²⁴	301 providers ²⁵
Residential Aged Care (RAC)	\$656.8 million ²⁶	15,251 people ²⁷	764 providers ²⁸
Total for veterans’ care	\$1 billion²⁹	58,741 people³⁰	1,209 providers³¹
Child Care Subsidy (CCS)	\$15.1 billion³²	1,425,210 children and 1,001,660 families³³	Around 7,200 providers³⁴ operating 14,732 services³⁵
Medicare Benefits Schedule (MBS)	\$33.9 billion³⁶	23,500,000 people accessing at least one service³⁷	225,547 services delivering 454 million supports³⁸
Pharmaceutical Benefits Scheme (PBS)	\$19.7 billion³⁹	17,800,000 people accessing at least one medicine⁴⁰	6,271 providers⁴¹ supplying 223.1 million subsidised prescriptions⁴²

Information asymmetry drives ineffectiveness and poor outcomes in Australia's care markets

Asymmetric information in care markets occurs when consumers, providers, or other stakeholders lack equal access to critical market data for informed decisions. While information asymmetry can arise between various actors, this submission highlights two key forms. First, information asymmetry arising from systemic open data challenges which prevent care market participants from effectively using the information released by government. Second, information asymmetry arising from government withholding critical data about care markets, consumer needs, and provider activity, which undermines market performance.

These utility and access issues create asymmetric information and ultimately drive market ineffectiveness and poor care outcomes. When consumers lack open access to essential information about provider quality, availability, and cost, they cannot make informed decisions. This restricts their ability to switch providers or select the best care options, leaving people with suboptimal services and enabling lower-quality providers to persist. On the provider side, the lack of open market data undermines their ability to identify true demand for services, leading to inefficient resource allocation, reduced productivity, underutilisation of funded preventive care, and geographic disparities in care availability. Uncertainty from information asymmetry stifles competition as providers cannot accurately assess market needs, plan expansions, or offer competitive pricing. It can also cause a mismatch between services and demand, inflating costs and undermining long-term system sustainability.

Asymmetric information manifests as long waitlists, unmet funded needs, preventable disadvantages, missed economic opportunities, and increased pressure on emergency services and social welfare systems—outcomes these care systems are designed to prevent. For example, \$11.4 billion in funded NDIS care went unused last year due to market failures,⁴³ in part because consumers cannot easily find providers to connect with and providers lack clear, accessible data to identify who needs specific supports and where, hindering their ability to plan and expand services effectively. By failing to deliver this care, Australia's economy missed out on up to \$4.6 billion in potential savings from reduced pressure on emergency departments, hospitals, justice systems, homelessness and social housing systems, welfare systems, as well as lost tax receipts from people with disabilities and their carers gaining or increasing employment.⁴⁴

Information asymmetry is now widespread in Australia's market-driven, consumer-directed care systems, including aged care, disability care, veterans' care, child care, and primary health care. The Productivity Commission's 2017 *Data Availability and Use Inquiry* found that billions in potential savings are lost due to the poor utilisation

and lack of accessible open data within the care system.⁴⁵ Numerous reports have found that leveraging open data to better target preventive care could yield significant competition and productivity gains.⁴⁶

To reduce information asymmetry in care markets, two key issues must be addressed:

1. **Systemic challenges in using existing open data:** Performl's R&D is pioneering new technology to tackle this issue.
2. **Government withholding critical care information:** Government should adopt an open-data-driven approach to care market stewardship.

Performl is pioneering technology to solve systemic challenges care markets face in using open data

Commonwealth, State and Territory Governments have released trillions of cells of open data about Australia's care markets over the last decade. However, systemic open data challenges prevent providers and consumers from effectively using the available information. These challenges include:

- Increasing data volumes that are difficult to manage.
- Scattered data sources without a centralised storage system.
- Inconsistent labelling and terminology across datasets.
- Unstructured formats (e.g., PDFs).
- Missing metadata, essential for correct interpretation.
- Pre-aggregated data, limiting deeper analysis that requires raw, unaggregated datasets.
- Suppressed small cell values, which obscures marginalised cohorts, instead of applying privacy-preserving techniques like random error introduction.
- Frequently changing formats and standards.
- Omitted critical information, leading to incomplete datasets.
- Arbitrary data removal, preventing longitudinal analysis.
- Bespoke geographies (e.g., NDIS Service Districts and Aged Care Planning Regions) that do not align with the Australian Statistical Geography Standard (ASGS), preventing data integration.
- Inconsistent and non-contiguous datasets, making comparisons unreliable or impossible.

For example, the Australian Children's Education & Care Quality Authority (ACECQA) national register⁴⁷ and *StartingBlocks.gov.au*⁴⁸ includes data on current and past National Quality Standard ratings. However, consumers cannot search for child care services that have improved their ratings. Specialist Disability Accommodation (SDA) providers in the NDIS market have access to an open

dataset on demand and supply. But the multi-index structure of the information obscures the total SDA places in Australia. Providers must perform a non-trivial transformation and linkage on the dataset to calculate total SDA capacity, reducing the utility of the released information.

These challenges are partly inevitable because government data custodians cannot foresee every future use case or need. They interpret and categorise data based on current priorities, which vary across individuals, organisations, and contexts. As data evolves, inconsistencies naturally emerge. Balancing immediate needs with long-term data management goals leads to trade-offs that complicate future integration and interpretation. These factors should drive a strong preference for releasing data in a standards-based, consistent format across care markets and systems, in its least aggregated and most practicable form, while safeguarding private and sensitive information. Any specific aggregation limits the flexibility of future analyses, as no single method suits all situations. By avoiding inconsistent and custom aggregations, this approach allows for multiple interpretations and safe uses through analysis, maximising the potential to address diverse and evolving needs.

Over the past two years, Performl has led R&D to address the systemic challenges care markets face in effectively using open data. Performl's solution involves:

- **Developing a scalable data integration framework:** This framework unifies fragmented datasets, centralises storage, and ensure consistent data formatting and metadata management, making the data accessible and useful.
- **Building an AI-powered analytics platform:** This platform seeks to allow care industry stakeholders to query open data using natural language, enabling them to ask complex questions, such as identifying areas of unmet care needs or predicting future demand for services, without requiring deep technical expertise.
- **Implementing advanced privacy-preserving techniques:** By leveraging differential privacy and noise introduction methods, Performl's solution seeks to ensure sensitive data remains protected while still providing granular insights necessary for effective decision-making.
- **Creating dynamic, real-time data tools:** The technology allows for continuous updates, reducing the reliance on outdated data and enabling care industry stakeholders to respond to emerging needs.

Performl's R&D program aims to move beyond existing limitations, enabling care providers and industry stakeholders to use open data effectively and at scale. This will not only improve their ability to deliver preventive care but also enhance their capacity to compete in the market, improve operational productivity, and make the care system more sustainable. This work underpins future consumer applications.

By solving systemic open data challenges in care markets, Performl aims to enable a more competitive, productive, and sustainable care industry, benefiting both providers and consumers by:

- **Enhancing competition:** By improving access to open data and reducing technical barriers, more providers, particularly small- to medium-sized ones, will be able to compete better. Access to timely, relevant data will help identify growth opportunities and develop innovative care solutions.
- **Improving productivity:** The ability to analyse and act on open data will streamline operations, enabling providers to make data-driven decisions that improve resource allocation, reduce inefficiencies, and deliver more care services.
- **Supporting care system sustainability:** As providers better target preventive care through data insights, the overall burden on Australia's care system will decrease. Preventive care addresses health and social issues early, reducing long-term costs. This will curb unsustainable growth in care expenditure and improve outcomes for Australians needing support.
- **Empowering consumers:** Improved access to clear, standardised open data will enable consumers to make informed decisions about their care options. By offering advanced analytics to consumers that interpret complex datasets, consumers can compare services, track provider improvements, and select care based on personalised needs and preferences.

Government blocking open access to essential information negatively impacts our care systems

Government restrictions on open access to market information stifle competition, reduce sector productivity, and threaten the long-term sustainability of the care system. Lifting these restrictions is critical to unlocking the potential of open-data-driven market stewardship, which is essential for improving care outcomes.

The economic case for open-data-driven market stewardship in care systems is supported by key market theories such as market efficiency,⁴⁹ information asymmetry,⁵⁰ principal-agent problem,⁵¹ open data as a public good,⁵² transaction costs,⁵³ market signalling,⁵⁴ and consumer sovereignty.⁵⁵ These theories demonstrate how open data improves decision-making, enhances resource allocation, increases transparency, aligns provider incentives with consumer needs, promotes fairness, reduces inefficiencies, fosters trust, and empowers consumers to drive better care outcomes.

Open data also supports the government's role as a market steward. It enables evidence-based policy design, dynamic adjustments, and transparent monitoring of the care sector. Open data fosters trust by empowering consumers to make informed

decisions and ensuring providers maintain high standards through public performance visibility. It also helps manage pricing, budgeting, and workforce planning, sending important signals to the market and helping ensure care remains accessible, equitable, and efficient. Open data is crucial for preventing market failures and identifying risks early to benefit consumers, providers, and government agencies. Open data is a significant lever for driving effective market stewardship.

A key example of the need for open-data-driven market stewardship is the SDA (specialist disability accommodation) market within the NDIS, which remains under budget projections. Government estimates projected \$700 million in SDA funding by July 2020,⁵⁶ but the current budget is \$470 million,⁵⁷ with \$316 million paid in the last 12 months.⁵⁸ This shortfall of housing for people with significant disabilities is in part due to a lack of market data on SDA demand and supply, limiting investment. Government withholding access to market information on SDA demand has contributed to some regions facing a shortage of SDA places, while others risk oversupply.⁵⁹

The Australian Parliament raised the need for open access to small-area SDA demand data by design category and dwelling type in 2018.⁶⁰ These recommendations were repeated in the 2024 NDIS Review.⁶¹ However, the NDIA has yet to release small-area SDA demand data by these categories, slowing market growth. In 2018, the Australian Parliament committee emphasised that:

"[The] NDIA, as the national market steward, should be taking leadership on the provision of effective market information. Provision of effective market information will improve investor confidence and enable the market to grow to meet the needs of consumers."⁶²

Data on taxpayer subsidies paid to care providers is crucial for monitoring market concentration and diversification, enabling a better understanding of market saturation and competition. Care providers need access to data on payments to providers by small area to assess potential to enter or grow in specific markets. This data also allows consumers to evaluate the strength and support delivered by providers in small areas and validate providers' claims. However, this data is not routinely made available. Aged care is the only market-driven, consumer-directed care market we identified that regularly releases comprehensive data on payments to providers.⁶³ Performl has once gained similar information from the National Disability Insurance Agency on payments to providers under freedom of information (FOI) legislation.⁶⁴ The same information for a different time series has since been requested to measure changes over the last six months. However, this request for updated data has been declined, although an internal review is underway. Access to this information should not be withheld; it should be publicly available—just as it is in aged care—so the market has the information it needs to function effectively.

Recommendations

Recommendation 1: Establish a new National Competition Principle for care systems and open access to critical information assets held by government

A new National Competition Principle should be introduced to guide market design and market stewardship of care systems by government, promoting high-quality and price-efficient care through market competition.

This new Principle should apply to both market-driven, consumer-directed care systems and government-commissioned services, including those managed by non-government organisations such as Primary Health Networks.

The Principle should clearly define the government's ultimately responsibility to act in the public interest and ensure citizen wellbeing. In cases of market failure, a principles-based approach, including temporary market intervention, should be adopted to protect public interest and ensure continuity of care.

The Principle should recognise the government's responsibility to adopt an open-data-driven approach to market stewardship by providing open access to critical market data, fostering competitive, productive, and sustainable care systems.

As the Treasury consultation paper on revitalising competition highlights:

“Government data is increasingly important to business and consumers, and unnecessary restrictions on access to this data can impede competition.”⁶⁵

Establishing a presumption in favour of open access to non-sensitive care market data aligns with the Australian Government Data and Digital Strategy's commitment to making non-sensitive data open by default.⁶⁶ Open access must protect consumer privacy and respect legal requirements.

Governments should avoid discriminatory practices in data sharing to ensure fairness. When market information is provided to one participant, it should be equally shared with all participants. Currently, government data custodians in aged care,⁶⁷ disability care,⁶⁸ veterans' care,⁶⁹ child care,⁷⁰ and primary health care including MBS⁷¹ and PBS⁷² allow varying levels of custom data requests. However, custom information releases are not consistently shared with all market participants.

Agencies should maintain a public log of custom data requests, defaulting to open access for the information provided. If open access is not possible, selective sharing should be reviewed. While some cases may justify limited sharing, competitive neutrality must be prioritised to ensure no market participant gains unfair advantage in accessing information.

The principle of open access to care system data should encompass information held by the government on commissioned services, as well as data on services commissioned by agencies through government grants. For example, there is no publicly available list of services commissioned by Australia's 31 Primary Health Networks, despite the importance of such data for understanding primary care in the system. Contracts for critical services, such as 1800RESPECT and other government-funded care programs, should also include an open data sharing requirement, and funding, enabling insights into service needs and demographic trends across care systems.

Recommendation 3: Strengthen open data objectives under the provisional reform themes

Provisional reform theme four on human services does not explicitly acknowledge the role of open-data-driven market stewardship in reducing asymmetric information in care systems. We suggest rewording this to:

Objective 1: Reduce asymmetric information in care systems through open-data-driven market stewardship by government, empowering consumers to make informed choices and driving provider competition to promote high-quality, price-efficient, and needs-based care for all Australians.

Recommendation 4: Prioritise creation of a minimum open dataset for care markets as an immediate reform activity

Governments should create a minimum open dataset for care markets using existing data systems to enable an immediate improvement in open-data-driven market stewardship.

This dataset will improve provider competition and consumer choice in Australia's market-driven care systems. While some care sectors already attempt a version of this, it is neither a universal practice nor consistently well-executed. It should cover five critical areas: consumer, provider, financial, workforce, and outcome data. This approach ensures stakeholders have a comprehensive view of the market.

Robust privacy safeguards must be implemented, using de-identification techniques like noise introduction and error-injected anonymisation to maintain data utility while protecting consumer confidentiality. Implementing these methods will prevent masking the needs of small, marginalised populations.

The dataset should prioritise small-area data, Statistical Area Level 2 (SA2) or finer, for accurate decision-making and follow Australian Statistical Geography Standard (ASGS) classifications. Aggregating data at a higher geographic level freezes those choices and prevents drilling down into small-area insights. Time-series data is

crucial and should be updated every 90 days, with data released no later than 90 days from the measurement or exposure period to ensure it remains current and actionable, enabling timely tracking of market dynamics and insights.

These requirements can be addressed using existing administrative data systems, often with straightforward SQL queries, without the need for large-scale IT overhauls. A publicly accessible roadmap outlining progress for each of Australia's market-driven and consumer-directed care systems should be released. Proposed changes to the minimum open dataset should be flagged in advance, allowing stakeholders to provide input. This feedback will help the government ensure that open data releases are both relevant and valuable to the market.

The five dataset domains at the SA2 level should encompass the following:

a. Consumer Data

- **Eligibility, approvals, and access:** The number of individuals eligible, approved, and actively accessing services across care systems (aged care, NDIS, veterans' care, child care, MBS, and PBS).
- **Demographic breakdowns:** Age, gender, First Nations status, multicultural status, and vulnerability factors.
- **Support type breakdowns:** For example, therapy supports, accommodation, in-home supports, assistive technology.
- **Unmet demand:** Data on individuals with unused care budgets (e.g., NDIS), those waiting for approvals (e.g., aged care home packages), and those receiving low service levels (e.g. total child care supply is less than the population of children in need of care).
- **New entrants and exit flows:** To capture dynamic movement into and out of care markets, offering insights into provider demand and market changes.

b. Provider Data

- **Number and type of providers:** Active providers with data on their service type (residential, home care, disability services, etc).
- **Provider concentration:** The top 10 providers in each area by name, service capacity, and payment amounts.
- **Complaint and resolution tracking:** Number of complaints per provider and the speed and effectiveness of resolutions.
- **Worker screening:** Provider-specific data on worker screening to assess consistency and quality in care delivery.

c. Financial Data

- **Payments data:** Detailed reporting on budget allocations, actual payments made, and payments to providers.
- **Cost of care:** Average cost of services provided per service, broken down by care types to enable price comparisons for consumers.
- **Subsidy distribution:** Data on government subsidies and payments to providers, and gap payments by consumers, ensuring accountability for funding and highlighting disparities.

d. Workforce Data

- **Workforce distribution:** Information on workforce qualifications, skills shortages, geographical distribution, and workforce gaps.
- **Turnover rates and recruitment trends:** Data on workforce movement and shortages to highlight areas needing immediate intervention.
- **Workforce supply:** Information on the availability of potential carers and workers by type of care.

e. Outcome Data

- **Outcome-based indicators:** Data on health and wellbeing outcomes for consumers based on care received, satisfaction surveys, and other available measures.
- **Social impact metrics:** Data on the broader societal impact of services, such as community participation rates for NDIS clients or reduced hospital admissions for aged care recipients receiving Home Care Packages (HCP). The National Disability Data Asset (NDDA) and National Aged Care Data Asset (NACDA) could create powerful open datasets to track impact metrics at the SA2 area, by demographic and support dimensions.
- **Quality of care audits:** Regularly updated information on provider audit reports, compliance status, and improvement requirements.

This dataset should be regularly reviewed and expanded to include services commissioned by governments, not just market-driven and consumer-directed care systems. Commonwealth, State, and Territory Governments, along with consumers and providers, should be actively involved in maintaining and improving this minimum information asset.

Recommendation 5: Establish an intergovernmental framework and stakeholder forum for open-data-driven market stewardship in care systems

The Commonwealth, State, and Territory Governments should establish a comprehensive intergovernmental framework and stakeholder forum to accelerate open-data-driven market stewardship across care systems. This framework should clearly outline roles, responsibilities, and mechanisms for collaboration in both market-driven, consumer-directed care and government-commissioned services.

The framework must enable data sharing, decision-making, and oversight processes that strengthen market stewardship, ensuring care systems remain responsive, equitable, and sustainable. It should include the following key elements:

1. **Governance and oversight:** Create an intergovernmental forum to govern open data as a market stewardship practice in care systems. This forum should include representation from Commonwealth, State and Territory Governments. A stakeholder forum should also be established to inform this work, comprising consumers, care providers, and industry experts. This forum should be responsible for advising on minimum open data standards for care systems to ensure market and system participants have access to the information assets needed to function.
2. **Open data standards:** Develop minimum open data standards for care systems to ensure open and fair access to care data. This should include standards to ensure consumer privacy protection, guidelines for de-identification, and mechanisms to ensure equal data access for all stakeholders, promoting transparency and competitive neutrality.
3. **Market development:** Use an open-data-driven approach to inform market development, such as establishing a National Reserve Fund for underspends in care systems (e.g., the \$11.4 billion NDIS underspend). Funds could be directed to workforce development and capacity-building initiatives, based on open data about market needs, helping to stabilise care systems and address demand-supply mismatches.
4. **Market intervention:** Include provisions for temporary government commissioning of services when care markets fail, based on open data, to meet demand. For example, market failure due to workforce shortages or provider constraints. This could involve implementing alternative care delivery models until market conditions normalise, ensuring continuity of service and protecting consumer wellbeing. Market intervention should occur based on a transparent and open data framework so that market participants have a high level of confidence about markets at risk of failure and what conditions must be met for normal market operations to resume.

This framework will ensure that open-data-driven market stewardship is systematically embedded in policy, driving improved care outcomes and market resilience across Australia's care systems.

Thank you for considering this submission. We are happy to discuss the opportunities for improvement with you.

Contact information

Loki Ball
Co-Founder / CEO
Performl



¹ See Table 1: Australia's market-driven and consumer-directed care systems in this submission.

² Productivity Commission, *Report on Government Services 2024* (2024); Australian Government The Treasury, *2023 Intergenerational Report* (2023).

³ Productivity Commission, *Fairly Equal? Economic mobility in Australia*, Research Paper (2024); Productivity Commission, *Inquiry into Deep and Persistent Disadvantage in Australia* (2013).

⁴ Australian Government Australian Institute of Health and Welfare, *Report on the Social Determinants of Health* (2022); McClure Review of Australia's Welfare System (2015)

⁵ Budget estimate based on 12.11% of residential and home care payments in 2022-23 going to home support (CHSP) according to the Productivity Commission, *Report on Government Services 2024*, Table 14A.3 (2024).

⁶ Australian Government Australian Institute of Health and Welfare, GEN Aged Care Data, *People using aged care* (2024). Data as at 30 June 2023.

⁷ Australian Government Australian Institute of Health and Welfare, GEN Aged Care Data, *Providers, services and placed in aged care* (2024). Data as at 30 June 2023.

⁸ Budget estimate based on 63.11% of residential and home care payments in 2022-23 going to residential aged care (RAC) according to the Productivity Commission, *Report on Government Services 2024*, Table 14A.3 (2024).

⁹ Australian Government Australian Institute of Health and Welfare, GEN Aged Care Data, *People using aged care* (2024). Data as at 30 June 2023. The total figure may include double counting if summed with the number of people in residential aged care under veterans' care, as the dataset does not clarify whether veterans are included or excluded.

¹⁰ Australian Government Australian Institute of Health and Welfare, GEN Aged Care Data, *Providers, services and placed in aged care* (2024). Data as at 30 June 2023.

¹¹ Budget estimate based on 24.77% of residential and home care payments in 2022-23 going to home support (HCP) according to the Productivity Commission, *Report on Government Services 2024*, Table 14A.3 (2024).

¹² Australian Government Australian Institute of Health and Welfare, GEN Aged Care Data, *People using aged care* (2024). Data as at 30 June 2023.

¹³ Australian Government Australian Institute of Health and Welfare, GEN Aged Care Data, *Providers, services and placed in aged care* (2024). Data as at 30 June 2023.

¹⁴ Commonwealth of Australia, *Portfolio Budget Statements 2024-25*, Budget Related Paper No 1.9, Health and Aged Care Portfolio, Table 2.3.1 at Page 91 (2024).

¹⁵ Australian Government Australian Institute of Health and Welfare, GEN Aged Care Data, *People using aged care* (2024). Data as at 30 June 2023.

¹⁶ Australian Government, *Services Australia, Annual Report 2022-23*, Page 69 (2024). Data as at 30 June 2023.

-
- ¹⁷ Commonwealth of Australia, *Budget 2024-25, Budget Strategy and Outlook, Budget Paper No 1*, Table 6.3.1 at Page 198 (2024).
- ¹⁸ National Disability Insurance Agency, *Q4 2023-24 NDIS Quarterly report to disability ministers*, Figure 1 at Page 15 (2024). Data as at 30 June 2024.
- ¹⁹ National Disability Insurance Agency, *Q4 2023-24 NDIS Quarterly report to disability ministers*, Figure 31 at Page 52 (2024). Data as at 30 June 2024.
- ²⁰ Australian Government Department of Veterans' Affairs, Portfolio Budget Statements 2024-25 Budget Related Paper No 1.4B, Defence Portfolio (Department of Veterans' Affairs), Table 2.2.2, Page 41 (2024).
- ²¹ Productivity Commission, *Report on Government Services 2024*, Table 14A.7 (2024). Data as at 30 June 2023.
- ²² Australian Government, Department of Veterans' Affairs, *Veterans' Home Care (VHC) Assessment Agencies and Service Providers* (2024). Data as at 20 September 2024.
- ²³ Australian Government Department of Veterans' Affairs, Portfolio Budget Statements 2024-25 Budget Related Paper No 1.4B, Defence Portfolio (Department of Veterans' Affairs), Table 2.2.2, Page 41 (2024).
- ²⁴ Productivity Commission, *Report on Government Services 2024*, Table 14A.7 (2024). Data as at 30 June 2023.
- ²⁵ Australian Government, Department of Veterans' Affairs, *Panel of community nursing providers* (2024). Data as at 20 September 2024.
- ²⁶ Australian Government Department of Veterans' Affairs, Portfolio Budget Statements 2024-25 Budget Related Paper No 1.4B, Defence Portfolio (Department of Veterans' Affairs), Table 2.2.2, Page 41 (2024).
- ²⁷ Productivity Commission, *Report on Government Services 2024*, Table 14A.8 (2024). Data as at 30 June 2023.
- ²⁸ Australian Government Australian Institute of Health and Welfare, GEN Aged Care Data, *Providers, services and placed in aged care* (2024). Data as at 30 June 2023.
- ²⁹ Australian Government Department of Veterans' Affairs, Portfolio Budget Statements 2024-25 Budget Related Paper No 1.4B, Defence Portfolio (Department of Veterans' Affairs), Table 2.2.2, Page 41 (2024).
- ³⁰ Productivity Commission, *Report on Government Services 2024*, Table 14A.7 and Table 14A.8 (2024). Data as at 30 June 2023. The total figure may include double counting, as the dataset does not specify unique clients.
- ³¹ Australian Government, Department of Veterans' Affairs, *Veterans' Home Care (VHC) Assessment Agencies and Service Providers* (2024). Data as at 20 September 2024; Australian Government, Department of Veterans' Affairs, *Panel of community nursing providers* (2024). Data as at 20 September 2024; Australian Government Australian Institute of Health and Welfare, GEN Aged Care Data, *Providers, services and placed in aged care* (2024). Data as at 30 June 2023. The total figure may include double counting, as the datasets does not specify unique providers.
- ³² Commonwealth of Australia, *Budget 2024-25, Budget Strategy and Outlook, Budget Paper No 1*, Table 6.3.1 at Page 198 (2024).
- ³³ Australian Government Department of Education, *Child Care Subsidy data report - March quarter 2024* (2024). Data as at 31 March 2024.
- ³⁴ Australian Children's Education and Care Quality Authority, *NQF Annual Performance Report* (2024). Data as at 30 June 2023.
- ³⁵ Australian Government Department of Education, *Child Care Subsidy data report - March quarter 2024* (2024). Data as at 31 March 2024.
- ³⁶ Australian Government Department of Health and Aged Care, Portfolio Budget Statements 2024-25 Budget Related Paper No 1.9, Health and Aged Care Portfolio, Table 2.2.1 at Page 19 (2024).
- ³⁷ Australian Government Department of Health and Aged Care, Portfolio Budget Statements 2024-25 Budget Related Paper No 1.9, Health and Aged Care Portfolio, Page 19 (2024).
- ³⁸ Australian Government, Services Australia, *Annual Report 2022-23*, Page 66 (2024). Data as at 30 June 2023. There are 225,547 Medicare provider numbers, noting that health professionals are issued more than one provider number if providing services at multiple locations.

-
- ³⁹ Australian Government Department of Health and Aged Care, Portfolio Budget Statements 2024-25 Budget Related Paper No 1.9, Health and Aged Care Portfolio, Table 2.2.1 at Page 19 (2024).
- ⁴⁰ Australian Government Australian Institute of Health and Welfare, *Medicines in the health system* (2024). Data as at 30 June 2023. Data based on AIHW analysis of PBS data maintained by the Australian Government Department of Health and Aged Care.
- ⁴¹ Australian Government Department of Health and Aged Care, *Pharmaceutical Benefits Scheme (PBS) Expenditure & Prescriptions Report 1 July 2022 to 30 June 2023*, Table 2(a) at Page 3 (2024). Data as at 30 June 2023.
- ⁴² Australian Government Department of Health and Aged Care, *Pharmaceutical Benefits Scheme (PBS) Expenditure & Prescriptions Report 1 July 2022 to 30 June 2023*, Table 13 at Page 29 (2024). Data as at 30 June 2023.
- ⁴³ National Disability Insurance Agency, *Explore Data*, committed supports minus payments data for six-months in Q4 FY23/24 (January 2024 to June 2024) and Q2 FY23/24 (July 2023 to December 2023).
- ⁴⁴ Based on benefits realisation estimate by the National Disability Insurance Agency in Submission 161 to the Productivity Commission, *NDIS Costs Inquiry* (2017), adjusted to current investment level.
- ⁴⁵ Productivity Commission, *Data Availability and Use Inquiry* (2017).
- ⁴⁶ See 2024 Inquiry into Early Childhood Education and Care by the Productivity Commission; 2024 Report on Monitoring Social Determinants of Health Equity by the World Health Organisation; 2024 NDIS Review; 2024 Closing the Gap Review by the Productivity Commission; 2023 Intergenerational Report; 2023 Measuring What Matters Statement by the Federal Treasurer; 2023 Interim Economic Inclusion Advisory Committee Report; 2023 Productivity Inquiry by the Productivity Commission; 2023 Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability; 2021 Royal Commission into Aged Care Quality and Safety Final Report; and the 2018 Human Services Review by the Productivity Commission.
- ⁴⁷ <https://www.acecqa.gov.au/resources/national-registers>.
- ⁴⁸ <https://www.startingblocks.gov.au/>
- ⁴⁹ Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, 25(2), 383-417.
- ⁵⁰ Akerlof, G. A. (1970). The market for 'lemons': Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84(3), 488-500.
- ⁵¹ Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- ⁵² Samuelson, P. A. (1954). The pure theory of public expenditure. *Review of Economics and Statistics*, 36(4), 387-389.
- ⁵³ Coase, R. H. (1937). *The nature of the firm*. *Economica*, 4(16), 386-405.
- ⁵⁴ Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87(3), 355-374.
- ⁵⁵ Samuelson, P. A. (1948). Consumption theory in terms of revealed preference. *Economica*, 15(60), 243-253.
- ⁵⁶ National Disability Insurance Agency, Specialist Disability Accommodation (SDA) market information (2018).
- ⁵⁷ National Disability Insurance Agency, Datasets, Participant datasets, Participants with home and living supports, SDA enrolled dwellings and NDIS demand data (June 2024), Table P.2.
- ⁵⁸ National Disability Insurance Agency, Datasets, Payment datasets, Average support line item payments data downloads (June 2024).
- ⁵⁹ Performl analysis on SDA need, new builds, supply pipeline, and existing non-Basic SDA stock.
- ⁶⁰ Commonwealth of Australia, Report by the Jointed Standing Committee on the National Disability Insurance Scheme (2018), Paragraph 6.31.
- ⁶¹ Commonwealth of Australia, Department of Prime Ministers and Cabinet, Working together to deliver the NDIS – NDIS review: Final Report (Supporting Analysis), Page 621.
- ⁶² Commonwealth of Australia, Report by the Jointed Standing Committee on the National Disability Insurance Scheme (2018), Paragraph 6.42.
- ⁶³ Australian Government Australian Institute of Health and Welfare, GEN Aged Care Data, Aged care service list: 30 June 2023 (2023) at <https://www.gen-agedcaredata.gov.au/resources/access-data/2023/september/aged-care-service-list-30-june-2023>.
- ⁶⁴ FOI 23/24-1120 on the National Disability Insurance Agency FOI disclosure log at <https://www.ndis.gov.au/about-us/policies/freedom-information/foi-disclosure-log>.
- ⁶⁵ Australian Government the Treasury, Revitalising National Competition Policy, Consultation Paper, August 2024 (2024), Page 30.

⁶⁶ Australian Government, *Data and Digital Government Strategy* (2023).

⁶⁷ <https://www.gen-agedcaredata.gov.au/request-customised-data>

⁶⁸ <https://dataresearch.ndis.gov.au/request-data>

⁶⁹ <https://www.dva.gov.au/about/accessing-information/what-can-i-access/corporate-information-access/who-can-help-me-access-corporate-information>

⁷⁰ <https://www.servicesaustralia.gov.au/child-support-statistics?context=22>

⁷¹ <https://www.servicesaustralia.gov.au/medicare-statistics?context=22#a1>

⁷² <https://www.servicesaustralia.gov.au/medicare-statistics?context=22#a2>