

Identification of people with disability in linked administrative data for service use and outcomes reporting in housing

Summary of NDDA Pilot findings

December 2021



National
Disability
Data Asset

The information gap

While there are many administrative data collections which gather data about people with disability, these generally only contain information about individuals eligible for a specific service or program. As a result, reporting across systems to enable the measurement of outcomes under the new Australia's Disability Strategy (ADS) Outcomes Framework is hampered by the absence of a consistent indicator which would identify people with disability appearing in various data collections.

The purpose of this work was to test whether the National Disability Data Asset (NODA) can be used to create a comprehensive identifier for people with disability, and as a data source for reporting against the new ADS Outcomes Framework (housing indicators).

Key findings from jurisdictions participating in the pilot (New South Wales, Victoria, South Australia and Queensland)

- Siloed administrative data collections may severely underestimate the number of clients with disability. Linked data can help resolve these data gaps and enable better service provision to meet the needs of people with disability.
- People with disability are much more likely to rely on housing supports than people without disability. In fact, people with disability are:
 - 8 times more likely to live in public housing;
 - 5 times more likely to access specialist homelessness services;
 - 3 times more likely to receive Commonwealth Rent Assistance.
- People with disability are much more likely to live on their own. This is especially important in view of the events of COVID-19, when the ability to draw on supports and contacts outside of one's own household was impacted by public health restrictions and concerns.
- People with disability receiving housing supports are likely to have complex disability-related needs.
- People with psychosocial disability are overrepresented among public housing

Implications and actions

The results show that of all people using the housing supports analysed for this project, a large proportion have disability, with public housing in particular supporting a very high proportion of households with disability. Further work is required to explore if there are people who might benefit from housing supports but, for whatever reason, are unable to access them.

A more comprehensive understanding of the extent of interaction people with disability have with the housing support system would be made possible by linking data on other housing supports not covered in this project; as well as the inclusion of data from all Australian states and territories.

Contents

- 1 Background..... 1**
- 2 Key findings..... 2**
- 3 Implications6**
- 4 Key tables/ figures 7**
- 5 References..... 9**
- 6 APPENDIX: Overview of methodology 10**

1 Background

The purpose of this project was to test whether the National Disability Data Asset (NDDA) can be used to create a comprehensive identifier for people with disability, and as a data source for reporting against the new Australia's Disability Strategy (ADS) Outcomes Framework.

This project was the only one of the NODA test cases to use data from several states ¹.

Creation of a disability indicator

A key component of the project was creation of a disability indicator based on administrative data (information collected in the process of government service, policy or program delivery). While there are many administrative data collections which gather data about people with disability, these generally only contain information about individuals eligible for a specific service or program. In turn, mainstream data collections contain information about the broader population, however these generally do not

identify people with disability. As a result, reporting across systems to enable the measurement of outcomes under the new ADS Outcomes Framework is hampered by the absence of a consistent indicator which would identify people with disability appearing in various data collections.

The methodology for creating a set of disability indicators based on linked administrative data is described in the September Report for this test case. That report also provided initial findings on the performance of the indicator against other published statistics (the ABS Survey of Disability, Ageing and Carers (SDAC)) , and a first look at the impact of reporting on housing services use based on the linked-data indicator, compared with dataset-specific indicators of disability . Further work on testing the created linked-data indicators against SDAC is on-going.

Testing the disability indicator to report on housing service system

A second key component of the project was testing the created indicator to report on service use and outcomes of people with disability in a chosen service system - housing. Stable, accessible and affordable housing is fundamental to improving outcomes for people with disability. However, it is not possible currently to measure the extent of interaction people with disability have with the housing support system. This is because it is not known how many people with disability need access to and assistance with housing supports as a result of impairment. Further, people may not disclose their disability to a service provider if they do not consider it relevant to the housing support being accessed. Other NDDA Pilot projects are expected to contribute to ADS Outcomes Framework reporting by considering their focus systems, i.e. justice, early childhood, transition from education to employment, and mental health.

This Report provides summary information on findings related to housing supports and services received by people with disability.

¹ The data for this test case were provided by all jurisdictions participating in the NDDA Pilot (the Commonwealth, as well as New South Wales, Victoria, South Australia and Queensland).

2 Key findings

- **Siloed administrative data collections may severely underestimate the number of clients with disability (see also Figure 4.1):**
 - o Public Housing (PH):
 - 48% of all public housing tenants were identified as having disability based on the linked-data indicator, compared with 27% of tenants identified using the PH indicator alone [as at 30 June 2020]
 - 71% of all public housing households were estimated to have at least one person with disability [as at 30 June 2020].
 - o State Owned and Managed Indigenous Housing (SOMIH)²:
 - 24% of all SOMIH tenants were identified as having disability based on the linked-data indicator, compared with 10% tenants identified when using the SOMIH indicator alone [as at 30 June 2020].
 - o Specialist Homelessness Services (SHS):
 - 39% of SHS clients were identified as having disability based on the linked-data indicator, compared with just 5% of clients identified using the created disability indicator alone [between July 2012 and June 2020].
 - o Commonwealth Rent Assistance (CRA):
 - 41% of income units (individuals or a group of related people) receiving CRA were identified as having at least one person with disability based on the linked-data indicator
 - 20% of income units receiving CRA were identified as having at least one person with disability using the CRA data alone [as at 27 March 2020] (AIHW 2021)³.
- **People with disability are much more likely to rely on housing supports than people without disability (see also Figure 4.2):**
 - o Eight times more likely to live in public housing

² SOMIH data presented in this report is for people residing in Queensland and South Australia only.

³ The referenced publication reported on CRA using the Australian Government Housing Dataset (AGHDS). The AGHDS was not available for linkage in this test case, and the data for the analysis of CRA was derived using a different social security data set (DOMINO). Therefore, CRA results derived from the linkage analysis are not comparable with CRA analyses based on the AGHDS. Nevertheless, this test case has demonstrated the feasibility of using DOMINO for CRA analysis in situations where the AGHDS is not available.

- Around 8% of people with disability in New South Wales, Victoria, Queensland, and South Australia were public housing tenants, compared with around 1% of people without disability [as at 30 June 2020].
- o Five times more likely to access specialist homelessness services
 - 3.5% of people with disability in NSW, Victoria, Queensland, and SA accessed Specialist Homelessness Services in 2019-20 (0.7% of people without disability).
- o Three times more likely to receive Commonwealth Rent Assistance (CRA)
 - 26% of people with disability in NSW, Victoria, Queensland, and SA were in income units receiving CRA (8% of people without disability) [as at 27 March 2020].
- **People with disability receiving housing-related supports are likely to have different support needs to other supports recipients, or to other people with disability:**
 - o People with disability are much more likely to live on their own. This is especially important in view of the events of COVID-19, when the ability to draw on supports and contacts outside of one's own household was impacted by public health restrictions and concerns.
 - 21% of all Australians with disability living in households live on their own (compared with 7.6% of people without disability) (ABS 2019)
 - 54% of public housing households with at least one member aged 25- 644 with disability were sole occupants, compared with 26% of households with no disability
 - 28% of SOMIH households with at least one tenant aged 25-644 with disability were sole occupants, compared with 15% of households with no disability
 - 79% of (RA-receiving income units where at least one person had disability consisted of a single person with no dependent children (compared with 55% of income units with no disability as at 27 March 2020).
 - o People with disability on average require longer support periods from homelessness services providers than those without disability
 - In 2019-20, SHS clients with disability aged 25-64 had a median support period of 50 days (37 days for those without disability).
 - o Reasons for seeking assistance from homelessness services providers are different for people with and without disability
 - SHS clients with disability may have multiple reasons for seeking assistance
 - SHS clients with disability are more likely to indicate accommodation issues as their main reason for seeking assistance (40% of SHS clients with disability aged 25-64, compared with 29% of those without disability)

- Fewer SHS clients with disability are likely to indicate relationship problems as their main reason for seeking assistance (25% of SHS clients aged 25-64 with disability, compared to 45% for those without disability).
- o People with disability receiving housing supports are likely to have complex disability-related needs, having been identified in more than one disability group⁵:
 - 50% of all public housing tenants with disability [as at 30 June 2020]
 - 43% of all SOMIH tenants with disability [as at 30 June 2020]
 - 45% of SHS clients with disability [2019-2020]
 - 51% of income units receiving CRA where at least one person had disability⁶ [as at 27 March 2020].
- o People with psychosocial disability are overrepresented among public housing tenants and homelessness services clients (see also **Table 4.1**)
 - 64% of people with disability living in public housing in June 2020, and 73% of SHS 2019-20 clients with disability had a psychosocial disability, compared with 55% of people with disability in the general population [as at 30 June 2020]
 - 65% of CRA-receiving income units with disability had a member with psychosocial disability; 64% of income units with disability had a member with physical disability [as at 27 March 2020]
 - In contrast, only 52% of SOMIH tenants with disability were identified as having psychosocial disability [as at 30 June 2020]
 - The most prevalent disability type for SOMIH tenants was physical disability; 65% of SOMIH tenants with disability were identified as having this type of disability [as at 30 June 2020]
 - 44% of SHS clients with disability in 2019-20 had physical disability, compared with 63% of people with disability in the general population.
- o People with disability receiving housing supports are likely to have complex disability-related needs, having been identified in more than one disability group⁵:
 - 50% of all public housing tenants with disability [as at 30 June 2020]
 - 43% of all SOMIH tenants with disability [as at 30 June 2020]
 - 45% of SHS clients with disability [2019-2020]
 - 51% of income units receiving CRA where at least one person had disability⁶ [as at 27 March 2020].

⁴ The University of Melbourne researchers who created the linked-data disability indicator for this project recommend its use for people aged 25-64 years only. This is due to issues encountered when utilising the indicator to identify people with disability under 25 years or 65 years and over in the linked data.

- o People with psychosocial disability are overrepresented among public housing tenants and homelessness services clients (see also **Table 4.1**)
 - 64% of people with disability living in public housing in June 2020, and 73% of SHS 2019-20 clients with disability had a psychosocial disability, compared with 55% of people with disability in the general population [as at 30 June 2020]
 - 65% of CRA-receiving income units with disability had a member with psychosocial disability; 64% of income units with disability had a member with physical disability [as at 27 March 2020]
 - In contrast, only 52% of SOMIH tenants with disability were identified as having psychosocial disability [as at 30 June 2020]
 - The most prevalent disability type for SOMIH tenants was physical disability; 65% of SOMIH tenants with disability were identified as having this type of disability [as at 30 June 2020]
 - 44% of SHS clients with disability in 2019-20 had physical disability, compared with 63% of people with disability in the general population.
- **Reporting on housing measures for ADS Outcomes Framework⁷:**
 - o Wait times for allocation of public housing
 - The wait times for allocation of public housing were, in general, similar for households with and without disability (see also **Figure 4.3**) [for households with at least one member aged 25-64, as at June 2020]
 - Newly allocated public housing households with at least one member aged 25- 64 with acquired brain injury had the highest proportion of households allocated public housing in less than three months (42%), whereas households with sensory and speech disability had the lowest proportion (29%) (see also **Figure 4.4**).
 - o Rental stress⁸
 - 53% of (RA-receiving income units with disability and at least one member aged 25-64 were in rental stress (compared with 68% of income units without disability) [as at 27 March 2020]

⁵ Six disability groups were identified for this project: sensory and speech, intellectual, physical, psychosocial, acquired brain injury, and other disability.

⁶ Presence of multiple disability groups is more likely in CRA-receiving income units which consist of more than one person; 68% of these income units had presence of multiple disability groups. Among income units consisting of one person, 46% of income units had multiple disability groups.

⁷ At the time of writing, ADS Outcome Framework measures were in the process of being finalised. This paper reports on preliminary proposed measures and other related system performance measures.

⁸ Rental stress is one measure of housing afford ability. Rental stress is defined in this report as spending more than 30% of gross household income on rent.

- If these income units did not receive CRA, then 85% of income units with disability and 87% of income units without disability would have been in rental stress
 - This suggests that CRA may have had a greater impact on reducing rental stress for those with disability.
- o Overcrowding⁹
 - 4% of all public housing households with at least one tenant aged 25-64 with disability were overcrowded (compared with 9% of households without disability) [at 30 June 2020]
 - 10% of all SOMIH households with at least one person aged 25-64 with disability were overcrowded (compared with 16% of SOMIH households without disability) [as at 30 June 2020].
 - o Most people with disability seeking assistance from specialist homelessness services and experiencing domestic and family violence had their domestic violence service needs met
 - 29% of SHS clients aged 25-64 with disability needed domestic violence supports (44% of SHS clients aged 25-64 without disability) [July 2012-June 2020]
 - Of SHS clients aged 25-64 who needed domestic violence supports, 92% had their needs met (regardless of their disability status) [July 2012-June 2020].
- **First Nations Australians with disability receiving housing assistance**
 - o From the linked data used for this test case, people who identify as First Nations were less likely to also be identified as having disability than non-Indigenous people:
 - For example, 39% of the First Nations public housing tenants were identified as having disability, compared with 50% of non-Indigenous public housing tenants
 - This finding is at odds with other publicly available data which show that First Nations people have higher disability prevalence than the non-Indigenous population
 - One of the reasons for this finding in this test case could be a younger age structure of the First Nations population compared with the non-Indigenous population, and the created indicator's under-identification of disability for those younger than 25 years

⁹ This analysis uses the Canadian National Occupancy Standard (CNOS), a generally accepted standard for assessing overcrowding. The CNOS specifies a range of criteria, including no more than two people sharing a bedroom, separate bedrooms for single adults aged 18 years and over, and children aged 5-17 not sharing a bedroom with a child of the opposite sex.

- Other reasons could be the shortcomings of administrative data collections when it comes to accurately capturing information about disability status of First Nations peoples.
- **Cross-system analysis of housing supports**
 - o This test case demonstrated that NDDA allows a view across service systems and data sources to see how people with disability use different housing supports over time. A case study under this project looked at use of homelessness services by public housing tenants.
 - Of all public housing tenants on 30 June 2020, 25% had been assisted by Specialist Homelessness Services (SHS) at some point between July 2012 and June 2020. These proportions were similar for PH tenants with disability (of whom 26% received SHS assistance) and for PH tenants without disability (of whom 24% received SHS assistance)
 - Of all public housing tenants with disability on 30 June 2020, those with acquired brain injury (31%), psychosocial disability (30%), and intellectual disability (28%) were more likely to have accessed SHS services between July 2012 and June 2020 than those with sensory or speech (20%) or physical disability (22%).

3 Implications

The insights presented in this report highlight the importance of housing supports for people with disability. The results show that of all people using the housing supports analysed for this project, a large proportion have disability, with public housing in particular supporting a very high proportion of households with disability. A large proportion of people with disability accessing housing supports may also have complex needs due to multiple disabilities. The creation of a disability group indicator has shown how prevalent different types of disability (especially psychosocial and physical disability) are among those using housing supports. Psychosocial disability in particular has not been specifically captured in the housing support data; however, the linked data shows that psychosocial disability impacts the majority of people with disability who access housing supports.

An example case study looking at people with disability using both public housing and specialist homelessness services over time has been used in this report to demonstrate the possibilities for analysing client journeys between housing-related systems. It found that of all public housing tenants on 30 June 2020, 1 in 4 had accessed the SHS at some point in the previous eight years. Many more analyses of client journeys through

housing-related systems could be conducted in the future using this linked dataset.

There are three data limitations of particular note for this report. These are related to the identification of First Nations people with disability, the age limitations of the disability indicators, and that not every dataset with disability information has been linked in this project.

This project estimated about 8% of all people with disability live in public housing (June 2020), and 26% benefit from Commonwealth Rent Assistance (March 2020).

The project also identified a large proportion of people with disability who were not identified as receiving housing supports. These people may not require housing-related supports or assistance in seeking housing-related supports. However, further research is needed to explore if there are people who might benefit from housing supports but, for whatever reason, are unable to access them. People may also access housing supports that are not covered by this test case, such as community housing, First Nations community housing, private rent assistance provided by state and territory governments, and various home purchase assistance programs administered by each state and territory. The 2018 SDAC estimated that around 64% of all people with disability¹¹ lived in homes on an owner-occupier basis (comprising 44% owners without mortgage and 20% of owners with a mortgage) (ABS 2019). The inclusion of data on other housing supports in the future NODA would build a more complete picture of people's outcomes and pathways between different service systems.

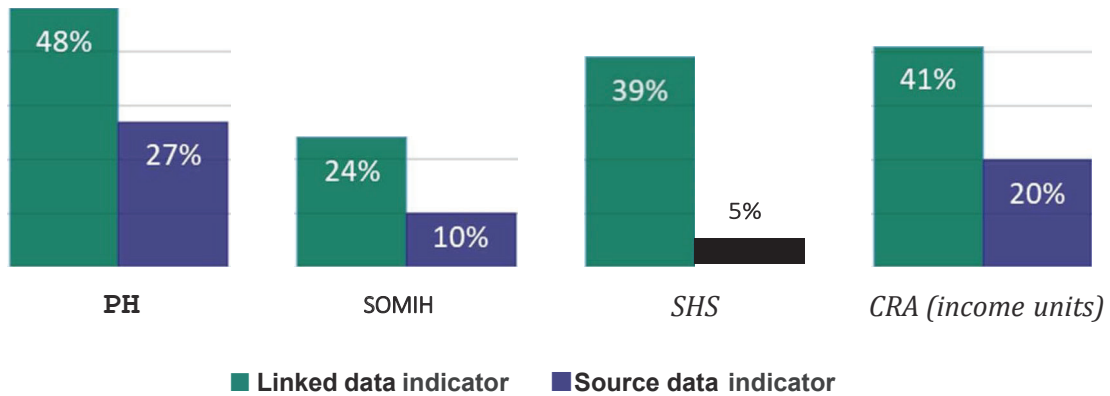
The work with the linked data in this test case will help shape the enduring NDDA. This report has demonstrated the robustness of the linked data and has also highlighted some areas for improvement. These insights will help inform how data can be best structured and analysed to support insights about the performance of housing-related systems and how to ensure the NODA is a suitable data source for reporting against the ADS Outcomes Framework.

¹⁰ These people could have been in public housing at the time of accessing homelessness services or have moved into public housing after accessing these services.

¹¹ Restricted to people aged 15 years and over, living in households.

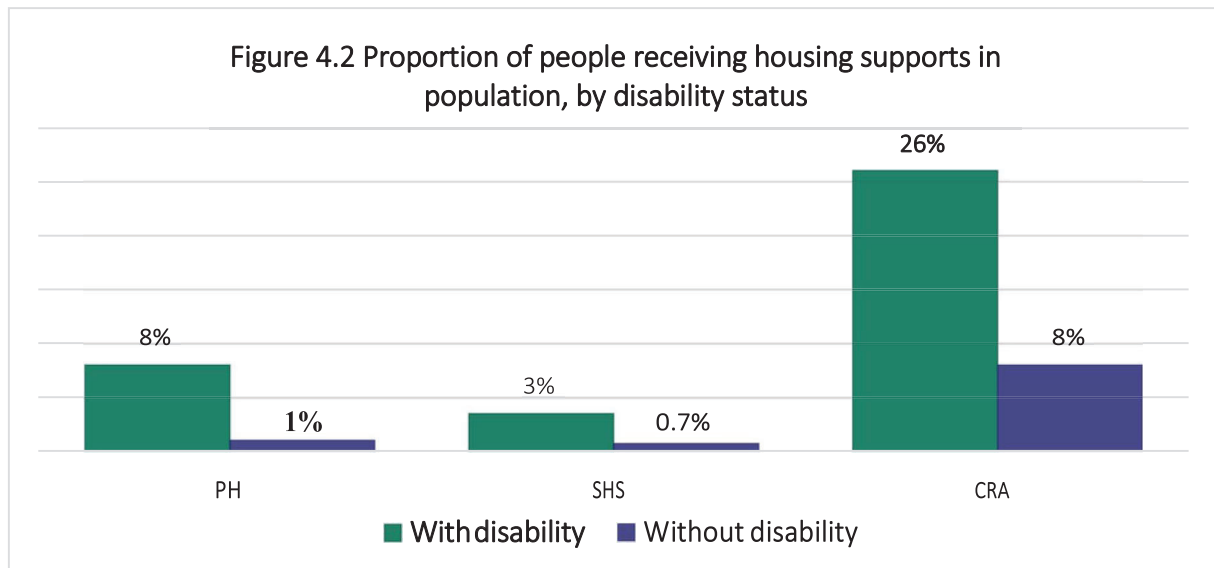
4 Key tables/ figures

Figure 4.1 Proportion of clients identified with disability using linked data vs source data alone



Notes: PH= Public Housing; SOMIH = State Owned and Manager Indigenous Housing; SHS = Specialist Homelessness Services; CRA = Commonwealth Rent Assistance. An income unit is one person or a group of related people within a household whose command over income is shared, or any person living in a non-private dwelling who is in receipt of personal income.

Figure 4.2 Proportion of people receiving housing supports in population, by disability status



Note: PH= Public Housing; SOMIH = State Owned and Manager Indigenous Housing; SHS = Specialist Homelessness Services; CRA = Commonwealth Rent Assistance.

Table 4.1 Proportion of people with disability in the general population and among housing supports clients by disability group, as at 30 June 2020

Disability group	All people with disability	PH tenants	SOMIH tenants	SHS clients
Sensory and speech	8.1	7.4	8.8	4.6
Intellectual	15.8	15.9	16.9	17.7
Physical	62.2	62.1	65.4	43.7
Psychosocial	55.0	64.0	51.6	72.7
Acquired brain injury	2.7	3.1	3.9	3.3
Other	7.4	9.0	6.5	6.7

Notes: Proportions will not add up to 100 per cent, as people may identify as having more than one type of disability. PH= Public Housing; SOMIH = State Owned and Manager Indigenous Housing; SHS = Specialist Homelessness Services.

Figure 4.3 Wait times for the allocation of public housing, by disability status in household, as at 30 June 2020

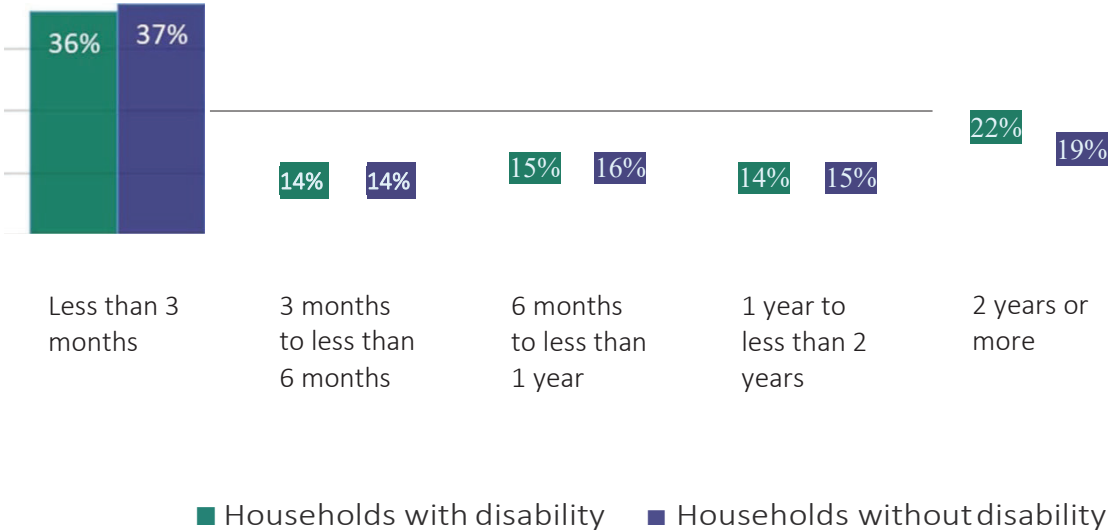


Figure 4.4 Proportion of households waiting less than 3 months for the allocation of public housing, by disability group in household, %



5 References

ABS (Australian Bureau of Statistics) 2019. Disability, ageing and carers, Australia: summary of findings, 2018. Canberra: ABS. <https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release>.

AIHW (Australian Institute of Health and Welfare) 2021. Housing assistance in Australia. Cat.no. HOU 325. Canberra: AIHW. Viewed 29 October 2021, <https://www.aihw.gov.au/reports/housing-assistance/housing-assistance-in-australia>.

6 APPENDIX: Overview of methodology

Data sources

- DOMINO (DSS)-social security and related information. DOMINO was used as one of the core data sources to create disability indicators, based on receipt of payments (including DSP, Youth Disability Supplement, Sickness Benefit, Mobility Allowance), medical conditions, and reduced capacity for work.
- NDIS (NOIA) - used as one of the core data sources to create disability indicators, based on participant status and type and severity of disability
- Medicare Benefits Schedule (MBS) - used to supplement creation of the disability indicators, using disability-related MBS items
- Pharmaceutical Benefits Scheme (PBS) - used to assess if PBS indicators can be used to provide supplementary information on identifying type of disability
- Disability Services National Minimum Data Set (AIHW)- used as one of the core data sources to create disability indicators, based on client status and type and severity of disability
- Commonwealth Rent Assistance data - created from DOMINO
- Specialist Homelessness Services Collection (AIHW) - used to supplement the creation of the disability indicator and to report on homelessness services received
- Public Housing and State Owned and Managed Indigenous Housing data collection (AIHW) - used to report on housing supports received
- Survey of Disability Ageing and Carers (ABS) - to use for benchmarking of the created disability indicator (and its sub-groups) against estimates and demographic characteristics of the SDAC sample.

Study period: January 2010-June 2020

Cohort definition

Two study groups were created for the linked dataset: case and control. The case group satisfied the following inclusion criteria:

- Identified as meeting one or more of a range of disability criteria applied across the available datasets from 2010 onwards.
- Identified as a resident of New South Wales, Victoria, Queensland, or South Australia at any time in any database.
- Eligible for Medicare.

- Alive on 1 January 2010.

Control group satisfied the following inclusion criteria:

- Not in the case group.
- Received housing support or were dependents of individuals receiving housing supports from 2010 onwards.
- Identified as a resident of New South Wales, Victoria, Queensland, or South Australia at any time in any database.
- Alive on 1 January 2010.

Project team

Department of Social Services (DSS):

Joanna Maning- Principal Investigator
Dr Anastasia Sartbayeva

University of Melbourne:

Prof Anne Kavanagh
Dr Zoe Aitken
Dr Nicola Fortune
Dr George Disney

Australian Institute of Health and Welfare (AIHW):

Alexia Tribe
Aaron McMillan
Xuijing Bai
Sarah Jones

First Nations Perspectives Reference Panel:

Ivan Simon
Paul Hausia
Andreas Vorst-Parkes
Sonya Parter
Corinne Hodson
Deb Nanschild (Facilitator)