Use of mainstream services and outcomes achieved for people with disability

5

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Key messages

Historically, there have been little available data on the use of mainstream services by people with disability and, where data are available, their scope and quality are quite variable. This has limited the available information about the patterns of service use and outcomes for people with disability.

This article draws on analysis and results from the National Disability Data Asset (disability data asset) Pilot phase, which used data that describe:

- use of disability supports

- use of mainstream supports (government-provided supports and services that are not specifically for people with disability). In the Pilot, data on selected mainstream services were included, based on policy priority and availability.

The data from different service systems were brought together by matching records that correspond to the same person in a way that did not identify them. This method of combining data is called data linkage. The Pilot phase of the National Disability Data Asset was the first time many of these sources had been linked to help gain insights for people with disability.

The Pilot phase comprised 5 studies that focused on selected service systems and specific age groups. This article contains results from 4 of these that focused on welfare outcomes. Each study – undertaken using linked data for a single state, or small group of states in Australia – revealed valuable new insights for the groups of people with disability using mainstream services, and the pathways taken through these services.

These National Disability Data Asset Pilot studies found that, compared with people without disability, Australians with disability overall have lower education and employment outcomes. They are also over-represented in their need for housing support, and in their contact with child protection services and with the justice system, both as victims and perpetrators of crime.

(continued)

Key findings from the Pilot studies are detailed below:

- Children with disability and with developmental vulnerabilities in New South Wales had more days absent from school, and performed below peers on the National Assessment Program – Literacy and Numeracy (NAPLAN) in year 3.

- Nearly 1 in 3 people who had used a disability support service in New South Wales reported being the victim of a crime, and 1 in 8 reported being the victim of a violent crime.

- On average, secondary school students with disability in South Australia scored lower in standardised tests than students without disability. Students whose scores were lower were less likely to complete secondary education, go onto tertiary studies, and find employment in later life.

Existing data on public housing and homelessness assistance underestimate the proportion of service users with disability. Across New South Wales, Victoria, Queensland and South Australia, the study found that people with disability were:

- more likely to rely on housing and homelessness supports than people without disability

- 7 times more likely to live in public housing than people without disability

- 5 times more likely to access specialist homelessness services than people without disability.

The successful completion of these test cases clearly demonstrated the potential of linked data to inform disability policy. These findings are now being used to help to shape the design and implementation of an enduring disability data asset to support policy and research initiatives aimed at improving outcomes for people with disability.

About 1 in 6 (18%, 4.4 million) Australians live with disability. Disability is broadly defined as a limitation, restriction or impairment that restricts everyday activities and has lasted for at least 6 months (ABS 2019a). Disability can encompass a diverse range of limitations, restrictions and impairments, with many people with disability experiencing more than one (Figure 5.1).

Figure 5.1: Disability includes a diverse range of limitations, restrictions and impairments

Prevalence of different types of disability among people with disability in Australia, 2018
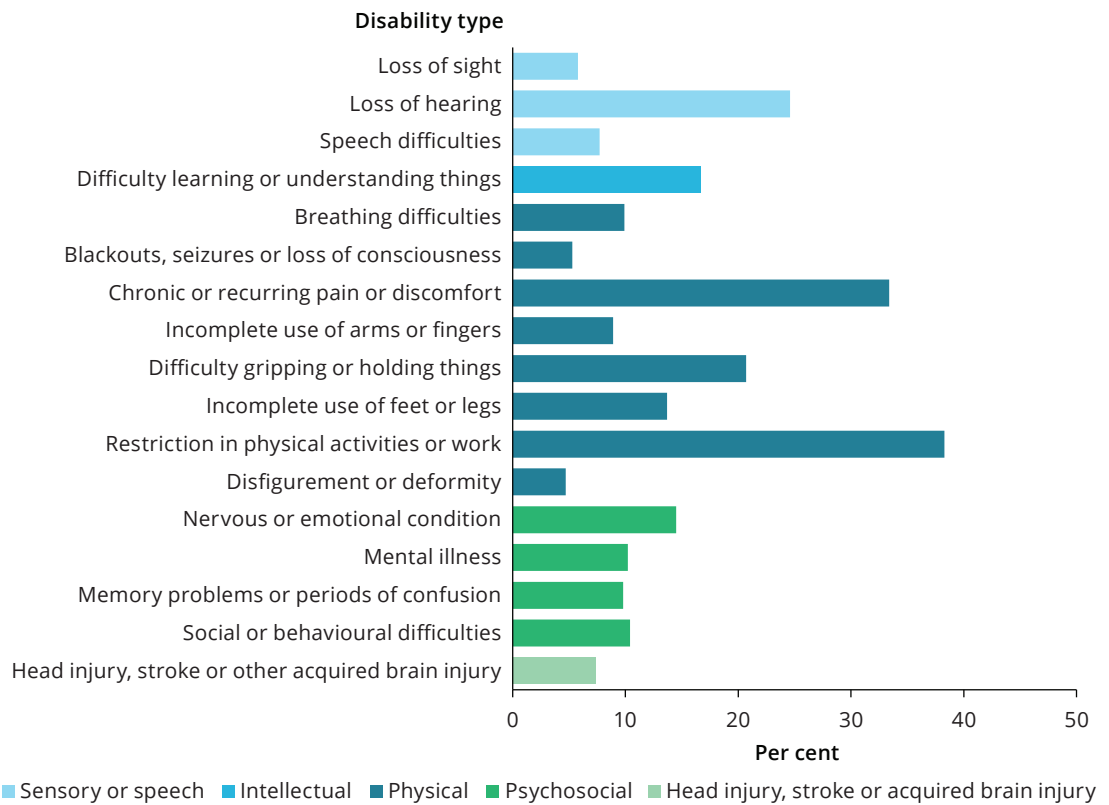
Note: Totals may sum to greater than 100% as a person may have multiple disabilities.
Source: ABS 2019b.

Like all Australians, people with disability use many mainstream services throughout their lives – namely, those services that government funds and/or provides for the entire population, not just for people with disability. Examples include health care, primary and secondary schooling, justice and policing, public housing and child protection.

Not all mainstream services collect data on whether the service recipient has disability; where they do, the data can be of poor quality, incomplete or inconsistent. Hence, there is a lack of information available on the experiences of people with disability using mainstream services, and the outcomes achieved (AIHW 2022b).

Aim

This article presents findings from the recent National Disability Data Asset Pilot phase, which used linked data to identify people with disability in data sets from selected mainstream services, and to explore their characteristics, service pathways and outcomes (see Box 5.1). These findings enhanced an understanding of the use of mainstream services by people with disability, and enabled attempts to answer questions such as those below:

- Are there differences in school and early education participation for children with disability?
- How does disability affect students' secondary school education and subsequent participation in the workforce as a young adult?
- Are children with disability more likely to come into contact with the child protection system?
- Are people with disability over-represented as victims or offenders, and what supports for people with disability are needed when in contact the justice system?
- Which people with disability are receiving housing and homelessness supports?

Box 5.1: What is the National Disability Data Asset?

In September 2019, the former Council of Australian Governments Australian Data and Digital Council agreed to develop an enduring disability data asset, subject to sustainable funding (Robert, the Hon. S 2019). The former Disability Reform Council (now Disability Reform Ministers) endorsed this decision (DSS 2019). The Australian Government then committed funding to build the National Disability Data Asset's next stage, conditional on states and territories agreeing to its co-governance and the supply of data.

The disability data asset is a new approach for connecting information about people with disability for research and analysis. It is intended to bring together de-identified person-level data from Australian, state and territory governments and non-government agencies. The shared and integrated data should enable a better understanding of how people with disability are supported through services, payments and programs across multiple service systems.

If implemented, the disability data asset will assist governments and researchers to understand both successful and unsuccessful pathways for achieving outcomes for people with disability. It will also include digital platforms that allow the general population – including people with disability, their families and carers – to explore the data in ways relevant to their circumstances.

The disability data asset has the potential to achieve a range of long-term benefits for people with disability, disability organisations, researchers and governments. These include improved:

• understanding of how different supports and services contribute to outcomes for people with disability

• understanding of how to better reach and serve vulnerable groups in the community

• access to better, more complete data from system-wide and person-centred perspectives

• evidence on the supports and services that work, enabling disability organisations to deliver those designed for the needs and situation of people with disability (NDDA 2021a)

• data quality – filling gaps, making disability information consistent when analysing different services and outcomes and developing a data improvement plan.

The disability data asset will enable a shared understanding of outcomes for people with disability arising from disability policy changes. This will support evaluations and policy development to help improve specialist and mainstream services and supports.

(continued)

Box 5.1 (continued): What is the National Disability Data Asset?

One example of the disability data asset's potential future use is to support the successful delivery and monitoring of Australia's Disability Strategy 2021–31, Australia's national disability policy framework. The Strategy tracks and reports outcomes for people with disability through the Outcomes Framework. See the 'Further reading' section of this article for more information on these topics, and up-to-date information on the progress of the Strategy.

National Disability Data Asset Pilot

The project underwent 2 years of testing and development called the Pilot during 2020 and 2021 (NDDA 2021). This phase linked around 50 data sets from the Australian Government; the National Disability Insurance Agency; and the New South Wales, Victorian, Queensland and South Australian governments. Guided by its Disability Advisory Council, the Pilot aimed to assess the disability data asset's potential value by providing insights into 5 high-priority Pilot studies that were focused on the following themes:

- early childhood supports (for New South Wales)

- interaction of people with disability with the justice system (for New South Wales)

- pathways from education to employment (for South Australia)

- services and supports for people with disability and mental health issues (for Victoria)

- outcomes measurement, focusing on housing-related supports (for New South Wales, Victoria, Queensland and South Australia).

These Pilot studies were exploratory, designed to test the feasibility of using a large-scale linked data asset to provide evidence for key disability policy questions. They were conducted by research teams in different jurisdictions and employed a range of different methodologies and data sources. More work will be required to evaluate the benefits of the different methodologies and to further standardise approaches employed in the disability data asset.

As the Commonwealth Accredited Integrating Authorities who prepared the linked data, the AIHW and the Australian Bureau of Statistics (ABS) met stringent criteria on the creation, access and use of the data. These included protocols to ensure secure end-to-end data management, processes to manage re-identification risks, stringent information and communications technology security, and robust governance (AIHW 2021b). In particular, the studies and data activities were approved by Australian, state and territory government ethics committees and guided by input from First Nations expert panels.

What data are available concerning people with disability?

In Australia, a range of services and payments support people with disability and help them to participate in various aspects of everyday life. Supports provided nationally include the:

• Disability Support Pension (DSP)

• National Disability Insurance Scheme (NDIS)

• Disability Employment Services (DES).

The above 3 programs target people whose disability arises before selected age cut-offs. These ages are 65 for the NDIS and the pension age (currently 66 years and 6 months) for both the DSP and DES. Some of these programs allow an active participant to continue to receive supports beyond the age eligibility cut-off for new applicants.
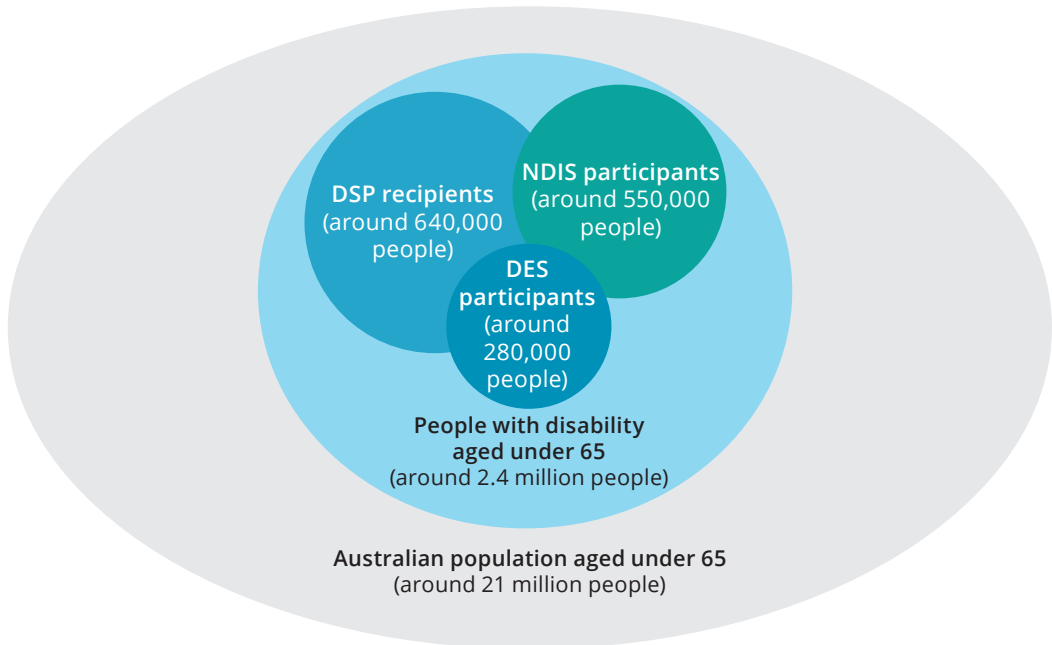
These programs collect and report detailed data on the characteristics of people receiving the supports provided under the schemes, the types of supports received and, in some cases, the outcomes achieved (for more information, see the 'Further reading' section at the end of this article).

It is estimated that around 2 in 3 (66%) of all people with disability below age 65 (2.4 million people) do not access the DSP or NDIS supports (Figure 5.2). This reflects eligibility criteria of these schemes around disability severity and permanence, and the life activities affected. It should also be noted that these schemes generally do not collect data on the use of mainstream services by their clients. Therefore, additional data sources are needed to describe the full range of service experiences for all people with disability.

Figure 5.2: Most Australians with disability do not use specialist disability support

Key disability cohorts in the Australian population, aged under 65, 2018 to 2022

DSP recipients
(around 640,000
people)

NDIS participants
(around 550,000
people)

DES
participants
(around
280,000
people)

People with disability
aged under 65
(around 2.4 million people)

Australian population aged under 65
(around 21 million people)

Notes

1. Areas for the different programs and their overlaps are for illustrative purposes only and are not to scale.

2. Counts for the Australian population and for people with disability are from 2018 and are based on self-reported disability status.

3. Counts for DSP recipients and NDIS participants are from 2022 and are based on data from disability-specific programs that require evidence of disability.

4. The count for DES participants is from 2020 and is based on data from disability-specific programs that require evidence of disability.

5. Around 800,000 people under age 65 received DSP and/or NDIS supports as of December 2022.

Sources: ABS 2019a, 2019c; DSS 2020, 2023; NDIA 2021, 2022.

As mentioned earlier, mainstream services often do not collect data on whether the person using the service has disability; where they do, the data can be limited. The ability to capture more comprehensive information about disability status across mainstream services has historically been hampered by:

- existing data sources for service use by people with disability being fragmented, dispersed and incomplete

- complexity of the concepts underpinning definitions of disability and challenges in collecting this information during a service encounter

- low adoption of a disability 'flag' to identify people with disability across mainstream data sources

- inconsistent definitions for disability across existing data sources (that is, data sources tend to use definitions of disability that are specific to that service type).

As a result, information about mainstream service use is inconsistent and inadequate to determine outcomes or areas of improvement for people with disability.

Data linkage enables new insights

Data linkage is used to fill existing data gaps and improve upon existing data by bringing together multiple data sources while preserving privacy. It can combine information about the lives of people with disability to enable:

- flagging of people with disability in mainstream collections that do not currently include a disability status 'flag'
- flagging of people with disability who do not receive specialist disability supports
- understanding of pathways of people with disability through and between specialist and mainstream service systems
- exploration of outcomes achieved for people with disability, using various support types (including the study of disadvantages or inequalities experienced by people with disability in relation to people without disability).

Data linkage can be optimised by including data from many different service systems to create a linked data asset. This means analyses can include contributions from all services and other supports relevant to the outcomes of interest.

Insights from the National Disability Data Asset

Recent data linkage work has begun to deal with these issues and data gaps. In particular, the recent disability data asset Pilot studies (which integrated over 50 data sets) have provided valuable insights into the lives of people with disability and highlighted the potential for such approaches.

This article explores the findings of the disability data asset Pilot studies that relate to community services provided for people with disability. Overall, these studies found that a linked data asset like the disability data asset could:

- flag people with disability in data sets that
  - do not have such flags, providing findings that could be reported for the first time, such as the comparatively high proportion of people with disability who are victims of crime
  - have limited disability status information, allowing findings such as a better estimate of the proportion of public housing tenants with disability

- enable the reporting of disability type, which provides evidence of the over-representation of people with psychosocial disability using specialist homelessness services

- enable the analysis of

  - service pathways for potential intervention points, such as highlighting the comparatively high number of children with disability using early childhood education

  - outcomes achieved at different stages of a service system such as the education and employment outcomes achieved during and after high school.

Early childhood

A child's early years are a critical period, having a tremendous impact on learning and development in later life. Early provision of childhood education services can improve long-term outcomes (AIHW 2015). Understanding the services that children use, and their impact, can help both the community and governments to provide services that better enable children to reach their potential. However, understanding how disability and developmental vulnerabilities progress over childhood and the interaction with the variety of disability supports and mainstream services accessed over time can be challenging.

The Early Childhood Pilot study explored these interactions for children in New South Wales, using services such as the education system and specialised disability supports, as well as interactions with the child protection system. It also explored the prevalence of disability among children in these systems (Box 5.2).

Box 5.2: Early Childhood Pilot study

The National Disability Data Asset Early Childhood Pilot study (Early Childhood study) used linked data to measure outcomes for over 2.3 million children in New South Wales who were born between 2003 and 2019. The study used linked data to identify children who when aged 6 or under (before age 7) may have disability or be developmentally vulnerable. The study used data from the following government supports and services to investigate service use and outcomes for children with disability:

- the NDIS

- school student records from New South Wales government schools

- NAPLAN test results

- Medicare-subsidised medical appointments

- the child protection system.

(continued)

Box 5.2 (continued): Early Childhood Pilot study

Developmentally vulnerable children

The Australian Early Development Census (AEDC) collects data every 3 years on how ready young Australian students are for their first year of full-time school. It measures 5 areas of early childhood development, and scores each area as either developmentally on track, at risk, or vulnerable.

Students who are developmentally vulnerable in 2 or more domains are considered to be the most vulnerable and are referred to as 'developmentally vulnerable' in the Early Childhood study report. Around 1 in 10 (10%) New South Wales children in the AEDC are categorised this way. This does not include children with an identified special needs status – who have chronic medical, physical or intellectual disabilities based on medical diagnosis.

Children with disability

Children were identified as having disability if, before the age of 7, they had:

- been accepted into the NDIS or used the equivalent disability supports funded under the National Disability Agreement (NDA) before the NDIS, or
- used services subsidised by the Medicare Benefits Schedule relating to disability, or
- been identified in the AEDC as a child with special needs status, or
- had their disability notified to the NSW Department of Education.

A child could be identified as having both disability and developmental vulnerability, except for those with a special needs status in the AEDC.

Disability was broadly classified as intellectual/learning, psychosocial, sensory/speech, physical/diverse or other disability.

See *Early Childhood Supports in NSW* (NDDA 2022a) for further details of the study.

Disability in early childhood

Over 2 million children under age 7 live in Australia. Of these children, about:

- 1 in 20 (5.2%) are estimated to have disability, using the ABS Survey of Disability, Ageing and Carers (ABS SDAC, ABS 2019b)

- 1 in 9 (11%) are developmentally vulnerable on 2 or more domains in the AEDC (see Box 5.2 for the definition of developmental vulnerability) (DESE 2021).

- 2.9% are active NDIS participants as of June 2020 (NDIA 2020).

The Early Childhood study determined that around 1 in 8 (13%) children in New South Wales born between 2003 and 2019 had been identified as having disability before age 7. This identification was based on first use of a disability-specific support or first identification of disability during use of a mainstream service (this is quite different from the survey methodology used by the ABS SDAC to generate the 5.2% referred to above).

The study also found that 1 in 10 (10%) children in New South Wales were developmentally vulnerable when assessed through the AEDC (Box 5.2).

Among children identified as having disability:

- 55% had an intellectual/learning disability

- 40% had a psychosocial disability

- 19% had a sensory/speech disability

- 15% had a physical disability

- 27% had multiple disabilities.

For ages up to and including age 6, the study found a steady increase in disability identification as age increased (Figure 5.3).

The Early Childhood study found that around 40,000 (13%) of New South Wales children with disability born between 2003 and 2019 were or had been active NDIS participants by June 2019 (NDDA 2022a).

Figure 5.3: Number of young children identified as having disability increases with age

Rate of children identified in the Early Childhood study as having a disability, by age of disability identification, NSW children born between 2003 and 2019, per 10,000

Children per 10,000
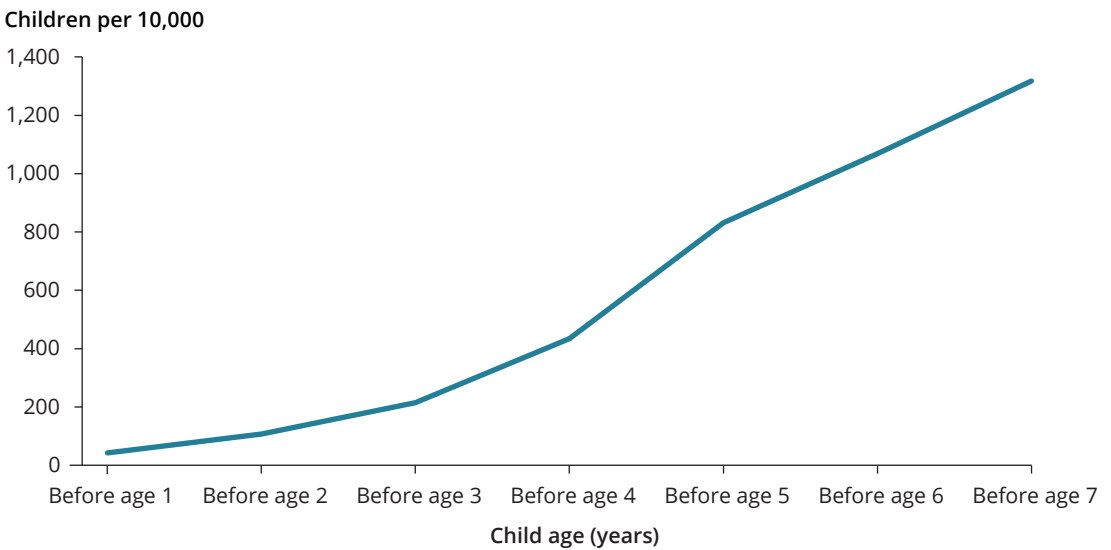
Source: NDDA 2022a.

Use of early childhood education

Enrolment in primary and secondary education is mandatory for children in Australia. Early childhood education and care are options for families before primary school and can include preschool, centre-based day care and family day care options.

The Early Childhood study found that, in New South Wales, 80% of children identified as having disability before age 7 were enrolled in early childhood education before starting primary school. This proportion was higher than for children with developmental vulnerability (60%) and for children not identified as having disability (56%).

These findings highlight that early childhood education may be a useful intervention point for additional support. The likelihood of being enrolled in early childhood education did not vary with disability type.

Use of disability supports by children from non-English-speaking backgrounds

The Early Childhood study found that children with disability from an English-speaking background were more likely to have used disability supports than children with disability from a non-English-speaking background. Around 2 in 5 (39%) New South Wales children with disability who had an English-only language background made use of NDIS supports, compared with 14% of children with disability from a non-English language background.

Early education outcomes

The Early Childhood study examined education outcomes, including:

• year 3 NAPLAN score

• school attendance.

The Early Childhood study's linked data enabled NAPLAN results for children with and without disability to be compared. Children with disability were less likely to meet the National Minimum Standard (NMS) on year 3 NAPLAN. Around 1 in 4 children with disability and 1 in 3 children with developmental vulnerability achieved below the NMS compared with 1 in 10 children without disability.

Among children with disability, children with intellectual/learning or physical/diverse disabilities were the least likely to achieve the NMS (over 3 times less likely than children without disability). Children with sensory/speech or psychosocial disability were over 2 times less likely to meet the NMS than children without disability.

Children with disability or developmental vulnerability were, on average, absent from school more than peers without disability or developmental vulnerability. Primary school students without disability or developmental vulnerability were absent for 12 days per year on average. This was slightly higher for children with disability (around 15 days per year) and developmental vulnerabilities (around 17 days per year) (NDDA 2022a).

The study's report did not explore the reasons for absenteeism, and whether these differed between children with disability and children without disability.

Contact with the child protection system

The Early Childhood study explored contact with the child protection system, given this is a well-established risk factor for developmental vulnerability and poor educational outcomes (AIHW 2022a).

In Australia, state and territory child protection agencies assist vulnerable children who have been, or are at risk of being, abused, neglected or otherwise harmed, or whose parents are unable to provide adequate care and protection. A child can be brought to the attention of these agencies (known as a notification), which can then result in an investigation into the risk of harm to the child. If the investigation identifies sufficient reason to believe that the child is at risk of abuse, neglect or harm, arrangements can be put in place to protect the child, including placement in out-of-home care.

Nearly 2 in 5 (37%) children placed in out-of-home care between 2003 and 2019 were identified as having disability before age 7. Over 1 in 5 (22%) of all children who have been in out-of-home care had an intellectual/learning disability and about 1 in 5 (17%) had a psychosocial disability.

Secondary education outcomes

Education is about gaining the knowledge and skills a person needs to participate in all aspects of daily life. Having a higher level of education generally results in better employment outcomes and higher income – key factors in economic security, independence and subjective wellbeing (AIHW 2021a).

Available evidence demonstrates that levels of educational attainment are lower for people with disability than for people without disability. For example, an estimated 1 in 3 (34% or 1.2 million) people with disability aged 20 and over have completed year 12 or equivalent. This is much lower than the 2 in 3 (66% or 9.7 million) people without disability in this age range (ABS 2019b).

Of working-age people (ages 15–64) who acquired disability before age 15, more than 1 in 5 (21% or 85,000) left school before age 16, compared with 1 in 11 (8.9% or 1.2 million) people without disability (ABS 2019a).

Box 5.3: Education to Employment Pilot study

The National Disability Data Asset Education to Employment study examined data for nearly 190,000 South Australian students who enrolled in year 10 in a government school at any time between 2005 and 2019. Most students in the study were aged between 15 and 17. Students who left school before year 10 were not included. Based on data for 2021, around 63% of enrolments in South Australia are in government schools (ABS 2021).

Students with disability

The South Australian Department of Education collects information about students' disability to help understand their needs and support their education. The Education to Employment study used this information to identify around 19,000 students with disability.

The study also used records for disability-specific supports provided under the NDA; however, not all students with disability use these supports. This can be due to their not meeting eligibility criteria for the supports, support availability, or the choice of the student or their parent or guardian. This method identified nearly 11,000 students who used disability-specific supports.

The study examined outcomes for these 2 groups of students separately. The report did not discuss whether there was an overlap between the 2 groups.

(continued)

Box 5.3 (continued) : Education to Employment Pilot study

NAPLAN

NAPLAN is a test designed to measure students' academic progress throughout their studies. It is intended that all students participate, with adjustments to enable participation by students with disability. An application can be made to not participate, such as when a child has disability that severely limits their ability to access and complete the test.

Analysis methods

The study examined the effect that disability may have had on a student's NAPLAN participation or results, their secondary school completion, and later outcomes. The analysis considered the students' gender; whether they lived in a major city, regional or remote community; the socioeconomic disadvantage of the region in which they lived; and whether they spoke English or another language at home.

Several of the results in the study's report are presented as differences in percentage points. This article presents the expected proportion of students with disability who would achieve the outcome measured, if all known factors other than disability were equal to those students without disability. See *NDDA pilot – South Australian test case: education to employment* (NDDA 2022d) for more information on the technical details of the study, including its use of multivariate analyses.

The highest level of educational attainment for people with disability has improved over the last decade but is still generally lower than for people without disability (AIHW 2022b). For example, the highest level of educational attainment was a bachelor's degree or higher for:

• 17% (or 614,000) of people with disability aged 20 and over

• 11% (or 107,000) of people with severe or profound disability in the same age range.

This compares with 35% (or 5.0 million) of people without disability aged 20 or over (ABS 2019a).

While there is evidence of this difference in education outcomes across the Australian population, there is less information available on the challenges and obstacles faced by people with disability during education and the impact this has on post-school outcomes.

To start filling this data gap, the Education to Employment Pilot study brought together information on year 10 students from South Australia, including their disability status and whether they begin further studies and employment after secondary school (Box 5.3). It explored:

- their achievement at secondary school, based on NAPLAN results and completion of secondary school
- whether they started further studies or found employment after secondary school
- if students with strong achievements at secondary school were more likely to either start further studies or find employment
- and whether there were differences between students with and without disability.

NAPLAN participation and results

Since 2016, nearly 9 in 10 year 9 students in South Australia have participated in the NAPLAN reading and writing tests. The Pilot study found that a student with disability was 26 percentage points less likely to participate in NAPLAN at year 9 than a peer without disability, suggesting that around 7 in 10 students with disability participate in year 9 NAPLAN. (See Box 5.3 for details on how this study calculated results for students with disability.)

The Education to Employment study found that whether or not a student participated in year 9 NAPLAN varied with the type of disability:

- Around 1 in 3 students with intellectual disability participated (based on a gap of 63 percentage points).
- Around 6 in 10 students with autism spectrum disorder participated (a gap of 30 percentage points).
- Around 3 in 4 students with a speech, language or communication disability participated (a gap of around 15 percentage points).

The study found that the average year 9 NAPLAN results for students with disability were 74 points below the average for students without disability (488 compared with 562). As students with disability were less likely to participate in NAPLAN testing, the study predicted that the gap would increase if all students participated (see Figure 5.4; and Box 5.3 for definition of these gaps). This gap varied by disability type, with students with intellectual disability estimated to be the most disadvantaged (Figure 5.4).

Higher scores in year 7 NAPLAN tended to lead to higher scores in year 9 NAPLAN. This trend was found across all types of disability as well as for students without disability.

Figure 5.4: Students with all disability types achieve lower NAPLAN results than their peers without disability

Estimated gaps between students with disability and other students on year 9 NAPLAN score in SA, 2008 to 2019
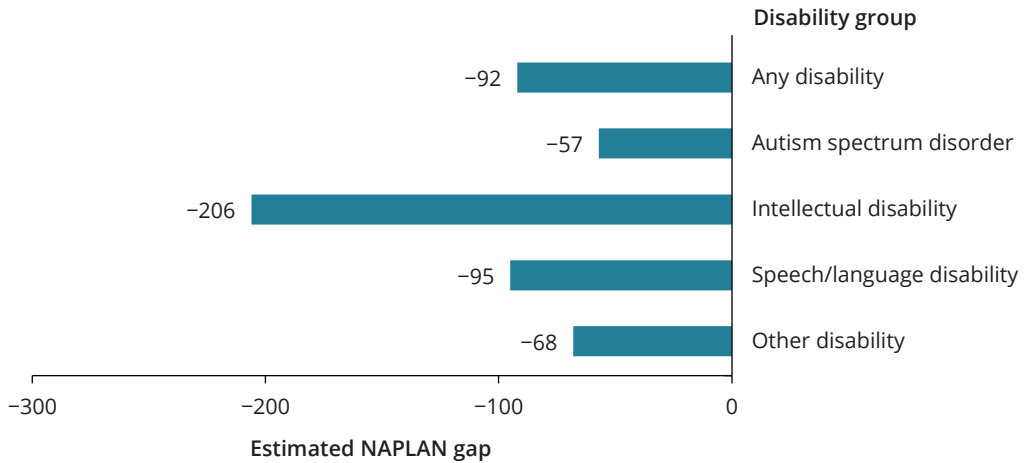
Notes

1. Includes only South Australian students enrolled in year 10 in government schools between 2005 and 2019.

2. Gaps are calculated based on results from students who participated in year 9 NAPLAN and estimates for students who did not.

Source: NDDA 2022d.

Year 12 completion rates

The Education to Employment study found a difference in the level of educational completion for people with and without disability. About 2 in 5 (41%) students with disability who started year 10 completed the SACE (year 12 certificate) compared with 3 in 5 (59%) students without disability.

There were indications that the lower proportion of year 12 completions for people with disability reflected their lower results on the year 9 NAPLAN. Where students with and without disability had similar year 9 NAPLAN results, they were similarly likely to complete the SACE. However, students with an intellectual disability were less likely to complete SACE even when their NAPLAN results were equivalent to students without intellectual disability.

Outcomes after secondary school

The Education to Employment study found that South Australian students with disability were 23 percentage points less likely to enrol in further education after high school than students without disability. However, the difference reduced to 5 percentage points when their educational achievements and other factors were equivalent. This difference is mostly due to a gap of 26 percentage points in students with disability enrolling in a bachelor's degree or above compared with former students without disability. Students with disability were slightly more likely to enrol in Vocational Education and Training (VET) courses at the Certificate I–II level than students without disability.

South Australian students with disability who enrolled in a bachelor's degree and above were 26 percentage points less likely to complete their studies. This gap shrank if prior educational achievement at NAPLAN, and SACE completion, were equivalent; however, students with intellectual or language and communication disabilities remained disadvantaged. A smaller gap (7 percentage points less likely) was observed for students enrolled in VET Certificate III–IV, while VET Certificate I–II and diplomas saw similar completion rates.

People with disability are disadvantaged in achieving equal work and pay

The Education to Employment Pilot study found that students with disability were between 20 and 26 percentage points less likely to be employed after secondary school than students without disability.

Students with disability who did go on to obtain employment were 18 percentage points less likely to be employed full time than students without disability. The gap reduced to 15 percentage points for students with disability who had a similar educational achievement to students without disability. Even when employed full time, people with disability earned around 16% to 22% less per week than people without disability.

Contact with the justice system

Whether people with disability in the justice system are offenders or victims, it is important that they are provided with equal access to justice and, where needed, receive appropriate services and other supports.

The National Disability Data Asset Justice Pilot study (the Justice study) aimed to enhance understanding of these issues by bringing together information on disability service use and data on contact with the justice system in NSW (Box 5.4). This article presents some of the study's findings on the experiences of people with disability who have been victims of crime, and people aged 10–17 with disability who committed offences.

Victims of crime

Exploring the experiences of people with disability as victims of crime and the quality of support offered in the justice system can provide insights into how to improve outcomes for this group.

Combining multiple years of justice system and disability support data allowed the Justice study to explore the recent histories of people with disability who were victims of crime. In particular, it found that for people who had used a core disability support (Box 5.4) and were born in or before 2008:

• about 1 in 3 were recorded as being the victim of a crime between 2009 and 2018

• about 1 in 8 were recorded as being the victim of a violent crime between 2009 and 2018

• about 1 in 4 First Nations women with disability were recorded as being the victim of a violent crime. The rate was higher (nearly 2 in 5) if they were aged between 15 and 18.

Box 5.4: Justice study

The Justice study brought together data for about 2.8 million people in New South Wales, comprising people who received disability supports or services or had contact with the justice system as victims or offenders between 2009 and 2018. Within the broader study, youth justice outcomes were examined for people born between 1997 and 2000.

People with disability

This study considered a person to have used a core disability support if they:

- had a NDIS plan
- had received DSP payments
- had received specialist disability supports funded under the NDA.

A broader disability indicator included the above, and anyone who had:

- received disability-specific Medicare supports
- received an income support payment (determined by Services Australia) with records of a reduced capacity to work due to a medical condition, whether temporary or ongoing.
- a hospital episode with a diagnosis indicative of disability
- reported their disability when seeking specialist homelessness services or public housing support.

The study also considered records of criminal offenders in custody who were referred to Statewide Disability Services, or who were identified as intelligence quotient below 70. This cohort did not contribute to the analyses described in this paper to ensure statistical validity.

Disability was further defined as being cognitive, physical or psychosocial. The study did not investigate whether a disability was present before the crimes investigated by the justice system. See *Interaction of people with disability and the justice system in NSW* (NDDA 2022c) for more information on the technical details of this study.

Young people with disability in the justice system

The Justice study found that between 2009 and 2018, around 1 in 8 (13%) people who received a core disability support were recorded as having committed an offence before age 18, compared with 1 in 17 (5.8%) people who did not access these supports (Table 5.1).

Offences by people aged under 18 can be dealt with by way of a police caution, a youth justice conference or a court proceeding. A potential outcome for cases proceeding to court in New South Wales between 2009 and 2018 was dismissal under the (now repealed) *Mental Health (Forensic Provisions) Act 1990* (NSW)(MHA).

While only 3.5% of people aged 10–17 in New South Wales received a core disability support, this group made up a higher proportion both of young people with a police caution, youth justice conference or court appearance (7.7%), and of young people who had one or more remanded or sentenced custody episodes (17%) (Figure 5.5). People aged 10–17 with a psychosocial disability were the most likely to have committed an offence or had a remanded or sentenced custody episode before age 18 (Table 5.1).

Table 5.1: Proportion of young people (aged 10–17) born between 1997 and 2000, by disability status and group, who offended or had a custody episode in New South Wales between 2009 and 2018

| Disability group	With a recorded offence (%)	Have had a custody episode (%)
No disability	5.8	0.7
Any disability	13.0	4.0
Physical	7.4	2.0
Cognitive	12.4	3.9
Psychosocial	15.8	4.8

Notes

1. A person may have more than one of the above disabilities.

2. Includes people born in New South Wales between 1997 and 2000.

3. Offences determined from records of police cautions, youth justice conferences and court appearances.

4. Custody episodes include remanded and sentenced custody.

Source: Boiteux and Poynton 2023.

Figure 5.5: Young people with disability are over-represented in the justice system

Proportion of young people (aged under 18) with disability born between 1997 and 2000 (based on core disability support use definition), by contact with justice system in NSW between 2009 and 2018

Contact with justice system
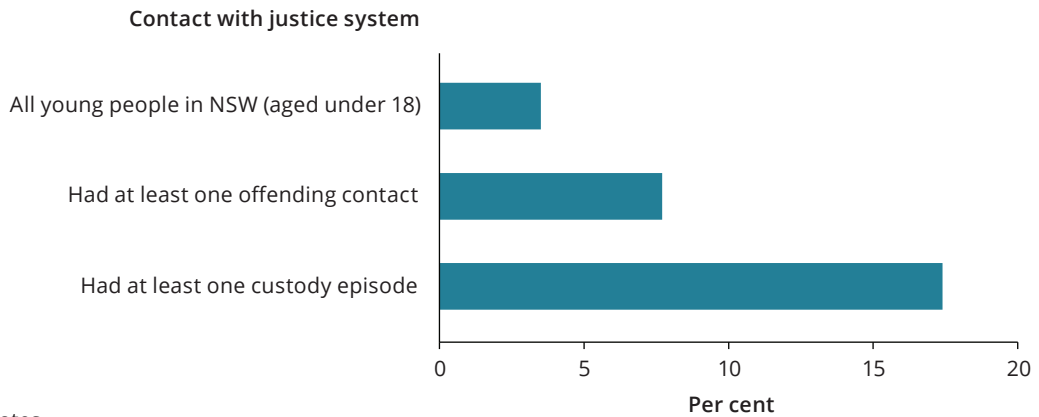
Notes

1. Offending contact includes police cautions, youth justice conferences and court appearances.
2. Custody episodes includes both remanded and sentenced custody.
3. Offending contact population includes those with custody episodes.

Source: Boiteux and Poynton 2023.

Diversions

Diversions under the *Young Offenders Act 1997* (NSW) (YOA) allow young people aged 10–17 to be receive a police warning, police caution, or referral to a youth justice conference rather than proceeding to court for an offence. To be eligible for diversion, the person must:

- have committed an eligible offence
- admit guilt, and
- not have more than three prior cautions.

For eligible offences, around 9 in 10 (93%) offenders received a YOA diversion for their first offence instead of proceeding to court. The Justice study found that these proportions were the same for young offenders with and without disability. However, young people with disability were less often eligible for a YOA diversion due to the type of offence committed.

Not all offences are eligible for diversion – and some may be eligible only in certain circumstances. For offences known to be ineligible or those where eligibility could not be determined, first-time offenders aged 10–17 with disability were less likely to be diverted from the criminal justice system (31%) than first-time offender in the same age bracket without disability (46%). This analysis may have been affected by differences in the type of offences committed and the ability of the source data to identify those offences eligible for diversion.

Dismissals under the NSW Mental Health Act 1990

The Justice study found that people with disability were more likely to receive a dismissal under the MHA, and less likely to be found guilty, than people without disability.

Until 2018, the MHA allowed judicial officers to consider applications to dismiss cases if the accused suffered from a mental health condition – and where the offence was not strictly indictable. The judicial officer had the option to order the person into care, treatment and/or assessment for their condition.

For first offences that proceed to court, if the offence type was eligible for MHA dismissal:

- around 1 in 6 (16%) offenders aged 10–17 with disability received an MHA dismissal compared with only 2.4% of offenders aged 10–17 without disability
- around 3 in 4 (74%) offenders aged 10–17 with disability were found guilty, compared with around 9 in 10 (88%) offenders aged 10–17 without disability
- the remaining cases were found not guilty or otherwise withdrawn. These proportions did not differ between offenders aged 10–17 with disability (9.8%) and offenders without disability (9.5%) (Boiteux and Poynton 2023).

If the offence type was ineligible for an MHA dismissal, offenders aged 10–17 with disability were found guilty in just over half (55%) of cases compared with about 4 in 5 (81%) for offenders without disability.

Overlap with child protection

The Justice study found that nearly 9 in 10 (89%) alleged offenders aged 10–17 with disability had already been notified to the child protection system, whether there was a substantiated need for protection or otherwise (counted before their first offence). This compared with 5 in 10 (51%) people aged 10–17 with disability without an alleged offence at age 15. Nearly 2 in 3 (63%) people aged 10–17 with disability accused of an offence had more than 6 prior child protection notifications, compared with 1 in 4 (23%) of people aged 10–17 with disability without an offence.

Influence of early use of disability supports

People aged 10–17 with disability were less likely to become offenders if they began using disability services (including the NDIS or the prior NDA-funded supports) at a younger age. The study found that the odds of people aged 10–17 with disability offending was around 1.5 times higher if their first use of disability services was when aged 13–15, and 1.8 times higher if aged 16–17 (this includes the DSP), compared with people aged 10–17 whose first disability services use was when aged 10–12.

Homelessness and housing supports

Housing plays a major role in the health and wellbeing of all people, by providing shelter, safety and security. The availability of affordable, sustainable and appropriate housing helps people with disability to participate in the social, economic and community aspects of everyday life. A person who does not have access to stable housing may experience compounding consequences, including homelessness, poor health and lower rates of employment and education.

The Outcomes Reporting Pilot study evaluated the extent to which data from the disability data asset could be used to derive a comprehensive disability indicator (Box 5.5). Much of this evaluation was based on a comparison with the ABS Survey of Ageing, Disability and Carers (SDAC).

Public housing and specialist homelessness services (SHS) are among the few mainstream services that routinely gather and report data on people's disability status. This Pilot study compared the cohort based on the linkage-derived disability indicator with the cohort estimated each year, using disability flags from the annual public housing and SHS data collections. This allowed the extent to which these disability flags under-report the number of people with disability who use these services to be explored.

The new linked data also allowed the public housing and SHS service use data to be disaggregated by disability type for the first time.

Unlike the other Pilot studies, this Pilot study included data from multiple states, in this case, New South Wales, Victoria, Queensland and South Australia.

> ## Box 5.5: Outcomes Reporting Pilot study
>
> The National Disability Data Asset Outcomes Reporting Pilot study explored the circumstances of people who have used public housing, state owned and managed Indigenous housing (SOMIH), SHS and Commonwealth Rent Assistance (CRA).
>
> The housing and homelessness data sources contributing to the study were:
>
> - public housing data between June 2018 and June 2020 from New South Wales, Victoria, Queensland and South Australia. In June 2020, records indicate 420,000 people used public housing
> - data from SOMIH between June 2018 and June 2020 from Queensland and South Australia. Nearly 13,000 people used SOMIH on 30 June 2020
> - data from SHS between July 2011 and June 2020 from New South Wales, Victoria, Queensland and South Australia. Between July 2019 and June 2020, over 230,000 people were assisted by SHS
> - data for people in income units that received CRA between June 2010 and March 2020. Over 2.2 million people were in an income unit that received CRA in March 2020.
>
> This article focuses on the data for public housing and SHS. A person may receive support from more than one of these services at a time.

(continued)

Box 5.5 (continued): Outcomes Reporting Pilot study

Definition of disability

People accessing these housing supports were identified as having a disability if they:

- were an active participant in the NDIS
- had used equivalent disability supports funded under the NDA before the NDIS
- had received DSP or other disability-specific income supports or Centrelink payments
- had received Medicare Benefits Schedule payments for services relating to disability
- had Pharmaceutical Benefits Schedule funded scripts for pharmaceuticals specific to disability conditions
- had a disability flagged in the public housing, SOMIH or SHS data.

Disability was further classified into 6 broad groups:

- sensory and speech
- intellectual disability
- physical disability
- psychosocial disability
- acquired brain injury
- other.

Quality of derived disability indicator

The study's indicator did not identify as many people with disability under age 25 or above age 64 as identified by the ABS Survey of Disability, Ageing and Carers. This means that some records were not flagged in the services data as belonging to people with disability when they should have been. For some services, this could affect a substantial proportion of users – for example, 55% of people living in public housing are younger than 25 or older than 64.

See *Identification of people with disability in linked administrative data for service use and outcomes reporting in housing* (NDDA 2022b) for more information on the technical details of the study.

Specialist homelessness services

Specialist homelessness agencies provide a wide range of services to assist people who are experiencing homelessness or who are at risk of homelessness, ranging from general support and assistance to immediate crisis accommodation.

Around 1.1% of Australians, or 230,000 people, are assisted by SHS each year (AIHW 2022c). Based on the Pilot study's derived disability indicator, an estimated 3.5% of people with disability use SHS in a year, compared with 0.7% of people without disability.

The Outcomes Reporting study's investigation into SHS suggests that the current administrative data collections underestimate the number of clients with disability. The study found that 37% of all SHS clients in 2019–20 in the 4 participating jurisdictions were identified as having disability, compared with 2.4% of clients identified using the current administrative data. This more than a 10-fold difference in the number of clients identified with disability suggests that the current disability flag is mainly identifying disability for people with more severe impairment.

The study's method also provided richer information regarding disability than already available with the current administrative data. This allowed the service use of people with different disability types, or support needs, to be compared. For example, of the SHS clients identified as having disability using the derived indicator, 73% were identified as having psychosocial disability. This information is not available in the SHS data alone.

Among people with disability, there was a higher prevalence of psychosocial disability among SHS clients (73%) than among the general population (54%) (Figure 5.6). The linked data also showed that 45% of SHS clients with disability had multiple disabilities. Clients with disability were more likely to be older than clients without disability (Figure 5.7).

Figure 5.6: Psychosocial disability is more prevalent among people with disability who are SHS clients than among people with disability who are not

Prevalence of disability groups among people with disability in NSW, Vic, Qld and SA by their SHS client status, 2019–20
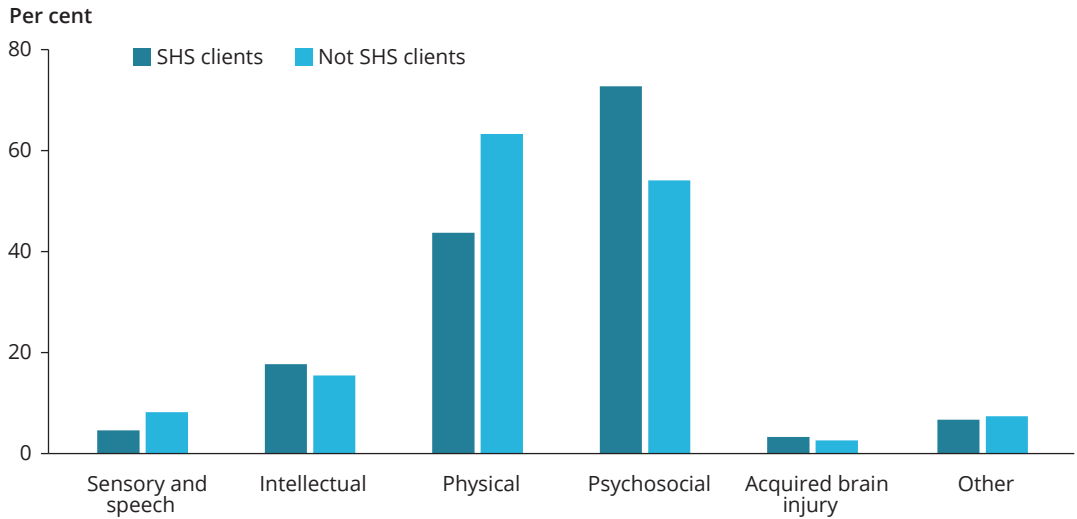
Source: AIHW (2022) NDDA Outcomes Reporting Pilot, unpublished AIHW analysis of data asset.

Figure 5.7: SHS clients with disability are older than SHS clients without disability

Age distribution of SHS clients with and without disability in NSW, Vic, Qld and SA, 2019–20
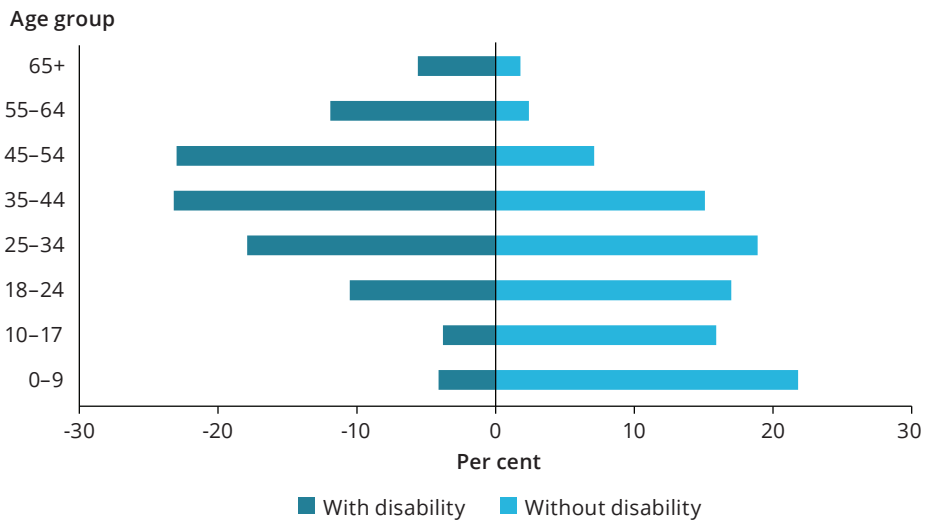
Notes

1. There are limitations with identifying people with disability under the age of 25 and over the age of 64 years. Caution should be used for ages outside this range.
2. Percentages may not sum to 100 due to rounding.
3. Per cent calculations are based on totals less 'Not stated' (unless 'Not stated' has been combined with another category for confidentiality reasons).

Source: AIHW (2022) NDDA Outcomes Reporting Pilot, unpublished AIHW analysis of data asset.

Public housing

Public housing is a form of social housing managed by state and territory housing authorities. This includes dwellings owned by the housing authority or leased from the private sector or other housing program areas. Public housing provides public rental housing or is leased to public housing tenants, with allocations based on assessed levels of need.

As with the SHS data above, the Outcomes Reporting study found that the public housing administrative data from the 4 jurisdictions underestimated the number of tenants with disability. Based on administrative data currently collected by state and territory public housing authorities, it is estimated that 1 in 4 (27%) public housing tenants in the 4 jurisdictions have disability. In comparison, the linked data from the Pilot study showed that nearly 1 in 2 (47%) public housing tenants in the 4 jurisdictions have disability.

The linked data showed that, each year, people with disability are roughly 7 times more likely to be public housing tenants than people without disability. As of June 2020, around 1 in 10 people (8.3%) with disability lived in public housing compared with 1.2% of people without disability.

From the linked data, the study could determine disability types among public housing tenants for the first time. Half (50%) of public housing tenants with disability had more than one disability. Around 3 in 5 (64%) people with disability living in public housing had a psychosocial disability and 3 in 5 (62%) had a physical disability. These proportions were similar to those for people with disability not living in public housing (Figure 5.8).

Figure 5.8: Public housing tenants with disability have more psychosocial disability than people with disability who are not public housing tenants

People with disability in NSW, Vic, Qld and SA and their public housing tenancy status, by disability group, as at 30 June 2020
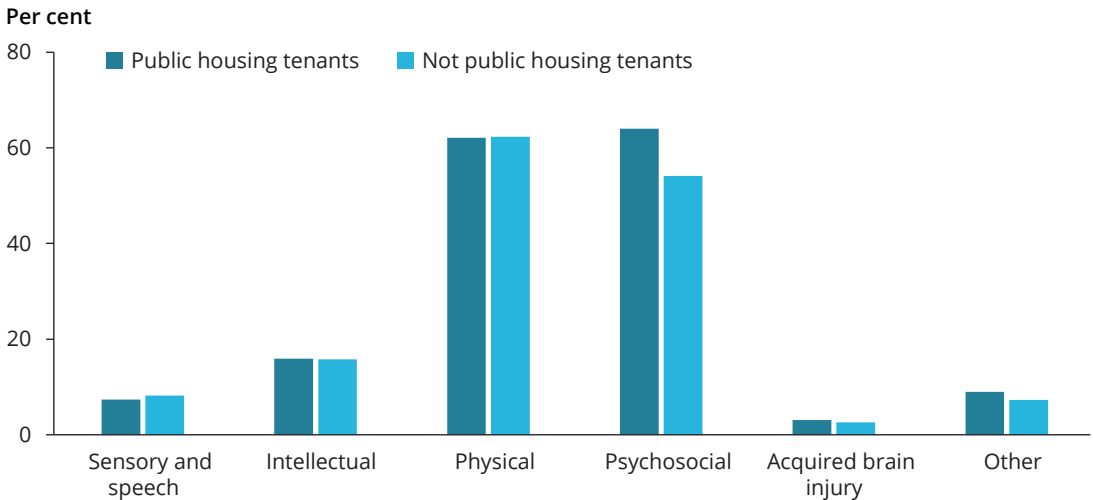
Source: AIHW analysis of data asset, Outcomes Reporting Pilot.

The study found that, as at 30 June 2020, 25% of public housing tenants had received SHS assistance in the previous 8 years. Public housing tenants with disability (26%) were likely to have accessed SHS assistance at the same rate as public housing tenants without disability (24%). Of public housing tenants with disability, people with acquired brain injury (31%), psychosocial disability (30%) and intellectual disability (28%) were more likely to have accessed homelessness assistance than people with sensory/ speech (20%) or physical disability (22%).

The linked data was used to inform several measures related to social housing in the Australian Disability Strategy Outcomes Framework (see the section headed 'Further reading'). One such measure was the average time waited for social housing, which is currently reportable only for people with disability as a whole. While the study found that wait times for people with disability and for people without disability were similar, they did vary between people with different disability types. Public housing households including a member with acquired brain injury (42%) had the highest proportion of households allocated housing within 3 months of application; those with sensory and speech disability had the lowest (29%).

Conclusion

The successful completion of the Pilot studies demonstrated the potential of linked data to generate new insights and inform disability policy across a wide range of service systems. In particular, the findings from these studies clearly showed the ability of linked data assets to:

- flag people with disability in data sets that
  - lack disability indicators, allowing new insights to be reported for the first time (for example, the comparatively high proportion of people with disability who are victims of crime)
  - have limited disability status information, allowing more accurate data to be published (for example, the greater than previously reported proportion of public housing tenants with disability)
- enable analysis of
  - results by disability type for the first time, potentially identifying overlooked groups (for example, the over-representation of people with psychosocial disability in SHS)
  - pathways for people with disability, highlighting areas of potential intervention (for example, the comparatively high number of children with disability using early childhood education)
  - outcomes achieved for people with disability at different stages within a service system (for example, educational and employment outcomes during and after high school).

It should be noted that the results obtained were specific to the conditions in each jurisdiction where the Pilot was conducted; larger, more broad-scale studies would be required for findings to be determined that more broadly apply beyond the specific parameters of each Pilot study. Also, these studies were exploratory in nature; they aimed to test the feasibility of large-scale data linkage and analysis, using a range of approaches by several different teams. While this feasibility has been clearly shown, further work is required to standardise the methodologies used in such a data asset.

These findings are now being used to help to shape the design and implementation of an enduring disability data asset so that it can support policy and research initiatives aimed at improving outcomes for people with disability.

Further reading

For more information on:

- the Australian Disability Strategy, see its topic on the Disability Gateway website at www.disabilitygateway.gov.au/ads. It describes the purpose and direction of the Strategy and how Australian, state, territory and local governments will contribute. Information on the Strategy's Outcomes Framework is at www.disabilitygateway.gov.au/node/3121. This lists measures to be included as part of the Outcomes Framework

- the Outcomes Framework measures, see Australia's Disability Strategy pages on the AIHW website www.aihw.gov.au/australias-disability-strategy. This includes the most up-to-date data for how the different measures are tracking

- the status and direction of the National Disability Data Asset, see its website at www.ndda.dss.gov.au. Information presented includes its vision, current progress for its implementation and how the disability community is involved in its design and governance

- disability-specific supports, see the *Specialised supports for people with disability* snapshot of *Australia's welfare 2021* at www.aihw.gov.au/reports/australias-welfare/supporting-people-with-disability. This describes federally funded supports – including the National Disability Insurance Scheme, the Disability Support Pension and Disability Employment Services – and presents an overview of other supports available.

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