

Not a Level Playing Field – People With Disability

October 2023

Exploring the intersection of inequality and disability



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The Actuaries Institute acknowledges the traditional custodians of the lands and waters where we live and work, travel and trade. We pay our respect to the members of those communities, Elders past and present, and recognise and celebrate their continuing custodianship and culture.

About this report

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1. Introduction

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Inequality and disability

The Actuaries Institute May 2023 Green Paper, *Not a Level Playing Field*, summarised the current state of economic inequality as well as the contributions from different demographic factors or drivers (e.g., geographic, gender, disability, First Nations status and age) and the impact across other societal domains aside from economic (namely housing, health, social, education and environment). This highlighted that people with disability, among other subgroups, experience higher rates of economic hardship due to systemic factors, and that this contributes to overall inequality significantly.

This paper seeks to enrich the insights available from the earlier paper by providing a deeper and more nuanced examination of inequalities for people with disability in Australia. Our analysis follows the approach from the main paper with outcomes compared across the same indicators (where possible). The discussion then draws on considerations and outcomes that are more specific to people with disability and spans other data sources.

The analysis and positions stated in this paper are put forward in the spirit of further supporting an objective, well-informed and vigorous debate on how Australia can address systemic inequalities for people with disability.

Issues facing people with disability

Australia was an early signatory to the United Nations Convention on the Rights of Persons with Disabilities (United Nations, 2023). Despite this commitment, recent work and events have highlighted ongoing challenges for people with disability:

- The long-running Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability has highlighted maltreatment at both individual and systemic levels. The cost of maltreatment is large, estimated at \$46 billion per year. Poorer health and wellbeing outcomes are the largest component of this (\$28.4 billion), followed by employment and financial security outcomes (\$6.4 billion) (Vincent et al., 2022).
- Organisation for Economic Co-operation and Development (OECD) employment rates continue to show Australia has room to improve on employment opportunities for people with disability – Switzerland has achieved a small employment gap (16 percentage points) with an employment rate of 58% for people with disability and 74% for people without disability (OECD, 2022). The 2018 Survey of Disability, Ageing and Carers (SDAC) has employment rates in Australia for people aged 15–64 with disability at 48%, compared to 80% for people without disability. This large gap has not reduced over the past 20 years (AHRC, 2005), long enough for it to have generational impacts.

- The National Disability Insurance Scheme (NDIS) represents a large increase in supports for people with permanent and significant functional impairment requiring specialist support. The current NDIS Review (2023) has highlighted the contrast between the significant supports available under the NDIS and relative paucity outside it (NDIS Review, 2023). It has also created a somewhat artificial division of entry before or after age 65 that can significantly affect what supports are available for older Australians with disability.

This suggests that many of the issues raised in the landmark [2009 SHUT OUT report](#) remain. That report pointed to isolation and struggles to access many necessities that most Australians take for granted.

In improving policy and outcomes for people with disability, complications abound. One commonly cited issue is the accountability between different agencies and levels of government. For example, the current NDIS Review identifies the ‘oasis in the desert’ effect, which suggests a lack of supports outside the Scheme in community and mainstream settings. The twin desires of improved specialist supports and better community inclusion is another common tension (McVilly et al., 2022) – which occurs in areas of accommodation, employment and education, for example.

Despite the challenges, efforts at change are ongoing and the chance to effect potentially very meaningful change is now on the horizon. The end of September this year marked the final report release of the Disability Royal Commission, which included a suite of recommendations to improve circumstances and reduce maltreatment. The [Australian Disability Strategy 2021–2031](#) was released last year and includes a broad suite of indicators which are now routinely tracked, increasing accountability.



Defining disability and reporting outcomes for this paper

Before talking to outcomes for people with disability, we must address definitions. The Australian Bureau of Statistics (ABS) definition of disability used in the SDAC (and other places) is 'any limitation, restriction or impairment which restricts everyday activities and has lasted, or is likely to last, for at least six months' (ABS, 2018). Our primary data source for this paper is the Household, Income and Labour Dynamics in Australia (HILDA) survey, which adopts a similar definition: 'an impairment, long-term health condition or disability which restricts their everyday activities that had lasted, or was likely to last, for a period of six months or more' (Wilkins et al., 2021).

We note both these definitions are:

- broad, in that they are not strictly tied to self-identification of disability; and
- aligned with a 'social model' of disability, where the emphasis is around impacts on everyday activities rather than specific medical diagnoses.

Definitions can vary across different contexts and programs. For example, NDIS eligibility is restricted to disabilities that are likely to be permanent and has more granular eligibility rules for various types of diagnoses. The NDIS population (aged under 65) as at June 2023 was 583,000 people (another 27,500 participants are aged 65+), which is about a fifth of the total number of people with disability in that age range.

When considering which data sources to use, definitions are not the only consideration. HILDA and SDAC provide data under the broader and 'social model' view of disability. However, both are surveys – they do not cover the full population with disability. HILDA, in particular, is a longitudinal survey of a sample of the full population, and results for people with disability are based on a fairly modest number and can be subject to small number errors. SDAC data, while disability focused, is infrequently collected. NDIS data covers the whole population within the NDIS so does not suffer from survey biases or small error estimates. However, it does not cover the many people with disability outside the NDIS and is lacking in functional assessment information.

HILDA survey and disability

We primarily present outcomes using HILDA data. This is for consistency with our existing work on inequality, and because it enables unit record data to be used to understand a wide range of outcomes and characteristics. However, there are some limitations:

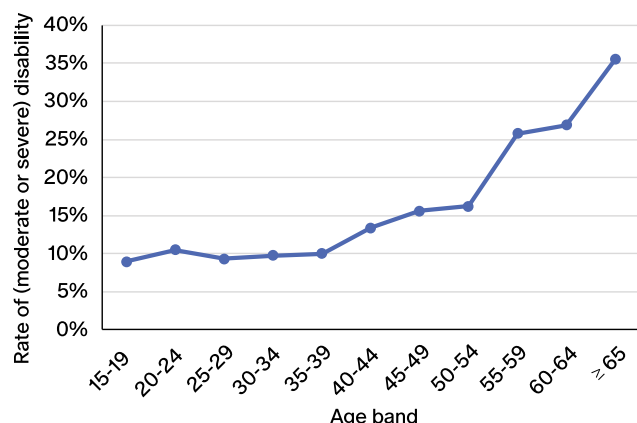
- Our definition of moderate or severe disability (restricting with some impact on the ability to work) does not align exactly with the SDAC.
- Group homes are likely underrepresented in the data, which may exclude people with particularly low levels of function.
- The implied number of people aged 15–64 receiving Disability Support Pension (DSP) using the survey is 560,000, compared to an actual number of 650,000 as at June 2021 – so there appears to be underrepresentation.

Where appropriate, we bring in statistics from other sources to ensure a more complete picture. We have seen reasonable alignment in outcome relativities.

Our standard HILDA cohort is 'moderate and severe disability' who are those reporting 'impairment, long-term health condition or disability which restricts their everyday activities that had lasted, or was likely to last, for a period of six months or more' as well as some related impact on the ability to work (at least 1 on a 10-point scale). 'Severe' refers to people scoring 7–10 on the impact on their ability to do work. This approach is consistent with Vu et al. (2020).

Around 19% of the population live with moderate or severe disability. A large fraction of this can be tied to ageing. Figure 1 shows the rate of disability by age band. About 14% of people aged 15–64 and 36% of people over 65 have a (moderate or severe) disability. With an ageing population, living with disability is likely to become even more common over time. Disability rates are also increasing for children, although challenges exist in distinguishing between underlying prevalence changes and increased diagnosis rates.

Figure 1 – Rate of (moderate or severe) disability by age



Source: Analysis of HILDA data, 2021 wave

For this paper, we focus on the working-age population – people aged 15–64. This means we focus on the years where economic (and other) inequalities primarily accumulate (although this impacts outcomes in later years). It also means we avoid muting the differences by including older people with disability that onsets later in life.¹

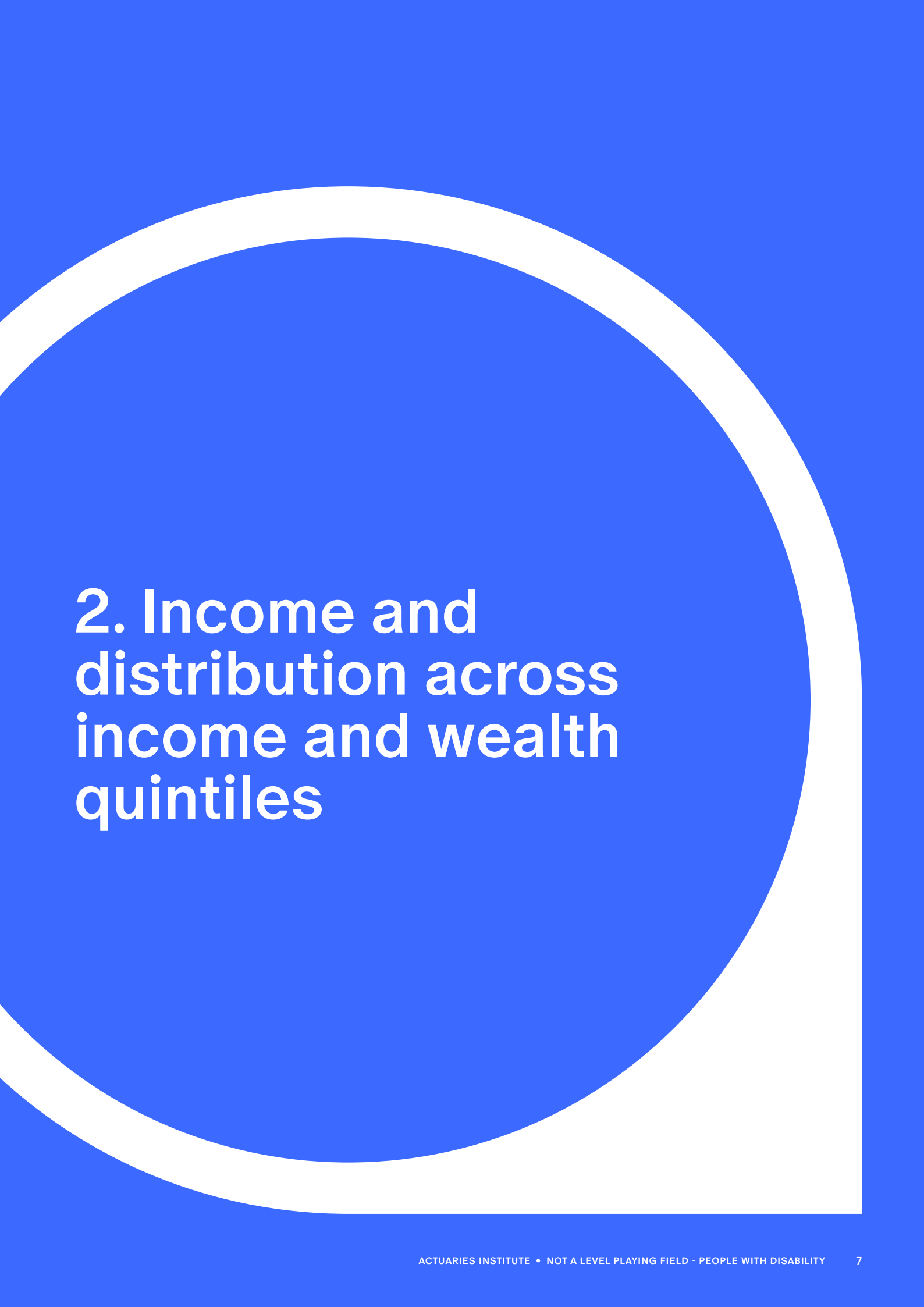
The age distribution also means comparisons that control for age can be very different to those that do not. For this work, and consistent with our main paper, *Not a Level Playing Field*, we have primarily focused on the age group 35–54 to minimise age distortions.

The nature and severity of functional impact of disability varies considerably. While outcomes are often reported for people with disability as a whole, in part due to data limitations, this can mask variation. Outcomes are typically poorer for people with more severe disability. People with intellectual disabilities face unique challenges, and the ability to access government services and associated outcomes are particularly poor for this group. There are also intersections to consider. The rate of disability among First Nations Australians is around 1.5–1.9 times that of non-Indigenous Australians (Australian Institute of Health and Welfare [AIHW], 2023a). For this group, social inequalities accumulate among both dimensions, leading to particularly high levels of disadvantage. In this paper we primarily report on people with disability as a whole and try to highlight key areas where subgroups are particularly impacted. It is worth keeping in mind that outcomes for people with disability are an average across a very heterogeneous group.

Many people with disability do not even feel safe disclosing they have a disability – for example, 2013 data showed only half of Australian public servants with disability disclosed this disability (Gray, 2020). While an individual should have the right to choose if they disclose a disability, the study suggests worries around treatment and stigma impact disclosure. In a more recent NSW qualitative study, 84% of people with disability seeking work in the public service feared discrimination because of both their own past experiences and those of other people with disability (ARTD Consultants, 2021).

Compared to the summaries in our main paper, we have focused the metrics on individuals rather than households (where possible). We also report on all people with disability rather than primary householders with disability. This leads to some differences with our main paper but, we believe, best focuses on outcomes for people with disability.

¹ There will still be some people aged under 65 with disability who earned relatively high incomes or accumulated wealth prior to disability onset. This will reduce the apparent inequality between groups. However, the issue is substantially reduced by excluding people aged 65 and older, where disability rates escalate quickly.

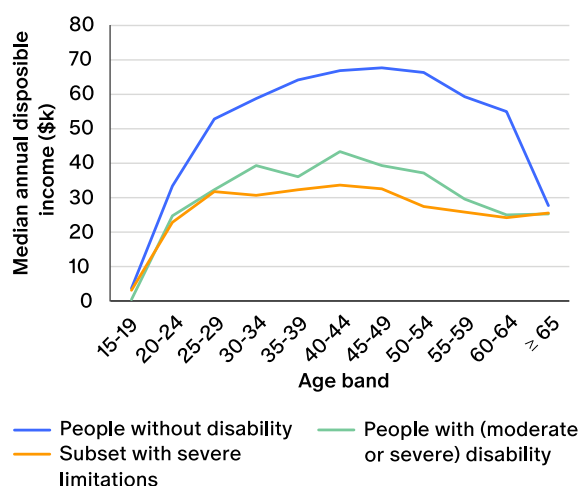


2. Income and distribution across income and wealth quintiles

2. Income and distribution across income and wealth quintiles

As with our main paper, we first look at economic inequality and then broaden out to related impacts on other domains. Figure 2 shows the average income for people with disability is much lower than for people without disability across all age bands. It is even lower for people with severe disability – across ages 25–64, disposable income² is about half that of people without disability. Compounding the lower incomes, it has been estimated that people with disability need 50% additional income to achieve the same standard of living as a person without disability (Vu et al., 2020). While much of this is offset by the NDIS for those with severe disability, those with a disability but without work-related limitations were still estimated to require 19% additional income.

Figure 2 – Income profile of people with and without disability



Source: Analysis of HILDA data, 2021 wave

While some differences relate to fewer hours worked, people with disability currently face substantial barriers to employment, particularly employer readiness, and this reduces their earnings. There are large differences in employment and unemployment rates for people with and without disability. HILDA data shows that in 2021:

- the employment rate for people with moderate or severe disability was 46%, 35 percentage points less than for people without disability (81%);
- the unemployment rate for people with moderate or severe disability was 12%, over three times higher than for people without disability (3.4%); and
- the underemployment rate for people with moderate or severe disability was 18%, around 2.5 times higher than for people without disability (7.4%).

Increased rates of unemployment and underemployment are also concerning, as underemployment has been shown to be more detrimental to the mental health of people with disability than the general population. This is hypothesised to be due to the combination of multiple disadvantages (Milner et al., 2017).

The unemployment rate shows that a significant part of the gap in employment is attributable to people who want to work. The National Disability Strategy Consultation Report identified that 'the most common reason for a lack of employment opportunity is low disability awareness among employers, which leads to a lack of understanding of people's abilities. Low visibility of people with disability in community means employers are not exposed to the abilities of prospective employees' (The Social Deck Pty Ltd, 2019).

The total cost of poorer employment outcomes for people with disability is estimated to be \$21.5 billion per year, with at least \$5.5 billion of this attributable to identifiable maltreatment (Vincent et al., 2022).

The lack of employer-readiness disadvantages employers, potential employees and potential coworkers. While Australia-specific evidence is lacking, international studies have shown many benefits to employing people with disability. A systematic review found including people with disabilities improved:

- profitability, including through lower staff turnover, more reliability and higher employee loyalty;
- competitive advantage, including through diversifying customers, increasing customer loyalty and satisfaction, and increasing innovation, productivity and safety; and
- inclusivity of work culture, of benefit to all employees and the company (Lindsay et al., 2018).

Lower employment rates directly affect income and wealth. This can be seen in the distribution of people with disability across income and wealth quintiles. Table 1 shows how disability groups are spread across individual disposable income quintiles for the 35–54 age band (to reduce age-related variation). If income was uncorrelated with disability, we would see 20% of the cohort in each quintile. In reality, we see a significant skew – 41% of people with moderate or severe disability are in the lowest quintile and 9% are in the top, so 4.6 times as many people with disability are in the bottom compared to top quintile. The true skew is likely even larger given some underrepresentation of the people with more severe disability in the HILDA survey (e.g., those in group homes and receiving DSP).

2. Disposable income is as reported in the HILDA survey. This is total income after receipt of government benefits and deduction of income tax. It includes wages and salary, business income, investment income and private pensions but excludes realised capital gains.

Table 1 – Summary of rates of disability subsets and proportion of disability group within each individual disposable income quintile. Ages 35–54.

	% of HILDA population	Distribution across income quintiles (1 = lowest)				
		1	2	3	4	5
Moderate or severe disability	14%	41%	27%	15%	9%	9%
Moderate disability	9%	32%	27%	16%	11%	12%
Severe disability	5%	56%	26%	12%	5%	3%

Source: Analysis of HILDA data, 2021 wave

Table 2 shows similar information, except grouping into quintiles based on household wealth. This shows slightly less skew by virtue of the household view but still substantial – households with a member with moderate or severe disability are 1.9 times as likely to be in the lowest wealth quintile.

Table 2 – Summary of rates of disability subsets and proportion of disability group within each household wealth quintile. Ages 35–54.

	% of HILDA population	Distribution across income quintiles (1 = lowest)				
		1	2	3	4	5
Moderate or severe disability	13%	38%	19%	16%	16%	11%
Moderate disability	8%	33%	20%	17%	18%	12%
Severe disability	5%	46%	18%	15%	12%	10%

Source: Analysis of HILDA data, 2018 wave. Wealth data is not available for more recent waves.





3. Impact across wellbeing domains

3. Impact across wellbeing domains

While discussions of inequality most commonly focus on income and wealth differences, this underplays the multidimensional nature of disadvantage and the strong correlations with other outcomes. This section highlights the differences in outcomes for people with disability across the same six domains in the *Not a Level Playing Field* paper. Our analysis follows the approach from the main paper with outcomes compared across the same indicators (where possible). Most (but not all) indicators are drawn from 2021 HILDA data. The comparison is limited to people aged 35–54 (where possible) to improve comparability. Formal indicator definitions, full details on sources and additional indicator data for other age groups are included in Appendix A. The discussion then draws on considerations and outcomes that are more specific to people with disability.


Not a Level Playing Field included discussion of most of these indicators and the harms of poorer outcomes. We have not replicated that discussion here. Instead, we show the differences for people with disability and highlight other disability relevant considerations in each domain.

3.1 Economic

Our economic indicators show how people with disability experience universally poorer outcomes across a range of common measures of economic wellbeing.

In Section 2, we looked at the pervasive issues of income and wealth inequality as well as the key issues of unemployment and underemployment for the working-age population.

Here we have summarised the differences in outcomes for the 35–54 age group consistent with *Not a Level Playing Field* and explore other areas of economic disadvantage.

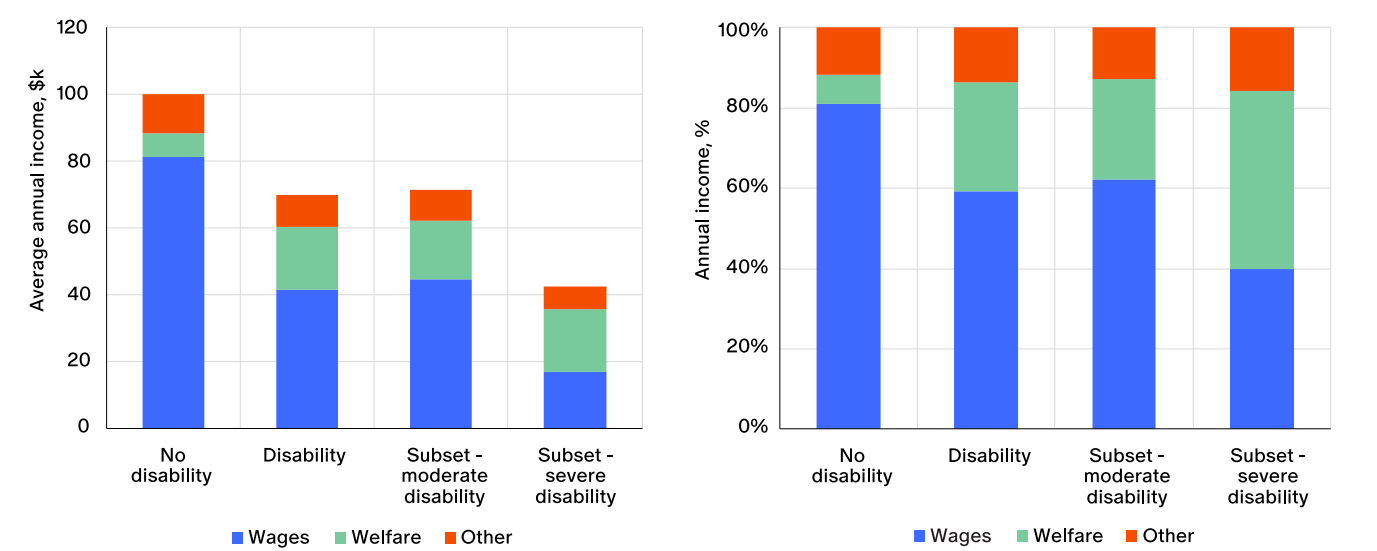
	Economic
Compared to people without disability, people with moderate or severe disability are:	
3x	More likely to be unemployed or be underemployed
0.7x	Less wealthy, in terms of net assets
4x	More reliant on welfare income
2x	More likely to be living in poverty

Source: Analysis of HILDA data, 35–54 age group, moderate and severe disability

We saw lower disposable income patterns in Figure 2. We can also examine the different sources of income, shown in Figure 3. It shows how the welfare system plays a role in supporting people both seeking work and those with limited capacity for work – for people with severe disability, 44% of income relates to government benefits. This means welfare policy settings have a large impact on people with disability. While DSP payments are higher than JobSeeker payments, not all people with disability are eligible for DSP:

- There were 645,000 people aged 15–64 receiving DSP at March 2023.
- Another 375,000 people with partial capacity to work – typically related to an ongoing health issue or disability – were receiving other income support payments (mainly JobSeeker benefit) (Department of Social Services [DSS], 2023)
- In fact, over two-fifths of people on JobSeeker benefit have only partial capacity to work.

Figure 3 – Average annual income split by source for people with and without disability, and two disability subgroups, 2021. Ages 35–54.



Note: ‘Other’ is primarily investment income for this age band but also includes other income (for example, business income).
Source: Analysis of HILDA data, 35–54 age band

Case study: Successful social enterprise employment for people with disability

Social enterprise models, where organisations operate a viable business with an underlying aim of solving a social issue, are growing in prominence in Australia and worldwide.

White Box is a leader in the development of large-scale jobs-focused social enterprises. The White Box Enterprises payment-by-outcomes trial is a collaboration with the Department of Social Services to fund sustained employment as outcomes are achieved. Job seekers are placed across 15 jobs-focused social enterprises. Early results suggest good performance in terms of job retention, incomes and value-for-money for government (White Box Enterprises, 2023).

3.2 Housing

Lower incomes and wealth have implications for housing access too. Home ownership rates are markedly lower at 59% for people with disability compared to 73% for people without disability (-14 percentage points). This, in turn, can lead to higher rates of income poverty in older age, reduced stability of housing and associated social outcomes.

People with disability are 1.8x as likely to have recently struggled to pay their housing costs. This rate is particularly high for people with severe disability with one in five (21%) having recently struggled to pay their housing costs compared to 7% of people without disability.

	Housing
Compared to people without disability, people with moderate or severe disability are:	
14pp	Less likely to own their own home
1.8x	More likely to have recently been unable to pay their rent or mortgage

Source: Analysis of HILDA data, 35–54 age group, moderate and severe disability

People with disability are overrepresented across all housing supports. People with disability are three times more likely to receive Commonwealth Rental Assistance (24% of people with disability) than people without disability. It has been estimated that 71% of households in public housing have at least one person with disability. This high proportion reflects people with disability being eight times more likely to live in public housing (8% versus 1%). This means current pressures in the social housing system disproportionately impact people with disability. Wait times for public housing are similarly long for households with and without a person with disability, with around one in five households waiting two or more years (DSS, 2021).

Since the mid to late 20th century, many large residential institutions that housed people with disability have been closed, in recognition of the denial of basic human rights people with disability experienced and the detrimental impacts of segregation. Some people with disability were relocated to group homes. These are much smaller supported living arrangements. Around 17,000 people with disability live in group homes, and it is particularly common for people with intellectual disabilities. Many concerns have been raised about ongoing exclusion and isolation in these settings.³

There are differences in household composition as well. Non-dependent people with disability are 2.2 times as likely to live alone than non-dependent people without a disability and 1.6 times as likely to be lone parents (AIHW, 2022). While living arrangements can be a matter of personal choice, living alone is typically associated with less social support and negative health outcomes. It also places more financial pressure on a single income.

In addition, some people with disability face particular challenges in securing suitable housing, with most of Australia’s housing not designed to meet the needs of people with disability. Poor access, unsuitable layouts and inadequately designed bathrooms have been highlighted as particular problems. Modifications are not only costly but are particularly challenging when renting (Gusheh et al., 2021). In a survey of people with mobility impairments, 71% of respondents were living in housing that did not meet their accessibility needs (Goodwin et al., 2022). Finding a suitable rental is particularly difficult for wheelchair users, and current pressures on the rental market exacerbate this (Housing Hub, 2022).

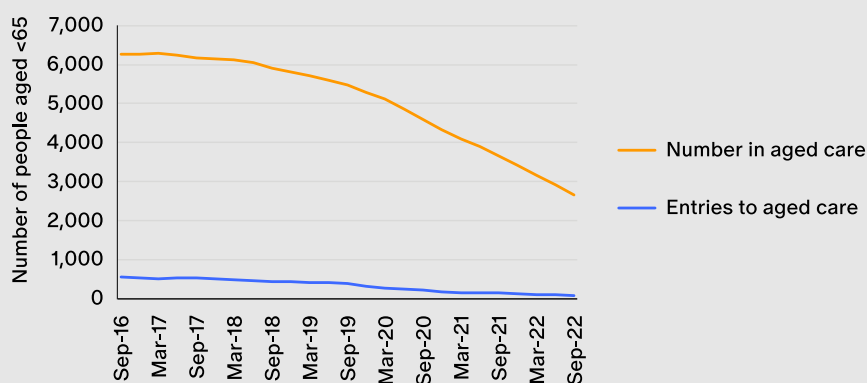
This likely contributes to people with disability having higher rates of dissatisfaction with their current home. Within the 25–44 age band, 16% of people with disability are not satisfied with their current home, 1.6 times the rate for people without disability (9.5%) (AIHW, 2022).

3. For a discussion, see the Royal Commission Issues Paper: Group homes <https://disability.royalcommission.gov.au/system/files/2022-03/Issues%20paper%20-%20Group%20homes.pdf>

Case study: Improving access to housing and reducing the rate of young people living in residential aged care

The NDIS has improved access to housing for those in the NDIS. The June 2023 quarterly report shows the number of participants with Specialist Disability Accommodation supports has grown by 50% to 23,000 over three years. Recently, governments have been working to reduce the number of people with disability under age 65 in residential aged care facilities – this has fallen from 5,600 in June 2019 to 2,400 in December 2023, facilitated by NDIS supports (e.g., Supported Independent Living). While some of this decrease reflects people close to age 65 'ageing out', there has also been a large decrease in the number of people under age 65 entering residential aged care. There were 400 entries in the quarter to June 2019 compared to 70 in the quarter to December 2022 (AIHW, n.d.).

Figure 4 – Number of people aged under 65 in aged care, and entering aged care



Source: Published on GEN-agedcaredata.gov.au



3.3 Health

Disability and health are intertwined – the relationship is complex and depends on numerous factors. Unpacking the causal pathways and dynamics is beyond the scope of this paper. Here we simply note the differences in outcomes for people with disability are large across a wide range of areas. This suggests there is potential for improved outcomes.

Just 35% of adults under age 65 with disability report their health as good or excellent. This is half the rate for people without disability (68%) (Centre of Research Excellence in Disability and Health [CRE-DH], 2022). This is reflected in poorer health outcomes such as higher rates of psychological distress (2x), deaths by suicide (3x) and all-cause mortality (5x).

The higher mortality rates are reflected in reduced life expectancy. For example, people aged 25–34 with disability have a life expectancy around 80% of that for people without disability. This is similar for ages 35–44, at 79% (Vincent et al., 2023).

	Health
Compared to people without disability, people with disability are:	
2x	more likely to be obese ^(a)
2x	more likely to be suffering psychological distress ^(a)
3x	more likely to die by suicide, after age-standardisation ^(b)
5x	at a higher rate of mortality, after age-standardisation ^(c)

Sources:

- (a) Analysis of HILDA data, 35–54 age group, moderate and severe disability
- (b) AIHW Deaths by suicide among people who used disability services 2015–2018
- (c) AIHW Mortality patterns among people using disability support services: 1 July 2013 to 30 June 2018

Additionally, the AIHW has found that people with disability have an unadjusted rate of 240 potentially avoidable deaths per 100,000 people. After adjusting for age, the rate for the study population was 3.6x as high as the general population (AIHW, 2020).

Obesity rates are higher for people with disability, alongside rates of modifiable lifestyle risk factors, including smoking (23% versus 9%) and not achieving physical activity guidelines (90% versus 84%). This can reflect the additional challenges people with disability face in terms of being active and greater difficulty accessing services. It is also entangled with the overrepresentation of people with disability in lower socioeconomic groups. Health and illness follow a social gradient — in general, the lower the socioeconomic position, the worse the health is.

People with disability report higher rates of many conditions than people without disability. This includes depression (20% versus 4%), anxiety (29% versus 9%), diabetes (7% versus 3%) and asthma (18% versus 9%) (CRE-DH, 2022). And, despite higher health needs, people with disability are much less likely to have private health insurance (41% versus 62% without disability).⁴

Poorer health outcomes reinforce the need to ensure that access to healthcare services for people with disability is affordable and appropriate. Common issues on appropriateness include communication barriers, disability awareness and diagnostic overshadowing (where symptoms are attributed to disability rather than a health issue).⁵

Case study: National Roadmap for Improving the Health of People with Intellectual Disability

The Australian Government released the National Roadmap for Improving the Health of People with Intellectual Disability in 2021 to address serious health inequities. It is investing \$43 million to fund the priorities which span research, education and improved preventative healthcare. Importantly, the roadmap has been developed with engagement from people with intellectual disability, family members and other carers and stakeholders (Department of Health and Aged Care, 2023).

While it is early days, the roadmap and associated actions are an important step towards improving outcomes for the 450,000 Australians living with intellectual disability.

4. Analysis of HILDA data, wave 2021, people aged 35–54

5. For example, see the Royal Commission Issues Paper: Health care for people with cognitive disability <https://disability.royalcommission.gov.au/publications/health-care-people-cognitive-disability>

3.4 Social

People with disability experience three to six times higher rates of poor outcomes across all our social domain indicators.

People with disability are also much more likely to experience social exclusion and loneliness. Among people aged 25–44:

- One in five (19%) people with disability experience social isolation, twice the rate for people without disability (10%).
- One in three (31%) people with disability experience loneliness, twice the rate for people without disability (16.8%) (AIHW, 2023b).

Systemic issues are highly apparent in the justice system, with people with disability being overrepresented in experiences of crime as well as offending and incarceration.

The impact of this is magnified by greater barriers to justice for people with disability. This includes challenges being heard and believed, both by the police and in court. A recent study found perpetrators of both violent crime and domestic violence were less likely to be proceeded against when victims have a disability (Ringland et al., 2022).

	Social
Compared to people without disability, people with disability are:	
6x	more likely to be a recent victim of violent crime ^(a)
5x	more likely to experience homelessness ^(b)
3x	More likely to be in out-of-home care as a child ^(b)
6x	More likely to be incarcerated ^(b)

Sources:

(a) Analysis of HILDA data, 35–54 age group, moderate and severe disability

(b) Analysis based on Vincent et al. (2022)

Experiences of crime

According to HILDA data, 3.3% of people with moderate or severe disability have been a victim of violent crime in the past year. This is nearly six times higher than the rate for people without disability (0.6%). The rate is even higher for people with severe limitations, for whom the rate is over 10 times higher than the rate for people without disability. The higher annual rates accumulate over time. The 2016 Personal Safety Survey results show nearly half (47%) of adults with disability had experienced violence since age 15 compared to about a third (36%) of people without disability.

Offending

In NSW, 13% of young people with disability have contact with the NSW youth justice system (by age 18), and those in contact with the system average 3.5 offences. This is more than twice the rate among people without disability (6% and 2.2 offences). The profile of offending differs for young people with disability compared to people without disability, and this leads to ineligibility for diversion (Boiteux & Poynton, 2023).

People with disability are overrepresented in custodial settings (estimated at six times based on Vincent et al., 2023, although data collections are variable in quality). Research has shown around half the custodial population has a disability and pointed to the need for further disability-focused research to identify opportunities for strengthened support and diversion for people with disability (Ringland et al., 2023).

First Nations people are vastly overrepresented in the justice system, and First Nations people with disability experience a level of ‘double discrimination’. The odds of offending for young First Nations people with disability have been estimated at two times that for non-Indigenous young people with disability (Boiteux & Poynton, 2023). Particularly high rates of intellectual disability have been reported for young First Nations people in custody, with one in four likely to have an intellectual disability compared with one in 12 non-Indigenous young people (Justice Health and Forensic Mental Health Network [JHFMHN] & Juvenile Justice NSW, 2017).

Homelessness

Homelessness is one area where disability status is not consistently measured in administrative data. For instance, true disability rates for people presenting to specialist homelessness services may be eight times the official figure of 5% (Aitken et al., 2021). If so, this suggests a five times higher incidence of homelessness, despite housing options through social housing or the National Disability Insurance Agency to support people with disability.

Child protection

Children with disability are heavily overrepresented in child protection systems – we have quoted the three times higher incidence found by Vincent et al. (2023). Research for the Disability Royal Commission also explored the issue of parents with disability being more likely to have children found to be at risk as well as entering care (Libesman et al., 2023). Data is a significant issue, but older research suggested about a third of child protection cases involved parents with disability, with mental health issues, psychosocial disability and intellectual disability the most common types of disability. As with the justice system, First Nations people are vastly overrepresented in the child protection system, and First Nations people with disability endure a level of double discrimination.⁶

International literature emphasises that advocates can play a critical role in supporting parents (with and without) disability to understand, be heard by, participate in and navigate the child protection system. However, these services are not currently readily available (Libesman et al., 2023).

Case study – Advocacy services help people with disability navigate the child protection system

Victoria Legal Aid has run the pilot Independent Family Advocacy and Support (IFAS) program. This program provides non-legal advocacy and support to parents and primary carers who are involved in the investigation stage of the child protection system, with the primary aim of diverting families from the child protection system. The three main priority groups for IFAS are First Nations families, families where one or both parents have an intellectual disability, and culturally and linguistically diverse families (Victoria Legal Aid, 2023). The final evaluation reported positive impacts as well as savings to government (Maylea et al., 2021).




6. The First Peoples disability network submission to the Disability Royal Commission provides a discussion of issues: https://fpdn.org.au/wp-content/uploads/2022/12/First-Peoples-with-Disability-Network-FPDN_DRC_First-Nations-child-protection-10.11.20.pdf

3.5 Education

School engagement for children with disability is the same as for children without disability. The rate of school attendance is 89% for both school-age children with and without disability. These rates have been steady over the 15 years to 2018 (AIHW, 2023b).

While school attendance may be similar, children with disability still experience high rates of exclusion within the school setting. A recent survey found 29% of children with disability had been excluded from excursions, events or activities at school in the past year (Dickinson et al., 2022).

	Education
Compared to people without disability, people with moderate or severe disability are:	
14pp	Less likely to finish Year 12
8pp	Less likely to use childcare

Source: Analysis of HILDA data, 35–54 age group, moderate and severe disability

Despite similar engagement, inequalities can clearly be seen in educational outcomes. By the end of school years, Year 12 completion is 14 percentage points lower for people with moderate or severe disability. However, differences in outcomes begin much earlier. In NSW, after controlling for socio-demographics, young children with disability (Green et al., 2022):

- were more than twice as likely as their peers to show developmental vulnerability in their early schooling years;
- had more days absent from school and more days suspended from school than their peers; and
- were over 2.5x as likely to achieve below the National Minimum Standard on any domain of the Grade 3 NAPLAN. This also flowed onto poorer outcomes in NAPLAN assessments in later years.

Early childhood education is a protective factor for both children with and without disability.

Many students with disability report poor experiences of their time at school, with challenges being:

- inadequate understanding of disability among teachers and school staff;
- fairly limited supports provided;

- symptoms of disability impacting both relationships with classmates and ability to study; and
- use of alcohol or drugs as coping mechanisms, which then compound issues faced in the school environment (Moskos et al., 2021).

As a result, some students report leaving school prior to Year 12 because of their poor experiences and perceive that this limited their future opportunities for work and study (Moskos et al., 2021). This highlights the importance of both improving schooling experiences as well the need for people with disability to be more commonly visible in leadership roles.

Barriers extend into higher education as well. Participation rates in both Vocational Education and Training (VET) and undergraduate studies are lower for people with disability. Just 4.4% of VET students and 8.1% of undergraduate students reported a disability (while not directly comparable measures, the population rate of disability shown in Figure 1 was around 10% for ages up to 40). The qualification completion rate for students with disability is 40% for VET and 51% for higher education, compared to 46% and 61%, respectively, for students without disability (AIHW, 2023b).

A pilot test case for the new National Disability Data Asset (NDDA) allowed researchers to take a detailed look at key education-related transitions in South Australia. They found that:

- Overall, students with disability were 23 percentage points less likely to enrol in post-school education. Even after controlling for past achievements, students with disability remained 5 percentage points less likely to enrol.
- Students with disability were 20 to 26 percentage points less likely to find employment at around age 25. Those who do find employment are 18 percentage points less likely to secure a full-time job than similar individuals in terms of socioeconomic characteristics and educational achievement (Mahuteau et al, 2021).

Case study – Telepresence robot technology supporting more inclusive education

MissingSchool is a not-for-profit organisation dedicated to raising awareness of the educational issues facing children who miss school because of critical or chronic illness, and to exploring ways of supporting the children, their families, their teachers and their learning through very difficult times.

MissingSchool led the Australian-first telepresence robot service pilot in the ACT, and the service now operates in every state/territory in Australia. Telepresence robots live in the regular classroom and are operated by kids who are away from school. This allows them to be seen and heard in their classrooms and to learn from their teachers with their classmates. This helps maintain vital relationships and reduce isolation (MissingSchool, n.d.).

3.6 Environmental

Large environmental issues such as climate change and air quality are society-wide intergenerational issues. However, the impacts disproportionately impact people with disability; for example, around the world, people with disability are more likely to be injured or die in disasters (United Nations Office for Disaster Risk Reduction [UNDRR], 2013). This reflects a broad range of challenges, from physical difficulties evacuating quickly, to accessibility of essential communications and interruption of electricity supply to critical supports. These accessibility challenges also apply to post-emergency supports, such as emergency shelters.⁷ Heat waves are a particular concern in Australia, and people with disability can be more susceptible to heat illnesses.

	Environment
Compared to people without disability, people with disability are:	
13pp	Less likely to be able to get to where they need to go
34pp	More likely to have difficulty accessing buildings/facilities

Source: Summarised by CRE-DH, 2022

Reflecting the needs of people with disability, the Australian Disability Strategy 2021–2031 includes a focus on improved disaster preparedness, risk management plans and public emergency responses to be inclusive of people with disability. AHW (2023) notes that, while data is not currently available, the intention is to develop and include the following measures in the outcomes framework:

- proportion and number of disaster management services that have disability-inclusive plans in place (system measure); and
- proportion of people with disability who report satisfaction in the accessibility of emergency, disaster preparedness and response information and services (population measure).

As people with disability are overrepresented in low-income groups, they are also disproportionately impacted by environmental issues with socioeconomic gradients. This includes limited access to green space and the adverse impacts of climate change. As in *Not a Level Playing Field*, there is little data currently available to quantify the impact of this.

Furthermore, people with disability face additional and unique challenges in navigating the built environment that contribute to higher rates of social exclusion (CRE-DH, 2022):

- One third of people with disability have difficulty accessing buildings or facilities.
- Only three quarters (77%) of people with disability report they can get where they need to go compared to 90% of people without disability. The difference is even more stark for people with severe disability (only 51%).

Disability Standards for Accessible Transport were developed in 2002 and require most public transport networks and infrastructure to be fully accessible by 2022, with trains and trams accessible by 2032 (Department of Infrastructure, Transport, Regional Development, Communications and the Arts [DITRDCA], n.d.). Despite these standards, and multiple reviews over the 20-year period, these standards have not been met, with estimates only 50% of the network is accessible (Xiao, 2023). The Disability Access to Premises – Building Standards commenced in 2011, which specify how public buildings must provide access for people living with disability. The 2021 review noted that, while access had improved for people with disability since their introduction, there were still a number of issues and areas for improvement (Department of Industry, Science and Resources [DISR], n.d.).

Case study – Emergency planning resource helps people with disability be ready for natural disasters

Flagstaff is a disability employment group based on the NSW South Coast. They developed the EMBER (Emergency Management Backpack Evacuation Resource) program following the 2019–20 NSW bushfires, during which they were issued an emergency bushfire evacuation warning.

EMBER supports people with disability to plan, act early and be prepared for an emergency through resources and accessible content. This includes emergency backpacks, an emergency planning app, a communication board app and checklists specifically designed to support individuals living with disability. The EMBER program was recognised with two awards at the 2023 Emergency Media and Public Affairs’ Awards for Excellence in Emergency Communication (EMPA, 2023).

7. See NDIS Review: Fire, Floods and COVID-19 for further discussion: <https://www.dana.org.au/wp-content/uploads/2023/07/DANA-Discussion-Paper-NDIS-Review-Fire-Floods-COVID-2023.pdf>



4. Conclusions and implications

4. Conclusions and implications

Overall comments

People with disability experience poorer wellbeing outcomes across all domains, an issue exacerbated by systemic barriers. These poorer outcomes both contribute to societal inequality and also reflect social inequality. Improvements in outcomes for people with disability will materially improve overall inequality statistics but, more importantly, we would like to believe, overall societal wellbeing.

Change is already afoot. The NDIS Review has examined the design, operations, sustainability and workforce of the NDIS. This includes better understanding mainstream services and supports outside the Scheme. The Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability reported in September this year and included recommendations spanning all sectors to improve outcomes. The Australian Disability Strategy 2021–2031 offers a comprehensive reporting framework and Targeted Action Plans that cover employment, community attitudes, early childhood, safety and emergency management.

We do not seek to preempt or repeat all the initiatives covered in the above, but are encouraged that they reflect the higher profile of issues related to disability. The challenge for government will be to first ensure people with disability are driving changes to programs, and then the ongoing implementation of programs and ensuring they generate the desired changes.

The need for action clearly goes beyond just government. Community attitudes need to evolve to reduce discrimination and stigma. Three quarters of Australians are unsure how to act towards people with disability (CRE-DH, 2021), which is both a byproduct of, and contributor to, too-low levels of inclusion.

Companies also have a role to play. Building disability awareness and confidence, combined with more inclusive workplaces, will help reduce barriers to employment. Workplaces can use the current period of low unemployment rates (and with many businesses struggling to find workers) as impetus to review and improve their inclusivity.

Moving from medical models to social and rights-based models

The medical model of disability defines people based on their impairment. This has the counterproductive effect of treating disability as a 'problem' to be managed. While a medical lens is useful for treating the symptoms of a disability, it can ignore deeper needs for inclusion.

The social model of disability focuses on how people with disability interact with broader society; rather than disability being a problem, it focuses on barriers that inhibit participation in areas such as community, employment and education.

A rights-based model reminds us that people with disability have rights and choices that need to be respected, and there is a collective responsibility to uphold these rights and value human diversity. Gerard Quinn's remarks to the Disability Royal Commission looked at this model, with reference to the United Nations Convention on the Rights of Persons with Disabilities and the challenging implications for segregation. He notes that, while much past policy tolerated the isolation of people with disability from community, in large part because that is easier to deliver, doing so can breach human rights for people with disability (Quinn, 2022). Duffy and Brown (2023) talk of a citizenship model, where systems support people to be active and contributing members of community, rather than just consumers of services.

A rights-based model has significant implications for how services are designed and for continued efforts on inclusion, choice and control for people with disability. In allowing people with disability to identify what adjustments or supports they need to live the life they choose, flexibility and a wider variety of supports are likely to be needed.

Data

As noted in *Not a Level Playing Field*, there is a need to improve recording of factors like disability in datasets. There are significant gaps for people with disability, for example:

- The Royal Commission found significant data gaps in trying to understand outcomes for people with disability experiencing violence, abuse, neglect and exploitation (Vincent et al., 2022).
- The Australian Disability Strategy 2021–2031 similarly acknowledges data gaps in its outcomes monitoring. The baseline outcomes reporting has data for 48 of the selected measures, with no data available for an additional 37 (AIHW, 2023). The Strategy includes a Data Improvement Plan that aims to make more outcomes available over time, although some note a lack of investment may hinder progress.
- The SDAC from the ABS is perhaps the best data source for understanding many characteristics of people with disability. However, it is completed only every three to four years with a significant turnaround time — the latest release at the time of writing is 2018, which means it does not reflect the significant changes to disability care over the past five years. The survey collects responses from around 65,000 people with disability; this is a significant number but far from the full population of people with disability.
- Disability status and type is often under represented in datasets. We discussed homelessness in Section 3.4, where rates might be eight times higher than reported.

Part of this challenge is that collecting accurate disability status can be time-consuming and may depend on people's willingness to self-disclose. These gaps in the data for people with disability also mean the picture of intersectionality is incomplete.

One potential solution is improved data linkage. The [National Disability Data Asset](#) (NDDA) will link a wide range of datasets from Commonwealth, State and Territory governments with a focus on providing a more complete picture of the life experiences of people with disability (although limited to reflecting government service use). Pilot tests have been run, and the first iterations are expected in 2024 and full operation by 2026. This should help solve identification, since disability status on one dataset (e.g., Census) can be carried across to others (e.g., justice or homelessness datasets). This should also enable better understanding of intersectionality, for example, outcomes for First Nations people with disability. Research using this asset should improve the evidence base on which to develop policy to support better outcomes for people with disability. Ultimately, especially as we move towards a social model of disability, and sometimes a rights-based model, data collection needs to expand beyond use of government services and capture broader experiences.



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5. References

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Appendix A

Additional notes and tables

Appendix A Additional notes and tables

A.1 Indicator details

The following table provides further details of the indicators used to explore inequality across the wellbeing domains.

Table A.1 – Further details on indicators of wellbeing domain outcomes

Domain	Indicator	Source	Year	Comment
Economic	Individual disposable income	HILDA	2021	Difference between positive and negative values of: Financial year disposable total income [positive(negative) values] (\$).
	Individual poverty rate	HILDA	2021	Personal disposable income below 50% of median (<\$19,667 in 2021).
	Household net wealth, \$000	HILDA	2018	Equivalised household net wealth. Difference between positive and negative values of: Derived Value: Household Net Worth [positive(negative) values] [imputed] (\$). Inflated to 2021 using CPI. Equivalised using OECD equivalence scale.
	Weighted underutilisation rate	HILDA	2021	Based on current labour force status, hours per week usually worked and hours would like to work. If hours <35 and would like to work ≥35 then underemployed. Weighted by number of hours underemployment. For unemployed the weight is 1, for underemployed the weight is the difference between hours and desired hours divided by desired hours.
	Welfare benefits ÷ income	HILDA	2021	Welfare benefits: Financial year Australian public transfers (inc family benefits) (\$) divided by individual total income. Individual total income: Difference between positive and negative values of: Financial year gross total income [positive(negative) values] (\$).
Housing	Home ownership	HILDA	2021	Do you (or any other members of this household) own this home, rent it, or do you live here rent free?
	Housing affordability	HILDA	2021	Since January 2020, did any of the following happen to you because of a shortage of money? a) Could not pay the mortgage or rent on time
Health & disability	Obesity	HILDA	2021	Body Mass Index (BMI) >30. Based on weight and height.
	Psychological distress	HILDA	2021	Kessler K10 score ≥20, likely to have mild mental disorder
	Suicide deaths per 100,000	AIHW	2021	Age standardised rate per 100,000. Comparison is to full population rather than people without disability. AIHW Mortality patterns among people using disability support services: 1 July 2013 to 30 June 2018
	Total deaths per 100,000	AIHW	2021	Age standardised rate per 100,000. AIHW Mortality patterns among people using disability support services: 1 July 2013 to 30 June 2018
	Have private health insurance	HILDA	2015–18	Response to: What type of health insurance do you have? Hospital cover only, extras cover only, or both hospital and extras cover? All types included.

Domain	Indicator	Source	Year	Comment
Social	Violent crime victimisation	HILDA	2015–18	We now would like you to think about major events that have happened in your life over the past 12 months. For each statement cross either the YES box or the NO box to indicate whether each event happened during the past 12 months. k) Victim of physical violence (e.g., assault)
	Homelessness rate over the year, per 100,000	Vincent et al. (2022)	2021/22	Rate of Specialist Homelessness Service use for adults, estimate based on work by Vincent et al. (2022)
	Children in out-of-home care, per 100,000	Vincent et al. (2022)	2021	Rate of out-of-home care placements among those under age 18. Estimate based on work by Vincent et al. (2022)
	Incarceration rate, per 100,000	Vincent et al. (2022)	2021	Adult incarceration rate, estimate based on work by Vincent et al. (2022)
Education	Year 12 completion	HILDA	2021	Highest education level achieved is year 12 or higher
	Early childcare use	HILDA	2021	Uses paid childcare (while any of the following: undertaking paid work, undertaking non-work activities or not undertaking paid work)
Environment	Can get where need to	Survey of Disability Ageing and Caring	2018	Summarised by CRE-DH (2022).
	No difficulty accessing buildings/facilities	General Social Survey	2014	Summarised by CRE-DH (2022).



A.2 Detailed indicators table

The following table provides outcome indicators for different age and disability subgroups.

Table A.2 – Further details on indicators of wellbeing domain outcomes

		Ages 35–54					Ages 15–34			Ages 55–64		
		Moderate or severe disability	No moderate or severe disability	Ratio	By degree of disability		Moderate or severe disability	No moderate or severe disability	Ratio	Moderate or severe disability	No moderate or severe disability	Ratio
					Moderate	Severe						
% of HILDA Average disposable income p.a.		14% \$52k	86% \$77K	0.7	\$60k	\$39k	10% \$31k	90% \$43K	0.7	26% \$40k	74% \$74K	0.5
Economic	Individual poverty rate	14%	7%	2.0	10%	20%	28%	23%	1.2	20%	12%	1.7
	Unemployment	10%	2%	4.6	11%	10%	17%	5%	3.2	10%	2%	4.4
	Underemployment	17%	5%	3.1	17%	17%	24%	11%	2.3	14%	5%	2.8
	Not in labour force	39%	11%	3.5	25%	61%	42%	17%	2.5	62%	26%	2.4
	Weighted underutilisation rate	13%	3%	3.8	13%	15%	20%	7%	2.7	11%	3%	3.3
	Household net wealth, \$000	381	544	0.7	404	344	240	364	0.7	576	1,023	0.6
	Welfare, fraction of indiv income	39%	10%	4.1	29%	56%	45%	14%	3.2	42%	10%	4.1
Housing	Home ownership rate	59%	73%	0.8	64%	50%	46%	57%	0.8	67%	83%	0.8
	Struggled to pay housing costs on time	13%	7%	1.8	8%	21%	9%	6%	1.6	8%	4%	1.9
Health & disability	Obesity rate	47%	28%	1.7	44%	53%	34%	21%	1.7	45%	28%	1.6
	Rate of psychological distress	58%	26%	2.2	55%	65%	73%	43%	1.7	47%	17%	2.7
	Suicide deaths per 100,000 (a)	34	11	2.9								
	Total deaths per 100,000 (a)	645	128	5.0								
	Have private health insurance	35%	60%	0.6	40%	27%	33%	45%	0.7	45%	66%	0.7
Social	Violent crime victim, past 12 months	3.3%	0.6%	6.0	1.5%	6.2%	4.9%	1.9%	2.6	1.4%	0.8%	1.8
	Homelessness rate over the year, per 100,000 (b)	4,211	898	4.7								
	Children in out-of-home care, per 100,000 (c)	3,504	1,088	3.2								
	Incarceration rate, per 100,000 (b)	611	105	5.8								
Education	Year 12 attainment rate	78%	92%	0.9	84%	69%	73%	82%	0.9	68%	80%	0.9
	Early childcare use	44%	52%	0.9	47%	40%	50%	53%	0.9	23%	37%	0.6
Environment	Can get where need to (b)	90%	77%	1.2								
	No difficulty accessing buildings/ facilities (b)	100%	66%	1.5								

(a) Standardised rates across all ages

(b) All adults (no age restriction)

(c) Children under age 18