



Delivered by the  
National Disability  
Insurance Agency

# Health and wellbeing of NDIS participants and their families and carers

As at 30 June 2023

Based on data collected from the Outcomes  
Framework questionnaires (Short Form and Long Form)



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Section 1:

# Introduction

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1.1

# Outcomes Framework questionnaires

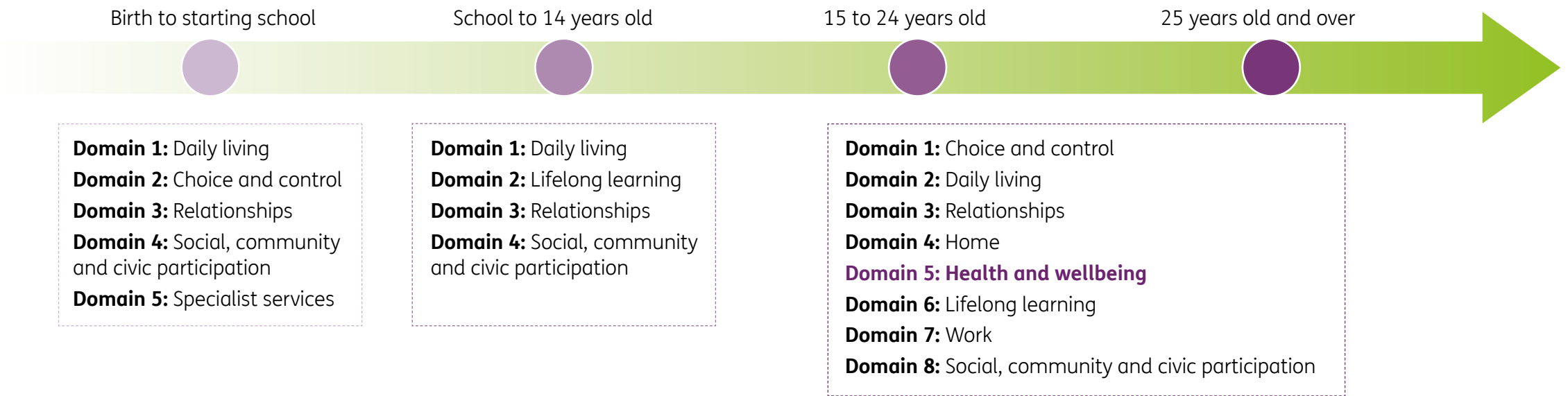
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# Outcomes Framework: Participants

A lifespan approach to measuring participants' goals and outcomes across main life domains has been used. This report focuses on the health and wellbeing domain.

## Lifespan approach: four age-based cohorts



While most domains overlap, goals and outcomes may differ depending on the age group.

This approach facilitates monitoring of participants' progress over time, as well as benchmarking to Australians without disability and to other OECD countries.

# Outcomes Framework: Families and carers

A lifespan approach to measuring family/carers outcomes across main life domains has also been used. This report focuses on the health and wellbeing domain.

## Lifespan approach: three cohorts, based on participant age



Many of the issues faced by families and carers are similar regardless of participant age (for example, being able to work as much as they want), however there are some differences (for example, families and carers of young children will be focussed on helping their child's early development and learning, whereas families and carers of young adults will want to help their family member to become as independent as possible). As for participants, the approach facilitates monitoring of progress for families/carers, as well as benchmarking, for example, against the Australian Population as a whole.

# Short Form (SF) and Long Form (LF)

The SF is completed by all participants and a family member or carer where possible, and contains questions useful for planning as well as key indicators to monitor and benchmark over time.

The LF is completed for a subset of participants, and includes some additional questions allowing more detailed investigation of participant and family/carers experience, and additional benchmarking.

For both the SF and the LF, participants are interviewed at baseline (Scheme entry), and are reinterviewed approximately annually, so that within-individual changes in outcomes can be tracked longitudinally over time.

Baseline modelling by participant characteristics has been undertaken for both SF and LF data.

Due to the smaller volume of data available for the LF, longitudinal modelling has only been undertaken for the SF data.

From 14 November 2022 the NDIA commenced trialling a new data system in Tasmania. For the period of the trial, the SF is only being collected for new Tasmanian participants and their families and carers. In addition, at the time this report was being prepared, data from the new system was still undergoing testing. Hence SF data from Tasmanian participants entering the Scheme between 14 November 2022 and 30 June 2023 are not included in this report. The LF is not affected by this data system change.

# Areas of health and wellbeing



- Daily fruit and vegetable intake
- Alcohol use
- Smoking status
- Undertaking of exercises



Has involvement with the NDIS improved the health and wellbeing of participants and their families or carers?



- Health check
- Visiting a dentist
- Flu vaccination
- Cervical cancer screening
- Mammography screening
- Prostate specific antigen (PSA) test
- Educated and supported for sexual health



Participant and family/carer health, rated by themselves as “excellent”, “very good”, “good”, “fair” or “poor”



- Risk of psychological distress (measured by Kessler 6 scores)
- Level of resilience (measured by Brief Resilience Scale)



- Satisfaction with health services
- Number of hospital visits in the last 12 months
- Having a doctor to see regularly
- Difficulty getting health services



Participant and family/carer saying they feel “delighted”, “pleased”, “mostly satisfied”, “mixed”, “mostly dissatisfied”, “unhappy” or “terrible” about their life outlook

# Analysis methods by outcome area

Methods of analysis vary by outcome area, as outlined below.

## Baseline and longitudinal analysis

Where the Scheme is expected to play a major role in improving the outcome, it is important to consider two components of experience:

- 1. Baseline** (Scheme entry), the starting point against which future outcomes will be compared. Recognising that participants do not all enter the Scheme on an equal footing, statistical modelling is used to identify factors that help explain the variation in baseline experience
- 2. Longitudinal**, or how outcomes change over a participant's time in the Scheme. Longitudinal analysis tracks the same group of people over time in the Scheme. Statistical modelling is used to identify factors associated with changes in outcomes.

Baseline and longitudinal analysis is used for outcomes in the areas of mental health, health services, life satisfaction and self-rated health.

## Cross-sectional analysis

In areas where the Scheme is not primarily responsible for directly influencing outcomes, cross-sectional analysis has been performed. This analysis tracks outcomes over calendar time and includes all available responses at each time point. Unlike longitudinal analysis, each time point includes potentially different groups of people and a mix of different durations in the Scheme. Statistical modelling is not performed as part of this analysis.

Cross-sectional analysis is used for outcomes in the areas of healthy living and preventative health.

## Benchmarking

Baseline and cross-sectional outcomes are compared to the general Australian population where population benchmark data is available.

## Analysis of linked data

In addition to the self-reported outcomes framework data, NDIS participant data has been linked to Medicare-subsidised health service usage data for financial year 2021–22 in the Person Level Integrated Data Asset (PLIDA)<sup>1</sup>. These results enable comparison of service usage between NDIS participants and the general Australian population. Types of service considered are GP, allied health and mental health services. The analysis includes proportions of participants accessing these services, and numbers of services accessed. Results are presented by age group, primary disability type, gender and Indigenous status.

<sup>1</sup> [Person Level Integrated Data Asset \(PLIDA\) | Australian Bureau of Statistics \(abs.gov.au\)](https://www.abs.gov.au/person-level-integrated-data-asset)

## Analysis methods by outcome area cont.

### **Perceptions of whether the NDIS has helped**

The outcomes framework also asks participants and their family and carers whether they think their involvement with the NDIS has improved their health and wellbeing. Results are presented by reassessment time point, starting from reassessment 1 (since the Scheme has not had an opportunity to help at baseline). Statistical modelling is used to identify drivers of positive responses at reassessment 1 as well as drivers of changes in responses over time.

### **Further detail**

Further discussion of the methodology used in this report is contained in Section 2.

### **What's next**

The next sub-section (1.2) distils key insights derived from this report. Section 2 describes methodology employed throughout the report, and Section 3 presents detailed results for all health and wellbeing indicators from the outcomes framework, as well as results of the data linkages analysis.



1.2

Key messages

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# Participant

## Healthy living



### Calendar-year trend and comparison with Australian population

#### Alcohol consumption

Compared to the Australian population, NDIS participants tend to drink less frequently, and consume less when they do drink.

#### Smoking

The percentage of the Australian population who have ever smoked decreased between 2017 and 2020, while the percentage of NDIS participants who have ever smoked has increased.

#### Exercise

The proportion of NDIS participants who said they undertook exercise has increased between 2016 and 2021.

### By age, primary disability type and level of function<sup>1</sup>

#### Fruit and vegetable consumption

Higher percentages of older participants meet the recommended daily intake according to Australian Recommended Guidelines (ARG) for fruit and vegetables.

#### Alcohol consumption

Participants with multiple sclerosis have the highest percentage drinking alcohol, but they tend to drink fewer standard drinks per occasion than other disability types.

The percentage of participants who do not drink alcohol is higher for participants with lower levels of function.

#### Smoking

Participants with psychosocial disability have the highest percentage that are current smokers.

<sup>1</sup> One-way analyses, not controlling for other factors.

# Participant Preventative health



## Calendar-year trend and comparison with Australian population

### Health check

The percentage of NDIS participants who had a health check in the past 12 months is higher than that of the Australian population, with the difference being larger for males.

### Flu vaccination

The percentage of NDIS participants who had a flu shot in the past 12 months increased steadily from 2016 to 2022 except for a small decrease in 2021, possibly due to COVID.

### Screenings

The percentage of NDIS participants who have been screened for cervical cancer, breast cancer and prostate cancer decreased slightly over time.

## By age, primary disability type and level of function<sup>1</sup>

### Health check and dentist visit

The percentage of participants who have had a health check in the past 12 months increases with age after age 25. Participants aged 15 to 17 have by far the highest percentage who have seen a dentist in the past 12 months.

### Sexual health education

Younger participants, as well as participants with autism (possibly also age related) have notably higher percentages being educated and supported for sexual health.

### Screenings

Older participants tend to see higher percentages being screened for breast cancer or prostate cancer.

<sup>1</sup> One-way analyses, not controlling for other factors.

# Participant Mental health



## Calendar-year trend and comparison with Australian population

- Participants who entered the Scheme later, as well as female participants, tend to see lower levels of resilience and higher psychological distress
- The percentage of NDIS participants experiencing high or very high distress is more than triple that of the Australian population.
- Participants who are less resilient tend to be more psychologically distressed
- Participants with psychosocial disability, whether primary or secondary, tend to experience high level of psychosocial distress and have low level of resilience.

## Significant changes in outcomes longitudinally and drivers of changes

- Male participants tend to have greater improvements in resilience longitudinally
- The percentage of participants with high or very high psychological distress reduced by 4 percentage points after 2 years in the Scheme
- Increases in resilience are associated with reductions in psychological distress.

# Participant Health services 1/2



## Drivers of baseline outcomes and comparison with Australian population

### Satisfaction with health services

Participants with Down syndrome are more than twice as likely as those with intellectual disability to be satisfied with the health service they received.

### Hospital visits

The percentage of NDIS participants who have been to the hospital in the past 12 months is more than triple the Australian population. The percentage is higher for females, as well as those who entered the Scheme in later years.

### Difficulty accessing health services

Lower percentages of participants entering the Scheme in later years have no difficulty accessing health services.

## Significant changes in outcomes longitudinally and drivers of changes

### Hospital visits

The percentage of participants who have been to the hospital in the past 12 months decreased by around 5 percentage points in their first year in Scheme for all time-in-Scheme cohorts.

### Regular doctor

Participants who utilised smaller proportions of their previous plan are less likely to start seeing a regular doctor and more likely to stop seeing their regular doctor.

### Barriers to accessing health services

Of those having difficulty accessing health services, in later reassessments, lower percentages say lack of support is a reason, and higher percentages say it is due to access issues.

# Participant Health services 2/2



## Proportion accessing Medicare-subsidised services and comparison to Australian population

### Accessing Medicare-subsidised allied health services

Over half of the participants with multiple sclerosis and stroke accessed Medicare-subsidised allied health services, the highest among the disability types during FY2021/22.

### Accessing Medicare-subsidised GP services

The highest proportion of NDIS participants accessing Medicare-subsidised GP services were those with multiple sclerosis, spinal cord injury and stroke during FY2021/22.

### Accessing Medicare-subsidised mental health services

The proportion of NDIS participants accessing Medicare-subsidised mental health services was nearly twice the proportion for the Australian population.

## Number of Medicare-subsidised services accessed and comparison to Australian population

### Accessing Medicare-subsidised GP services

Participants with psychosocial disability consulted a GP the most often of all primary disabilities during the financial year. Conversely, participants with autism had one of the lowest levels of GP consultations among the various disability types.

### Accessing Medicare-subsidised allied health services

Overall, the average number of allied health consultations by NDIS participants and the Australian population were the same during FY2021/22.

### Accessing Medicare-subsidised mental health services

The number of mental health consultations by participant with psychosocial disability exceeded the NDIS participant average by nearly 50%.



# Participant and families or carers

## Life satisfaction (feeling “delighted”, “pleased” or “mostly satisfied”)



### Drivers of baseline outcomes

- Life satisfaction at baseline is slightly worse for participants who entered in later years but slightly better for families and carers of participants who entered in later years
- The percentage of family/carers with a positive outlook is higher where the participant also has a positive life outlook
- Participants with intellectual disability are more likely than most other disability types to have a positive outlook; while among families and carers, mothers tend to be more pessimistic than most other relationship types.

### Significant changes in outcomes longitudinally and drivers of changes

- The percentage of participants who have a positive life outlook increased by 17 percentage points for those who have been in the Scheme for 4 years
- Life satisfaction of participants with Down syndrome, intellectual disability, or sensory disability is more likely to improve and less likely to deteriorate, compared to those with psychosocial disability
- Mothers of NDIS participant who have been in the Scheme for 4 years see an increase of 8.5 percentage points in the percentage with a positive life satisfaction
- Compared to mothers, fathers’ life satisfaction is more likely to improve and less likely to deteriorate
- Among participants whose life satisfaction improved from baseline to latest reassessment, half (49.9%) of their family/carers’ life satisfaction also improved, compared to 35.7% of families and carers of participants whose life satisfaction did not change, and 24.5% for those deteriorated.

# Participant and families or carers

## Self-rated health (rating own health as “excellent”, “very good” or “good”)



### Drivers of baseline outcomes and comparison with Australian population

- The percentage of participants rating their health positively at baseline decreased by around 20 percentage points from 2016 to 2021 for both males and females, while that of the Australian population remained relatively constant at a much higher level than NDIS participants
- NDIS fathers tend to rate their health more positively than mothers and spouse/partners but still less positively than Australian males overall
- For both participants and family/carers, there is a decreasing age trend in respondents rating their health positively from age 18 to 54
- Higher percentages of family/carers rate their health positively if the participant does so as well; in particular, mothers' self-rated health is more sensitive to the participants' than other relationship types.

### Significant changes in outcomes longitudinally and drivers of changes

- Participants with higher levels of function, males, those who are not from an Indigenous or CALD background, those with no secondary disability, those living in Supported Independent Living (SIL) or who have ever been in residential aged care before age 65 (YPIRAC) are all more likely to improve and less likely to deteriorate in self-rated health
- Families and carers of participants with autism are less likely to improve and more likely to deteriorate in self-rated health compared to most other disability types
- Fathers are more likely to improve and less likely to deteriorate in self-rated health than mothers
- From baseline to latest reassessment, families/carers' self-rated health was more likely to improve when participants' self-rated health improved.

# Participant and families or carers

## Has the NDIS helped (saying the NDIS improved their health and wellbeing)



### Drivers of reassessment 1 outcomes

- The percentage of NDIS participants saying the NDIS improved their health and wellbeing at reassessment 1 has increased each year from 2018 to 2023
- The proportion of NDIS parents (mothers or fathers) saying the NDIS helped at reassessment 1 increased by around 10 percentage points from 2018 to 2021. Lower increases were observed for other carers
- For family/carers aged 18 to 44, the proportion saying the NDIS helped at reassessment 1 decreased with age for parents, but increased with age for spouse/partners
- Older participants are more likely to say the NDIS improved their health and wellbeing
- Families and carers living outside major cities are less likely to say the NDIS helped
- At reassessment 1, just 14.8% of families and carers said the NDIS helped if their participant said the NDIS did not help; compared to 63.1% of families and carers saying the NDIS helped if the participant said the NDIS helped.

### Change in outcomes in reassessment 2 and beyond

- For both males and females, the percentage of participants saying the NDIS helped increased each year, from reassessment 1 to reassessment 6
- The percentage of NDIS parents saying the NDIS helped is lower at later reassessments, while this percentage is higher at later reassessments for spouse/partners, grandparents and siblings
- Participants who utilised lower percentages of their previous plan are less likely to improve and more likely to deteriorate in their rating of whether the NDIS helped.

Section 2:

# Methodology

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2

# Health and wellbeing methodology (1/11)

## Baseline analysis and modelling

Analysis at baseline (Scheme entry) looks at how participants and their families and carers are going when the participant enters the Scheme – before it has had a chance to make a difference. The following areas and outcomes are included in the baseline analysis:

1. **Mental health:** Participant resilience, level of psychological distress
2. **Health services:** Participant satisfaction with health services, hospital visits, having a regular doctor, ease of health service access
3. **Life satisfaction:** Participants and family/carers responding “delighted”, “pleased” or “mostly satisfied” to the statement “Thinking about my life in general now and in the future, I feel...” (positive life outlook)
4. **Self-rated health:** Participants and their family/carers rating their health as “excellent”, “very good”, or “good”.

Baseline analysis recognises that participants do not enter the Scheme on equal footing, and baseline outcomes vary by a number of factors including those listed on slide 28.

Results of two baseline analyses are presented for each outcome above:

1. **Time-series outcomes** by Scheme entry year, split by gender (or family/carer relation to participant) and benchmarked against the Australian population where data are available
  - The Australian population benchmark, where available, as well as NDIS data for individual participant gender or carer relationship, are indirectly standardised to NDIS aggregate respondent age and gender distribution for better like-to-like comparison.
2. **Baseline modelling:** Logistic regression on dichotomised outcomes, with results presented as follows:
  - Odds ratio<sup>1</sup> plots show point estimates and 95% confidence intervals for significant categorical predictors
  - Commentary discussing all results of the modelling, including the effect of significant numeric predictors and interactions (to maintain clarity, these are not shown on the odds ratio plots).

1 Odds = probability outcome is achieved divided by probability outcome is not achieved. Logistic regression models the log odds as a function of potential predictors. Odds ratio for given level of a categorical predictor relative to the reference level = odds for the given level, divided by odds for the reference level. An odds ratio of 1 implies no difference from the reference level. An estimated odds ratio that is significantly greater than 1 implies the odds of achieving the outcome are higher for the given level compared to the reference level. An estimated odds ratio that is significantly less than 1 implies the odds of achieving the outcome are lower for the given level compared to the reference level.

# Health and wellbeing methodology (2/11)

## Trend analysis and modelling

As the NDIS aims to improve participant and family/carer health and wellbeing outcomes listed on the previous slide, it is important to monitor progress in these areas over time as participants receive supports from the Scheme.

Further longitudinal analysis is presented for most metrics<sup>1</sup> mentioned on the previous slide:

1. Longitudinal summaries by reassessment time point, in aggregate as well as split by gender. Each time-in-Scheme cohort is shown in a separate graph. McNemar's test is used to determine the statistical significance (at 0.05 significance level) of changes from baseline to latest reassessment for each gender (or carer relationship) in each cohort.

### 2. Trend modelling<sup>1</sup>:

- Responses to each metric are dichotomised into two categories, by which improvements and deteriorations in outcomes are defined. Separate improvement and deterioration models are fitted for each metric
  - o Definitions for improvements and deteriorations in longitudinal models by metric is presented in the table below
- Only one-year changes in health outcomes are modelled to control for time lag between two response time points
- Generalised Estimating Equations (GEE) are used to allow for the correlation between longitudinal outcomes for the same participant, as each person may contribute multiple one-year change observations
- A list of explanatory variables considered for trend modelling is provided on slide 28
- Results are presented in the same format as baseline modelling output:
  - o Categorical variables are shown in odds-ratio format where 95% confidence intervals of coefficient estimates for significant predictors are compared against value 1
  - o Significant numeric variables are stated separately.

<sup>1</sup> Due to small numbers, no longitudinal modelling is performed for the metrics of resilience, psychological distress or health service satisfaction. However, trend summaries by cohort are still presented. The number of hospital visits and barriers to health service access in Section 3.4 (slides 110 and 125) are presented cross-sectionally by time in Scheme, rather than longitudinally.



# Health and wellbeing methodology (3/11)

## Modelled longitudinal changes

Metrics	Response change	
	Improvement	Deterioration
Hospital visits (P <sup>1</sup> ): How many times have you been to the hospital in the last 12 months?	One or more visits <i>to</i> No visit	No visit <i>to</i> One or more visits
Regular doctor (P <sup>1</sup> ): Do you have a doctor that you see on a regular basis?	No <i>to</i> Yes	Yes <i>to</i> No
Access health services (P <sup>1</sup> ): Have you had difficulty in getting health services?	Yes <i>to</i> No	No <i>to</i> Yes
Life satisfaction (P/F <sup>1</sup> ): Thinking about my life in general now and in the future I feel <sup>3</sup>	MX/MD/UH/TR <i>to</i> DL/PL/MS	DL/PL/MS <i>to</i> MX/MD/UH/TR
Self-rated health (P/F <sup>1</sup> ): In general, my health is:	Poor/Fair <i>to</i> Good/Very Good/Excellent	Good/Very Good/Excellent <i>to</i> Poor/Fair
Has the NDIS helped? (P/F <sup>1</sup> ): Has the NDIS improved your health and wellbeing?	No <i>to</i> Yes	Yes <i>to</i> No

1 P denotes that the metric is only applicable to participants; P/F denotes that the metric is applicable to both participants and family/carers.

2 DL = Delighted; PL = Pleased; MS = Mostly satisfied; MX = Mixed; MD = Mostly dissatisfied; UH = Unhappy; TR = Terrible.

# Health and wellbeing methodology (4/11)

## Age group transitions and longitudinal cohorts

### Age group transitions

Most<sup>1</sup> questions of the health and wellbeing domain in the participant questionnaire are asked of participants aged 15 and over. There are two different ways responses are tracked depending on whether participants have reached age 15 at the time of Scheme entry:

- If the participant is aged 14 or under at Scheme entry: the report tracks the participant’s answers to questions from when they first turned 15 and started answering health and wellbeing questions. Longitudinal time-in-Scheme cohorts in trend analysis utilises a pseudo-baseline that is reset upon first response to health and wellbeing questions
- If the participant is aged 15 or over at Scheme entry: the report tracks all the answers by the participant since Scheme entry. Longitudinal cohorts in trend analysis are determined by the true baseline at Scheme entry.

All questions in the health and wellbeing domain in the family/carer questionnaire are applicable to families and carers of participants of all ages. The report therefore tracks all the answers by the family/carer since participant Scheme entry, and longitudinal cohorts in trend analysis are determined by the true baseline at Scheme entry.

### Longitudinal cohorts

For each health and wellbeing indicator, longitudinal results are considered separately for six cohorts of participants. The cohorts are based on the number of complete years of experience that the participant has contributed to that indicator as at 30 June 2023. For a given indicator, each participant belongs to one cohort only.

The following table shows how cohorts C1–C6 are defined.

Cohort	Number of years of experience contributed to indicator	Possible total number of years in the Scheme
C6	6	6
C5	5	5–6
C4	4	4–6
C3	3	3–6
C2	2	2–6
C1	1	1–6

<sup>1</sup> Exceptions are the screening questions. The cervical screening question is applicable to those aged 25+ so a pseudo-baseline is set for those turning 25 while in the Scheme. The mammogram and PSA test questions are only applicable to those aged 40+ and 50+, respectively. No baseline is reset as these age thresholds do not align with questionnaire age group transitions in the Outcomes Framework. This is a caveat as longitudinal cohorts are only determined accurately for participants already aged 40+/50+ at Scheme entry.

# Health and wellbeing methodology (5/11)

## Cross-sectional outcomes

The Short Form Outcomes Framework (SFOF) and Long Form Outcomes Framework (LFOF) capture a range of participant and family/carer health outcome indicators and track them over time. This section describes methodology for some of the health outcomes captured by the LFOF which the Scheme is **not primarily responsible for directly influencing**, in the following two areas:

### Healthy living

- Daily fruit and vegetable intake
- Alcohol consumption: whether consumed and if so, frequency of drinking and amount consumed per occasion
- Past and current smoking status
- Exercise: whether undertaken (light or vigorous exercise) and if so, frequency of exercise.

### Preventative health

- Whether had a health check, visited a dentist or had a flu shot in the past 12 months
- Whether female participants have been screened for cervical or breast cancer; whether male participants have been screened for prostate cancer
- Whether educated and supported for sexual health.

For the above health outcomes, baseline and trend analysis are not shown. Instead, outcomes are summarised cross-sectionally showing responses from each calendar year<sup>1</sup>. This approach tracks the movement of those health outcomes over time, assuming that systemic and environmental factors outside of the NDIS are the predominant influence of change.

The cross-sectional analysis methodology for these outcomes includes the following:

- Time-series results by calendar year, split by gender and compared to the Australian population where data are available. The Australian population benchmark, where available, as well as NDIS data for individual participant gender or carer relationship, are indirectly standardised to NDIS aggregate respondent age and gender distribution for better like-to-like comparison
- A more in-depth summary of health outcomes based on the 2022 LFOF data<sup>1</sup>, including by key participant characteristics:
  - Summaries by response options, split by gender, as well as in aggregate
  - Summaries by participant age group, with select age groups exhibiting strong gender effect also split by gender
  - Summaries by participant primary disability type and level of function.

<sup>1</sup> NDIS LFOF collection typically takes place between July and December each year. 2022 LFOF data is the latest available as at June 2023.

# Health and wellbeing methodology (6/11)

## Has the NDIS helped?

At the end of the health and wellbeing domain in both the participant and family/carer questionnaires, respondents are asked about their perceptions of whether their involvement with the NDIS improved their health and wellbeing. Results are presented in Section 3.7.

The following analyses are performed on “Has the NDIS Helped” questions:

1. Summaries of responses at reassessment 1 (the questions are not applicable at baseline since the Scheme has not had an opportunity to help at baseline), split by participant gender or respondent relationship to participant
2. Summaries of responses by reassessment time point from R1 to R6.  
At a given reassessment, all responses given at that reassessment contribute to the analysis. Hence the analysis is cross-sectional by time in Scheme, i.e. results at review  $t$  represent a snapshot of all participants' views as at  $t$  years in the Scheme. This is in contrast to the longitudinal (by time in Scheme) presentation for the outcome indicators. The rationale for this difference is that the “Has the NDIS helped” questions measure satisfaction with the Scheme, rather than outcomes of participants<sup>1</sup>
3. Longitudinal modelling, with the same methodology and presentation as those described on slide 22
4. Additional insights on how participants' responses to this question correlate to that of their family/carers, both at reassessment 1, and longitudinally.

<sup>1</sup> The approach is also different to the cross-sectional by calendar time methodology.

# Health and wellbeing methodology (7/11)

## Modelled characteristics

The table on the following page presents lists of participant and family/carer characteristics that have been considered in the modelling described on slides 21 and 22.

Participant and family/carer models are distinguished by:

- Addition of carer age and respondent relationship to participant for families and carers
- Addition of SIL and YPIRAC (in residential aged care before age 65) status for participants.

Baseline and trend models are distinguished by the following:

- Addition of interaction terms between age and gender, as well as age and disability type in baseline models
- Addition of secondary psychosocial disability flag in baseline models
- Addition of plan funding, composition, management type, utilisation and time in Scheme in trend models.

# Health and wellbeing methodology (8/11)

## Modelled characteristics cont.

Feature category	Characteristic	Participant models		Family/carer models	
		Baseline <sup>1</sup>	Trend <sup>2</sup>	Baseline <sup>1</sup>	Trend <sup>2</sup>
Demographics	Participant age	✓	✓	✓	✓
	Participant gender	✓	✓	✓	✓
	Family/carer age	×	×	✓	✓
	Respondent relation to participant	×	×	✓	✓
	CALD status	✓	✓	✓	✓
	Indigenous status	✓	✓	✓	✓
Scheme entry	Reporting entry type	✓	✓	✓	✓
	Scheme access criteria	✓	✓	✓	✓
Disability	Primary disability type	✓	✓	✓	✓
	Whether has secondary disabilities	✓	✓	✓	✓
	Whether has a secondary psychosocial disability	✓	×	✓	×
	Level of function	✓	✓	✓	✓
Geographical	State/Territory	✓	✓	✓	✓
	Remoteness	✓	✓	✓	✓
	Unemployment rate in LGA	✓	✓	✓	✓

Feature category	Characteristic	Participant models		Family/carer models	
		Baseline <sup>1</sup>	Trend <sup>2</sup>	Baseline <sup>1</sup>	Trend <sup>2</sup>
Living arrangement	Whether in Supported Independent Living (SIL)	✓	✓	×	×
	Whether been in residential aged care before age 65	✓	✓	×	×
Plan features	Annualised plan funding	×	✓	×	✓
	Composition of plan funding	×	✓	×	✓
	Plan management type	×	✓	×	✓
	Level of support to connect with NDIS	✓	✓	✓	✓
	Plan utilisation	×	✓	×	✓
Time variables	COVID-19 indicators	✓	✓	✓	✓
	General time trend	✓	✓	✓	✓
	Change in time trend after each COVID time point	✓	✓	✓	✓
	Time in Scheme	×	✓	×	✓
Other interactions	Select age and gender effects <sup>3</sup>	✓	×	✓	×
	Select age and disability effects <sup>3</sup>	✓	×	✓	×

1 Including models for “Has the NDIS Helped” questions at R1.

2 Including longitudinal changes in responses to “Has the NDIS Helped” questions after R1.

3 Required interaction terms are determined by observing two-way plots where gender/disability have a different effect on the health outcome at different age groups.



# Health and wellbeing methodology (9/11)

## Treatment of COVID effect

In the “Time variables” block in the list of modelled variables on the previous slide, a few variables related to the effect of COVID are mentioned:

- **COVID-19 indicators:** A step change in the response probability at each of the four COVID time points modelled (listed below) is assumed to start affecting outcomes:
  1. **23 March 2020** – the date that stronger restrictions in response to the first wave of COVID were announced
  2. **1 June 2020** – the date by which most restrictions in response to the first COVID wave were lifted
  3. **26 June 2021** – the date that NSW was put back under lockdown because of the spread of Delta-strain COVID
  4. **11 October 2021** – the date that NSW started to ease all COVID restrictions for the last time
- **General time trend:** Unrelated to the pandemic, but helps isolate COVID impact when controlled for in models
- **Change in time trend after each of the above four COVID time points:** Different time trends before and after each COVID time point mentioned above.

Therefore, the probability of satisfying target measures<sup>1</sup> at any point in time depends on a combination of:

- A constant level before COVID
- The **general time trend** applicable at the response date independent of any COVID effect
- An aggregation of the effects from the two dot points above, as well as all (if any) previous COVID effects, including **step changes** and **changes in time trend**.

As suggested on the previous slide, these COVID-related variables apply to all participant and family/carer models, both at baseline and longitudinally.

<sup>1</sup> Target measure at baseline is defined as the probability of meeting the indicator; longitudinally, target measure is the probability of changes in the status of meeting the indicator (as described on slide 23).

# Health and wellbeing methodology (10/11)

## Population benchmarks

The table on the right lists the population benchmarks referenced in this report, survey question wordings in the benchmark, as well as the years in which each population benchmark is available.

### Key to abbreviations

Abbreviation	Full name
AIHW	Australian Institute of Health and Welfare
HILDA	Household, Income and Labour Dynamics in Australia
NCIRS	National Centre for Immunisation Research and Surveillance
NHS	National Health Survey
PEIA	Patient Experience in Australia

NDIS indicator	Benchmark source	Benchmark wording	Time points available in the benchmark							
			2016	2017	2018	2019	2020	2021	2022	
Daily fruit intake	NHS	Usual daily servings of fruit		✓				✓		
Daily vegetable intake	NHS	Usual daily servings of vegetables		✓				✓		
Whether drink alcohol	NHS	Frequency of alcohol consumption in the last 12 months		✓				✓		
Alcohol frequency	NHS	Frequency of alcohol consumption in the last 12 months		✓				✓		
Standard drinks of alcohol per occasion	NHS	Number of standard drinks by day		✓				✓		
Smoking status	NHS	Daily smoker status		✓				✓		
Frequency of undertaking exercise		Not applicable	×	×	×	×	×	×	×	×
Frequency of vigorous exercise		Not applicable	×	×	×	×	×	×	×	×
Health check in the past 12 months	HILDA	Have you had any of the health check-ups or tests in the last 12 months		✓					✓	
Dentist visit in the past 12 months	PEIA	Needed to and saw a dental professional	✓	✓	✓	✓	✓	✓	✓	
Flu vaccination in the past 12 months	NCIRS	Recorded coverage of seasonal influenza vaccine				✓	✓	✓	✓	
Education and support for sexual health	La Trobe University <sup>1</sup>	Who received RSE (relationships and sexual education)							✓	
Had a PAP test in the past 12 months	HILDA	Had check-up or test in last 12 months – Pap smear		✓						
Had a cervical screening in the past 5 years	AIHW	Had a screening HPV test between 1 January 2018 and 31 December 2021							✓	

<sup>1</sup> Participants aged 14–15 only

# Health and wellbeing methodology (11/11)

## Population benchmarks cont.

### Key to abbreviations

Abbreviation	Full name
AIHW	Australian Institute of Health and Welfare
HILDA	Household, Income and Labour Dynamics in Australia
NCIRS	National Centre for Immunisation Research and Surveillance
NHS	National Health Survey
PEIA	Patient Experience in Australia

NDIS indicator	Benchmark source	Benchmark wording	Time points available in the benchmark							
			2016	2017	2018	2019	2020	2021	2022	
Had a mammogram in the past 12 months	HILDA	Had check-up or test in last 12 months – Breast screening		✓					✓	
Have had a PSA test	HILDA	Had check-up or test in last 12 months – Prostate check		✓					✓	
Psychological distress	HILDA	Kessler Psychological Distress Scale (K10) risk categories <sup>1</sup>		✓			✓		✓	
Mental resilience	Not applicable		×	×	×	×	×	×	×	×
Satisfaction with health services	Not applicable		×	×	×	×	×	×	×	×
Hospital visits in the past 12 months	HILDA	Number of hospital admissions (including 0)		✓					✓	
Whether have a regular doctor	HILDA	Is there one particular doctor you usually see if you are sick or need health advice		✓					✓	
Difficulty accessing health services	Not applicable		×	×	×	×	×	×	×	×
Participant life satisfaction	Not applicable		×	×	×	×	×	×	×	×
Family/carer life satisfaction	Not applicable		×	×	×	×	×	×	×	×
Participant self-rated health	HILDA	Self-assessed health	✓	✓	✓	✓	✓	✓	✓	
Family/carer self-rated health	HILDA	Self-assessed health	✓	✓	✓	✓	✓	✓	✓	
Participant saying the NDIS helped	Not applicable		×	×	×	×	×	×	×	×
Family/carer saying the NDIS helped	Not applicable		×	×	×	×	×	×	×	×

<sup>1</sup> HILDA K10 scores have been mapped to NDIS K6 score when benchmarking is performed to align risk categories

Section 3:

# Detailed report by health and wellbeing areas

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3

3.1

Healthy living

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## Key statistics

Outcome indicators	Males		Females		By age group <sup>4</sup>		By disability <sup>3,4</sup>	
	Compared to Australian population <sup>1,2,5,6</sup>	NDIS percentage 2022 <sup>5</sup>	Compared to Australian population <sup>1,2,5,6</sup>	NDIS percentage 2022 <sup>5</sup>	Lowest %	Highest %	Lowest %	Highest %
Eating two or more servings of fruit per day	Notably higher	37.3%	Slightly higher	42.0%	45–49 (33.5%)	65+ (53.8%)	Psychosocial disability (32.3%)	Down syndrome (56.3%)
Eating five or more servings of vegetables per day	Similar	6.1%	Slightly higher	10.1%	15–17 (4.5%)	65+ (12.4%)	Intellectual disability (4.1%)	Multiple sclerosis (21.5%)
Drinking alcohol <sup>7</sup>	Much lower	52.8%	Much lower	49.0%	18–24 (44.1%)	30–34 (59.7%)	Down syndrome (10.3%)	Multiple sclerosis (65.3%)
Of those drinking alcohol, drinking less frequently than weekly <sup>7</sup>	Notably higher	51.8%	Much higher	64.3%	65+ (43.0%)	25–29 (74.6%)	Cerebral palsy & other neurological (46.4%)	Intellectual disability (71.3%)
Of those drinking alcohol, having two or fewer standard drinks per occasion <sup>7</sup>	Much higher	57.8%	Notably higher	71.8%	30–34 (54.2%)	65+ (81.6%)	Psychosocial disability (54.4%)	Multiple sclerosis (82.3%)
Past smoker <sup>7</sup>	Slightly lower	22.0%	Slightly lower	23.1%	18–24 (4.9%)	60–64 (38.1%)	Down syndrome (0.0%)	Multiple sclerosis (38.0%)
Current smoker <sup>7</sup>	Similar	19.9%	Similar	17.9%	18–24 (9.0%)	45–49 (31.9%)	Down syndrome (0.0%)	Psychosocial disability (37.4%)
Exercising twice per week or more	Not applicable	67.6%	Not applicable	60.9%	40–44 (58.4%)	15–17 (69.4%)	Psychosocial disability (62.5%)	Sensory disability (73.1%)
Undertaking vigorous exercise weekly or more	Not applicable	39.6%	Not applicable	27.8%	60–64 (18.1%)	15–17 (48.1%)	Psychosocial disability (24.9%)	Autism (42.9%)

1 Comparisons are performed at the latest timepoint where the population benchmark is available.

2 “Much higher” if NDIS percentage is over 15 percentage points (pp) higher than the Australian population; “Notably higher” if NDIS percentage is 5–15 pp higher than the Australian population; “Slightly higher” if NDIS percentage is 2–5 pp higher than the Australian population; “Similar” if NDIS percentage is +/-2 pp of the Australian population; “Slightly lower” if NDIS percentage is 2–5 pp lower than the Australian population; “Notably lower” if NDIS percentage is 5–15 pp lower than the Australian population; “Much lower” if NDIS percentage is over 15 pp lower than the Australian population.

3 Does not consider disability types where sample size is less than 20, or “Other” disability type.

4 Results by age and disability presented here are one-ways and do not control for other factors.

5 The analysis only concerns participants aged 15 to 64, as beyond age 65, population benchmarks have different age distribution compared to NDIS participants aged 65+.

6 NDIS Long Form surveys are carried out each October therefore do not necessarily coincide with survey times in the population benchmark.

7 Participants aged 18+ only.

# Daily fruit intake (1/3)

Cross-sectional outcomes – percentage eating 2+ servings of fruit per day<sup>1</sup>  
By response year and gender

### Key observations

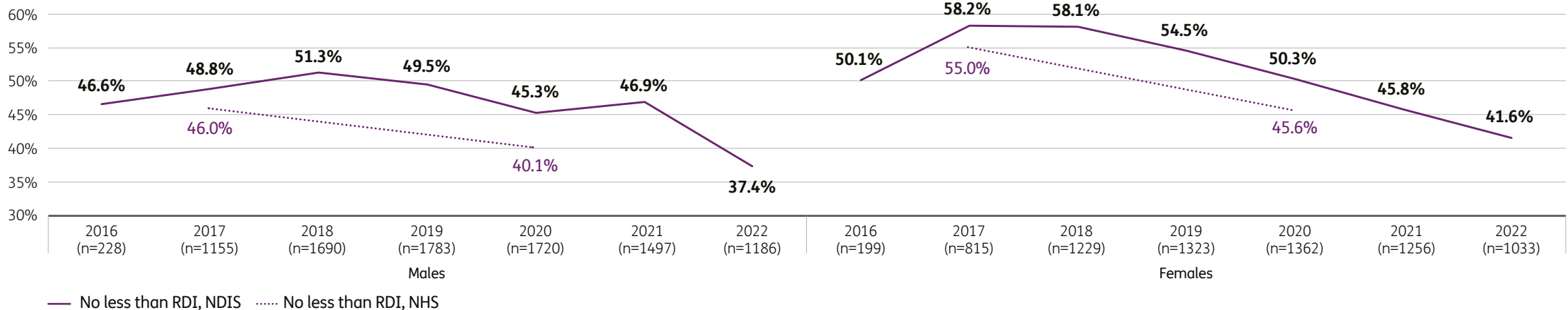
The percentage of NDIS participants meeting the Recommended Dietary Intake (RDI) guideline<sup>1</sup> for fruit intake of two servings per day **increased between 2016 and 2018, and then decreased after 2018.**

**Female** participants tend to eat **more** servings of fruit per day **than male** participants.

Relative to the Australian population represented by data from the National Health Survey (NHS), **NDIS participants tend to eat more servings** of fruit per day.

### Time series – NDIS participants compared to the Australian population<sup>2,3</sup> (age standardised)

Percentage eating 2 or more servings of fruit per day



1 According to the Australian Recommended Guidelines (ARG) (2013), the recommended number of servings of fruit daily for girls/women and boys/men from age 9 and up is two servings per day. RDI stands for recommended daily intake.  
 2 NDIS Long Form Outcomes Framework (LFOF) Data Collection typically takes place between July and December each year, therefore the 2017 LF survey is benchmarked against NHS 2017–18, and 2020 LF survey benchmarked against NHS 2020–21. All results are age standardised to make yearly comparison and comparison between NDIS participants and the Australian population comparable.  
 3 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

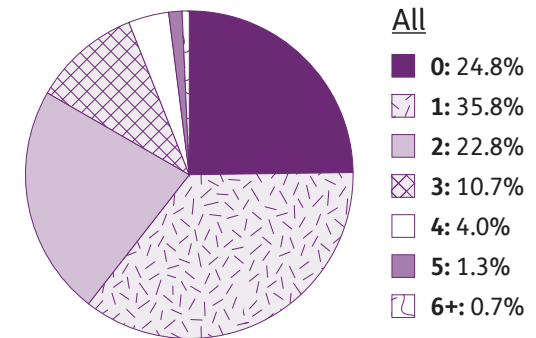
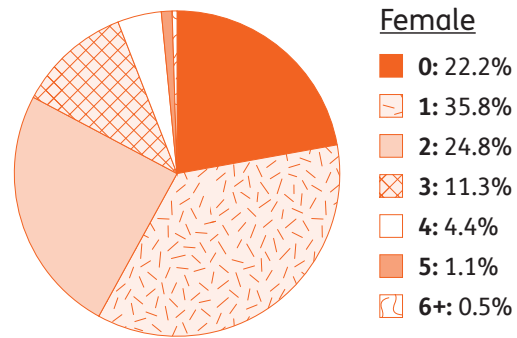
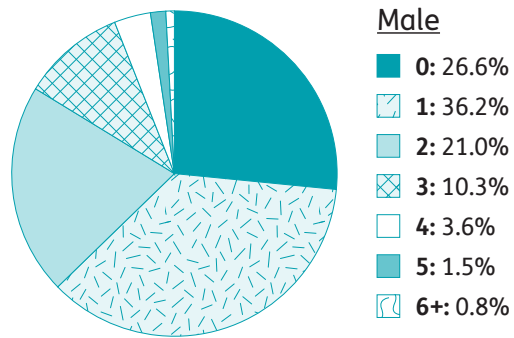
# Daily fruit intake (2/3)

Cross-sectional outcomes – percentage eating 2+ servings of fruit per day<sup>1</sup>

## Response options by gender

According to the pie charts, in 2022, **37.3%** of NDIS male participants ate 2 or more servings of fruit per day, compared to **42.0%** of female participants.

### Number of fruit servings per day in 2022 – NDIS participants (unstandardised)



<sup>1</sup> According to the Australian Recommended Guidelines (ARG) (2013), the recommended number of servings of fruit daily for girls/women and boys/men from age 9 and up is two servings per day. RDI stands for recommended daily intake.



# Daily fruit intake (3/3)

## Cross-sectional outcomes – percentage eating 2+ servings of fruit per day<sup>1</sup> By age group, disability type and level of function in 2022

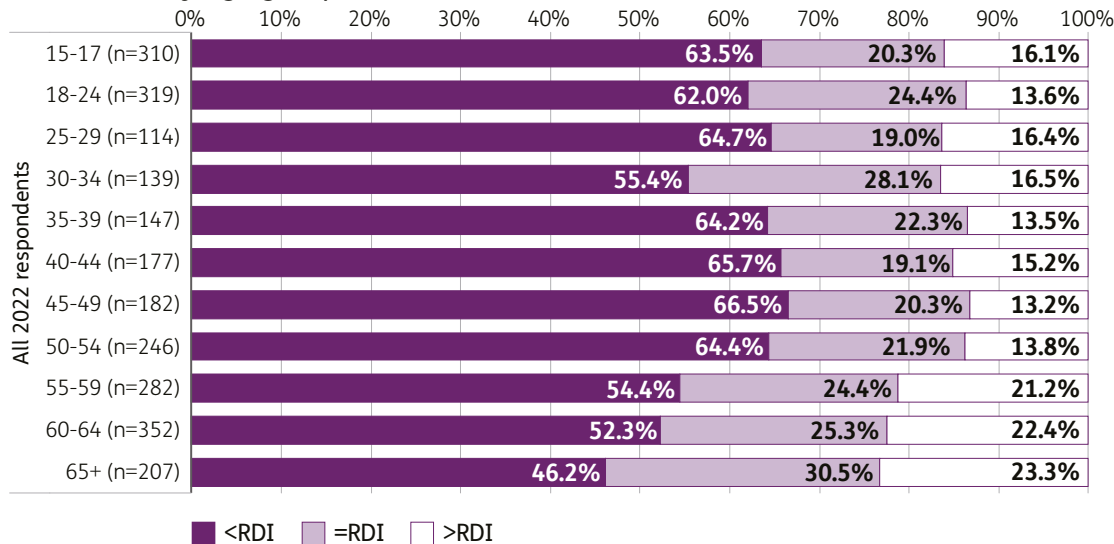
The proportion of participants meeting recommended dietary intake of daily fruit consumptions varies by age and disability.

The age groups with the **highest** proportion meeting RDI are participants **aged 65+** (53.8%) and participants **aged 30 to 34** (44.6%). The age groups with the **lowest** proportion meeting RDI are participants **aged 45–49** (33.5%) and participants aged 40–44 (34.3%).

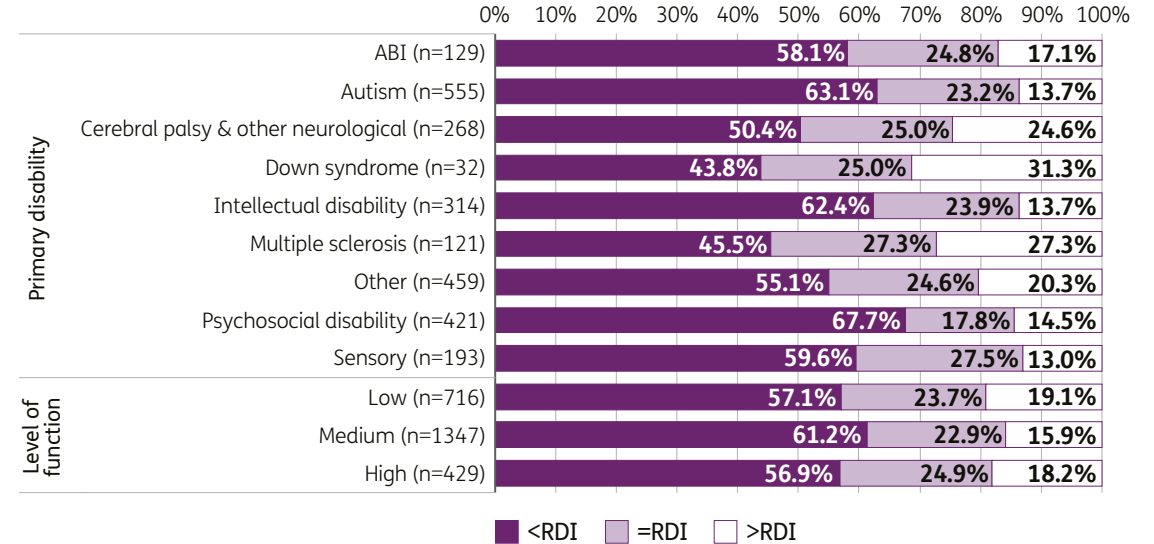
The primary disability groups with the **highest** proportion meeting RDI are participants with **Down syndrome** (56.3%) and participants with **multiple sclerosis** (54.6%). The primary disability group with the **lowest** proportion meeting RDI are participants with **psychosocial disability** (32.3%) and participants with **autism** (36.9%).

### Number of fruit servings per day in 2022 – NDIS participants (unstandardised, relative to RDI)

#### Fruit intake by age group



#### Fruit intake by primary disability and level of function



<sup>1</sup> According to the Australian Recommended Guidelines (ARG) (2013), the recommended number of servings of fruit daily for girls/women and boys/men from age 9 and up is two servings per day. RDI stands for recommended daily intake.

# Daily vegetable intake (1/3)

Cross-sectional outcomes – percentage eating 5+ servings of vegetables per day<sup>1</sup>  
By response year and gender

### Key observations

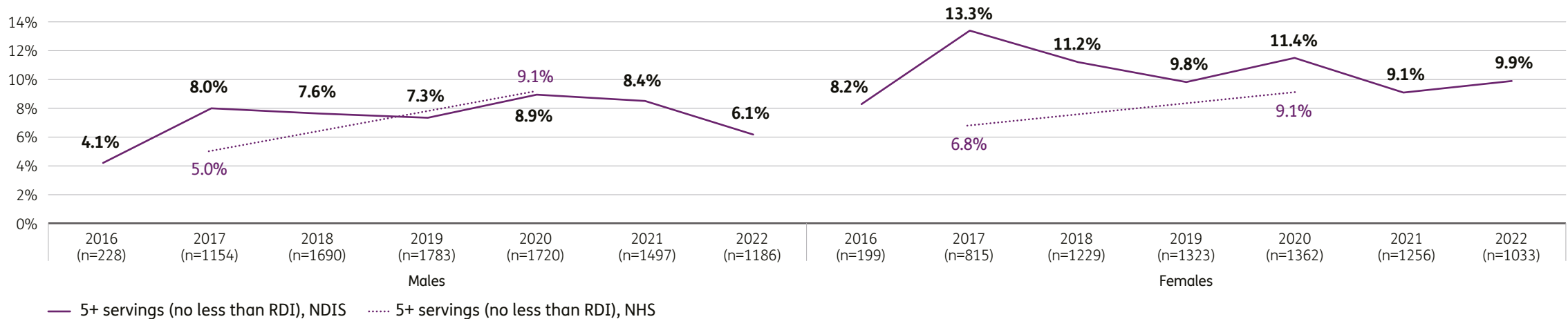
The **percentage of NDIS participants meeting the RDI guideline<sup>1</sup>** for vegetable consumption of 5 servings a day **is low**, with less than 10% of male participants and less than 14% of female participants meeting the recommendation.

**Higher** proportions of **female** participants meet the recommended daily intake of vegetable servings compared to male participants.

Relative to the Australian population, **higher** proportions of **NDIS participants** meet the recommendation than the Australian population.

### Time series – NDIS participants compared to the Australian population<sup>2,3</sup> (age standardised)

Percentage eating 5 or more servings of vegetables per day



1 According to Australian Recommended Guidelines (ARG) (2013), the recommended number of servings of vegetables daily for girls/women and boys/men from age 9 and up is five servings per day. RDI stands for recommended daily intake.  
 2 NDIS long form (LF) typically take place each October, therefore the 2017 LF survey is benchmarked against NHS 2017–18, and 2020 LF survey benchmarked against NHS 2020–21. All results are age standardised to make yearly comparison and comparison between NDIS participants and the Australian population comparable.  
 3 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

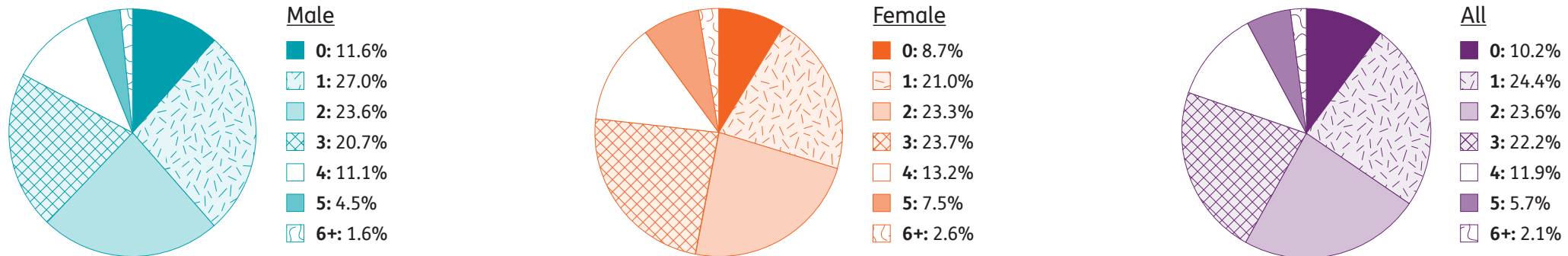
# Daily vegetable intake (2/3)

Cross-sectional outcomes – percentage eating 5+ servings of vegetables per day<sup>1</sup>

## Response options by gender

In 2022, **6.1%** of NDIS males eat 5 or more servings of vegetables per day, compared to **10.1%** of females.

### Number of vegetable servings per day in 2022 – NDIS participants (unstandardised)



<sup>1</sup> According to Australian Recommended Guidelines (ARG) (2013), the recommended number of servings of vegetables daily for girls/women and boys/men from age 9 and up is five servings per day. RDI stands for recommended daily intake.

# Daily vegetable intake (3/3)

## Cross-sectional outcomes – percentage eating 5+ servings of vegetables per day<sup>1</sup> By age group, disability type and level of function in 2022

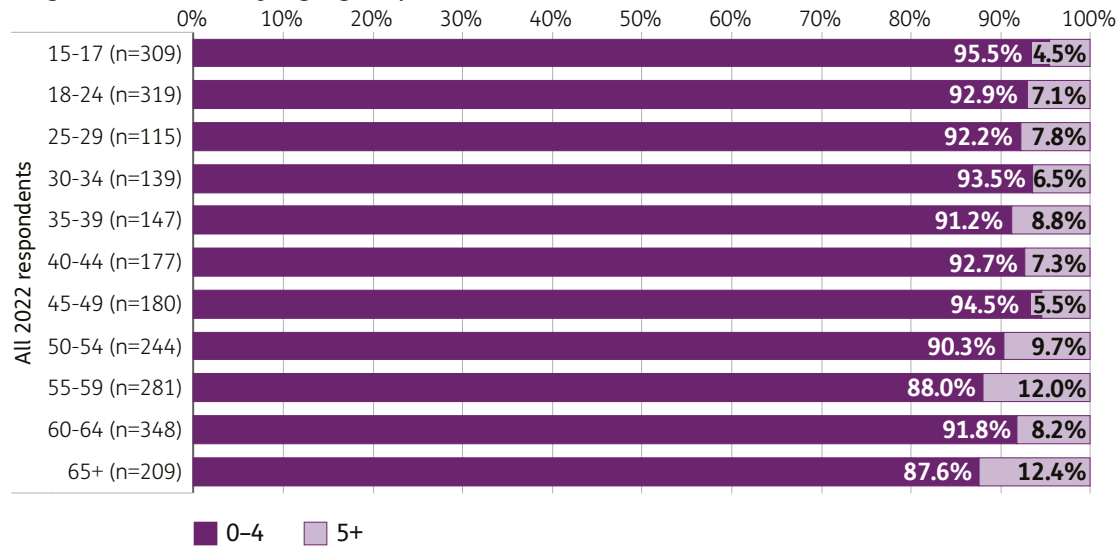
The proportion of participants meeting recommended dietary intake of vegetable consumption varies by **age** and **disability**.

The age groups with the **highest** proportion meeting RDI are participants **aged 65+** (12.4%) and participants **aged 55–59** (12.0%). The age groups with the **lowest** proportion meeting RDI are participants **aged 15–17** (4.5%) and participants **aged 45–49** (5.5%).

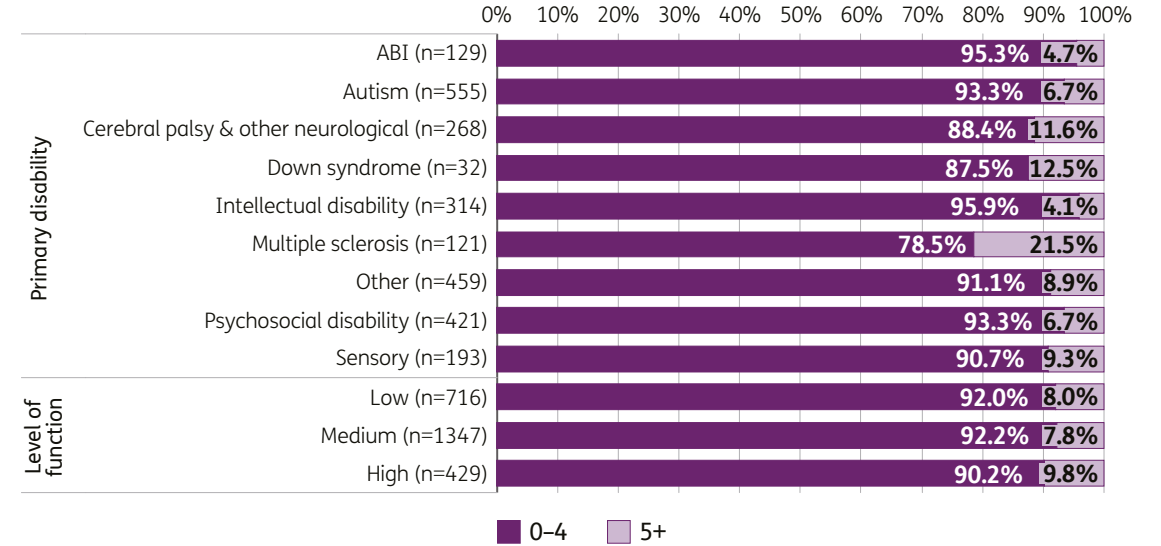
The primary disability group with the **highest** proportion meeting RDI are participants with **multiple sclerosis** (21.5%) and participants with **Down syndrome** (12.5%). The primary disability group with the **lowest** proportion meeting RDI are participants with **intellectual disability** (4.1%) and participants with **ABI** (4.7%).

### Number of vegetable servings per day in 2022 – NDIS participants (unstandardised, relative to RDI)

Vegetable intake by age group



Vegetable intake by primary disability and level of function



<sup>1</sup> According to Australian Recommended Guidelines (ARG) (2013), the recommended number of servings of vegetables daily for girls/women and boys/men from age 9 and up is five servings per day. RDI stands for recommended daily intake.

# Whether drink alcohol (1/3)

## Cross-sectional outcomes – percentage drinking alcohol<sup>1</sup> By response year and gender

### Key observations

**Less than half** of the NDIS participants drink alcohol.

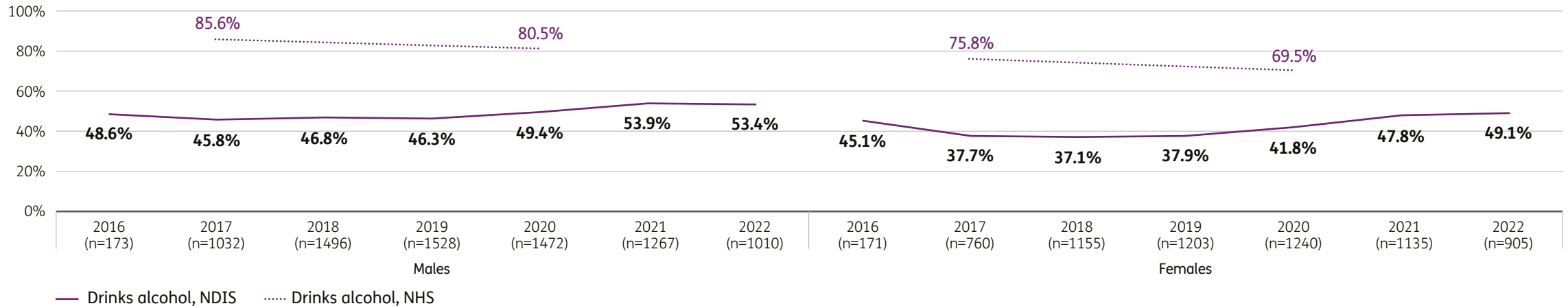
Between 2017 and 2022 there has been a small **increase** in the proportion of **NDIS participants** who drink alcohol, with most of the increase occurring between 2019 and 2021. By contrast, the percentage of the **Australian population** who drink alcohol **decreased** from 2017 to 2020.

**Lower** percentages of **female** participants drink alcohol compared to male participants.

Relative to the Australian population, **lower** percentages of **NDIS participants** drink alcohol.

### Time series – NDIS participants compared to the Australian population<sup>2,3</sup> (age standardised)

#### Percentage who drink alcohol



1 Results from participants aged under 18 are excluded from this analysis.  
 2 NDIS long form (LF) typically take place each October, therefore the 2017 LF survey is benchmarked against NHS 2017–18, and 2020 LF survey benchmarked against NHS 2020–21. All results are age standardised to make yearly comparison and comparison between NDIS participants and the Australian population comparable.  
 3 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

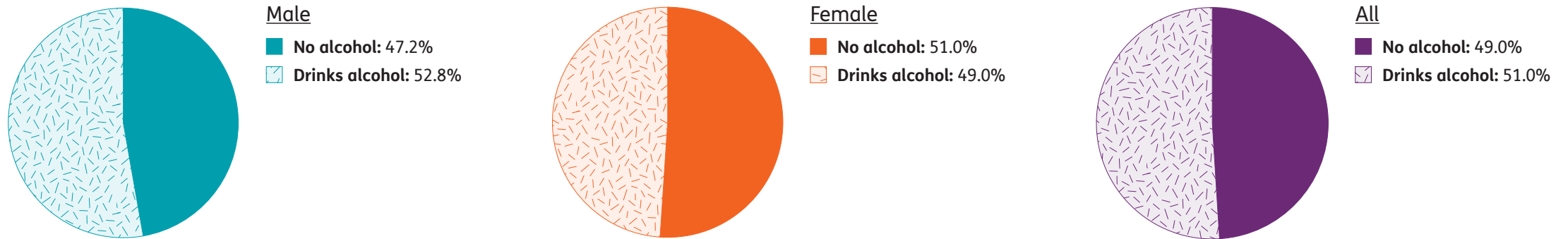
# Whether drink alcohol (2/3)

Cross-sectional outcomes – percentage drinking alcohol<sup>1</sup>

## Response options by gender

In 2022, **52.8%** of NDIS males and **49.0%** of NDIS females aged 18 and over said they drank alcohol.

### Whether drink alcohol in 2022 – NDIS participants (unstandardised)



<sup>1</sup> Results from participants aged under 18 are excluded from this analysis.

# Whether drink alcohol (3/3)

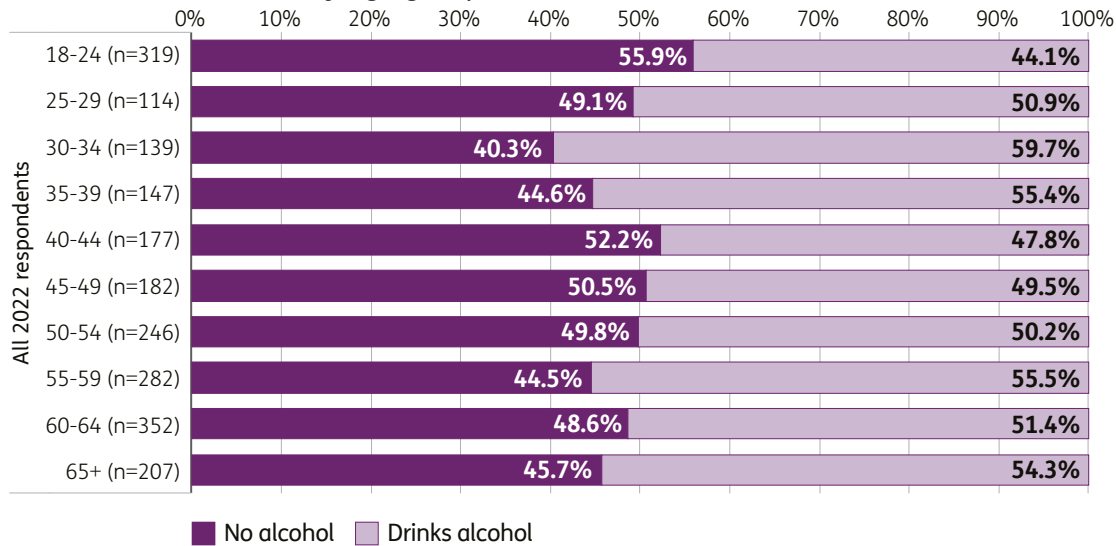
## Cross-sectional outcomes – percentage drinking alcohol<sup>1</sup> By age group, disability type and level of function in 2022

The proportion of participants who drink alcohol varies by **age, disability** and **level of function**.

The age groups with the **lowest** proportion who drink alcohol are participants aged **18 to 24** (44.1%) and participants aged 40 to 44 (47.8%). The age group with the **highest** proportion who drink alcohol are participants **aged 30 to 34** (59.7%).

### Whether drink alcohol in 2022 – NDIS participants (unstandardised, cont.)

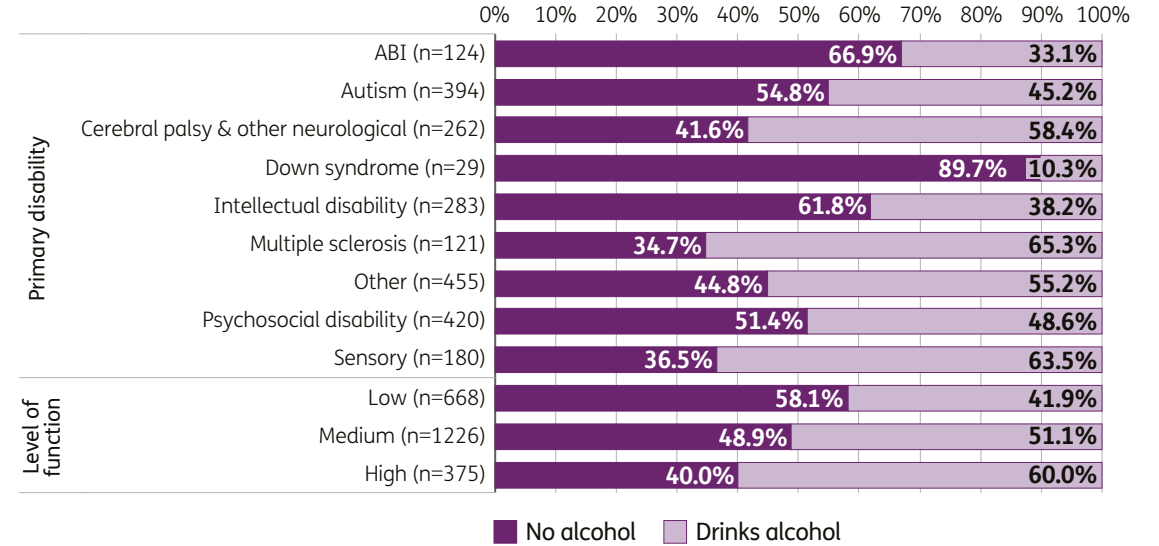
#### Whether drink alcohol by age group



The primary disability group with the **lowest** proportion who drink alcohol are participants with **Down syndrome** (10.3%). The primary disability groups with the **highest** proportion who drink alcohol are participants with **multiple sclerosis** (65.3%) and participants with a **sensory disability** (63.5%).

The percentage of participants who drink alcohol is **lower for participants with lower levels of function**. 41.9% of participants with low level of function drink alcohol, and 58.1% of participants with high level of function drink alcohol.

#### Whether drink alcohol by primary disability and level of function



<sup>1</sup> Results from participants aged under 18 are excluded from this analysis.

# Frequency of alcohol consumption (1/3)

Cross-sectional outcomes – percentage drinking alcohol at different frequencies<sup>1</sup>  
By response year and gender

### Key observations

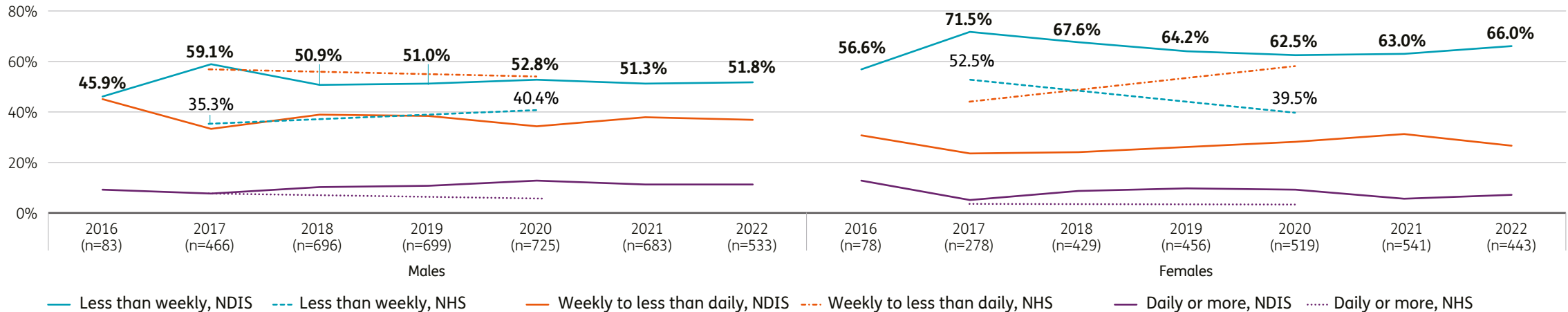
Comparing NDIS participants to the Australian population, **higher** proportions of **NDIS participants** drink less than weekly.

While the proportions of NDIS participants and Australian population who drink daily are **low**, **higher** proportion of **NDIS participants** drink daily compared to the

Australian population, with the proportions of NDIS participants drinking daily **increasing** between **2017 and 2020**.

### Time series – NDIS participants compared to the Australian population<sup>2,3</sup> (age standardised)

Of those who drink, frequency of alcohol consumption



1 This analysis only includes those drinking alcohol, and excludes responses from participants aged under 18.  
 2 NDIS long form (LF) typically take place each October, therefore the 2017 LF survey is benchmarked against NHS 2017–18, and 2020 LF survey benchmarked against NHS 2020–21.  
 All results are age standardised to make yearly comparison and comparison between NDIS participants and the Australian population comparable.  
 3 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.



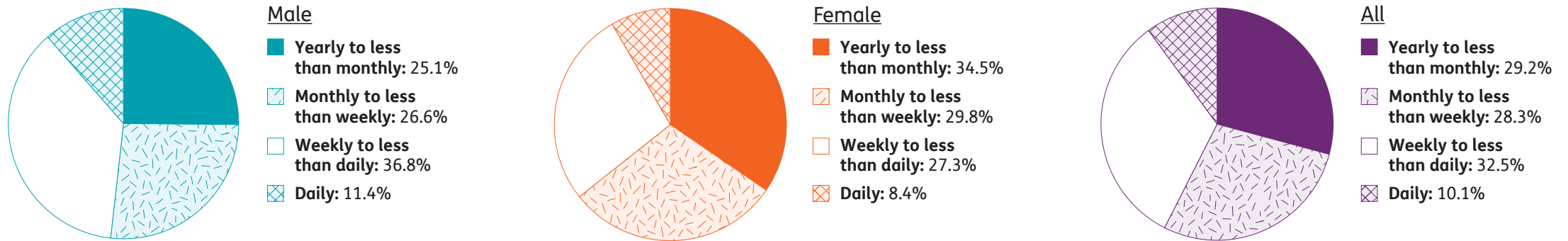
# Frequency of alcohol consumption (2/3)

Cross-sectional outcomes – percentage drinking alcohol at different frequencies<sup>1</sup>

Response options by gender

In 2022, **higher** proportions of **female** participants (64.3%) drink less frequently than weekly compared to male participants (51.8%).

## Frequency of alcohol consumption in 2022 – NDIS participants (unstandardised)



<sup>1</sup> This analysis only includes those drinking alcohol, and excludes responses from participants aged under 18.

# Frequency of alcohol consumption (3/3)

## Cross-sectional outcomes – percentage drinking alcohol at different frequencies<sup>1</sup> By age group, disability type and level of function in 2022

Of those drinking alcohol, frequency of consumption varies with **age** and **disability type**. Younger participants tend to drink **less** frequently and very small percentages drink daily up to the age of 45.

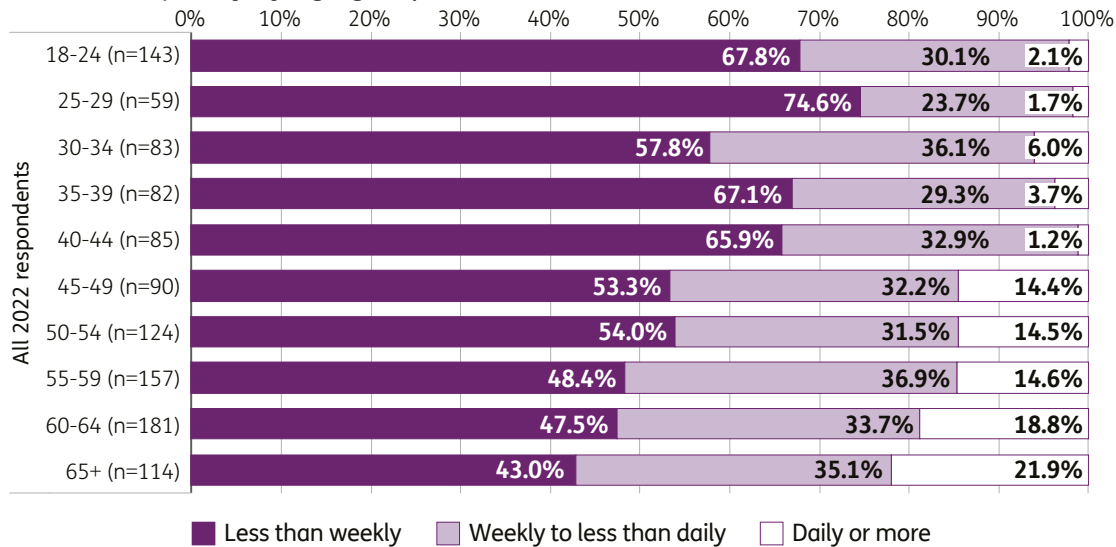
All 29 surveyed participants with Down syndrome in 2022 who drink alcohol, drink less frequently than weekly. This result may be partly impacted by small sample size. Participants with autism or intellectual disability also drink alcohol **less** frequently

than most other disability types. For all other disability types, around 50% drink less frequently than weekly and around 15% drink daily or more.

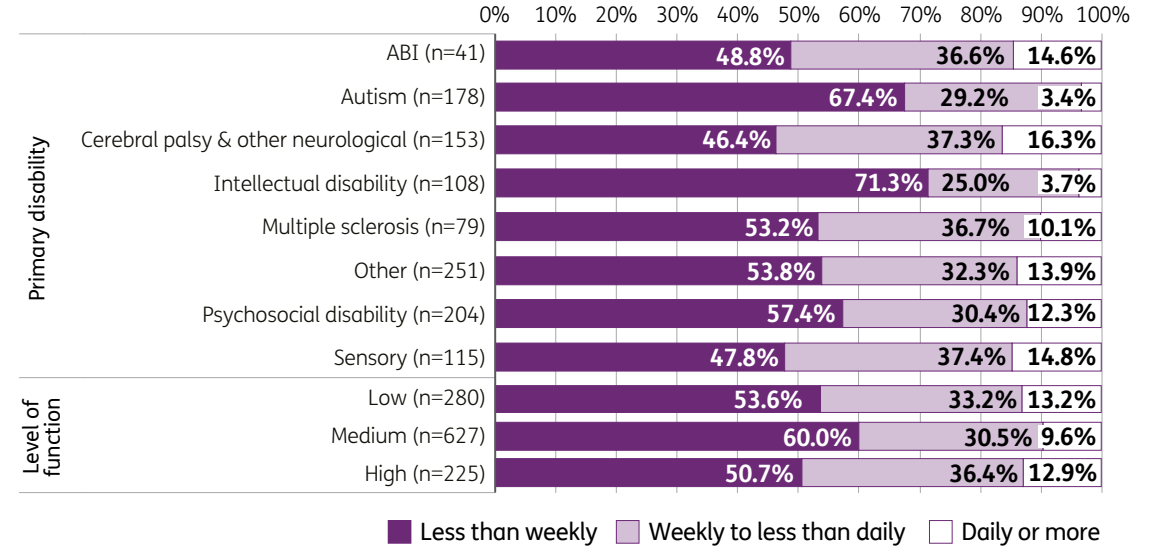
Frequency of drinking alcohol does not bear a clear relationship to participant level of function.

### Frequency of alcohol consumption in 2022 – NDIS participants (unstandardised, cont.)

Alcohol frequency by age group



Alcohol frequency by primary disability and level of function



<sup>1</sup> This analysis only includes those drinking alcohol, and excludes responses from participants aged under 18.

# Alcohol consumption per occasion (1/3)

Cross-sectional outcomes – percentage drinking different standard drinks per occasion<sup>1</sup>  
By response year and gender

### Key observations

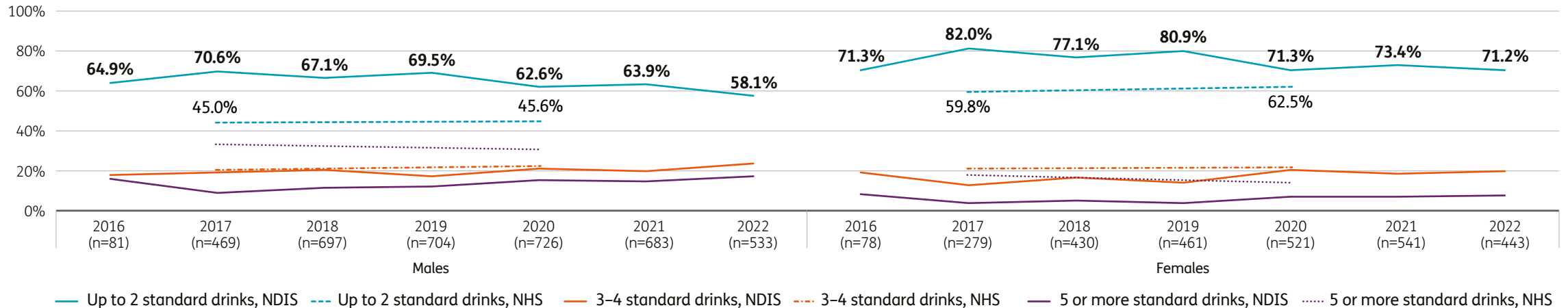
For NDIS participants who drink, **higher** proportions are drinking more standard drinks per occasion **after 2019**.

Relative to the Australian population, **NDIS participants** tend to drink **fewer** standard drinks per occasion.

**Female** participants tend to drink **fewer** standard drinks per occasion compared to male participants.

### Time series – NDIS participants compared to the Australian population<sup>2,3</sup> (age standardised)

Of those who drink, number of standard drinks per occasion



1 This analysis only includes those drinking alcohol, and excludes responses from participants aged under 18.  
 2 NDIS long form (LF) typically take place each October, therefore the 2017 LF survey is benchmarked against NHS 2017-18, and 2020 LF survey benchmarked against NHS 2020-21.  
 All results are age standardised to make yearly comparison and comparison between NDIS participants and the Australian population comparable.  
 3 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

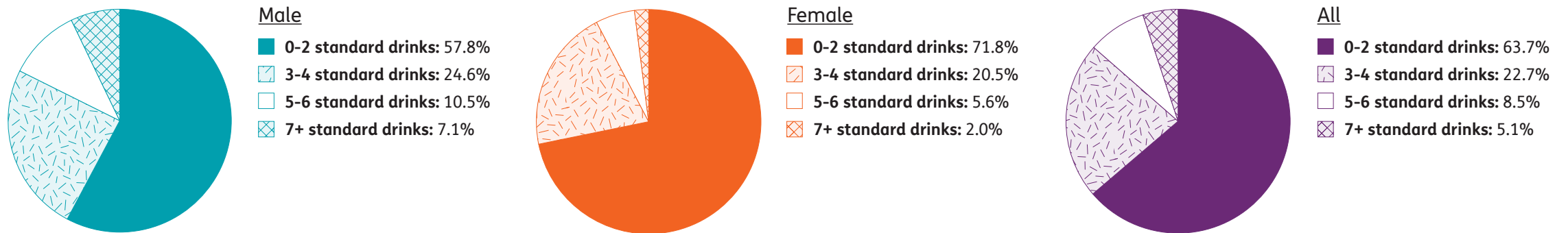
# Alcohol consumption per occasion (2/3)

Cross-sectional outcomes – percentage drinking different standard drinks per occasion<sup>1</sup>

## Response options by gender

In 2022, **57.8%** of NDIS males who drink have 0–2 standard drinks per occasion, compared to **71.8%** of females who drink.

### Number of standard drinks per occasion in 2022 – NDIS participants (unstandardised)



<sup>1</sup> This analysis only includes those drinking alcohol, and excludes responses from participants aged under 18.

# Alcohol consumption per occasion (3/3)

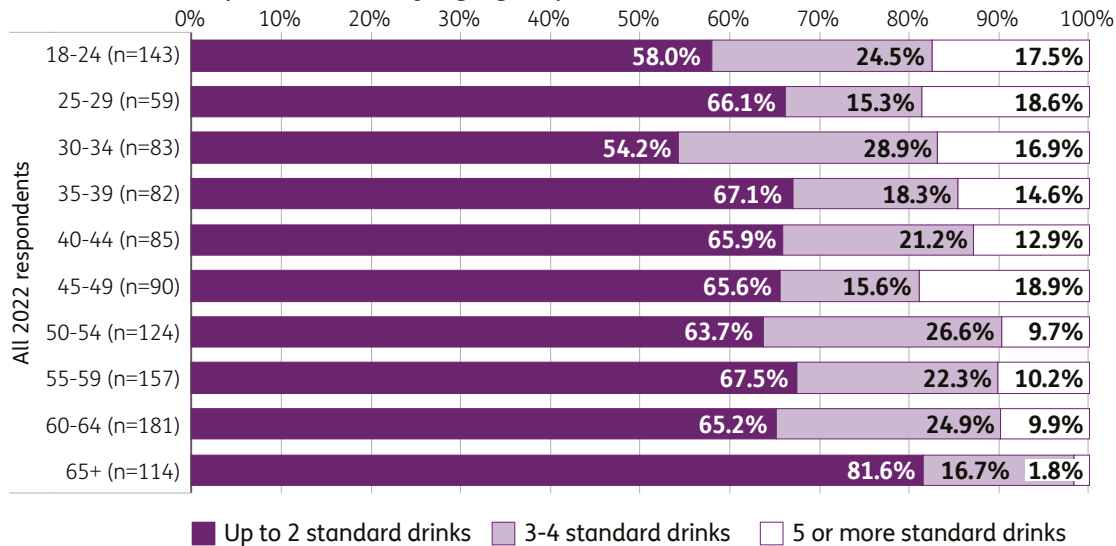
## Cross-sectional outcomes – percentage drinking different standard drinks per occasion<sup>1</sup> By age group, disability type and level of function in 2022

The participant age group with the **highest** proportion consuming less than 2 standard drinks per occasion is **age group 65+** (81.6% consume less than 2 standard drinks, 16.7% consume 3–4 standard drinks, and 1.8% consume 5 or more standard drinks). The participant age group with the **highest** proportion consuming more than 5 standard drinks per occasion is **age group 45 to 49** (18.9%) followed by **age group 25 to 29** (18.6%).

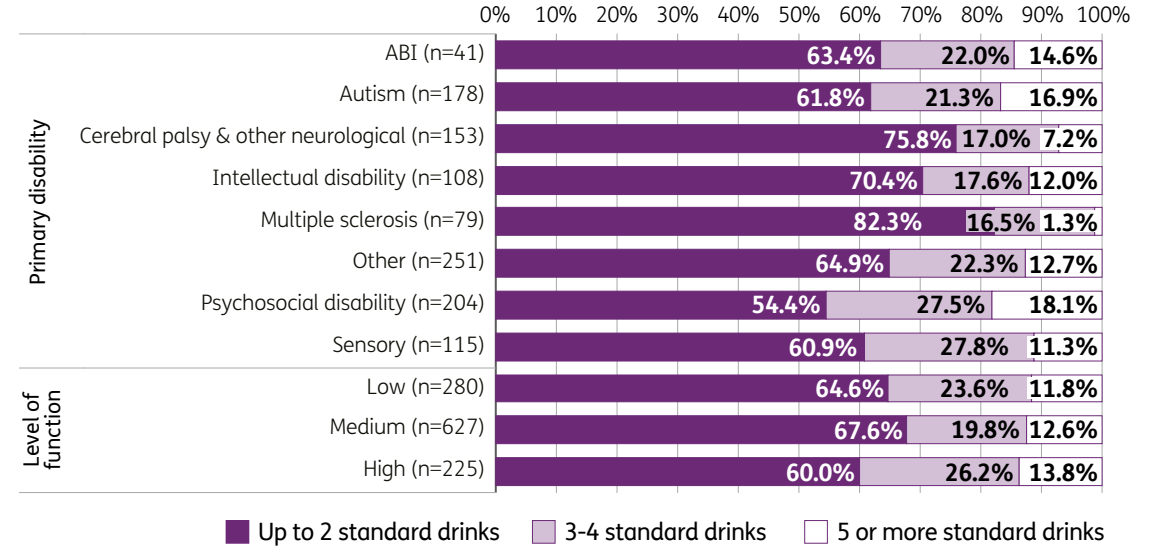
Comparing across primary disability groups, participants with **psychosocial disability** have the **highest** percentage consuming 5 or more drinks per occasion (18.1%) and the **lowest** percentage consuming less than 2 standard drinks per occasion (54.4%). Participants with **multiple sclerosis** have the **lowest** percentage consuming 5 or more drinks per occasion (1.3%) and the **highest** percentage consuming less than 2 drinks per occasion (82.3%).

### Number of standard drinks per occasion in 2022 – NDIS participants (unstandardised, cont.)

Standard drinks per occasion by age group



Standard drinks per occasion by primary disability and level of function



<sup>1</sup> This analysis only includes those drinking alcohol, and excludes responses from participants aged under 18.

# Smoking status (1/3)

Cross-sectional outcomes – percentage who currently/used to/never smoke<sup>1</sup>  
By response year and gender

### Key observations

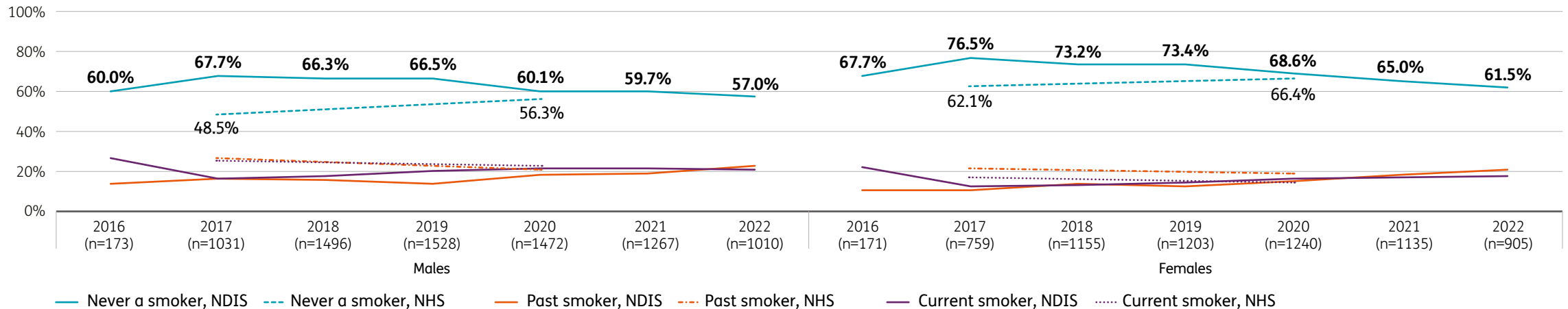
The percentage of **NDIS participants** who have never smoked **decreased from 2017 to 2022**, while the percentage of the **Australian population** who have never smoked **increased** between **2017 and 2020**.

The percentages of NDIS participants who smoked in **2017** was **lower than for the Australian population**. However the gap narrowed in 2020.

**Higher** percentages of **males than females** are current or past smokers.

### Time series – NDIS participants compared to the Australian population<sup>2,3</sup> (age standardised)

#### Smoking status



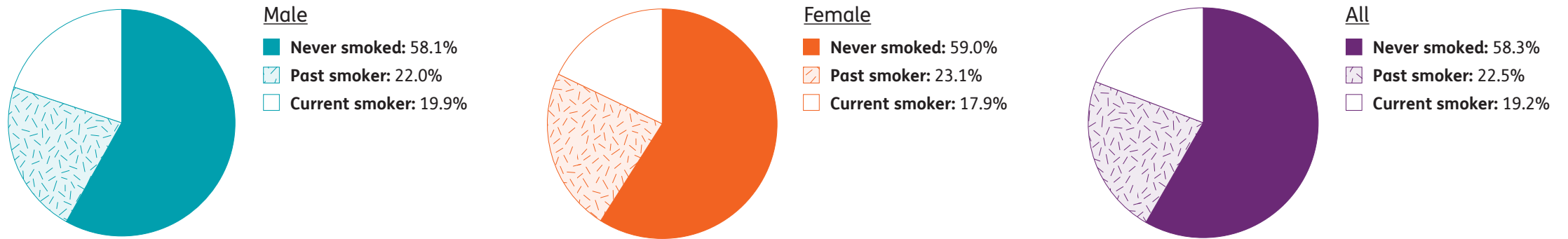
1 Results from participants aged under 18 are excluded from this analysis.  
 2 NDIS long form (LF) typically take place each October, therefore the 2017 LF survey is benchmarked against NHS 2017–18, and 2020 LF survey benchmarked against NHS 2020–21. All results are age standardised to make yearly comparison and comparison between NDIS participants and the Australian population comparable.  
 3 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

# Smoking status (2/3)

Cross-sectional outcomes – percentage who currently/used to/never smoke<sup>1</sup>  
 Response options by gender

In 2022, **19.9%** of NDIS males and **17.9%** of NDIS females currently smoke, **22.0%** of males and **23.1%** of females are past smokers.

## Smoking status in 2022 – NDIS participants (unstandardised)



<sup>1</sup> Results from participants aged under 18 are excluded from this analysis.

# Smoking status (3/3)

## Cross-sectional outcomes – percentage who currently/used to/never smoke<sup>1</sup> By age group, disability type and level of function in 2022

The proportion of participants who have **ever smoked** (past smoker or current smoker) **increases steadily with age up to age 45**, with age group 45–49 having the highest proportion who have ever smoked (57.2%), followed by age group 60–64 (55.1%) and age group 55–59 (54.1%).

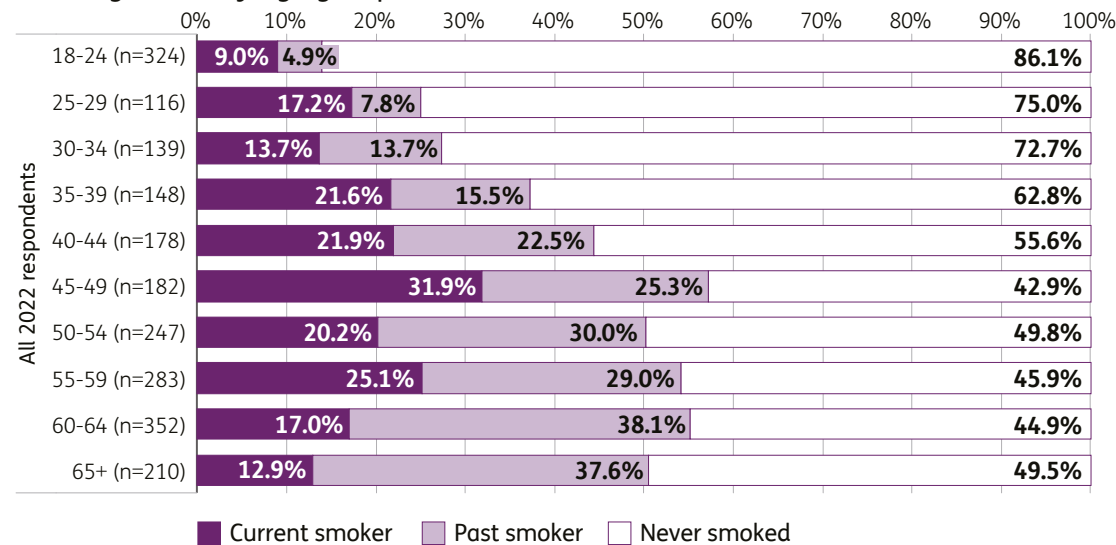
Participants with primary disability of **psychosocial disability** and participants with primary disability of **ABI** have the **highest proportions who have ever smoked** (63.7%

and 63.3% respectively). Participants with primary disability of **Down syndrome** have the **lowest proportion who have ever smoked** (0 out of 29 participants) followed by participants with primary disability of **autism** (19.3%) and **intellectual disability** (19.4%).

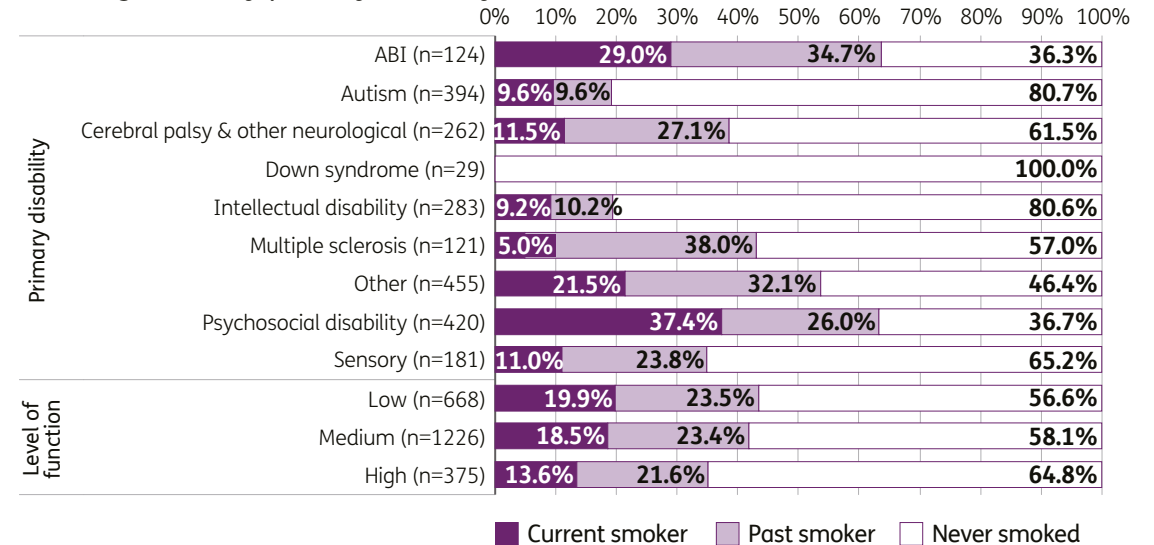
Just under 20% of participants with a low or medium level of function are current smokers, compared to 13.6% of those with a high level of function. Just under 24% of participants with a low or medium level of functions are past smokers, compared to 21.6% of those with a high level of function.

### Smoking status in 2022 – NDIS participants (unstandardised, cont.)

#### Smoking status by age group



#### Smoking status by primary disability and level of function



<sup>1</sup> Results from participants aged under 18 are excluded from this analysis.



# Undertaking exercise (1/3)

Cross-sectional outcomes – percentage undertaking exercise at different frequencies  
By response year and gender

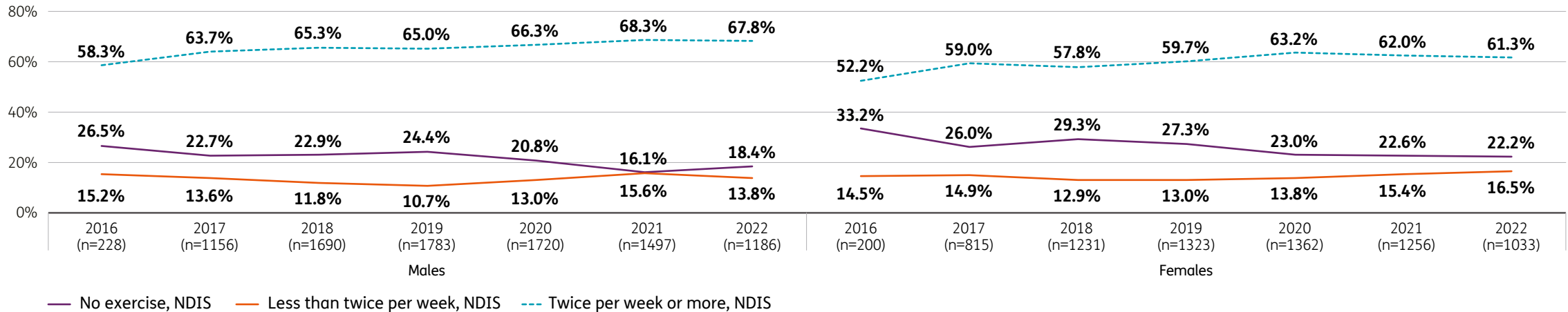
### Key observations

The proportion of NDIS participants who said they undertake exercise has **increased** between **2016 and 2021**.

**Higher** proportions of **male** participants undertake exercise compared to female participants.

### Time series – NDIS participants from 2016 to 2022<sup>1,2</sup> (age standardised)

#### Frequency of undertaking exercise



1 No Australian population benchmark is available for this indicator.  
2 NDIS respondents each year are standardised to aggregate (all years and genders) NDIS respondent age distribution.

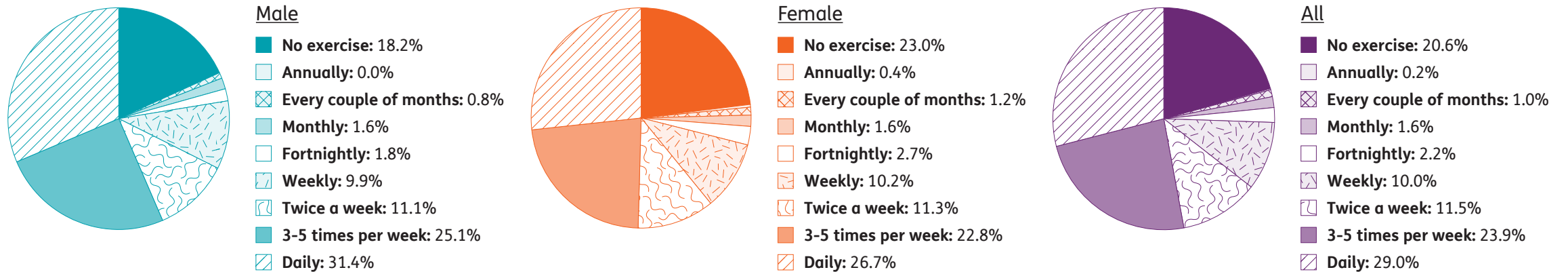
# Undertaking exercise (2/3)

Cross-sectional outcomes – percentage undertaking exercise at different frequencies

Response options by gender

In 2022, **18.2%** of NDIS males do not exercise, compared to **23.0%** of females; **67.6%** of males exercise twice or more per week, compared to **60.9%** of females.

## Frequency of undertaking exercise in 2022 – NDIS participants (unstandardised)



# Undertaking exercise (3/3)

## Cross-sectional outcomes – percentage undertaking exercise at different frequencies By age group, disability type and level of function in 2022

The percentage of participants who **undertake exercise** is the **highest** for age group **15 to 17** (87.1%) and age group **18 to 24** (86.7%) and gradually decreases with age up to age 40. Age group **60 to 64** has the **highest** percentage who do not undertake exercise (27.8%) followed by age group 40 to 44, 50 to 54 and 55 to 59 (24.7%).

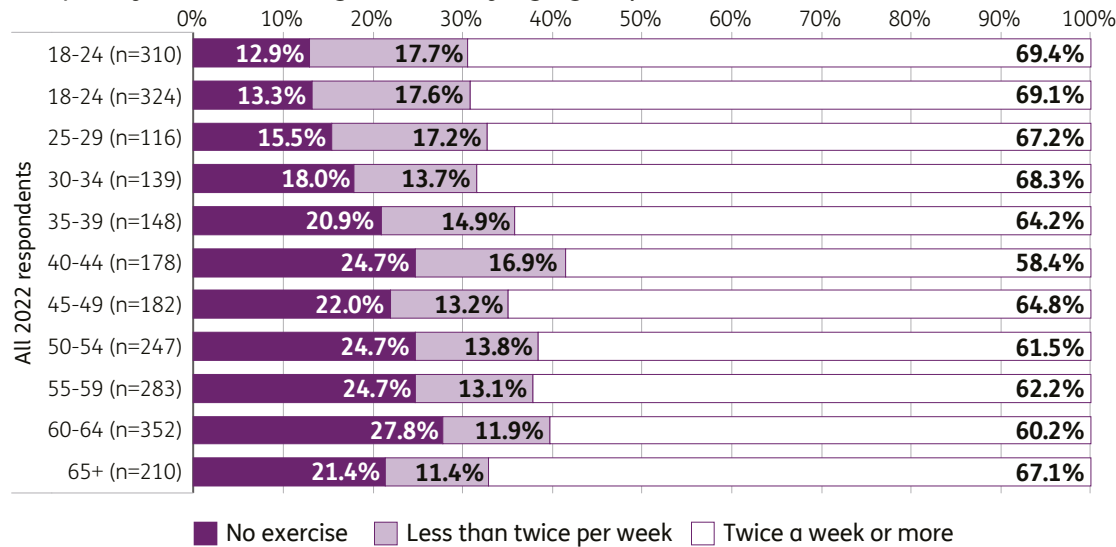
Participants with **acquired brain injury, cerebral palsy** or **other neurological** disability, or **psychosocial** disability tend to **exercise less** than other stated disability

types, as over 20% of them do not exercise. Almost 30% of the “**Other**”<sup>1</sup> **disability** group (which includes those with physical disabilities) **do not exercise**. Participants with a **sensory disability** exercise **most frequently**.

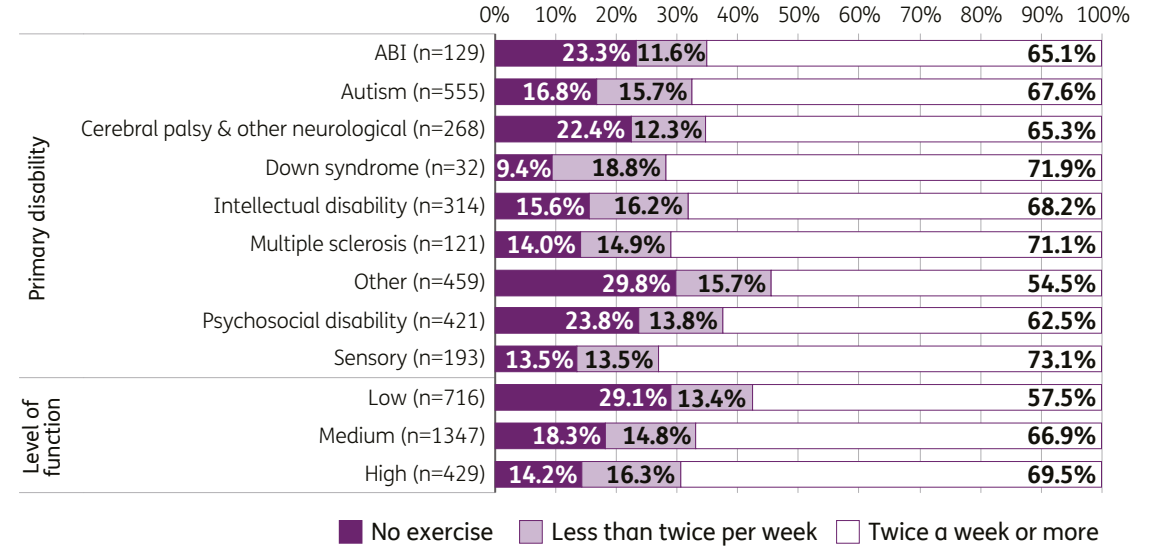
The percentage who **don’t exercise** tends to **decrease** with **increasing level of function**, and the percentage who exercise **twice a week** or more tends to **increase** with increasing level of function.

### Frequency of undertaking exercise in 2022 – NDIS participants (unstandardised, cont.)

#### Frequency of undertaking exercise by age group



#### Frequency of undertaking exercise by primary disability and level of function



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

# Vigorous exercise (1/3)

## Cross-sectional outcomes – percentage exercising vigorously at different frequencies<sup>1</sup> By response year and gender

### Key observations

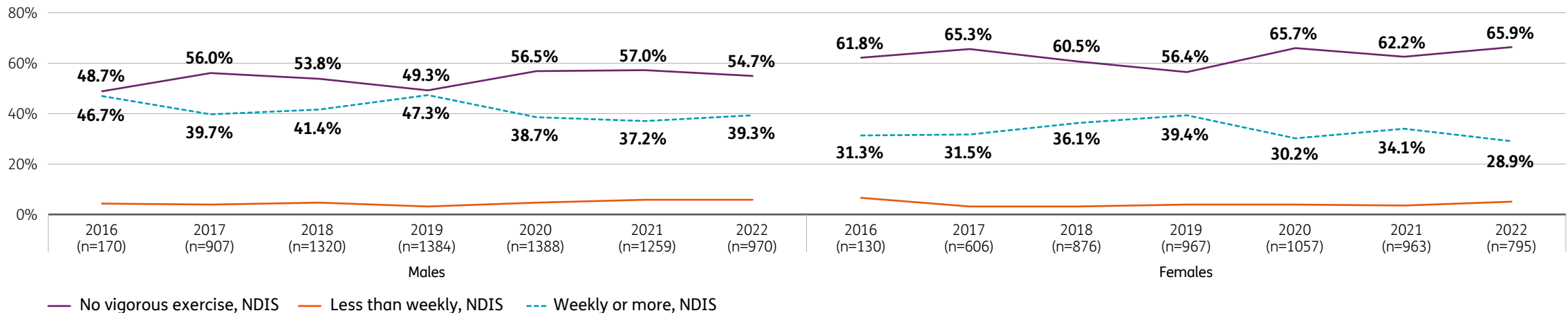
Around 50% of male NDIS participants **do not participate** in vigorous exercise.  
Around 60% of female participants do not participate.

Additionally, for those who **undertake vigorous exercise**, **higher** proportions of **male** participants do so weekly or more often compared to female participants.

Overall, of those engaging in vigorous exercise, the majority tend to participate **weekly or more**.

### Time series – NDIS participants from 2016 to 2022<sup>2,3</sup> (age standardised)

Of those undertaking exercise, frequency of vigorous exercise



1 This question is asked to participants undertaking exercise only. Example of vigorous exercise including running, cycling and tennis; the exercise should be for at least 10 minutes.  
2 No Australian population benchmark is available for this indicator.  
3 NDIS respondents each year are standardised to aggregate (all years and genders) NDIS respondent age distribution.

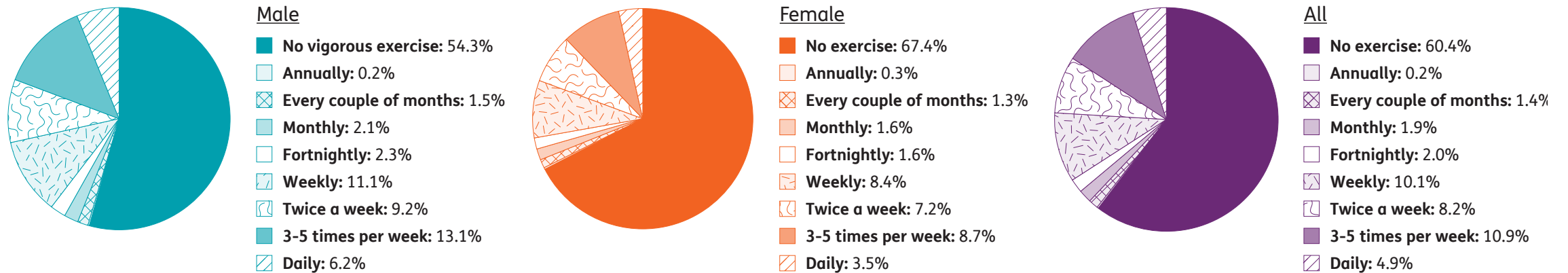
# Vigorous exercise (2/3)

Cross-sectional outcomes – percentage exercising vigorously at different frequencies<sup>1</sup>

Response options by gender

In 2022, **39.6%** of NDIS males who exercise also undertake vigorous exercises weekly or more frequently, compared to **27.8%** of females.

## Frequency of vigorous exercise in 2022 – NDIS participants (unstandardised)



<sup>1</sup> This question is asked to participants undertaking exercise only. Example of vigorous exercise including running, cycling and tennis; the exercise should be for at least 10 minutes.

# Vigorous exercise (3/3)

## Cross-sectional outcomes – percentage exercising vigorously at different frequencies<sup>1</sup> By age group, disability type and level of function in 2022

There is a generally decreasing trend in participants undertaking vigorous exercise with increasing age up to 60–64, although the 30–34 and 35–39 age groups are out of line with this trend.

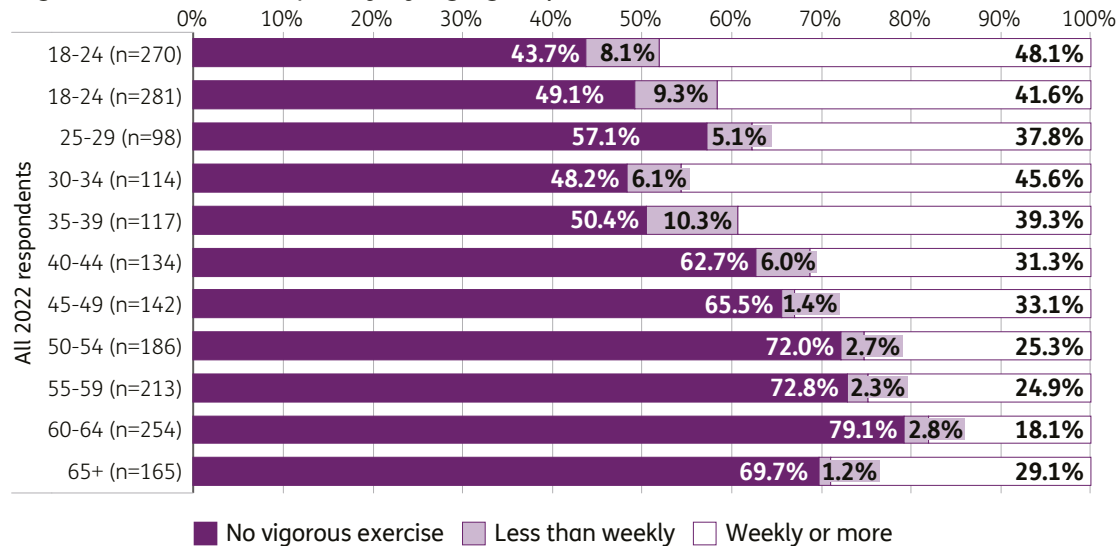
Of those who exercise, a slightly **lower** percentage of participants with **autism** or a **sensory disability** do not undertake vigorous exercise, compared to other disability

types. This may partly reflect younger average age and/or higher average level of function for these participant groups.

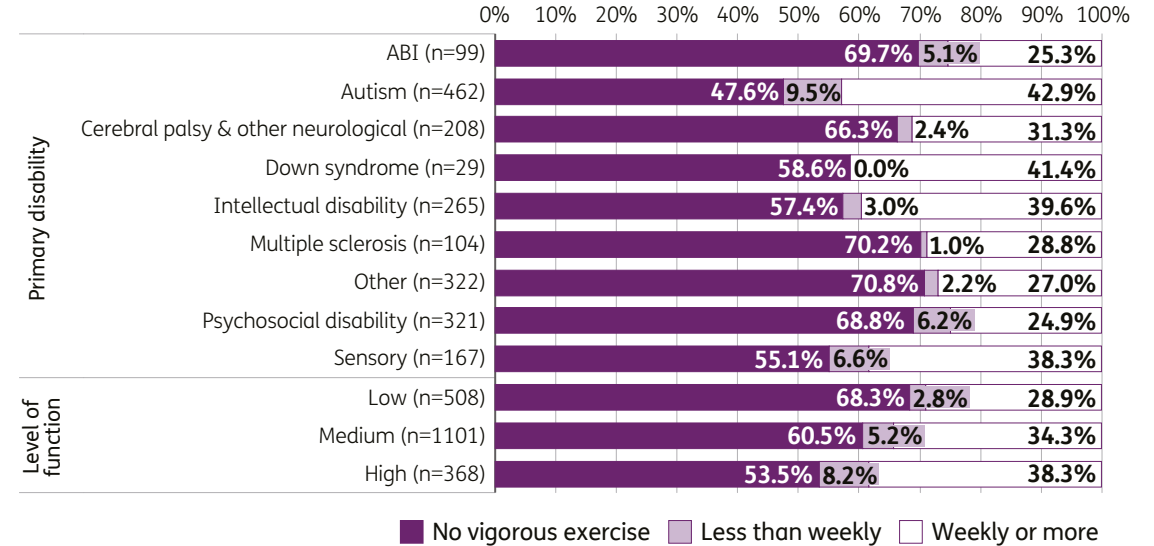
Participants who have **higher levels of function** tend to engage in vigorous exercise **more frequently**.

### Frequency of vigorous exercise in 2022 – NDIS participants (unstandardised, cont.)

#### Vigorous exercise frequency by age group



#### Vigorous exercise by primary disability and level of function



<sup>1</sup> This question is asked to participants undertaking exercise only. Example of vigorous exercise including running, cycling and tennis; the exercise should be for at least 10 minutes.

3.2

## Preventative health

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## Key statistics



Outcome indicators	Males		Females		By age group <sup>4</sup>		By disability <sup>3,4</sup>	
	Compared to Australian population <sup>1,2,6,7</sup>	NDIS percentage 2022 <sup>6</sup>	Compared to Australian population <sup>1,2,6,7</sup>	NDIS percentage 2022 <sup>6</sup>	Lowest %	Highest %	Lowest %	Highest %
Had a health check in the last 12 months <sup>8</sup>	Much higher	85.6%	Notably higher	87.7%	25–29 (74.1%)	50–54 (93.9%)	Autism (80.2%)	Acquired brain injury (93.8%)
Seen a dentist in the last 12 months <sup>8</sup>	Slightly higher	52.7%	Similar	56.1%	40–44 (46.1%)	15–17 (74.2%)	Acquired brain injury (49.6%)	Autism (60.5%)
Have been flu-vaccinated in the last 12 months <sup>5,8</sup>	Much higher	60.7%	Much higher	64.2%	15–17 (48.1%)	65+ (80.0%)	Autism (48.6%)	Cerebral palsy & other neurological (78.0%)
Offered education and support for sexual health <sup>8,9</sup>	Much lower	20.7%	Much lower	24.8%	60–64 (6.8%)	15–17 (53.9%)	Multiple sclerosis (11.6%)	Autism (39.3%)
Screened for cervical cancer in the last 5 years (female 25+ only) <sup>8</sup>	Not applicable	Not applicable	Notably lower	55.9%	25–29 (30.8%)	35–39 (67.6%)	Acquired brain injury (41.0%)	Multiple sclerosis (68.6%)
Had a mammogram in the last 12 months (female 40+ only) <sup>8</sup>	Not applicable	Not applicable	Similar	35.6%	40–44 (13.3%)	60–64 (47.4%)	Autism (22.5%)	Multiple sclerosis (40.4%)
Have had a PSA test (male 50+ only) <sup>8</sup>	Much higher	45.9%	Not applicable	Not applicable	50–54 (35.8%)	60–64 (59.5%)	Psychosocial disability (33.0%)	Cerebral palsy & other neurological (61.8%)

1 Comparisons are performed at the latest timepoint where the population benchmark is available.

2 “Much higher” if NDIS percentage is over 15 percentage points (pp) higher than the Australian population; “Notably higher” if NDIS percentage is 5–15 pp higher than the Australian population; “Slightly higher” if NDIS percentage is 2–5 pp higher than the Australian population; “Similar” if NDIS percentage is +/-2 pp of the Australian population; “Slightly lower” if NDIS percentage is 2–5 pp lower than the Australian population; “Notably lower” if NDIS percentage is 5–15 pp lower than the Australian population; “Much lower” if NDIS percentage is over 15 pp lower than the Australian population.

3 Does not consider disability types where sample size is less than 20, or “Other” disability type.

4 Results by age and disability presented here are one-ways and do not control for other factors.

5 The Australian population benchmark used for flu vaccination is not distinguished by gender.

6 The analysis only concerns participants aged 15 to 64, as beyond age 65, population benchmarks have different age distribution compared to NDIS participants aged 65+.

7 NDIS Long Form surveys are carried out each October therefore do not necessarily coincide with survey times in the population benchmark.

8 Those responding “Not Sure” are included in the denominator in all the statistics presented in this table.

9 Comparison to Australian population benchmark for education and support for sexual health is only available for participants aged 14 and 15.



# Health checks (1/3)

## Cross-sectional outcomes – percentage that had a health check in the last 12 months By response year and gender

### Key observations

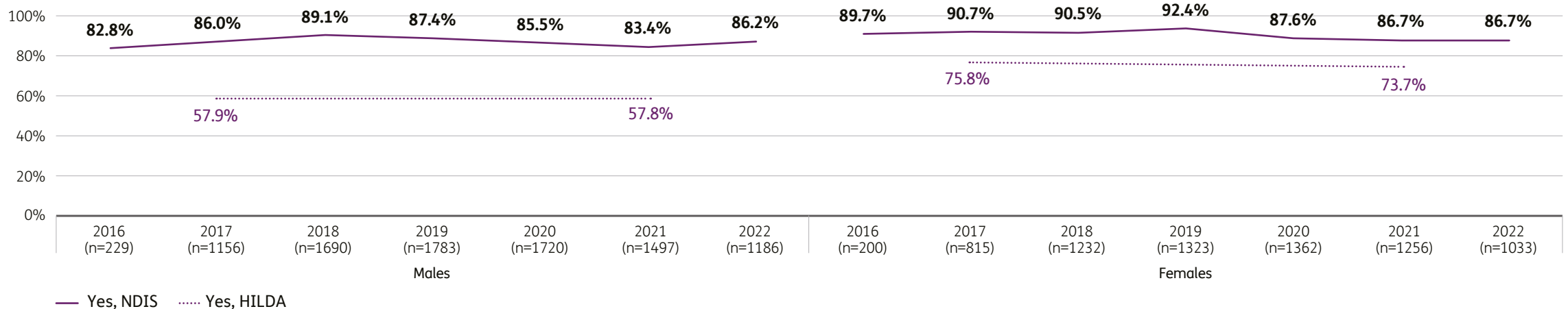
The percentage of NDIS participants “who have had a health check in the last 12 months” is **very high** (83% to 92%). There was a slight **decline** between 2019 and 2021.

**Slightly higher** percentages of **female** participants have had a health check in the last 12 months, compared to males.

Comparing to the Australian population, **higher** percentages of **NDIS participants** have had a health check, with the difference larger for males than females.

### Time series – NDIS participants compared to the Australian population<sup>1,2</sup> (age standardised)

#### Percentage had a health check in the last 12 months



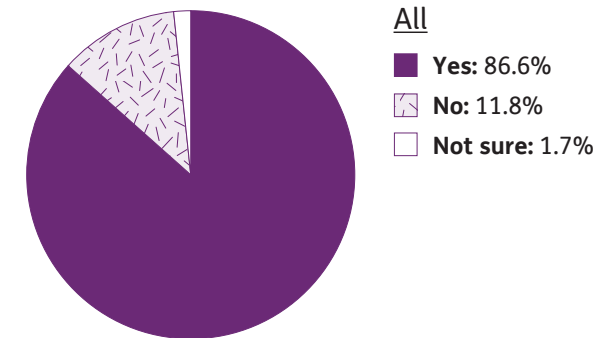
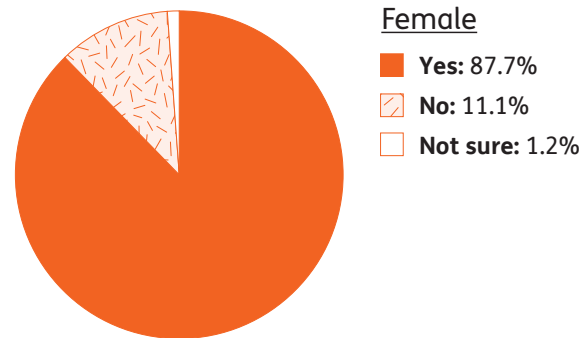
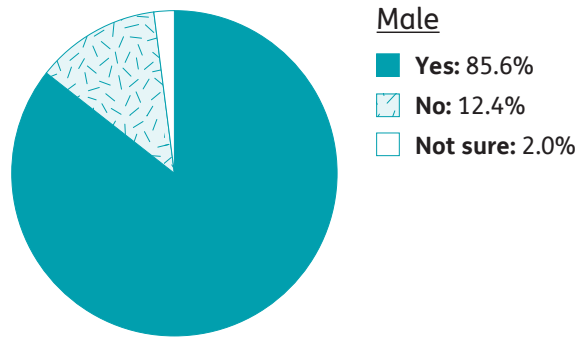
1 The NDIS results are the percentage responding “yes” to the question, and those responding “not sure” are included in the denominator.  
2 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

## Health checks (2/3)

Cross-sectional outcomes – percentage that had a health check in the last 12 months  
Response options by gender

In 2022, **85.6%** of NDIS males and **87.7%** of NDIS females have had a health check in the last 12 months.

### Health check in the last 12 months in 2022 – NDIS participants (unstandardised)



# Health checks (3/3)

## Cross-sectional outcomes – percentage that had a health check in the last 12 months By age group, disability type and level of function in 2022

The percentage of participants who have had a health check in the last 12 months is **higher** for older age groups from **age 50** (over 93%), and **lower** in younger **age groups between 18 and 29** (around 75%).

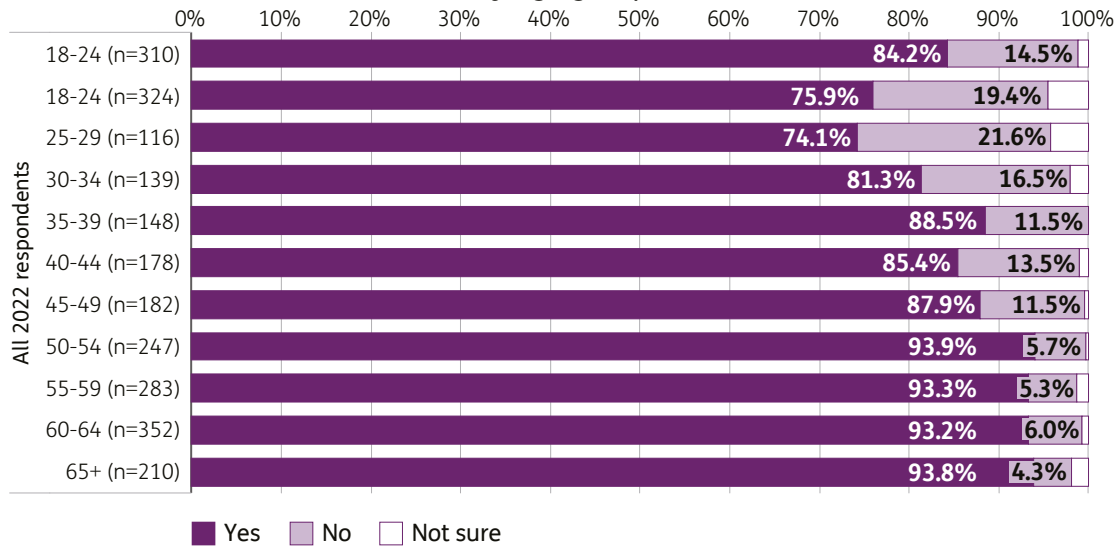
Participants with primary disability of **ABI** have the **highest percentage** who “have had a health check in the last 12 months” (93.8%), whereas participants with

primary disability of **autism** or **intellectual disability** have the **lowest** percentages (80.2% and 83.1% respectively).

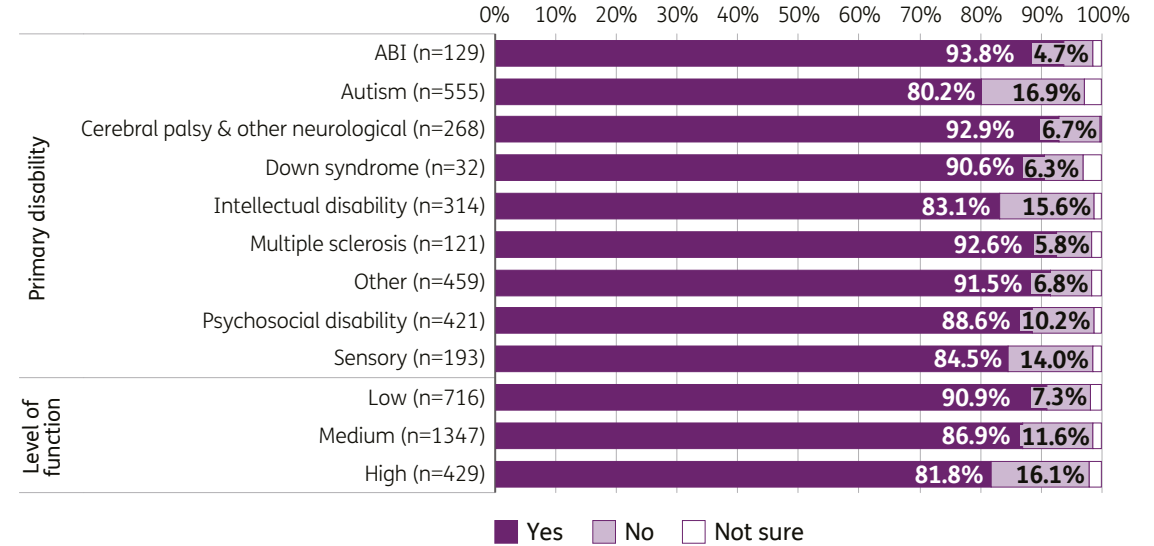
The percentage who have had a health check is **higher** for participants with **lower level of function** (90.9% of those with low level of function decreasing to 81.8% of those with high level of function).

### Health check in the last 12 months in 2022 – NDIS participants (unstandardised, cont.)

#### Health check in the last 12 months by age group



#### Health check in the last 12 months by primary disability and level of function



# Dentist visits (1/3)

## Cross-sectional outcomes – percentage that have seen a dentist in the last 12 months By response year and gender

### Key observations

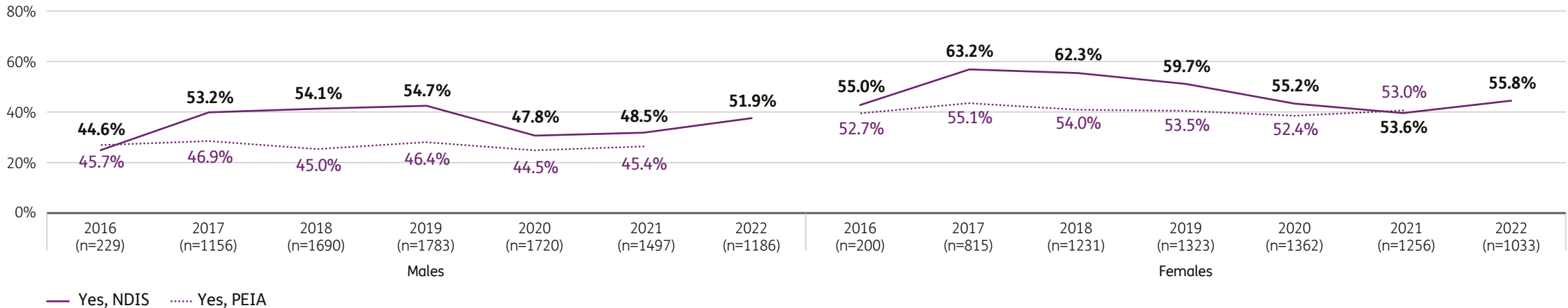
The percentage of NDIS participants who have seen a dentist in the last 12 months has **increased** between **2016 and 2017** and **decreased sharply** between **2019 and 2021**.

**Higher** percentages of **female** than male participants have seen a dentist in the last 12 months.

Compared to the Australian population, the percentage of **NDIS participants** who have seen a dentist in the last 12 months is **higher** particularly between **2017 and 2019**, with the **gap decreasing** from 2020.

### Time series – NDIS participants compared to the Australian population<sup>1,2,3</sup> (age standardised)

#### Percentage seen a dentist in the last 12 months



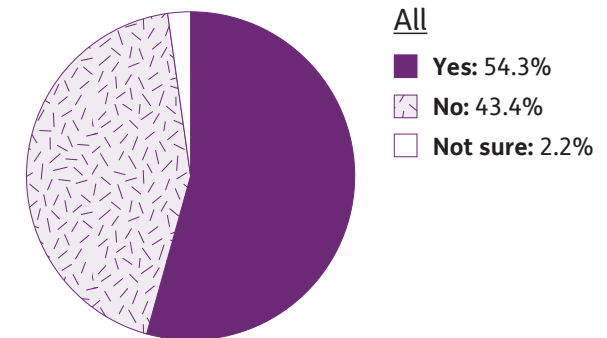
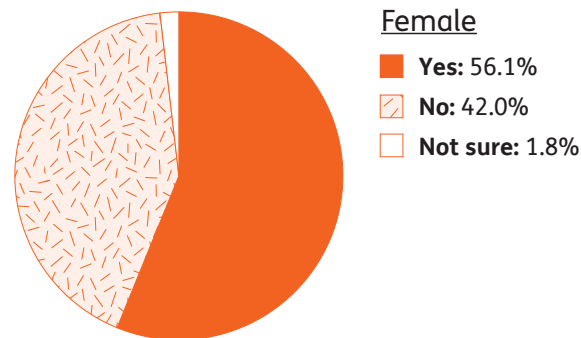
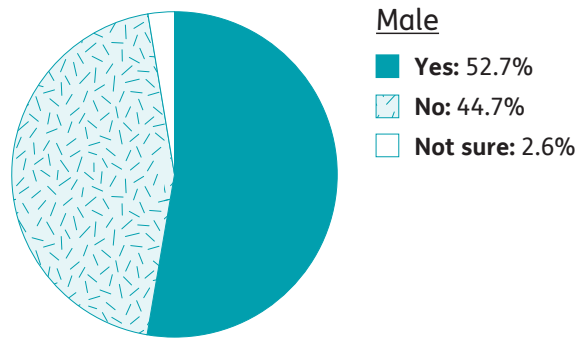
1 NDIS long form (LF) typically take place each October, therefore the 2016 LF survey is benchmarked against PEIA 2016–17, 2017 LF survey benchmarked against PEIA 2017–18 and so on.  
 2 The NDIS results are the percentage responding “yes” to the question, and those responding “not sure” are included in the denominator.  
 3 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

## Dentist visits (2/3)

Cross-sectional outcomes – percentage that have seen a dentist in the last 12 months  
Response options by gender

In 2022, **52.7%** of NDIS males and **56.1%** of NDIS females have seen a dentist in the last 12 months.

### Seen a dentist in the last 12 months in 2022 – NDIS participants (unstandardised)



# Dentist visits (3/3)

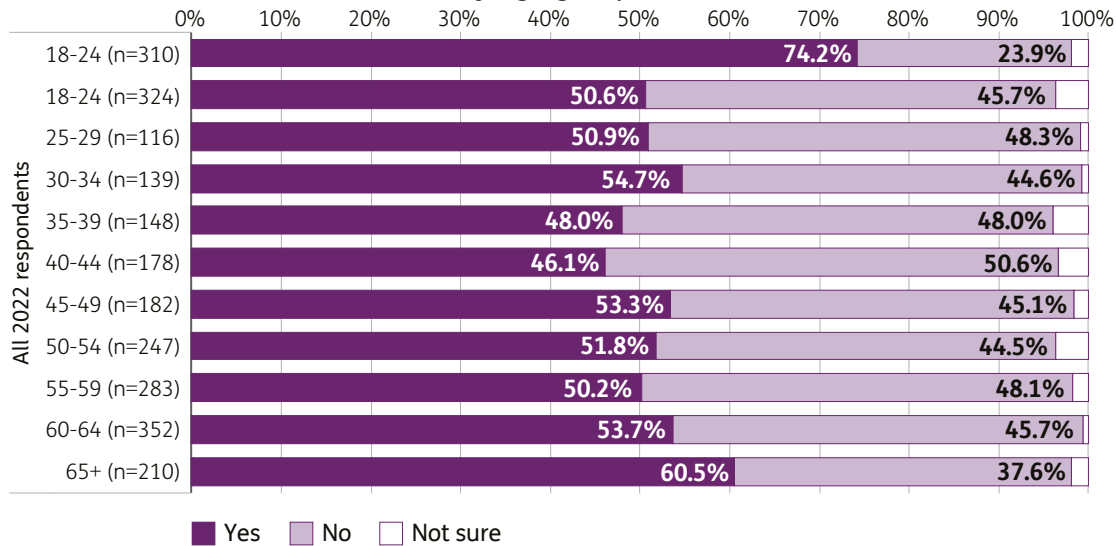
## Cross-sectional outcomes – percentage that have seen a dentist in the last 12 months By age group, disability type and level of function in 2022

Compared to other age groups above age 15, participants **aged 15 to 17** have by far the **highest percentage** who have seen a dentist in the last 12 months (74.2%) followed by participants **aged 65+** (60.5%).

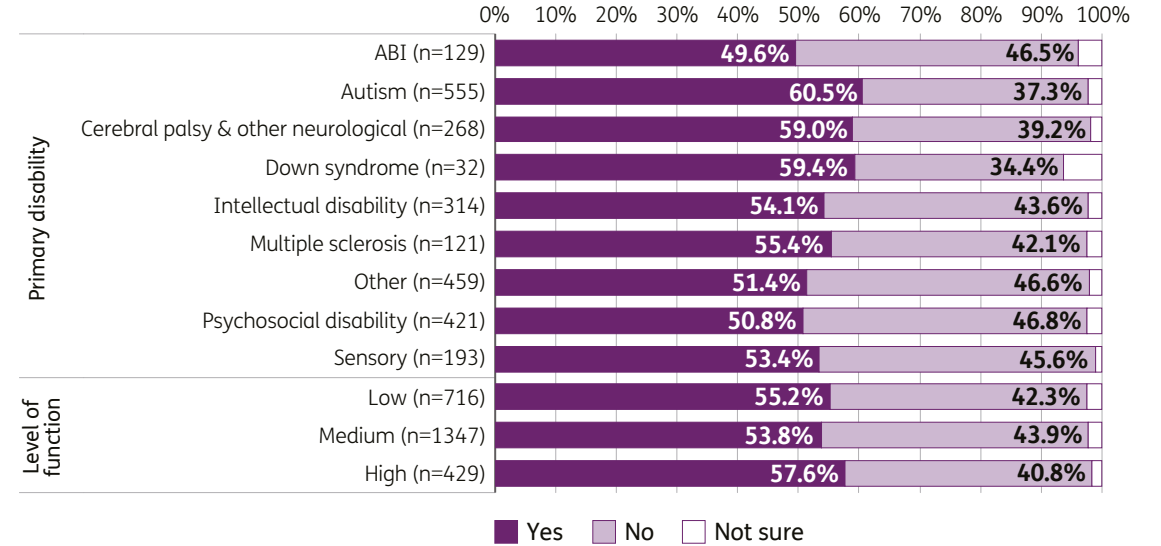
Overall, the percentage of those who saw a dentist in the last 12 months **does not vary a great deal by disability type** (50%–60%) or level of function (54%–58%).

### Seen a dentist in the last 12 months in 2022 – NDIS participants (unstandardised, cont.)

Dentist visit in the last 12 months by age group



Dentist visit in the last 12 months by primary disability and level of function



## Flu vaccination (1/3)

### Cross-sectional outcomes – percentage that have had a flu shot in the last 12 months By response year and gender

#### Key observations

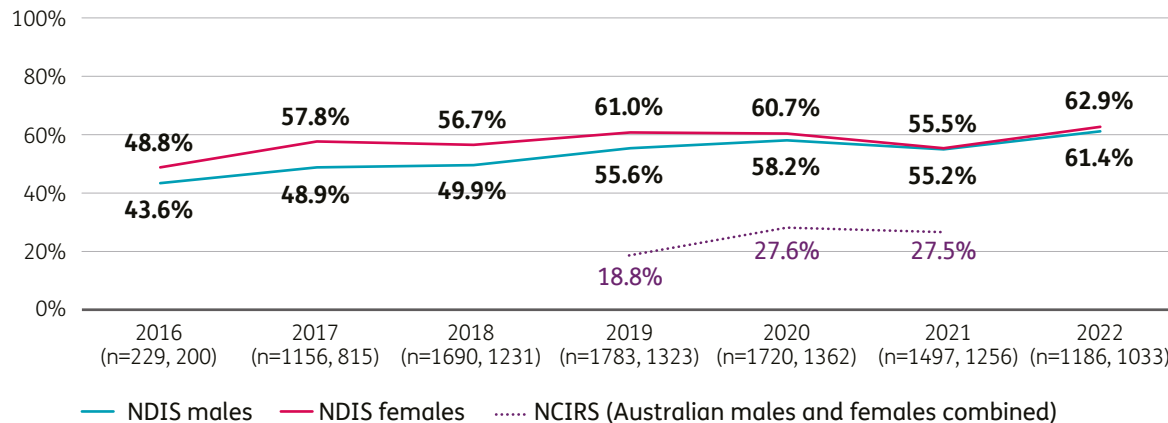
The percentage of NDIS participants who have been flu vaccinated has been **steadily increasing** except for the year 2021, possibly due to the impact of COVID-19.

Slightly **higher** percentages of **female NDIS participants** than male NDIS participants have had a flu shot in the last 12 months.

Compared to the combined male and female Australian population benchmark, **higher percentages of NDIS participants** have been flu vaccinated.

#### Time series – NDIS participants compared to the Australian population<sup>1,2,3</sup> (age standardised)

##### Percentage flu-vaccinated in the last 12 months



1 The population benchmark for this indicator is not distinguished by gender. We have implicitly assumed the Australian population distribution to be the same as that of the NDIS in this calculation in this comparison.

2 The NDIS results are the percentage responding “yes” to the question, and those responding “not sure” are included in the denominator.

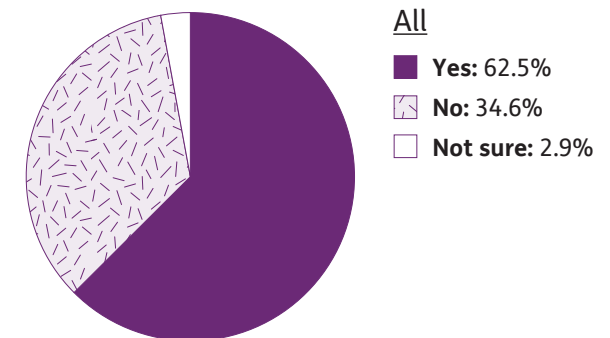
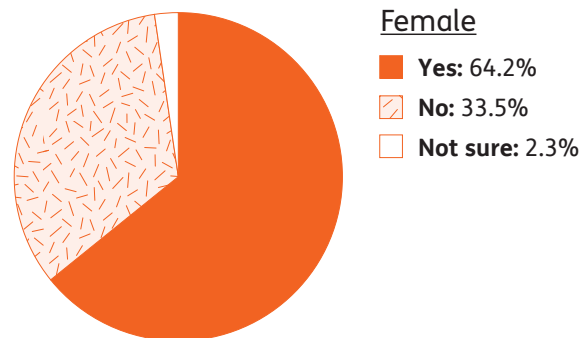
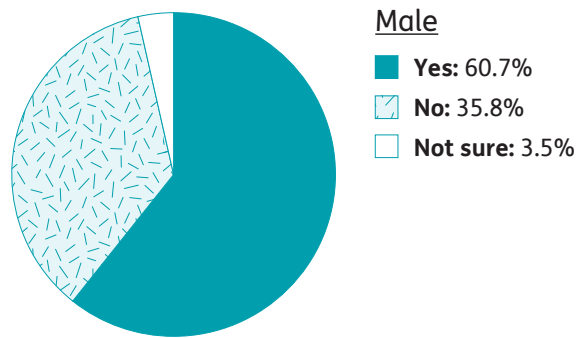
3 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

## Flu vaccination (2/3)

Cross-sectional outcomes – percentage that have had a flu shot in the last 12 months  
Response options by gender

In 2022, **60.7%** of NDIS males and **64.2%** of NDIS females have been flu-vaccinated in the last 12 months.

### Flu-vaccinated in the last 12 months in 2022– NDIS participants (unstandardised)





# Flu vaccination (3/3)

## Cross-sectional outcomes – percentage that have had a flu shot in the last 12 months By age group, disability type and level of function in 2022

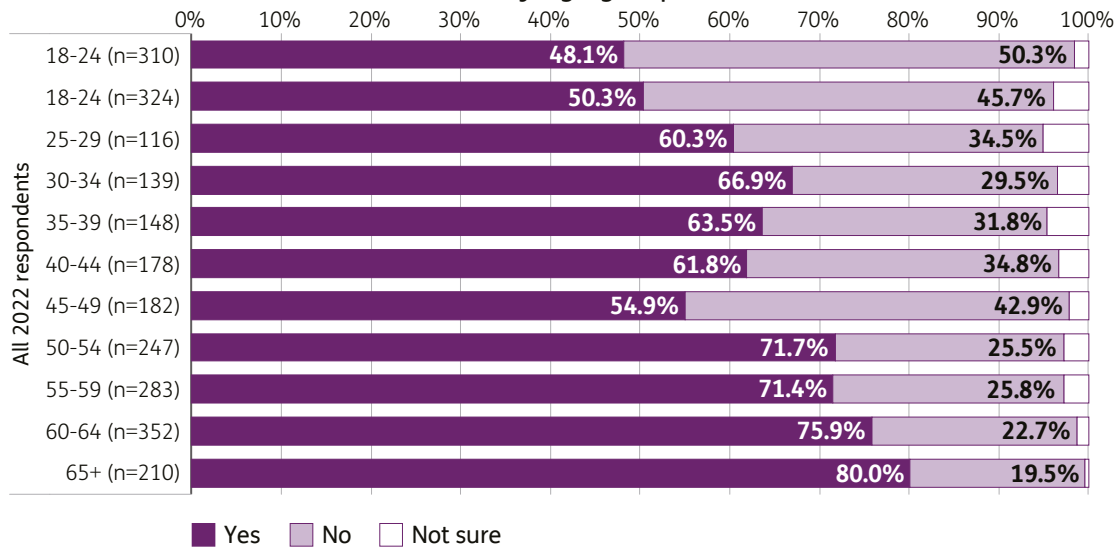
The percentage of NDIS participants who have been flu vaccinated in the last 12 months **increases with age** from **15 to 34**, decreases from 35 to 49 and increases again after age 50. Participants **aged 65** and over have the **highest flu vaccination coverage** (80.0%, compared to 62.5% overall).

Just under half (48.6%) of participants with **autism** had a flu shot in the last 12 months, compared to around three quarters of those with **ABI** (73.6%) or **cerebral palsy** or **other neurological** disability (78.0%).

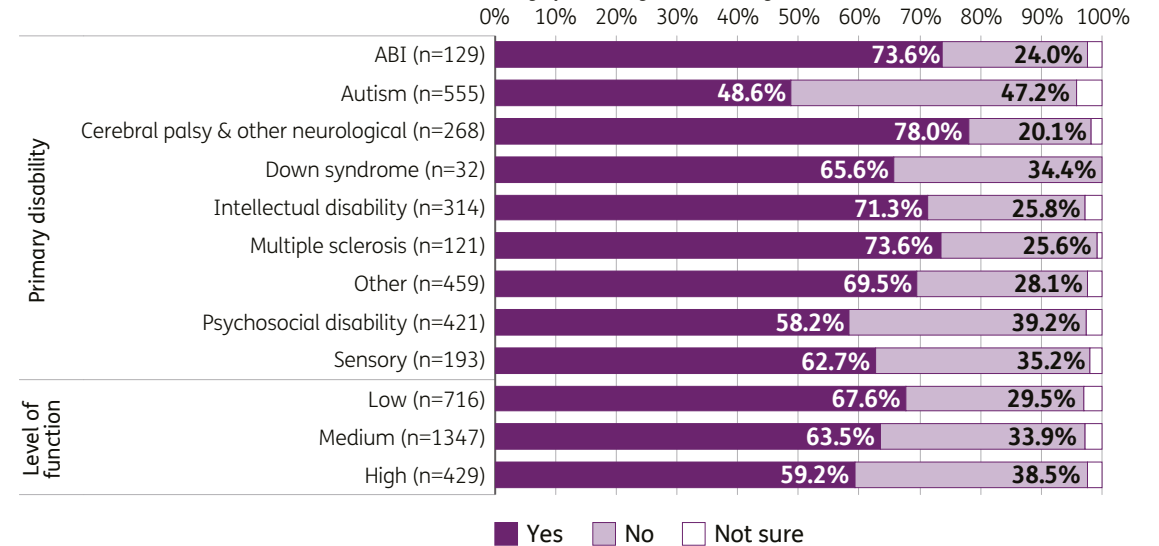
**Higher** percentages of participants with **lower levels of function** have been flu-vaccinated in the last 12 months.

### Flu-vaccinated in the last 12 months in 2022 – NDIS participants (unstandardised, cont.)

Flu vaccination in the last 12 months by age group



Flu vaccination in the last 12 months by primary disability and level of function



# Sexual health education (1/4)

## Cross-sectional outcomes – percentage offered education and support for sexual health By response year and gender

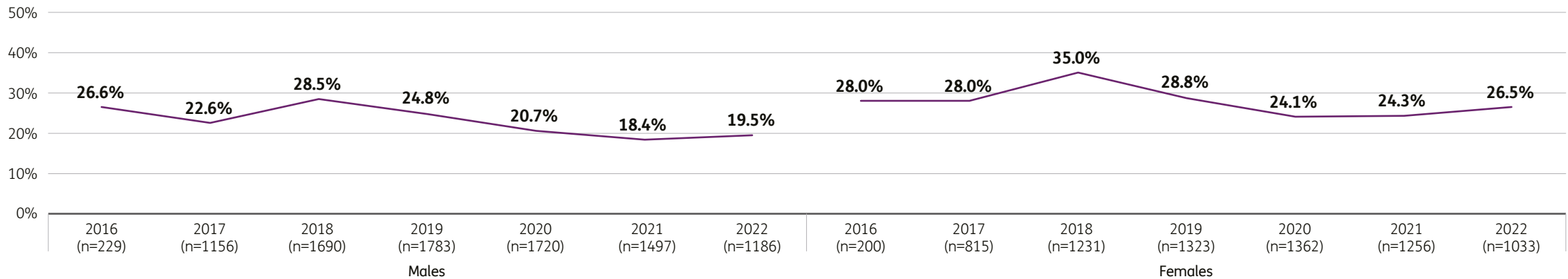
### Key observations

The percentages of NDIS participants who have been educated and supported for sexual health is **less than 30%**. **Slightly higher** percentages of **female** participants said they have been educated or supported compared to male participants.

Comparing over time, the percentage educated and supported has **declined** steadily **between 2018 and 2021**.

### Time series – NDIS participants from 2016 to 2022<sup>1,2,3</sup> (age standardised)

#### Percentage educated and supported for sexual health



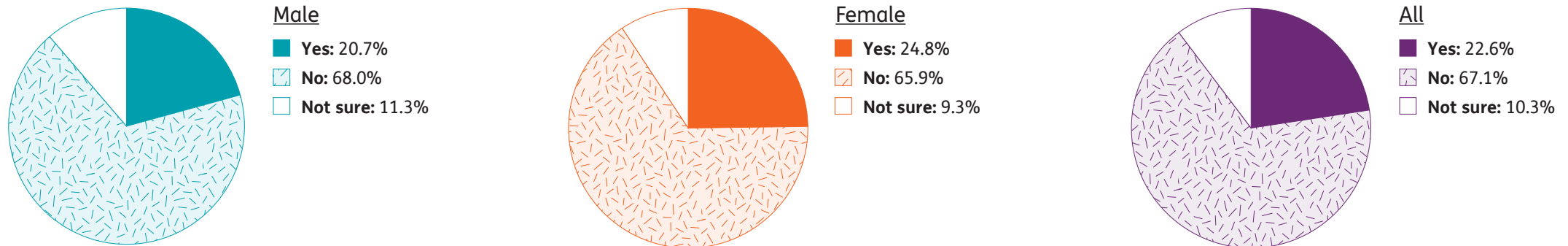
1 Australian population benchmark for this indicator is only available for those aged 14–15 and is presented on slide 72 along with the age graph.  
 2 The NDIS results are the percentage responding “yes” to the question, and those responding “not sure” are included in the denominator.  
 3 NDIS respondents each year are standardised to aggregate (all years and genders) NDIS respondent age distribution.

# Sexual health education (2/4)

## Cross-sectional outcomes – percentage offered education and support for sexual health Response options by gender

In 2022, **20.7%** of male NDIS participants and **24.8%** of female NDIS participants said they have received education and support for sexual health.

### Educated and supported for sexual health, 2022<sup>1</sup>– NDIS participants (unstandardised)



<sup>1</sup> The question wording is “Have you been offered education and support for sexual health?” and results are based on 2022 responses to the question. For those responding “Yes”, the offer of education or support may have occurred at any time prior to the response.

# Sexual health education (3/4)

## Cross-sectional outcomes – percentage offered education and support for sexual health By age group in 2022

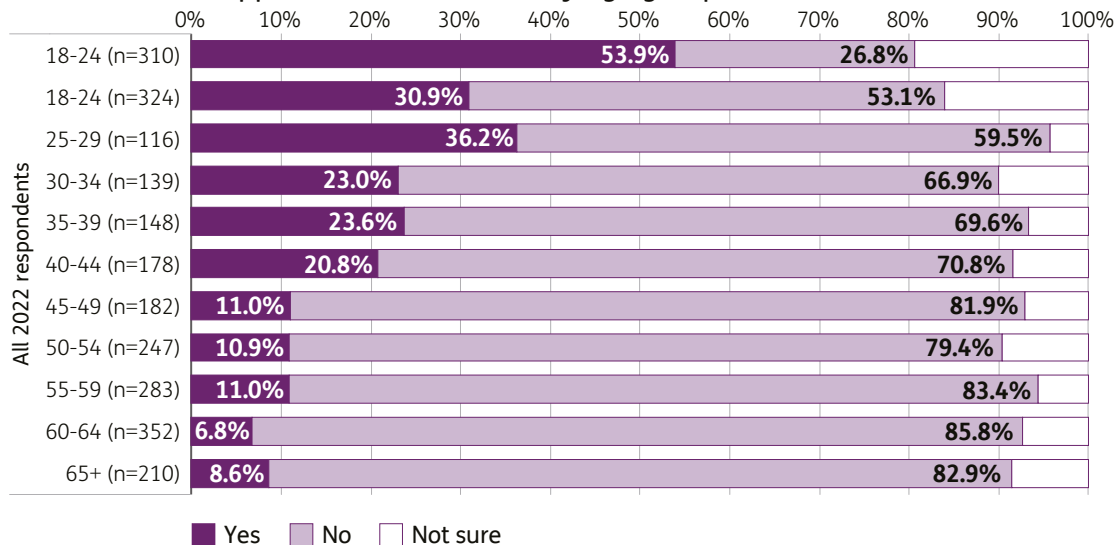
The percentage of NDIS participants who have been offered education and support is **higher** in the **younger age groups**. More than half (53.9%) of those aged 15 to 17, over 30% of those aged 18 to 29, and over 20% of those aged 30 to 44 said they had been offered education and support. The percentages reduced to around 11% for those aged 45–59 and below 10% for those 60 and over. However, participants aged 15 to 24 were more likely to respond “Not sure” to whether they have been offered education or support for sexual health.

For **age group 14 to 15** (right hand graph), a **higher** percentage of **female participants** said they had been offered education and support (73.2%) compared to male participants of the same age (67.4%).

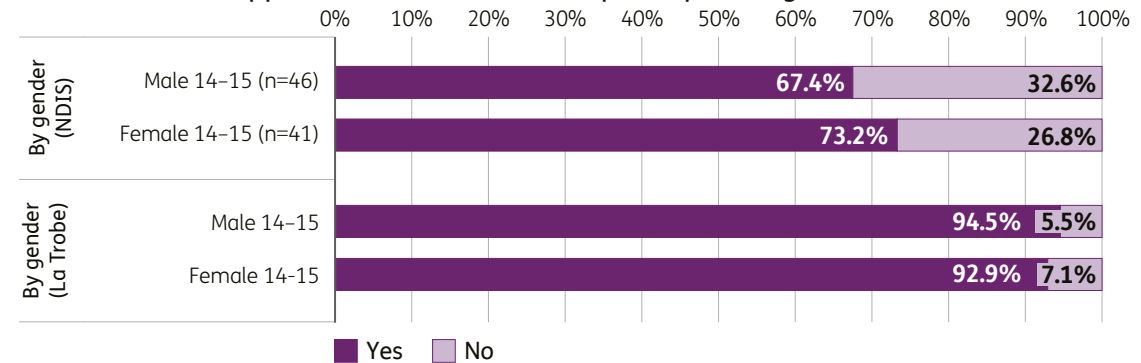
The population benchmark (bottom right) is from a survey of Year 8 and 9 students conducted by La Trobe University<sup>2</sup>. The percentage of **NDIS participants** aged 14 and 15 who said they had been offered education and support for sexual health is **lower than the Australian population** (by around 27 and 20 percentage points for males and females, respectively).

### Educated and supported for sexual health, 2022<sup>1</sup> – NDIS participants<sup>2,3</sup> (unstandardised, cont.)

Education and support for sexual health by age group



Education and support for sexual health for participants aged 14–15 vs La Trobe survey



1 The question wording is “Have you been offered education and support for sexual health?” and results are based on 2022 responses to the question. For those responding “Yes”, the offer of education or support may have occurred at any time prior to the response. Hence the decreasing trend with age may reflect a birth cohort effect (education/support may have been less widespread in the past) or recall bias.  
 2 Results for those aged 14 and 15 are compared against a La Trobe survey of sexual health among Australian secondary students: [ARCSHS\\_Aus Secondary Students and Sexual Health 2021\\_Print4.pdf](#) (teenhealth.org.au), and exclude participants responding “not sure”.  
 3 Caveat: La Trobe benchmark survey was undertaken in 2021, while the NDIS data for participants aged 14 to 15 is in 2022.

# Sexual health education (4/4)

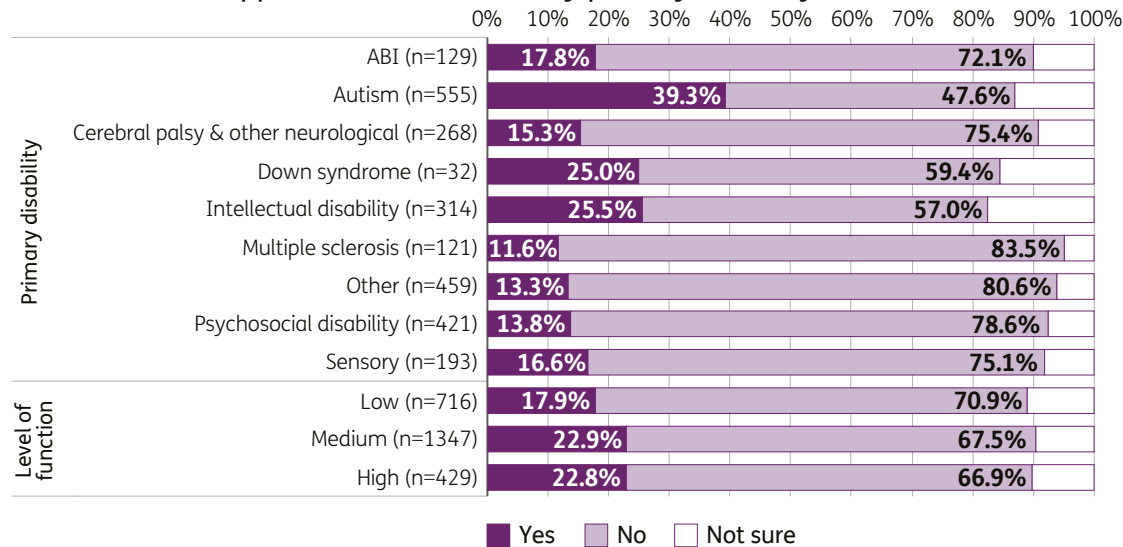
## Cross-sectional outcomes – percentage offered education and support for sexual health By disability type and level of function in 2022

Participants with **autism** have by far the **highest** percentage receiving education and support for sexual health, at 39.3%. This is possibly age-related as participants with autism are younger on average. This is **followed by** around 25% of those with **Down syndrome** or **intellectual disability**. The **lowest** percentage of those receiving support is among participants with **multiple sclerosis**, at 11.6%.

Just 17.9% of participants with a low level of function have been educated and support for sexual health, compared to almost 23% for those with a medium or high level of function.

### Educated and supported for sexual health, 2022<sup>1</sup> – NDIS participants (unstandardised, cont.)

#### Education and support for sexual health by primary disability and level of function



<sup>1</sup> The question wording is “Have you been offered education and support for sexual health?” and results are based on 2022 responses to the question. For those responding “Yes”, the offer of education or support may have occurred at any time prior to the response.

# Screenings (1/5)

## Cross-sectional outcomes – percentage screened for cervical/breast/prostate cancer By response year and gender

### Cervical cancer screening

There is a decrease in the percentage of NDIS females who have taken cervical screening (PAP test) in the last 12 months between 2016 and 2020. In 2017, the percentage of NDIS females who have taken a PAP test is similar to the Australian population.

In both 2021 and 2022, around 56% of NDIS females said had a cervical screening in the last 5 years, lower than the Australian population figure of 65% in 2021.

### Breast cancer screening

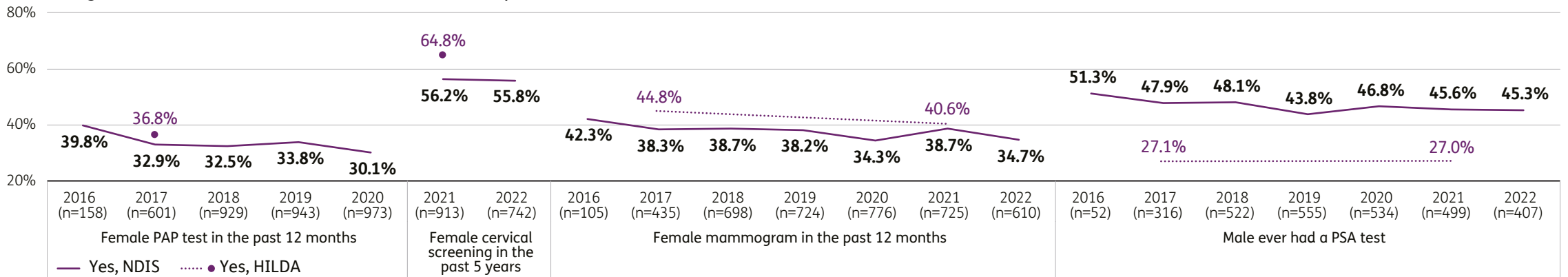
The percentage of NDIS females who have had a mammogram in the last 12 months has reduced slightly over time. In 2017 and 2021, the percentages of NDIS females screened for breast cancer are around 7 and 2 percentage points lower than the general population, respectively.

### Prostate cancer screening

The percentage of NDIS males who have had a PSA test has reduced between 2016 and 2022. In both 2017 and 2021, the percentage of NDIS males who responded “Yes” when asked whether they have had a PSA test was higher than the percentage of HILDA respondents who said they had had a prostate check in the last 12 months. The higher percentage is partly attributed to the different timeframe for the HILDA benchmark (12 months) compared to the implied “ever” for the NDIS question.

### Time series - NDIS participants compared to the Australian population<sup>1,2,3</sup> (age standardised)

Percentage screened for cervical cancer/breast cancer/prostate cancer



1 PAP test in 2016–2020, mammogram and PSA test are benchmarked against HILDA 2017 and 2021; cervical screening in 2021 and 2022 are benchmarked against AIHW.  
 2 The NDIS results are the percentage responding “yes” to the question, and those responding “not sure” are included in the denominator.  
 3 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years for the relevant gender) NDIS respondent age distribution.

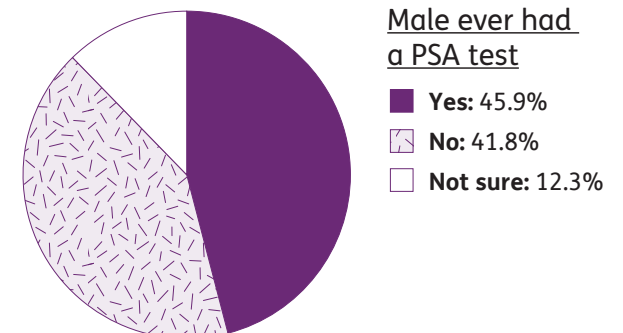
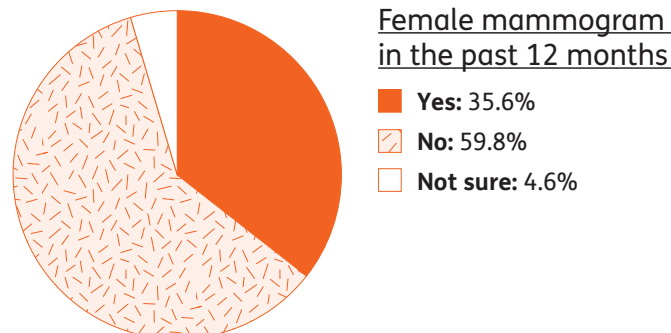
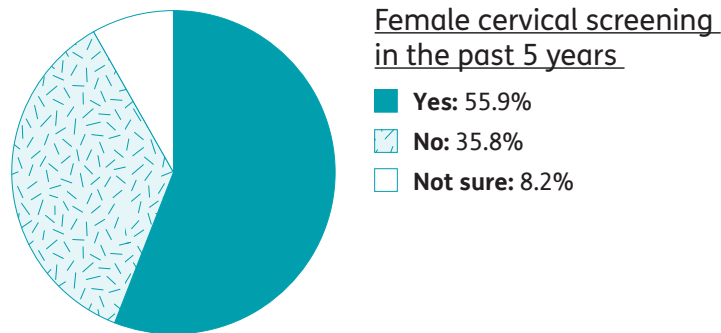
# Screenings (2/5)

## Cross-sectional outcomes – percentage screened for cervical/breast/prostate cancer Response options by gender

In 2022, **55.9%** of NDIS females over age 25 have had a cervical screening in the last 5 years; **35.6%** of NDIS females over age 40 have had a mammogram in the last 12 months.

In 2022, **45.9%** of NDIS males over age 50 have had a PSA test. Notably, **12.3%** (almost one in eight) of respondents cannot recall whether they have had a PSA test.

### Female cervical screening, female mammogram and male PSA test, 2022<sup>1</sup> NDIS participants (unstandardised)



<sup>1</sup> For PSA test, the question wording is “If you are a man over 50, have you had a PSA test?” and results are based on 2022 responses to the question. For those responding “Yes”, the test may have occurred at any time prior to the response. For the other two screening tests, the question asks about screening in the last five years for cervical screening and in the last 12 months for breast screening, as specified in the title of the respective graphs.

# Screenings (3/5)

## Cross-sectional outcomes – percentage screened for cervical/breast/prostate cancer By age group in 2022

### Cervical cancer screening

A lower percentage of female NDIS participants aged 25 to 29 have undertaken cervical screening in the last 5 years compared to older age groups. The recommended screening start age is 25<sup>1</sup>.

### Breast cancer screening

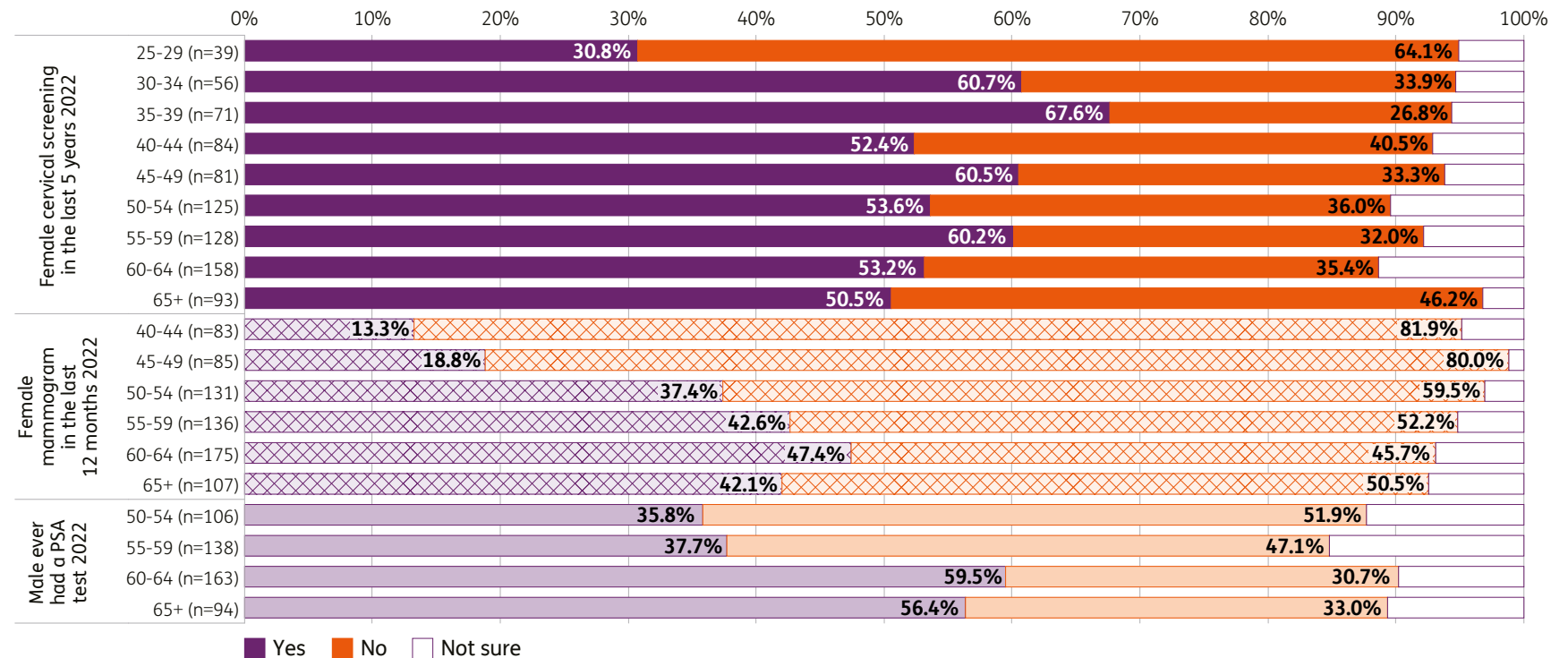
There is a large jump in the percentage of female participants who have had a mammogram in the last 12 months from age 50 compared to ages 40 to 49, this is in-line with the recommended mammogram start age of 50<sup>2</sup>.

### Prostate cancer screening

There is a jump in the percentage of male NDIS participants who have had a PSA test in the last 12 months from age group 55–59 (37.7%) to 60–64 (59.5%). The general recommended starting age for PSA screening is age 55<sup>3</sup>.

### Female cervical screening, female mammogram and male PSA test, 2022<sup>4</sup> – NDIS participants (unstandardised, cont.)

#### Screened for cervical cancer/breast cancer/prostate cancer by age group



1 Source: <https://www.health.gov.au/our-work/national-cervical-screening-program#:~:text=The%20National%20Cervical%20Screening%20Program,years%20through%20their%20healthcare%20provider>

2 Source: <https://www.cancer.org.au/mammogram>

3 Source: <https://www.cancercouncil.com.au/cancer-prevention/screening/reducing-your-risk-of-prostate-cancer/>

4 For PSA test, the question wording is “If you are a man over 50, have you had a PSA test?” and results are based on 2022 responses to the question. For those responding “Yes”, the test may have occurred at any time prior to the response. For the other two screening tests, the question asks about screening in the last five years for cervical screening and in the last 12 months for breast screening, as specified in the title of the respective graphs.



# Screenings (4/5)

## Cross-sectional outcomes – percentage screened for cervical/breast cancer By disability type and level of function in 2022

### Cervical cancer screening

Female participants with multiple sclerosis (68.6%) or a sensory disability were the most likely to say they have had cervical screening in the last 5 years. By contrast, only 41.0% of those with acquired brain injury said they have had screening, although a higher percentage of these participants were unsure.

Female participants with higher levels of function were more likely to say they have had a cervical screening in the last 5 years, and less likely to be unsure.

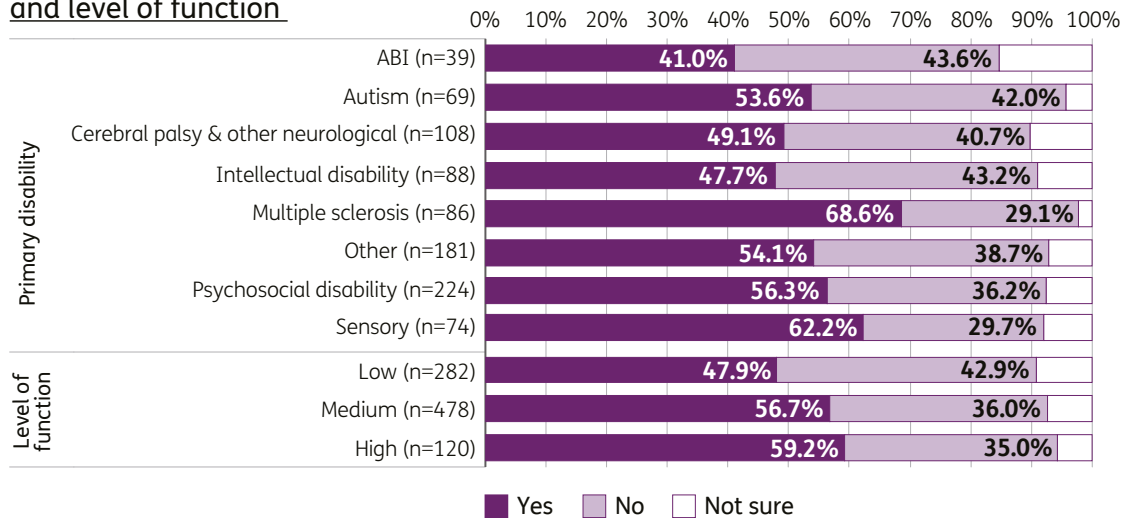
### Breast cancer screening

At least one-third of female participants aged 40 and over in each primary disability group said they have had a mammogram in the last 12 months, with the exception of ABI (29.7%) and autism (22.5%).

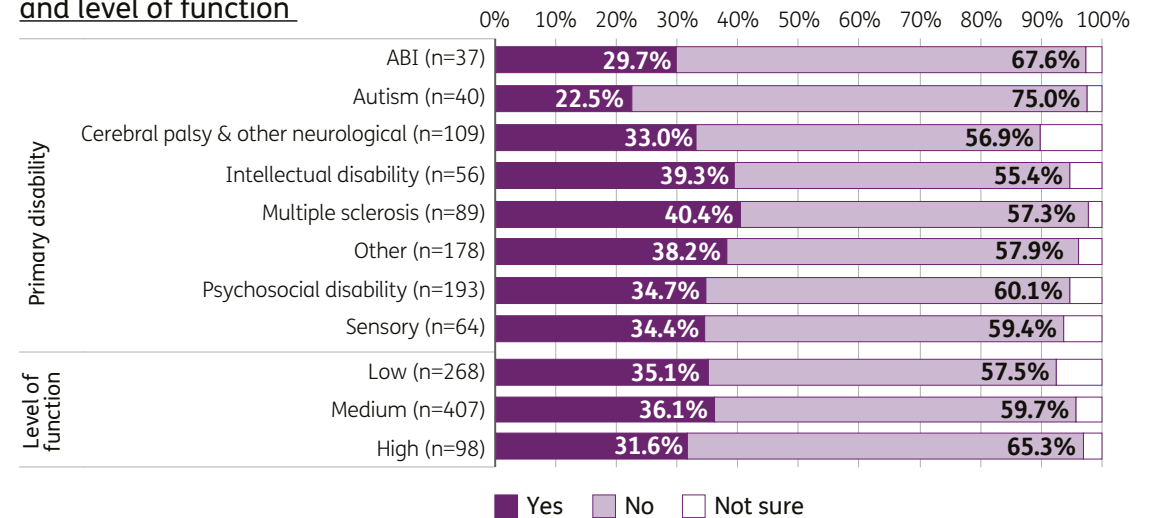
Female participants with high level of function were less likely to say they have had a mammogram in the last 12 months, and less likely to be unsure, compared to those with low or medium level of function.

### Female cervical screening, female mammogram in 2022 – NDIS participants (unstandardised, cont.)<sup>1</sup>

Female cervical screening in the last 5 years by primary disability and level of function



Female mammogram in the last 12 months by primary disability and level of function



<sup>1</sup> The cervical screening graph only includes female participants aged 25+; the mammogram graph only includes female participants aged 40+.

# Screenings (5/5)

## Cross-sectional outcomes – percentage screened for prostate cancer By disability type and level of function in 2022

### Prostate cancer screening<sup>1</sup>

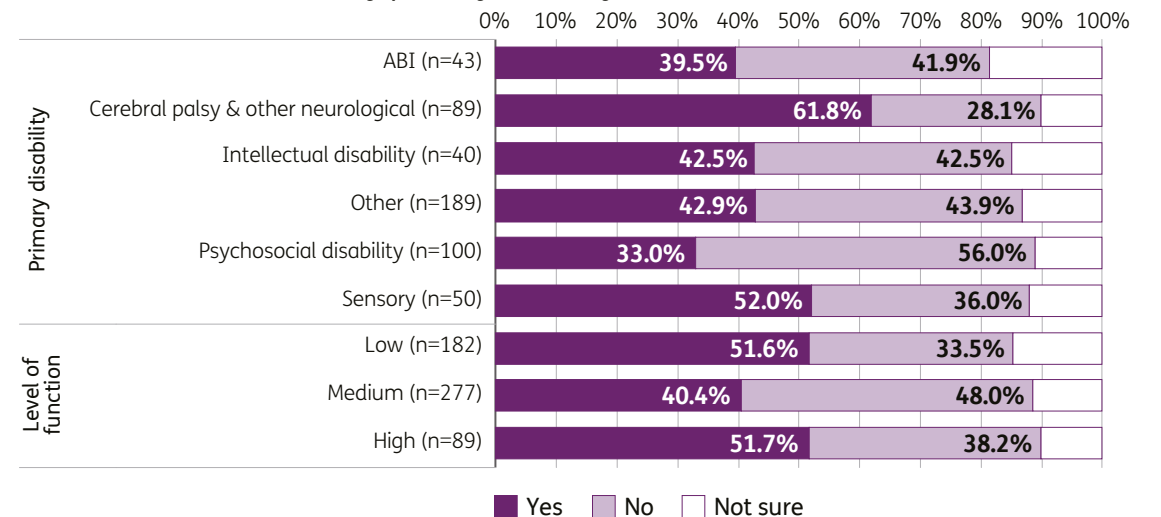
More than three-fifths (61.8%) of male participants aged 50 and over with primary disability of cerebral palsy/ other neurological disability have had a PSA test in the last 12 months.

By contrast, just under one-third (33.0%) with psychosocial disability have had screening.

A lower percentage of male participants with medium level of function have had a PSA test, compared to those with low or high level of function. Those with low level of function were more likely to be unsure.

### Male PSA test, 2022<sup>2</sup> – NDIS participants (unstandardised, cont.)<sup>3</sup>

#### Male ever had a PSA test by primary disability and level of function



1 Sample sizes for this indicator are quite small which may have impacted the reliability of these results.

2 The question wording is “If you are a man over 50, have you had a PSA test?” and results are based on 2022 responses to the question. For those responding “Yes”, the test may have occurred at any time prior to the response.

3 The graph on the left only includes male participants aged 50+.

3.3

Mental health

---

## Key statistics (1/2)



Outcome indicators	Males			Females			Kessler – BRS relationship	
	NDIS baseline compared to Australian population <sup>1,4,5,6</sup>	NDIS percentage at baseline <sup>2</sup>	Baseline to latest reassessment changes by cohort <sup>3</sup>	NDIS baseline compared to Australian population <sup>1,4,5,6</sup>	NDIS percentage at baseline <sup>2</sup>	Baseline to latest reassessment changes by cohort <sup>3</sup>	Baseline <sup>7</sup>	Trend <sup>7</sup>
Has high/very high psychological distress <sup>8</sup>	Much higher	22.8%	=↓=====	Much higher	31.4%	=↓=====	Higher distress ↔ lower resilience	Larger increase in distress ↔ larger decrease in resilience
Has normal/high resilience <sup>8</sup>	Not applicable	59.7%	↑=====↑=	Not applicable	52.7%	=====		

1 “Much Higher” if NDIS percentage is over 15 pp higher than the Australian population; “Notably Higher” if NDIS percentage is 5–15 pp higher than the Australian population; “Slightly Higher” if NDIS percentage is 2–5 pp higher than the Australian population; “Similar” if NDIS percentage is +/-2 pp of the Australian population; “Slightly Lower” if NDIS percentage is 2–5 pp lower than the Australian population; “Notably Lower” if NDIS percentage is 5–15 pp lower than the Australian population; “Much Lower” if NDIS percentage is over 15 pp lower than the Australian population.

2 All baseline entry years are aggregated.

3 Arrows denote the direction of percentage change from baseline to latest reassessment if the change is statistically significant; an equal sign denotes that the change is not significant; an “X” denotes the cohort is not graphed due to small numbers. Position in the text string represents time in the Scheme, ordered (left to right) from 1 to 6 years.

4 Comparisons are performed at the latest timepoint where the population benchmark is available.

5 The analysis only concerns participants aged 15 to 64. Baseline analysis is not applicable to participants aged 65 and over (only people under 65 are eligible to join the Scheme).

6 NDIS Long Form surveys are carried out in the second half of each calendar year and therefore do not necessarily coincide with survey times in the population benchmark.

7 Estimated Pearson correlation coefficient significantly different from zero at the 0.05 level.

8 Excludes participants who did not provide a valid response to all 6 constituent survey questions.

## Key statistics (2/2)

Modelled results <sup>1</sup>	Baseline		Trend (one-step)			
			Improvement		Deterioration	
	Strongest negative effect <sup>2</sup>	Strongest positive effect <sup>2</sup>	Least likely to improve <sup>2</sup>	Most likely to improve <sup>2</sup>	Least likely to deteriorate <sup>2</sup>	Most likely to deteriorate <sup>2</sup>
Has high/very high psychological distress	Primary disability: <b>Down syndrome</b>	Has secondary psychosocial disability: <b>Yes</b>	Not applicable (trend modelling not performed due to small numbers)			
Has normal/high resilience	Primary disability: <b>Autism</b>	Primary disability: <b>Down syndrome</b>	Not applicable (trend modelling not performed due to small numbers)			

<sup>1</sup> Amongst categorical variables with coefficient estimates significantly different from zero at the 0.05 level. Based on central estimates of the coefficients, without regard to precision of estimation. All the characteristics mentioned in this table are compared to their respective reference categories, which are specified on slides 84 and 89.

<sup>2</sup> The effect is considered “less likely” when the coefficient estimate is below 1 (less likely than the reference category); “more likely” when the coefficient estimate is above 1 (more likely than the reference category).

# Psychological distress (1/5)

## Baseline outcomes – percentage with high/very high psychological distress<sup>1</sup> By entry year and gender

At Scheme entry, higher proportions of female NDIS participants experience “high” or “very high” levels of psychological distress compared to male NDIS participants.

The proportion for NDIS participants is more than three times the proportion for the Australian population.

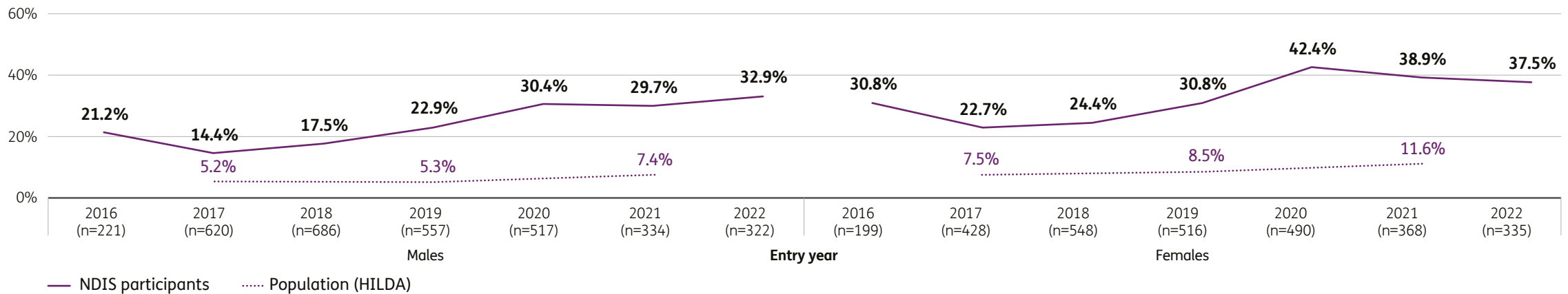
The proportion of NDIS participants experiencing “high” or “very high” levels at entry increased between 2017 and 2020, after which it levelled off (for males) or declined (for females).

An increase has also been observed for the Australian population between 2019 and 2021.

The increases may reflect the impact of the COVID-19 pandemic. For NDIS participants, the increase may also reflect the increasing proportion of participants entering with psychosocial disability.

### Time series: NDIS participants compared to HILDA (2017, 2019, 2021) (age standardised)<sup>2,3</sup>

#### Baseline: Percentage with high or very high level of psychological distress



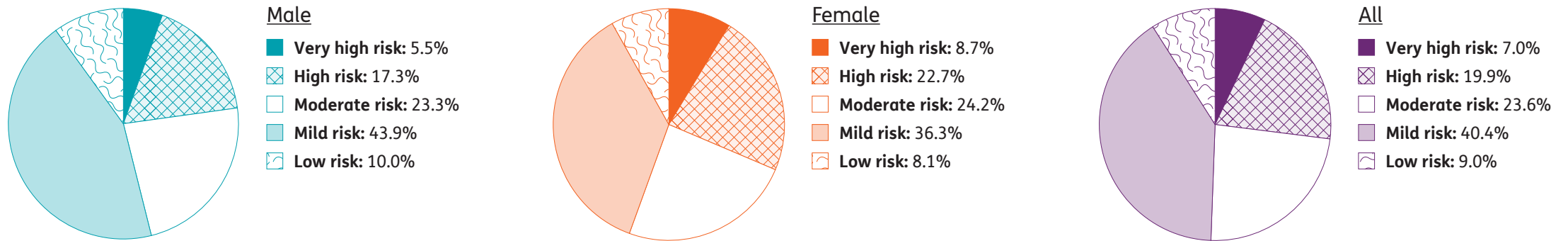
<sup>1</sup> Kessler 6 scores of 19 and above out of 30.  
<sup>2</sup> These results only include participants who responded to all six items contributing to the Kessler score calculation.  
<sup>3</sup> Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

# Psychological distress (2/5)

## Baseline outcomes – percentage with high/very high psychological distress Response options by gender

Overall, at Scheme entry, **22.8%** of male NDIS participants experienced “high” or “very high” levels of psychological distress, compared to **31.4%** of females.

### Psychological distress at baseline – NDIS participants<sup>1</sup> (unstandardised)

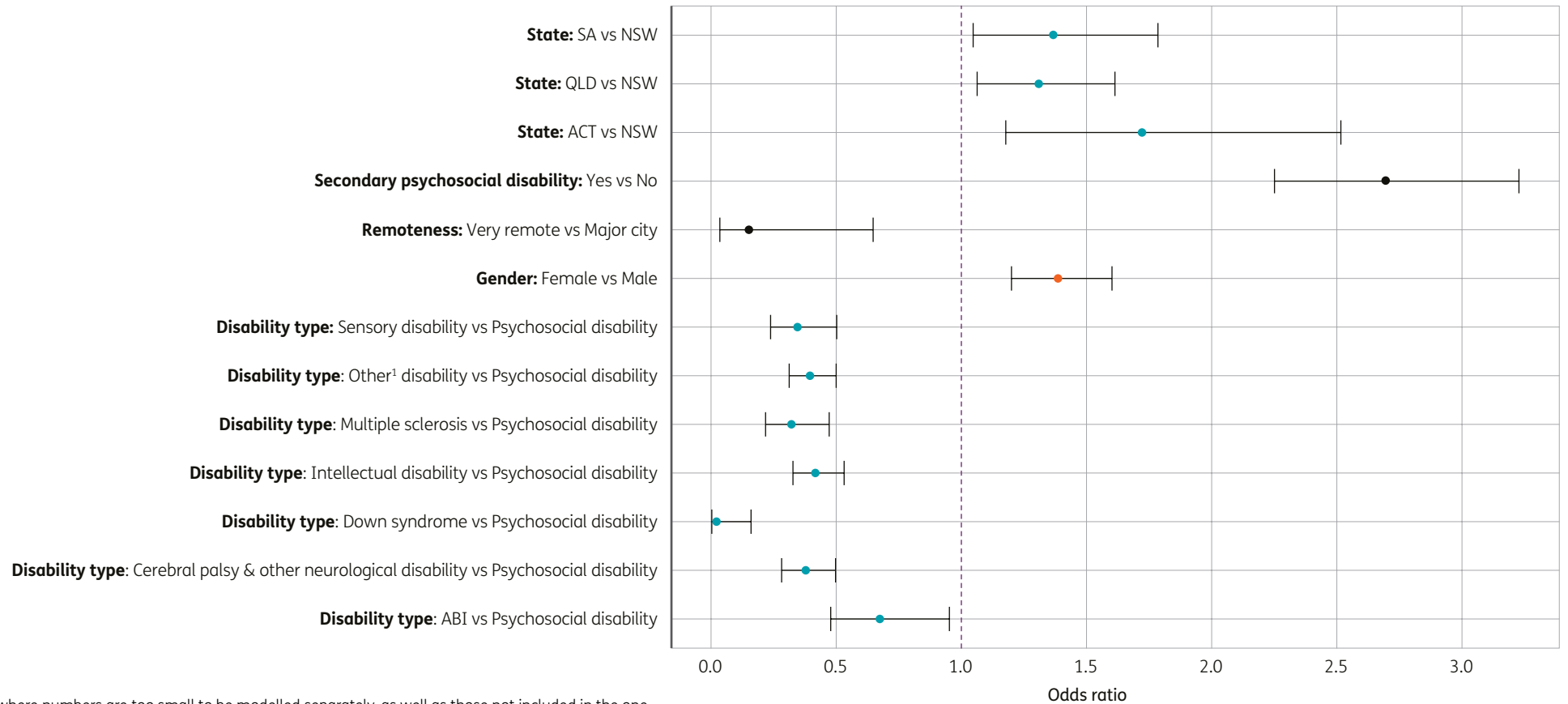


<sup>1</sup> These results only include participants who responded to all six items contributing to the Kessler score calculation.

# Psychological distress (3/5)

Baseline outcomes – percentage with high/very high psychological distress  
Modelling results and odds ratios

## Key drivers of NDIS participants with high/very high psychological stress (19 out of 30 or higher)



<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.



## Psychological distress (4/5)

### Baseline outcomes – percentage with high/very high psychological distress

#### Comments on modelled results

##### **Key drivers of NDIS participants with high/very high psychological stress (19 out of 30 or higher) cont.**

New NDIS participants with the following characteristics were **more likely** to experience “high” or “very high” levels of psychological distress:

- Living in SA, QLD, or ACT compared to those living in NSW
- Having a secondary psychosocial disability compared to those without a secondary psychosocial disability
- Female participants compared to male participants
- Having lower level of function (increasing trend with decreasing level of function)
- Entered the Scheme after the first COVID lockdown compared to those entering before.

Participants with the following characteristics were **less likely** to experience “high” or “very high” levels of psychological distress:

- Having primary disability that is not autism or psychosocial disability compared to having primary disability of psychosocial disability
- Living in a very remote area compared to those living in a major city.

# Psychological distress (5/5)

## Baseline outcomes – change in percentage with high/very high psychological distress<sup>1</sup> By longitudinal cohort and gender

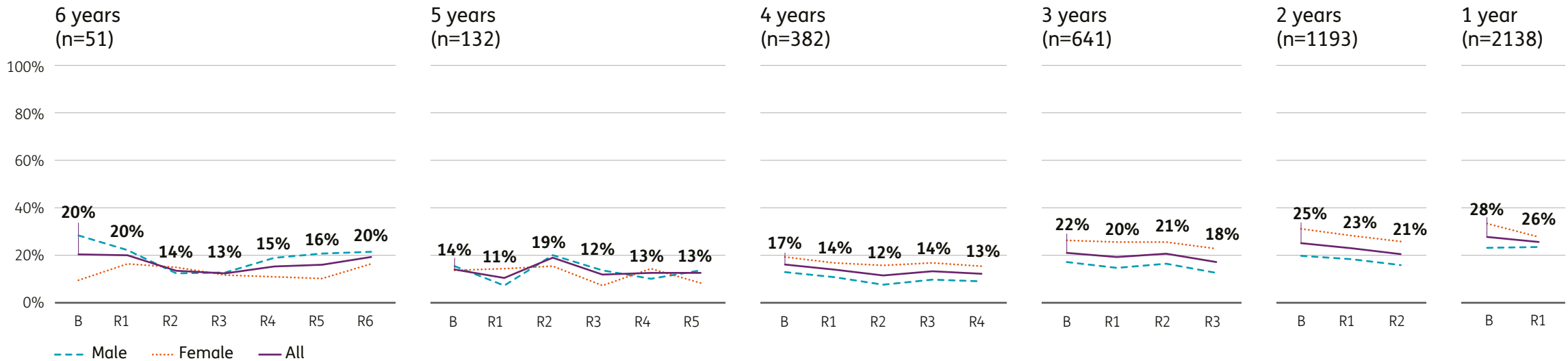
There is a decreasing trend (improvement) in the percentage of participants with high or very high risk of psychological distress across all cohorts. The trend is more consistent for the 1 to 4 year cohorts, with some volatility in the 5 and 6 year cohorts due to smaller numbers. For example, for the 4 year cohort, there was a 3.9 percentage point decrease from 16.7% to 12.9% between baseline and fourth reassessment.

A higher percentage of female participants reported high or very high psychological distress for most cohorts and time points compared to male participants.

The largest decrease between baseline and latest reassessment is for male participants over six years, with a decrease of 6.8 percentage points, from 28.6% to 21.7%.

The change between baseline and the latest reassessment is statistically significant for both males and females who have been in the Scheme for 2 years.

### Percentage of participants who have high or very high psychological distress (19 out of 30 or higher)<sup>2</sup>



<sup>1</sup> Due to small numbers, no trend modelling is performed on this indicator. The results presented only include participants who responded to all six items contributing to the Kessler psychological distress score calculation.

<sup>2</sup> Data labels displayed in the graph relate to the "All" series.

# Resilience (1/5)

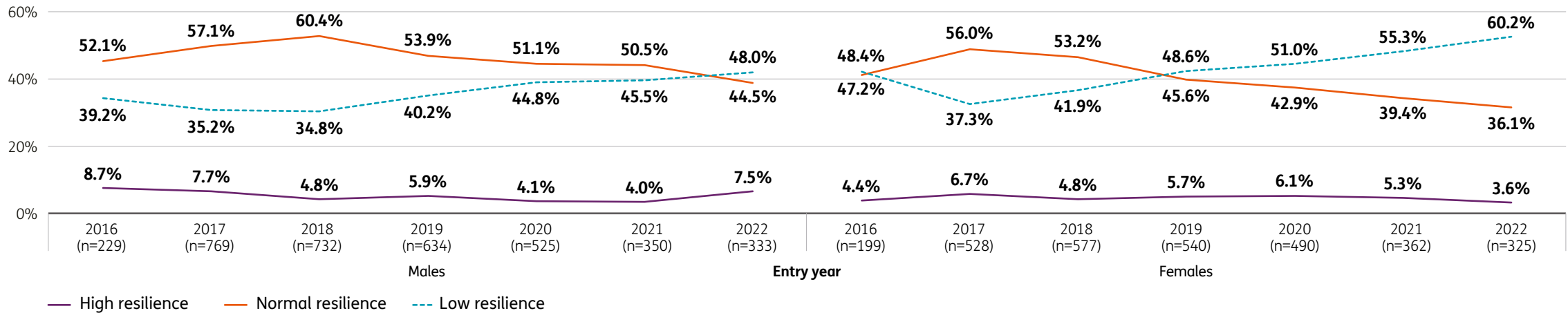
## Baseline outcomes – percentage with high, normal and low resilience score<sup>1</sup> By entry year and gender

Comparing over the years, there is a strong entry year effect. Since 2017 (females) or 2018 (males) there has been a steady decline in the proportion of new NDIS participants with Brief Resilience Scale (BRS) scores in the normal range and an increase in the proportion with scores in the low range.

Females are consistently less likely than males to have scores in the normal range, and more likely to have scores in the low range. From 2020, most female entrants have had scores in the low resilience range and the percentage has reached 60% for 2022.

### Time series: NDIS participants from 2016 to 2022 (age standardised)<sup>2,3,4</sup>

#### Baseline: Resilience level (measured by Brief Resilience Scale)



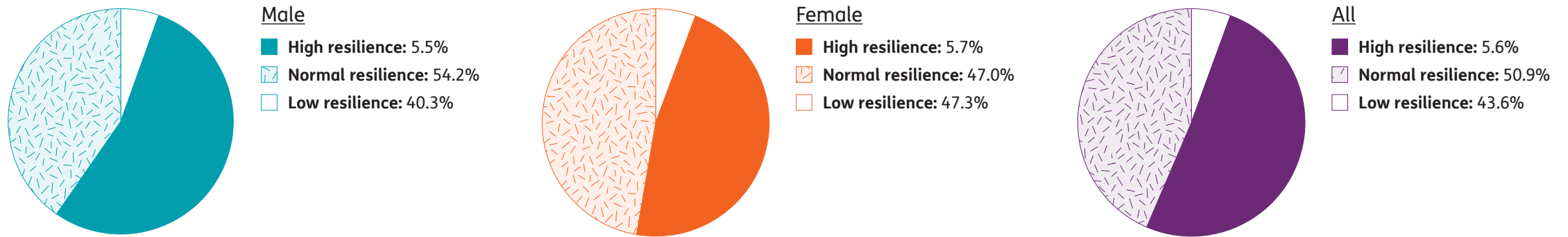
1 Brief Resilience Scale. A total score of less than 18 indicates low resilience, 18 to less than 25.86 normal resilience, and 25.86 to 30 high resilience.  
 2 These results only include participants who responded to all six items contributing to the Brief Resilience score calculation.  
 3 No Australian population benchmark is available for this indicator.  
 4 NDIS respondents each year are standardised to aggregate (all years and genders) NDIS respondent age distribution.

# Resilience (2/5)

Baseline outcomes – percentage with high, normal and low resilience score  
 Response options by gender

Overall, at Scheme entry, **40.3%** of NDIS males experience low resilience, compared to **47.3%** of females.

## Resilience at baseline – NDIS participants<sup>1</sup> (unstandardised)

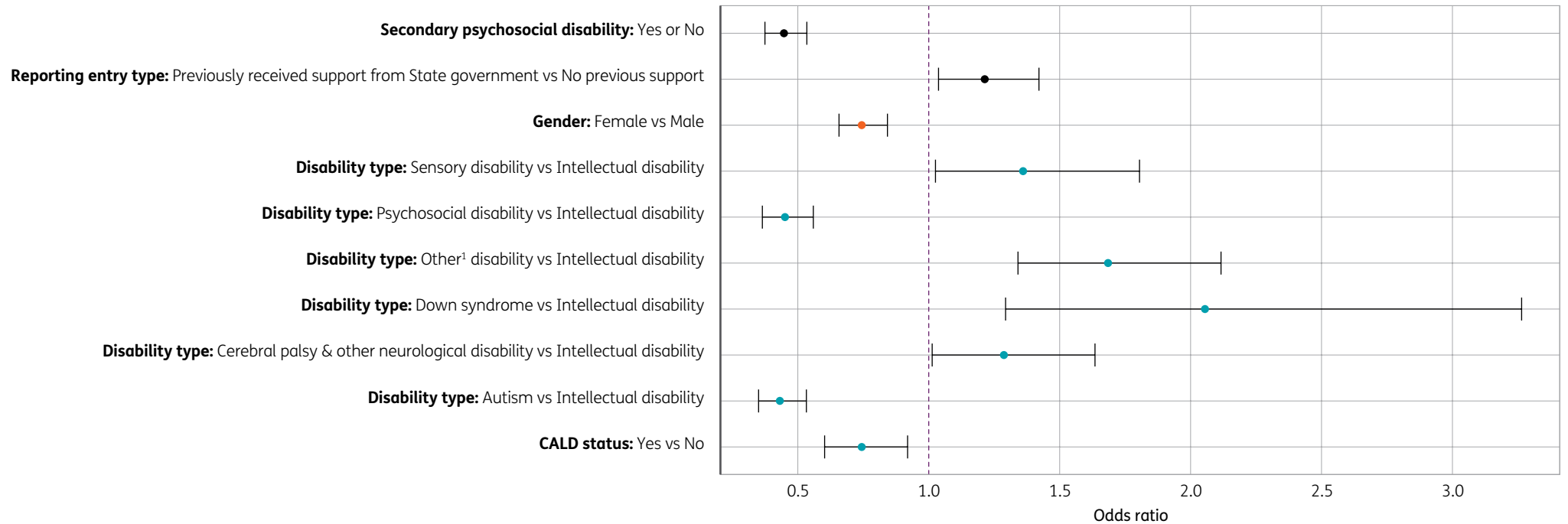


<sup>1</sup> These results only include participants who responded to all six items contributing to the Brief Resilience score calculation.

# Resilience (3/5)

Baseline outcomes – percentage with normal or high resilience score  
Modelling results and odds ratios

## Key drivers of NDIS participants with normal or high resilience score (18 out of 30 or higher)



<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Resilience (4/5)

### Baseline outcomes – percentage with normal or high resilience score Comments on modelled results

#### Key drivers of NDIS participants with normal or high resilience score (18 out of 30 or higher) cont.

Participants with the following characteristics are **more likely** to have normal to high resilience:

- Having primary disability of Down syndrome, a sensory disability, cerebral palsy and other neurological disabilities, or other disabilities, compared to having primary disability of intellectual disability
- Having previously received support from State government compared to those who have not
- Having higher age when first entering the Scheme (increasing trend with age).

Participants with the follow characteristics are **less likely** to have normal to high resilience:

- Having a secondary psychosocial disability compared to those without a secondary psychosocial disability
- Female compared to male
- Having primary disability of psychosocial disability or autism compared to having primary disability of intellectual disability
- Comes from a Culturally and Linguistically Diverse background compared to those who do not
- Having lower level of function (decreasing trend in resilience with decreasing level of function)
- For participants entering the Scheme after the end of second lockdown, those who entered on a later date.

# Resilience (5/5)

## Baseline outcomes – change in percentage with normal or high resilience score<sup>1</sup> By longitudinal cohort and gender

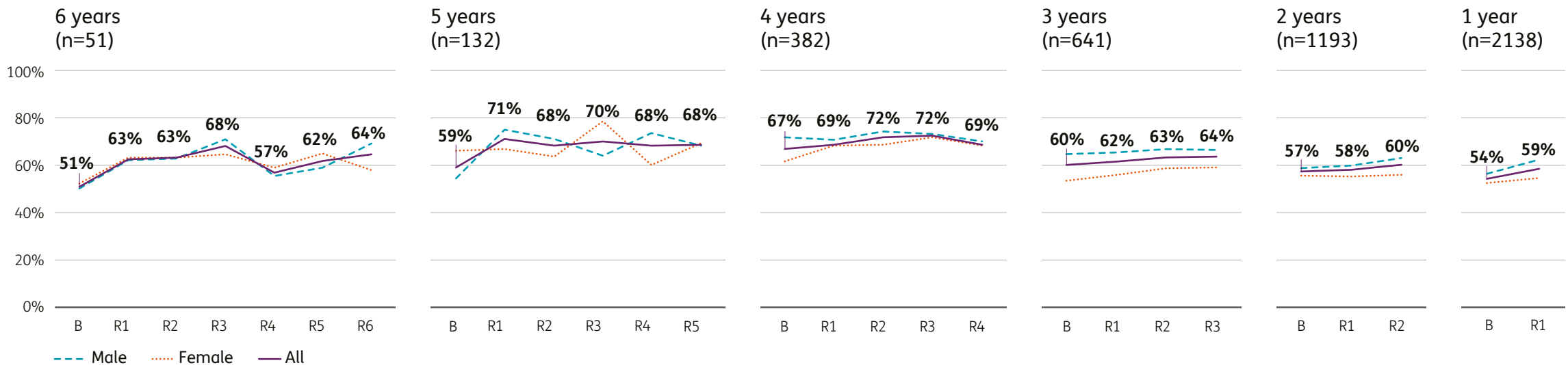
There is an increasing trend in the percentage of participants with normal to high resilience across all cohorts. After six years in the Scheme, there was a 13.5 percentage point increase from 51.0% to 64.4% with the largest increase of 11.5% at first reassessment.

For participants who have been in the Scheme for 1 to 4 years, higher percentages of males have normal to high resilience than females at all reassessment time points.

For most cohorts, males experience the largest increase over time, with an increase of 19.2 percentage points over six years from 50.0% to 69.2% and the largest increase of 12.1 percentage points at first reassessment.

The change between baseline and the latest reassessment is statistically significant for males who have been in the Scheme for 1 and 5 years.

### Percentage of participants who have normal or high resilience (18 out of 30 or higher)<sup>2</sup>



<sup>1</sup> Due to small numbers, no trend modelling is performed on this indicator. The results presented only include participants who responded to all six items contributing to the Brief Resilience score calculation.

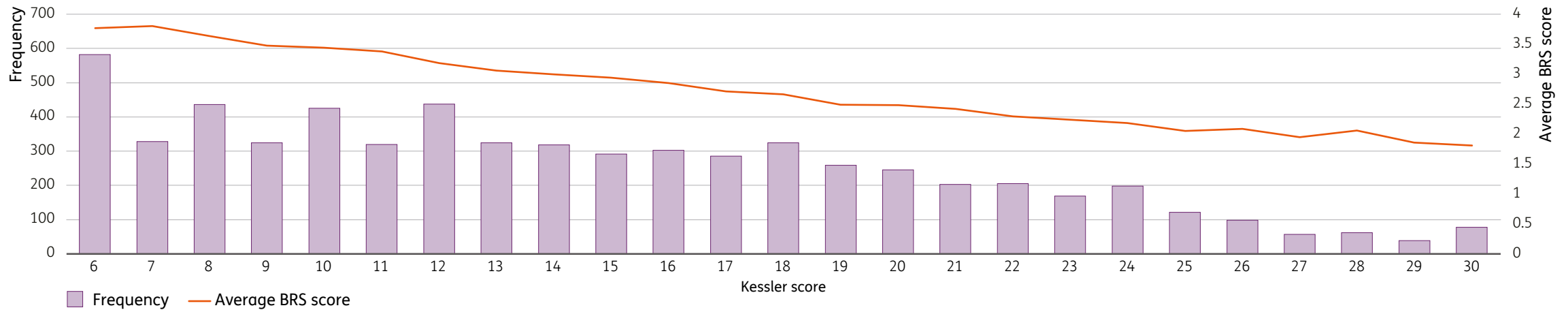
<sup>2</sup> Data labels displayed in the graph relate to the "All" series.

# Distress, resilience correlation (1/3)

## Baseline aggregates

At baseline, on average, the higher a participant's Kessler score, the lower their resilience score tends to be, which means high psychological distress is associated with low resilience.<sup>1</sup>

### Psychological distress vs resilience scores at baseline



<sup>1</sup> No causal relations are implied or measured in this analysis. The results should **not** be interpreted as saying that higher psychological distress **results** in lower resilience, or lower resilience **results in** higher psychological distress. They simply show average resilience level at each Kessler score.

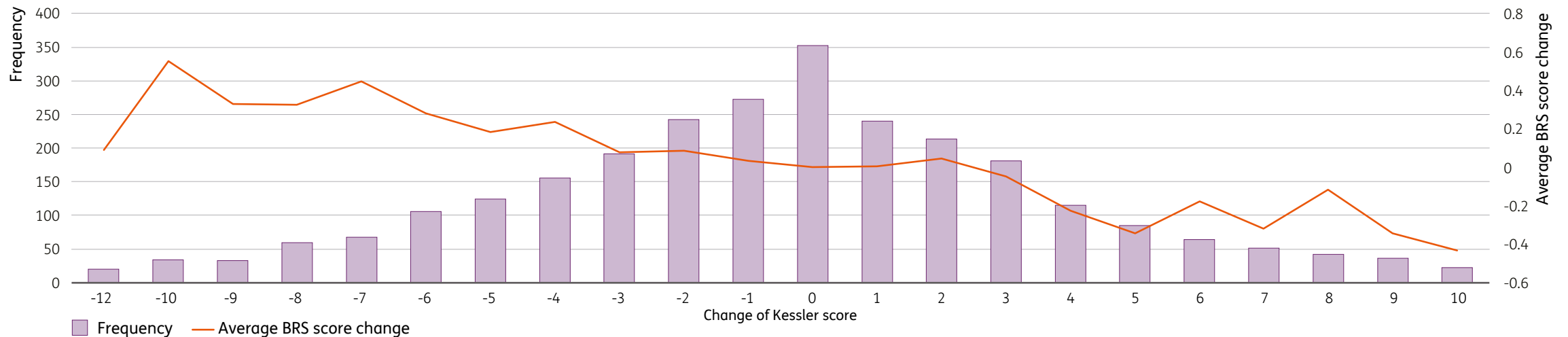


# Distress, resilience correlation (2/3)

## Longitudinal aggregates

Longitudinally, increases in Kessler scores tend to see more negative changes in resilience scores. This means that participants experiencing increased psychological distress tend to see their resilience falling.<sup>1</sup>

### Change in psychological distress vs resilience scores longitudinally<sup>2</sup>



1 No causal relations are implied or measured in this analysis. The results should **not** be interpreted as saying that greater increases in psychological distress **result in** greater decreases in resilience, or greater decreases in resilience **result in greater** increases in psychological distress. They simply show average changes in resilience level at each change in Kessler score.

2 This analysis does not control for time in Scheme and combines all results from baseline to latest reassessment regardless of time in Scheme.

# Distress, resilience correlation (3/3)

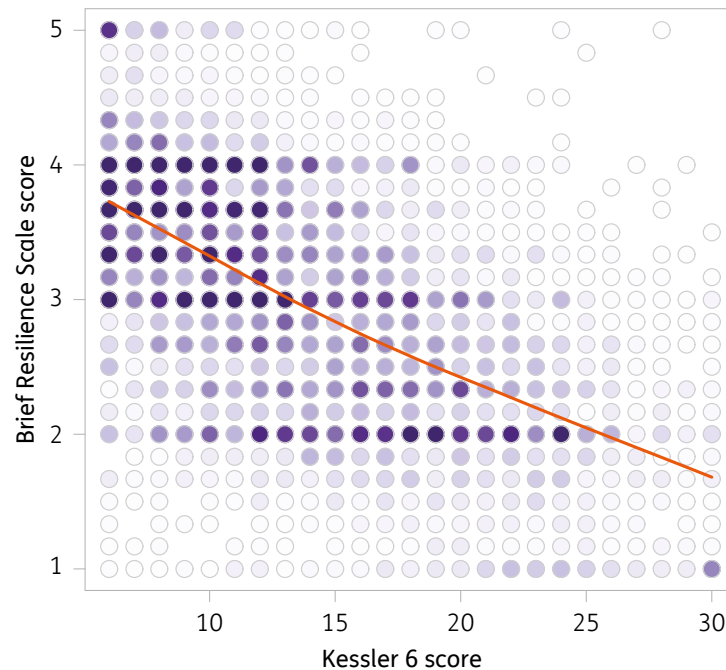
## Baseline and longitudinal scatter plots

These two scatter plots use the darkness of dots to denote the number of observations. The darker the dot, the more observations are associated with that dot. These two plots provide an alternative view to the charts on the previous slide.

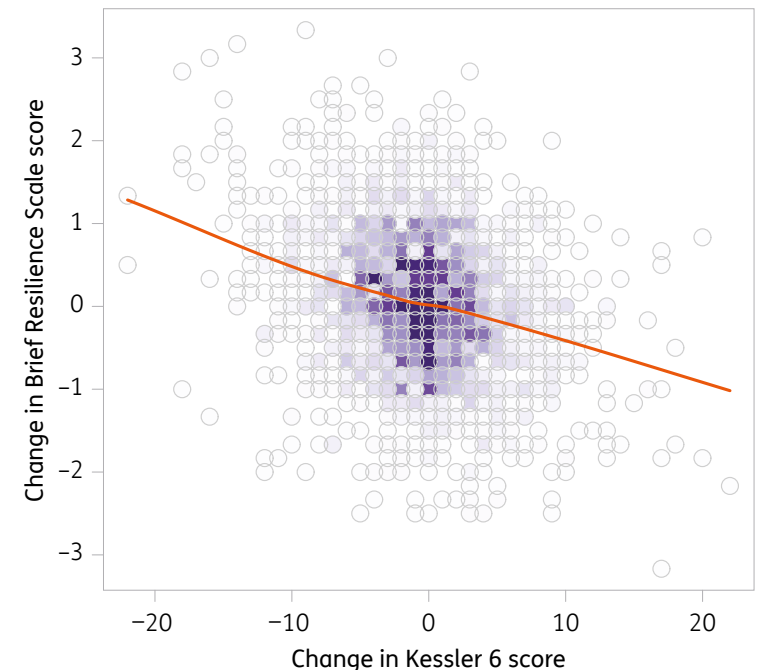
In the baseline (left-hand) plot, lower Kessler 6 scores have Brief Resilience Scores (BRS) concentrated between 3 and 4, while higher Kessler 6 scores have BRS scores concentrated towards 2. The non-parametric smooth curve<sup>1</sup> confirms the association between higher psychological distress and lower mental resilience. The estimated correlation coefficient is  $-0.61$  (significantly different from zero at the 0.05 level).

Longitudinally, most participants experienced little or no change in Kessler and resilience scores. Nevertheless, the fitted curve<sup>1</sup> indicates a negative relationship between change in psychological distress and change in mental resilience, and the estimated correlation coefficient is  $-0.25$  (significantly different from zero at the 0.05 level).

**Baseline distress vs resilience scores**



**Longitudinal distress vs resilience score changes<sup>2</sup>**



<sup>1</sup> Fitted using loess (locally estimated scatterplot smoothing) regression.

<sup>2</sup> This analysis does not control for time in Scheme and combines all results from baseline to latest reassessment regardless of time in Scheme.

3.4

Health services

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# Key statistics (1/3)

## Self-reported outcomes framework data

Outcome indicators	Males			Females		
	NDIS baseline compared to Australian population <sup>1,4,5</sup>	NDIS percentage at baseline <sup>2</sup>	Baseline to latest reassessment changes by cohort <sup>3</sup>	NDIS baseline compared to Australian population <sup>1,4,5</sup>	NDIS percentage at baseline <sup>2</sup>	Baseline to latest reassessment changes by cohort <sup>3</sup>
Satisfied with health services <sup>6,7</sup>	Not applicable	87.7%	=====	Not applicable	86.6%	=====
Have been to the hospital in the last 12 months	Much higher	40.2%	↓↓↓↓↓↓	Much higher	45.8%	↓↓↓↓↓↓
Have a doctor to see on a regular basis	Much higher	83.0%	↑↑↑↑↑↑	Notably higher	87.8%	↑↑↑↑↑↑
Have encountered difficulty accessing health services	Not applicable	34.0%	↓↓↓↓↓↓	Not applicable	59.2%	↓↓↓↓↓↓

1 “Much Higher” if NDIS percentage is over 15 pp higher than the Australian population; “Notably Higher” if NDIS percentage is 5–15 pp higher than the Australian population; “Slightly Higher” if NDIS percentage is 2–5 pp higher than the Australian population; “Similar” if NDIS percentage is +/-2 pp of the Australian population; “Slightly Lower” if NDIS percentage is 2–5 pp lower than the Australian population; “Notably Lower” if NDIS percentage is 5–15 pp lower than the Australian population; “Much Lower” if NDIS percentage is over 15 pp lower than the Australian population.

2 All baseline entry years are aggregated.

3 Arrows denote the direction of percentage change from baseline to latest reassessment if the change is statistically significant; an equal sign denotes that the change is not significant; an “X” denotes the cohort is not graphed due to small numbers. Position in the text string represents time in the Scheme, ordered (left to right) from 1 to 6 years.

4 Comparisons are performed at the latest timepoint where the population benchmark is available.

5 The analysis only concerns participants aged 15 to 64. Baseline analysis is not applicable to participants aged 65 and over (only people under 65 are eligible to join the Scheme).

6 NDIS Long Form surveys are carried out in the second half of each calendar year and therefore do not necessarily coincide with survey times in the population benchmark.

7 Excludes participants who did not receive healthcare in the last 12 months.

# Key statistics (2/3)

## Self-reported outcomes framework data cont.

Modelled results <sup>1</sup>	Baseline		Trend (one-step)			
			Improvement		Deterioration	
	Strongest negative effect <sup>2</sup>	Strongest positive effect <sup>2</sup>	Least likely to improve <sup>2</sup>	Most likely to improve <sup>2</sup>	Least likely to deteriorate <sup>2</sup>	Most likely to deteriorate <sup>2</sup>
Satisfied with health services	Primary disability: <b>Autism</b>	Primary disability: <b>Down syndrome</b>	Not applicable (trend modelling not performed due to small numbers)			
Have been to the hospital in the last 12 months	Primary disability: <b>Down syndrome</b>	Primary disability: reported as “ <b>Other</b> ” <sup>3</sup>	Primary disability: reported as “ <b>Other</b> ” <sup>3</sup>	Has been in residential aged care before age 65: <b>Yes</b>	Primary disability: <b>Autism</b>	Primary disability: reported as “ <b>Other</b> ” <sup>3</sup>
Have a doctor to see on a regular basis	Remoteness: <b>Very remote</b>	Age group: <b>60–64</b>	Has been in residential aged care before age 65: <b>Yes</b>	Primary disability: <b>Multiple sclerosis</b>	Age group: <b>65+</b>	Utilisation of the previous plan budget: <b>0–20%</b>
Have encountered difficulty accessing health services	Primary disability: <b>Down syndrome</b>	Has secondary psychosocial disability: <b>Yes</b>	Age group: <b>45–49</b>	Has been in residential aged care before age 65: <b>Yes</b>	Has been in residential aged care before age 65: <b>Yes</b>	Remoteness: <b>Remote/very remote</b>

1 Amongst categorical variables with coefficient estimates significantly different from zero at the 0.05 level. Based on central estimates of the coefficients, without regard to precision of estimation.

All the characteristics mentioned in this table are compared to their respective reference categories, which are specified on slides 102, 107, 111, 115, 118, 122, 126.

2 The effect is considered “less likely” when the coefficient estimate is below 1 (less likely than the reference category); “more likely” when the coefficient estimate is above 1 (more likely than the reference category).

3 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

# Key statistics (3/3)

## PLIDA FY2021–22 data linkage results

Metrics	Males		Females		By age group <sup>4</sup>		By disability <sup>4</sup>	
	Compared to Australian population <sup>1,2,3</sup>	NDIS results FY2021/22 <sup>2</sup>	Compared to Australian population <sup>1,2,3</sup>	NDIS results FY2021/22 <sup>2</sup>	Lowest	Highest	Lowest	Highest
Proportion accessing Medicare-subsidised GP services	Notably higher	91.4%	Slightly higher	94.7%	7–14 (88.8%)	65+ (98.1%)	Other sensory/speech (84.4%)	Multiple sclerosis (98.8%)
Average number of Medicare-subsidised GP services accessed <sup>5</sup>	+2	9	+3	12	Not applicable	Not applicable	Other sensory/speech (5)	Psychosocial disability (19)
Proportion accessing Medicare-subsidised Allied health services	Similar	32.7%	Similar	44.2%	0–6 (23.4%)	65+ (61.8%)	Global developmental delay (22.0%)	Multiple sclerosis (60.1%)
Average number of Medicare-subsidised Allied health services accessed <sup>5</sup>	+2	3	+1	4	Not applicable	Not applicable	Other sensory/speech (2)	Psychosocial disability (4)
Proportion accessing Medicare-subsidised Mental health services	Notably higher	17.3%	Notably higher	25.5%	0–6 (7.1%)	35–44 (31.9%)	Global developmental delay (5.7%)	Psychosocial disability (47.5%)
Average number of Medicare-subsidised Mental health services accessed <sup>5</sup>	+1	5	+2	7	Not applicable	Not applicable	Global developmental delay (3)	Psychosocial disability (9)

- 1 “Much Higher” if NDIS percentage is over 15 pp higher than the Australian population; “Notably Higher” if NDIS percentage is 5–15 pp higher than the Australian population; “Slightly Higher” if NDIS percentage is 2–5 pp higher than the Australian population; “Similar” if NDIS percentage is +/- 2 pp of the Australian population; “Slightly Lower” if NDIS percentage is 2–5 pp lower than the Australian population; “Notably Lower” if NDIS percentage is 5–15 pp lower than the Australian population; “Much Lower” if NDIS percentage is over 15 pp lower than the Australian population.
- 2 In the “Compared to Australian population” columns, the “+” sign denotes that on average, NDIS participants access these services more frequently than the Australian population by the number that follows; number of visits are rounded to the nearest whole numbers. Differences are calculated from these rounded whole numbers.
- 3 Comparisons are performed for FY2021–22.
- 4 Results by age and disability presented here are one-ways and do not control for other factors.
- 5 Average number of services accessed are based on those individuals accessing that particular service at least once in FY 2021–22.

## 3.4.1

Health service access and utilisation by NDIS participants, NDIS Outcomes Framework

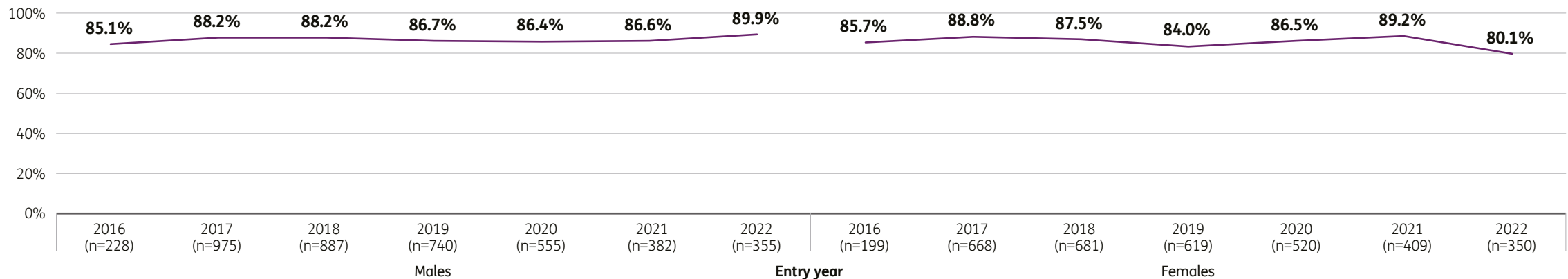
# Satisfaction with health services (1/5)

## Baseline outcomes – percentage satisfied with health services<sup>1</sup> By entry year and gender

At Scheme entry, the proportion of new NDIS participants satisfied with health services they received in the last 12 months remains high and steady for both males (85%–90%) and females (80%–89%).

### Time series: NDIS participants from 2016 to 2022 (age standardised)<sup>2,3</sup>

#### Baseline: Percentage satisfied with health services



n = represents the number of NDIS participants responded to the LFOF survey

1 These results exclude participants who did not receive health services or healthcare in the last 12 months.  
 2 No Australian population benchmark is available for this indicator.  
 3 NDIS respondents each year are standardised to aggregate (all years and genders) NDIS respondent age distribution.



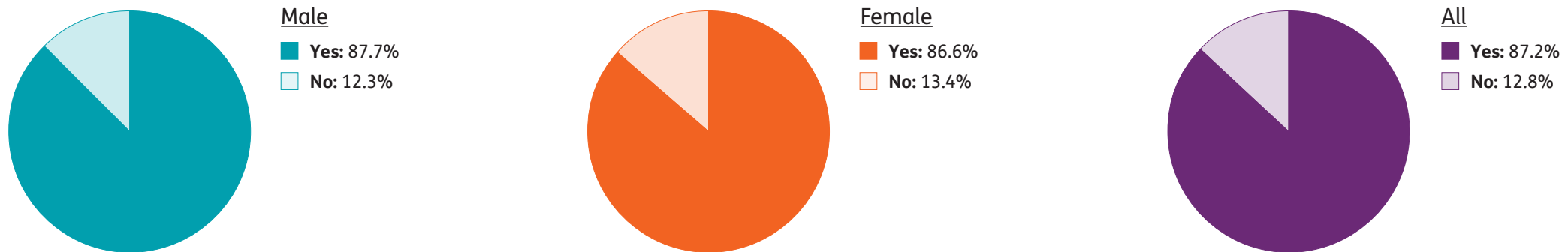
## Satisfaction with health services (2/5)

Baseline outcomes – percentage satisfied with health services

Response options by gender

Overall, **87.7%** of NDIS males say they are satisfied with health services they received in the last 12 months, compared to **86.6%** of females.

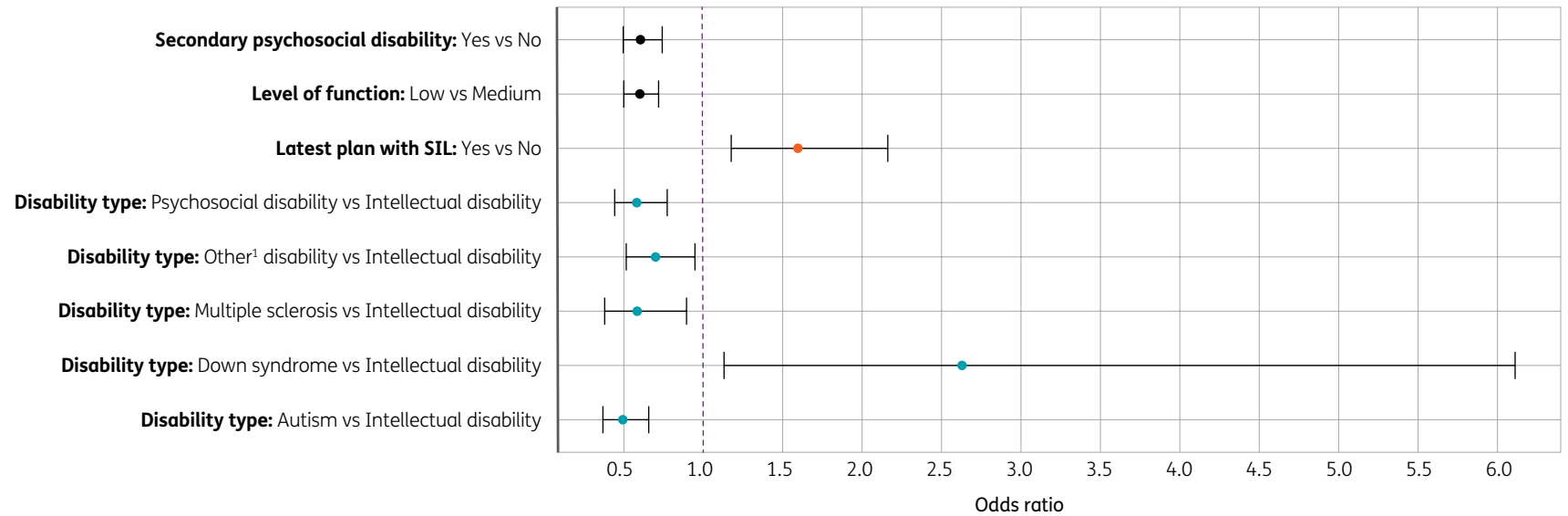
### Health service satisfaction at baseline – NDIS participants (unstandardised)



# Satisfaction with health services (3/5)

Baseline outcomes – percentage satisfied with health services  
Modelling results and odds ratios

## Key drivers of NDIS participants being satisfied with health services received in the last 12 months



<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Satisfaction with health services (4/5)

### Baseline outcomes – percentage satisfied with health services

#### Comments on modelled results

##### Key drivers of NDIS participants being satisfied with health services received in the last 12 months cont.

Participants with the following characteristics are **more likely** to say they are satisfied with the health services they received in the last 12 months:

- Having primary disability of Down syndrome compared to having primary disability of intellectual disability
- Having SIL funding in the latest plan compared to those without.

Participants with the following characteristics are **less likely** to say they are satisfied with the health services they receive in the last 12 months:

- Having a secondary psychosocial disability compared to those without a secondary psychosocial disability
- Having low level of function compared to having medium level of function
- Having primary disability of psychosocial disability, multiple sclerosis, autism, or a disability in the “other”<sup>1</sup> group compared to having primary disability of intellectual disability.

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

# Satisfaction with health services (5/5)

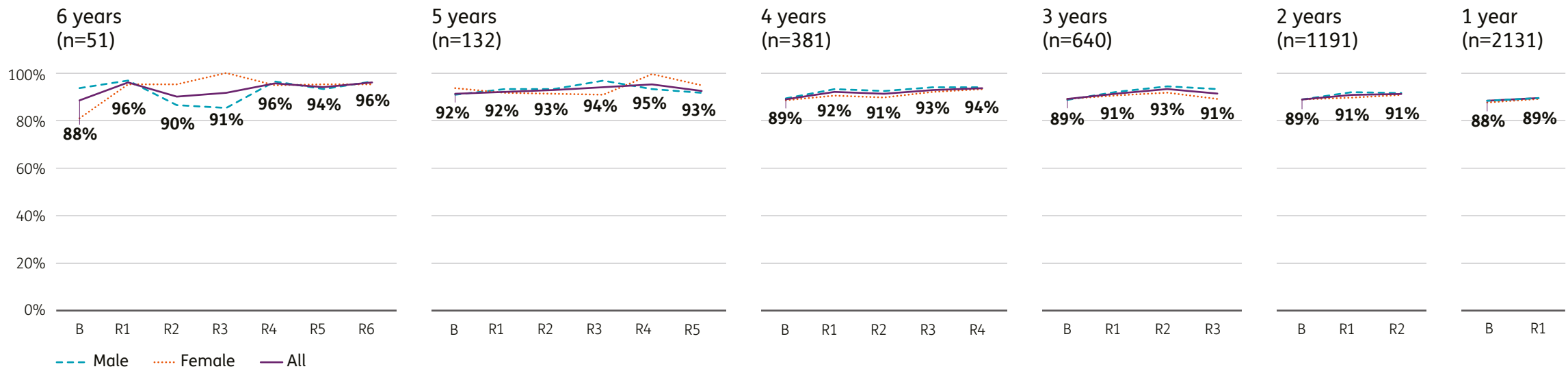
## Longitudinal outcomes – change in percentage satisfied with health services<sup>1</sup> By longitudinal cohort and gender

Of those who have received health services in the last 12 months, there is a slight increasing trend in the percentage who are satisfied with the treatment and care they receive from those services across all cohorts. After six years in the Scheme, there was a 7.5 percentage point increase from 88.2% to 95.7% with the largest increase of 7.8% at first reassessment.

The largest increase over time is associated with female group for cohort 6, with an increase of 14.0 percentage points over six years from 81.0% to 95.0% and the largest increase of 14.0% at first reassessment.

However, those changes are not statistically significant for either gender who have been in the Scheme for 1 to 6 years.

### Percentage of participants satisfied with health services received in the last 12 months<sup>2</sup>



<sup>1</sup> Due to small numbers, no trend modelling is performed on this indicator. The results presented exclude participants who did not receive health services or healthcare in the last 12 months.

<sup>2</sup> Data labels displayed in the graph relate to the "All" series.

# Hospital visits (1/8)

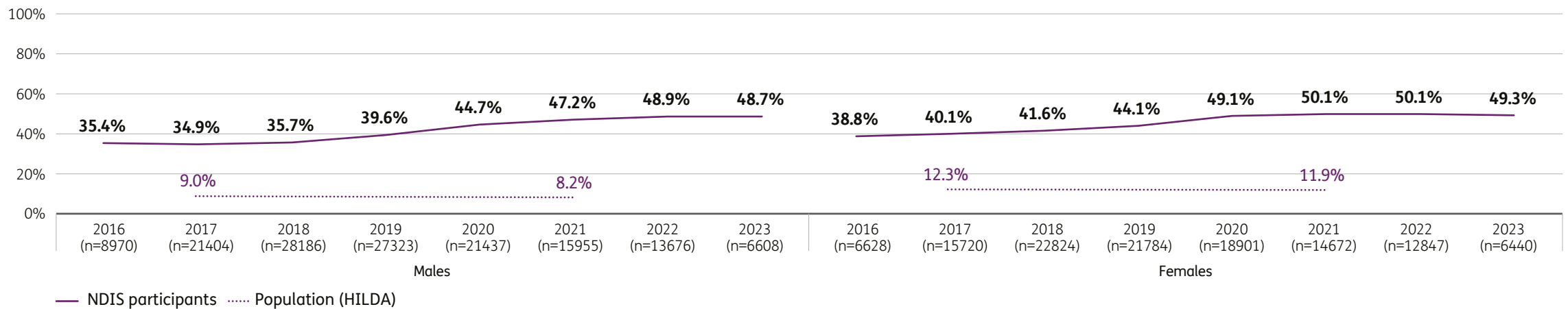
## Baseline outcomes – percentage visiting the hospital in the last 12 months By entry year and gender

Higher proportions of new NDIS participants have been to the hospital in the last 12 months compared to the Australian population. The proportion is higher for females than males.

Additionally, the proportion who have been to hospital has been increasing for new NDIS participants between 2016 and 2022, while the proportion remains significantly lower and stable for the Australian population between 2017 and 2021.

### Time series: NDIS participants compared to HILDA (2017, 2021) (age standardised)<sup>1</sup>

#### Baseline: Percentage have been in the hospital in the last 12 months



<sup>1</sup> Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

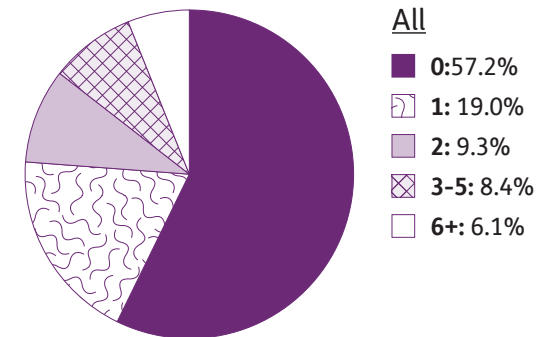
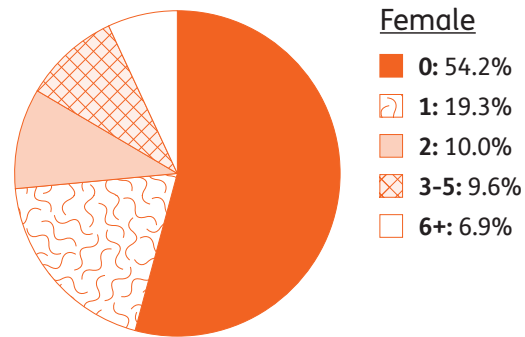
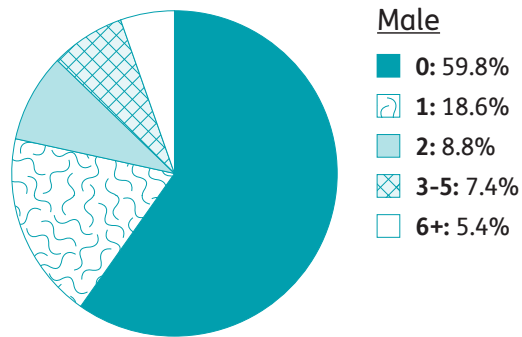
# Hospital visits (2/8)

Baseline outcomes – percentage visiting the hospital in the last 12 months

Response options by gender

At Scheme entry, **40.2%** of NDIS males have been to the hospital in the last 12 months, compared to **45.8%** of NDIS females.

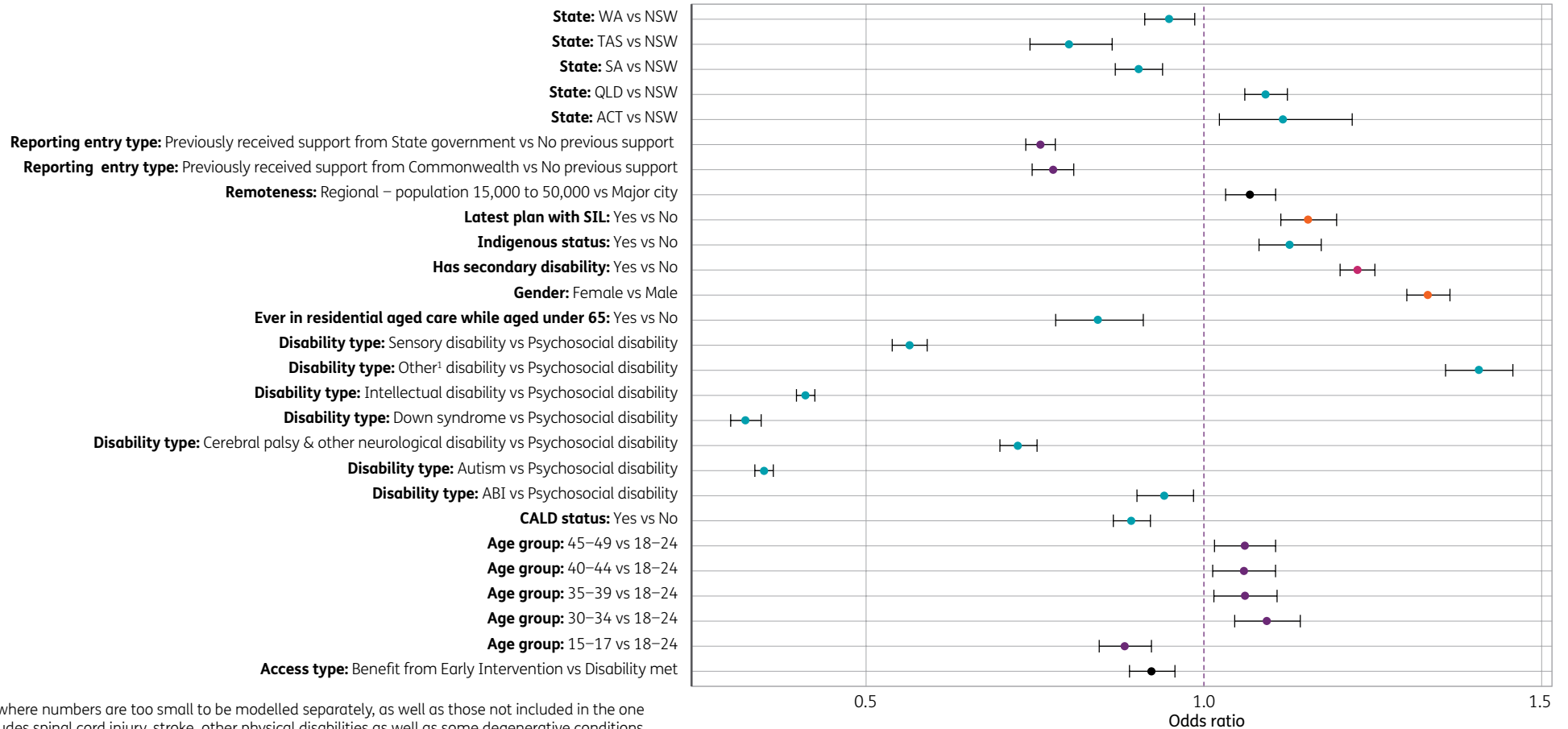
## Hospital visits in the last 12 months at baseline – NDIS participants (unstandardised)



# Hospital visits (3/8)

Baseline outcomes – percentage visiting the hospital in the last 12 months  
Modelling results and odds ratios

## Key drivers of NDIS participants having been to the hospital in the last 12 months



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Hospital visits (4/8)

### Baseline outcomes – percentage visiting the hospital in the last 12 months

#### Comments on modelled results

##### Key drivers of NDIS participants having been to the hospital in the last 12 months cont.

Participants with the following characteristics are **more likely** to have had one or more hospital visits in the last 12 months:

- Having a primary disability in the “other”<sup>1</sup> group compared to having psychosocial disability
- Having lower level of function (increasing trend with decreasing level of function)
- Living in QLD or ACT compared to living in NSW
- Female compared to male, in the age range under 50
- Having one or more secondary disability compared to those without
- Coming from an Indigenous background compared to non-Indigenous background
- Aged 30 to 49 compared to those aged 18 to 24
- Younger participants (those aged 15 to 34) with primary disability of multiple sclerosis
- Living in regional area with population between 15,000 to 50,000 compared to those living in a major city
- Entered the Scheme on a later date. There is a general increasing calendar time trend, which is stronger for participants entering after the first COVID lockdown. There is also a jump in the likelihood at the start of the first lockdown.

Participants with the following characteristics are **less likely** to have had one or more hospital visits in the last 12 months:

- Living in TAS, SA or WA compared to living in NSW
- Having previously received support from State government or Commonwealth government compared to those who have not
- Having been in residential aged care while aged under 65 compared to those who have not
- Having primary disability of a sensory disability, intellectual disability, Down syndrome, cerebral palsy and other neurological conditions, autism or acquired brain injury compared to having primary disability of psychosocial disability
- Coming from a CALD background compared to a non-CALD background
- Accessed the Scheme through early intervention (S25) compared to permanent disability (S24)
- Being in the 15 to 17 age group compared to being in the 18 to 24 age group
- For participants aged 18 to 24, there is a stronger effect for primary disability of a sensory disability relative to psychosocial disability.

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.



# Hospital visits (5/8)

## Longitudinal outcomes – change in percentage visiting the hospital in the last 12 months By longitudinal cohort and gender

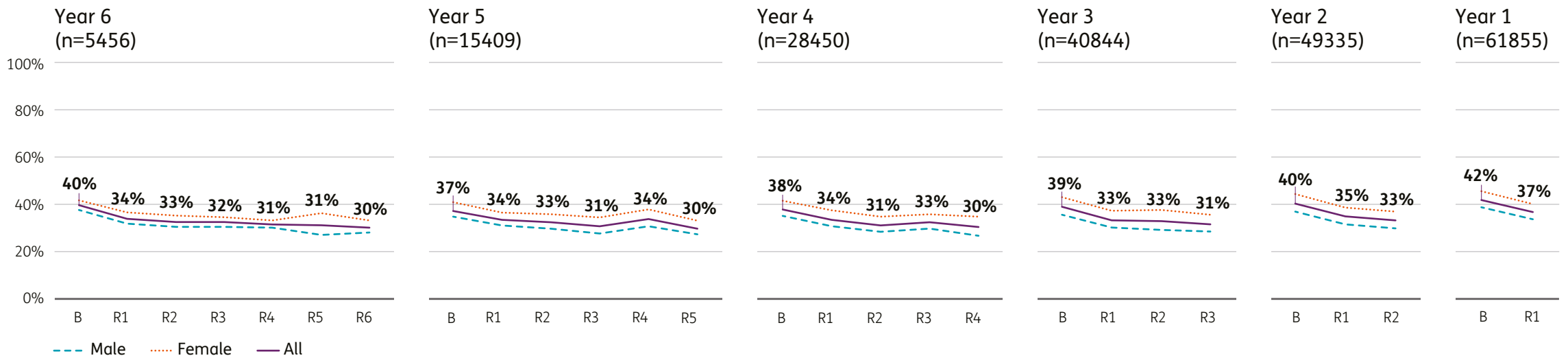
There is a decreasing trend (improvement) in the percentage of participants who have visited the hospital in the last 12 months across all cohorts, with the largest decrease occurring in the first year in Scheme for each cohort.

After six years in the Scheme, there was a 9.3 percentage point decrease from 39.5% to 30.3% with the largest decrease of 5.6 percentage points at first reassessment. The decrease was slightly stronger for males (9.7 percentage points from 37.8% to

28.1%) compared to females (8.6 percentage points from 41.8% to 33.2%). Higher percentages of female participants across all cohorts have been to the hospital than males.

The change between baseline and the latest reassessment is statistically significant for both males and females who have been in the Scheme for 1 to 6 years.

### Percentage of participants who have been to the hospital in the last 12 months<sup>1</sup>



<sup>1</sup> Data labels displayed in the graph relate to the “All” series.

# Hospital visits (6/8)

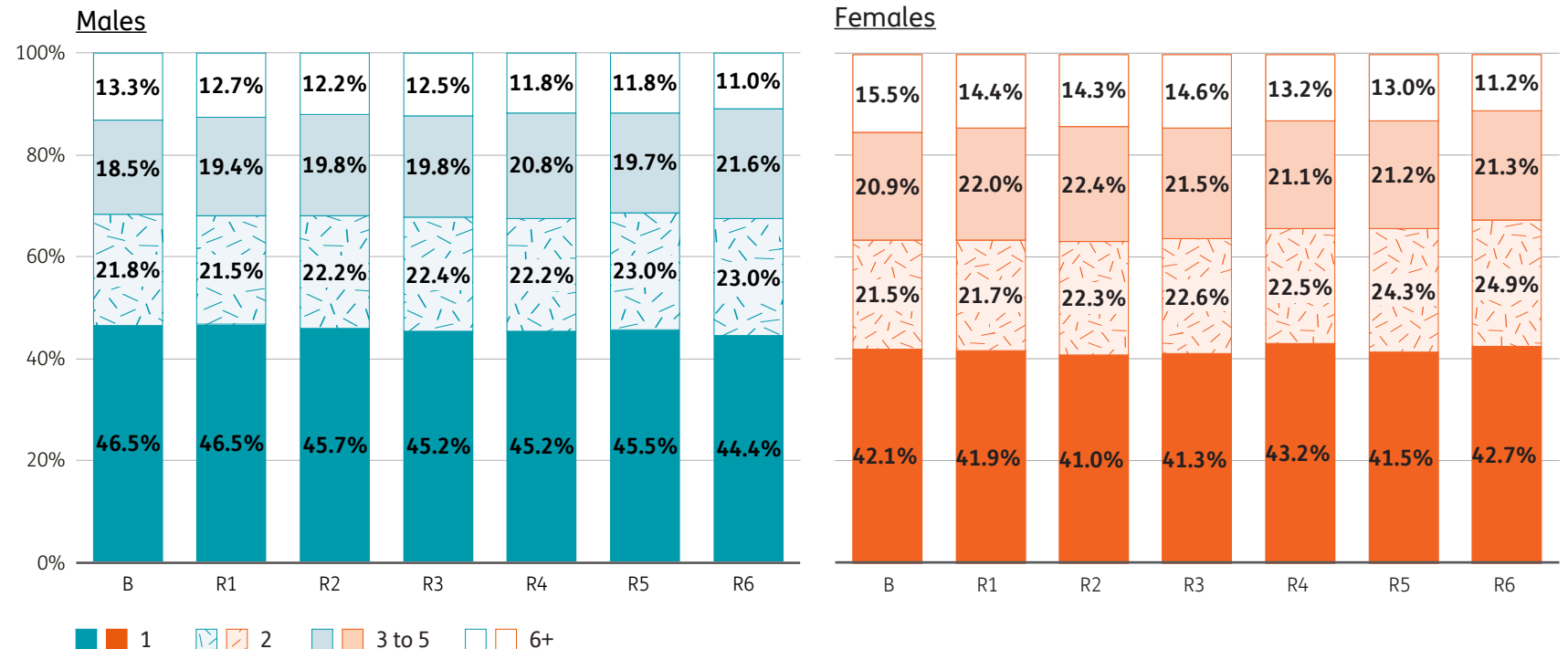
## Cross-sectional<sup>1</sup> outcomes – number of hospital visits<sup>2</sup> By time in Scheme and gender

Number of hospital visits made by NDIS participants in the last 12 months, of those who visited, varies slightly by time in Scheme.

Of those who visited the hospital:

- For males, the proportion visiting 2 to 5 times increased slightly towards later reassessments, while the proportion visiting 1 or 6+ times decreased slightly.
- For females, the proportion visiting 1 or 2 times increased while the proportion visiting 3+ times decreased, indicating an overall decrease in the frequency of female participants visiting the hospital after being in the Scheme for longer.

**Of those who went, number of hospital visits in the last 12 months**

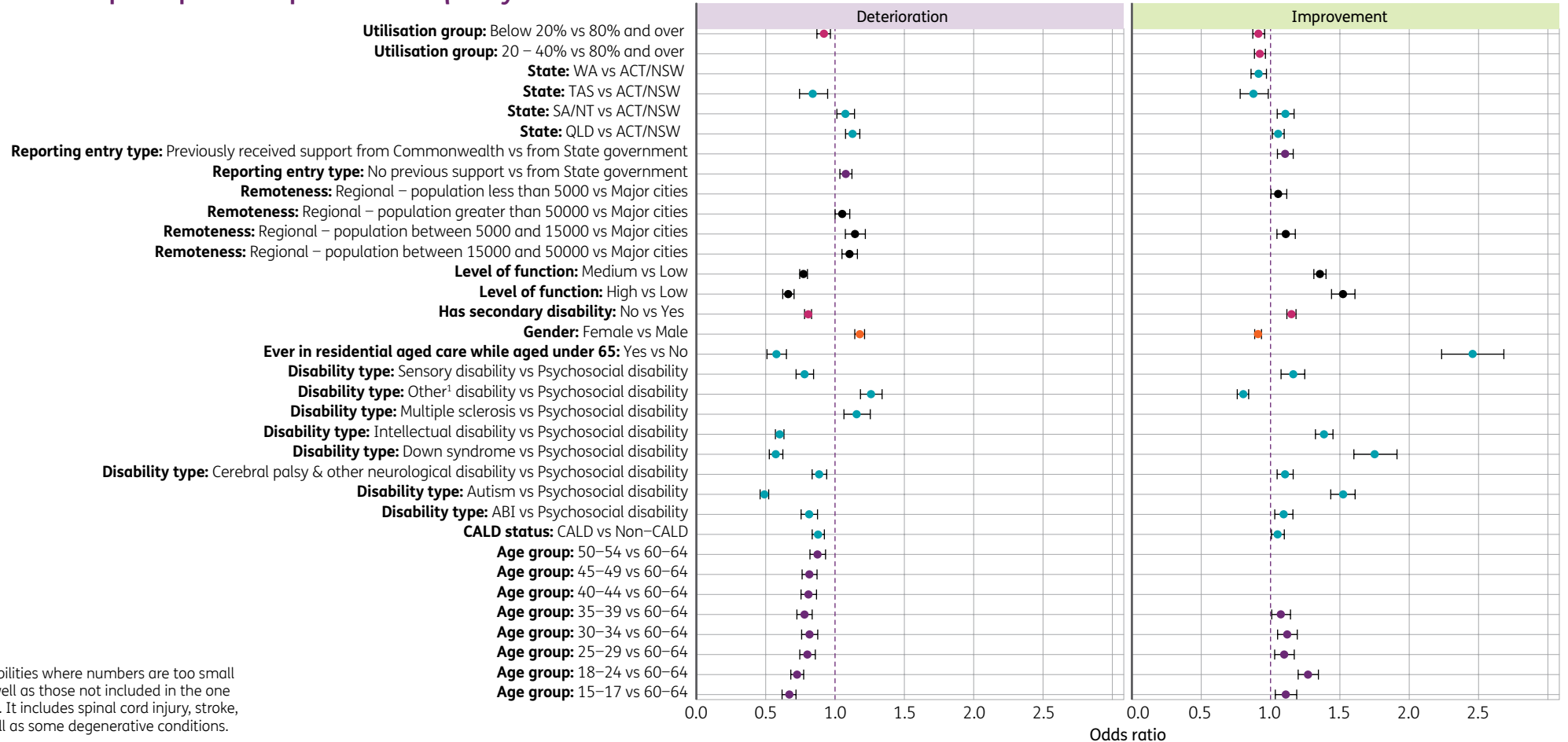


<sup>1</sup> The cross-sectional presentation here is by reassessment time points rather than response year. Therefore, it differs from that of the Healthy Living and Preventative Health sections.  
<sup>2</sup> These results exclude participants who did not visit hospital in the last 12 months.

# Hospital visits (7/8)

Longitudinal outcomes – change in percentage visiting the hospital in the last 12 months  
Modelling results and odds ratios

## Key drivers of changes in NDIS participants' hospital visits frequency



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Hospital visits (8/8)

### Longitudinal outcomes – change in percentage visiting the hospital in the last 12 months

#### Comments on modelled results

##### Key drivers of changes in NDIS participants' hospital visits frequency cont.

Participants with the following characteristics are more/less likely to experience changes in whether they visited the hospital in the last 12 months:

- Participants living in QLD, SA or NT are more likely to experience changes (positive and negative) compared to participants living in ACT or NSW, whereas participants living in TAS are less likely to experience changes compared to participants living in ACT or NSW
- Participants who previously received support from the Commonwealth government are more likely to improve compared to those who previously received support from State government. Participants who previously received no support are more likely to deteriorate compared to those who previously received support from State government
- Participants living in less populated (<5000) regional areas are more likely to improve compared to participants living in major cities. Participants living in moderately populated (>5000) regional areas are more likely to deteriorate compared to participants living in major cities
- Participants with medium or high level of function are more likely to improve and less likely to deteriorate compared to participants with low level of function
- Participants have no secondary disability are more likely to improve and less likely to deteriorate compared to participants have one or more secondary disabilities
- Female participants are less likely to improve and more likely to deteriorate compared to male participants
- Participants who have lived in residential aged care while aged under 65 are more likely to improve and less likely to deteriorate compared to participants who never have
- Participants with primary disability of a sensory disability, intellectual disability, Down syndrome, cerebral palsy and other neurological conditions, autism or ABI are more likely to improve and less likely to deteriorate compared to participants with primary disability of psychosocial disability
- Participants with primary disability of multiple sclerosis or other disabilities are more likely to deteriorate compared to participants with primary disability of psychosocial disability
- Participants from a CALD background are more likely to improve and less likely to deteriorate compared to participants come from Non-CALD backgrounds
- Participants aged between 15 and 54 are less likely to deteriorate compared to participants aged between 60 and 64. Participants aged between 15 and 39 are more likely to improve compared to participants aged between 60 and 64
- Likelihood of improvement decreases with later Scheme entry
- Likelihood of deterioration increases with later Scheme entry since the start of the COVID event, however, there is a downward jump in likelihood at the end of the first lock down.

# Regular doctor (1/7)

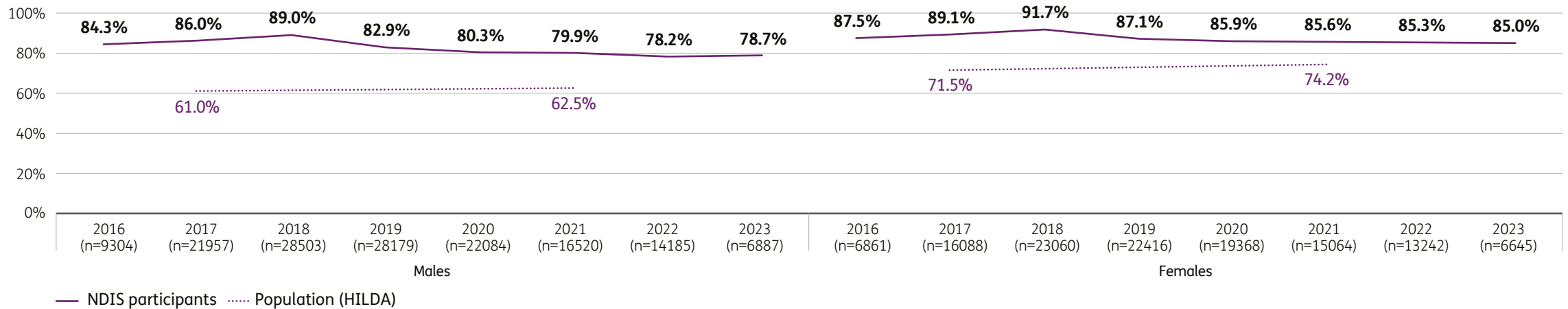
## Baseline outcomes – percentage having a regular doctor By entry year and gender

Higher proportions of NDIS participants have a regular doctor at Scheme entry compared to the Australian population of similar ages.

The proportion of new NDIS participants who have a regular doctor has reduced slightly in the more recent entry years.

### Time series: NDIS participants compared to HILDA (2017, 2021) (age standardised)<sup>1</sup>

#### Baseline: Percentage have a regular doctor



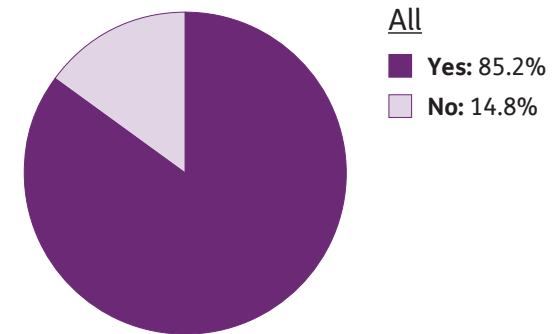
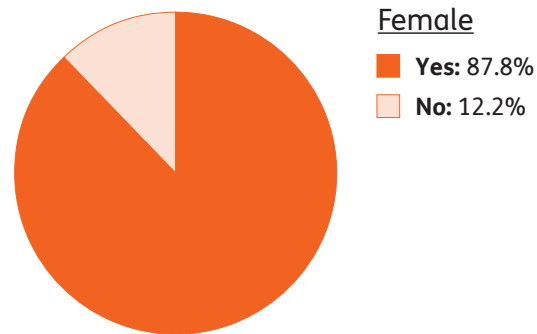
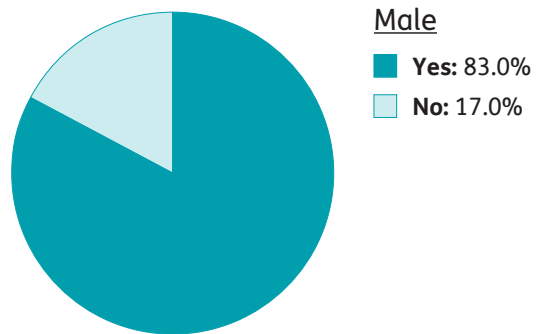
<sup>1</sup> Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

## Regular doctor (2/7)

### Baseline outcomes – percentage having a regular doctor Response options by gender

At Scheme entry, **83.0%** of NDIS males have a regular doctor, compared to **87.8%** of NDIS females.

#### Having a regular doctor at baseline – NDIS participants (unstandardised)

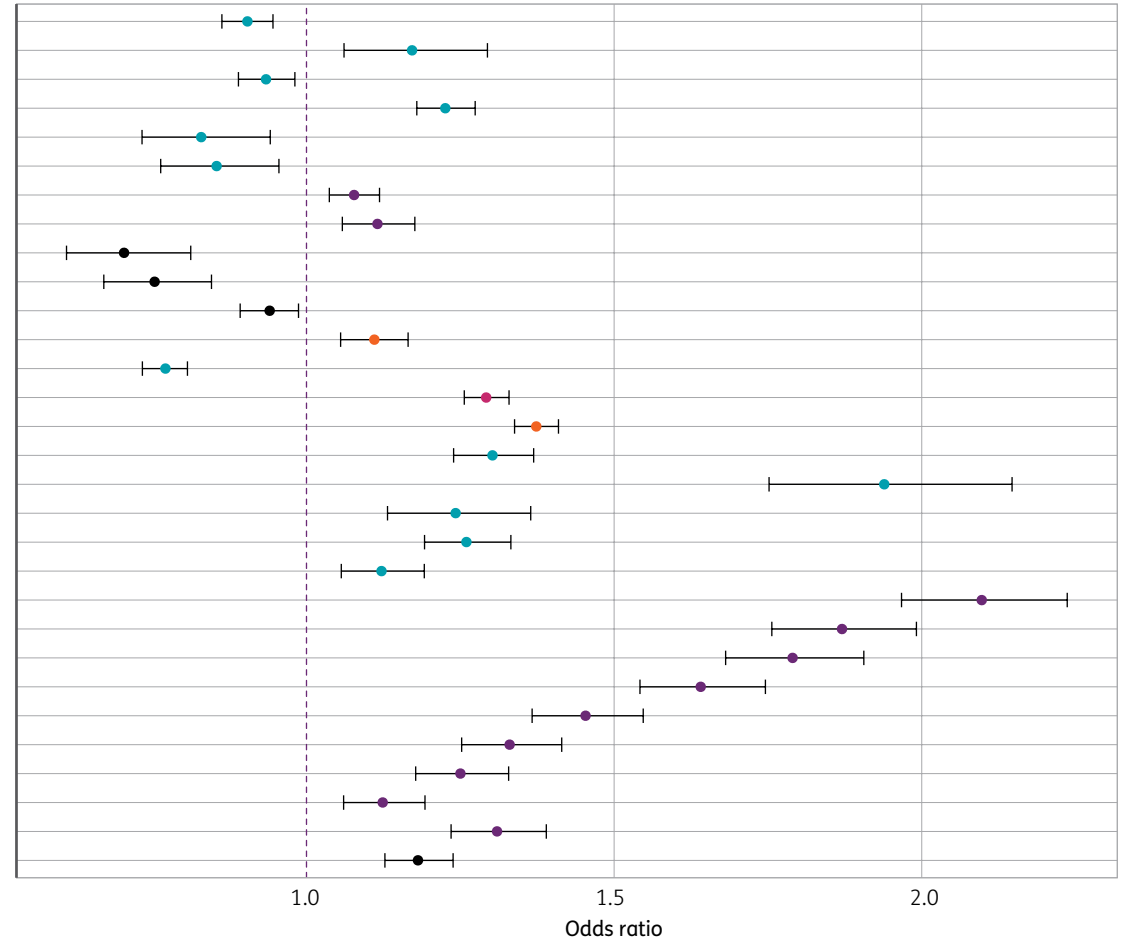


# Regular doctor (3/7)

## Baseline outcomes – percentage having a regular doctor Modelling results and odds ratios

### Key drivers of NDIS participants having a regular doctor

- State:** WA vs NSW
- State:** TAS vs NSW
- State:** SA vs NSW
- State:** QLD vs NSW
- State:** NT vs NSW
- State:** ACT vs NSW
- Reporting entry type:** Previously received support from State government vs No previous support
- Reporting entry type:** Previously received support from Commonwealth vs No previous support
- Remoteness:** Very remote vs Major city
- Remoteness:** Remote vs Major city
- Remoteness:** Regional – population < 5,000 vs Major city
- Latest plan with SIL:** Yes vs No
- Indigenous status:** Yes vs No
- Has secondary disability:** Yes vs No
- Gender:** Female vs Male
- Disability type:** Other<sup>1</sup> disability vs Psychosocial disability
- Disability type:** Multiple sclerosis vs Psychosocial disability
- Disability type:** Down syndrome vs Psychosocial disability
- Disability type:** Cerebral palsy & other neurological disability vs Psychosocial disability
- Disability type:** ABI vs Psychosocial disability
- Age group:** 60–64 vs 18–24
- Age group:** 55–59 vs 18–24
- Age group:** 50–54 vs 18–24
- Age group:** 45–49 vs 18–24
- Age group:** 40–44 vs 18–24
- Age group:** 35–39 vs 18–24
- Age group:** 30–34 vs 18–24
- Age group:** 25–29 vs 18–24
- Age group:** 15–17 vs 18–24
- Access type:** Benefit from Early Intervention vs Disability met



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Regular doctor (4/7)

### Baseline outcomes – percentage having a regular doctor Comments on modelled results

#### Key drivers of NDIS participants having a regular doctor cont.

Participants with the following characteristics are **more likely** to have a regular doctor:

- Living in TAS or QLD compared to living in NSW
- Having previously received support from State government or Commonwealth government compared to those who have not
- Having one or more secondary disabilities compared to those without
- Female compared to male
- Having SIL funding in their latest plan compared to those without
- Having primary disability of acquired brain injury, multiple sclerosis, Down syndrome, cerebral palsy and other neurological conditions, or a disability in the “other”<sup>1</sup> group compared to having primary disability of psychosocial disability
- Not aged 18 to 24 compared to those aged 18 to 24
- Accessed the Scheme through early intervention (S25) compared to permanent disability (S24)
- Having lower level of function (increasing trend with decreasing level of function).

Participants with the following characteristics are **less likely** to have a regular doctor:

- Living in LGA with higher unemployment rate (decreasing trend with increasing unemployment rate in the LGA lived in)
- Living in WA, SA, NT or ACT compared to living in NSW
- Living in remote, very remote or regional area with population less than 5,000 compared to living in a major city
- Entered the Scheme on a later date. There is a general decreasing calendar time trend, with a one-off fall in the likelihood at the start of first COVID lockdown
- Coming from an Indigenous background compared to non-Indigenous background
- Participants aged 18 to 29 with primary disability of a sensory disability compared to those with psychosocial disability in this age range
- Participants aged 15 to 24 with primary disability of intellectual disability compared to those with psychosocial disability in this age range.

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.



# Regular doctor (5/7)

## Longitudinal outcomes – change in percentage having a regular doctor By longitudinal cohort and gender

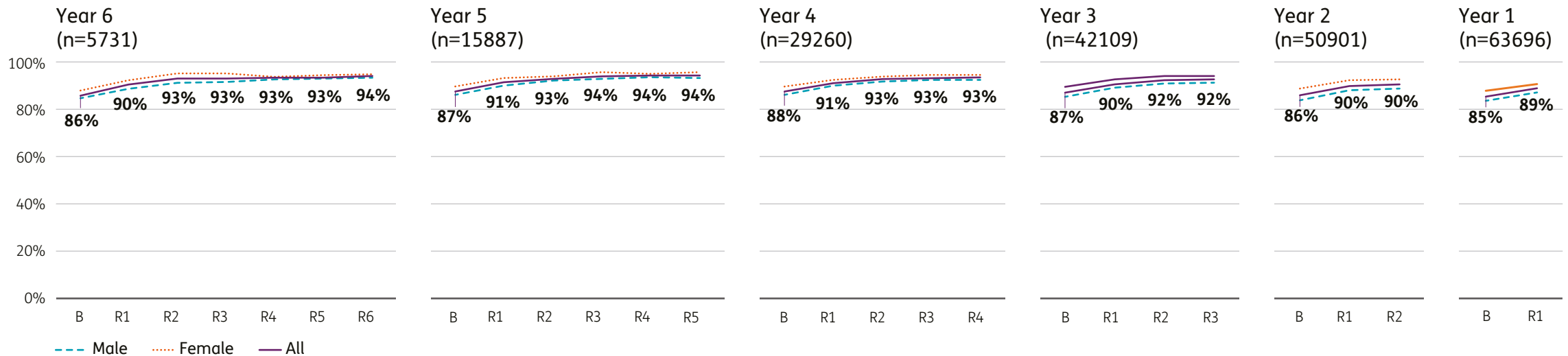
There are positive changes over time across all cohorts in the percentage of participants who have a doctor they see regularly, with the largest improvement occurring during the first year in Scheme for each cohort.

After six years in the Scheme, there was an 8.0 percentage point increase from 85.9% to 93.9% with the largest increase of 4.4 percentage points at first reassessment. The increase was slightly stronger for males (8.9 percentage points, from 84.5% to 93.3%) than females (6.9 percentage points, from 87.9% to 94.8%).

Higher percentages of female participants across all cohorts have a regular doctor than males.

The change between baseline and latest reassessment is statistically significant for both males and females who have been in the Scheme for 1 to 6 years.

### Percentage of participants who have a regular doctor<sup>1</sup>

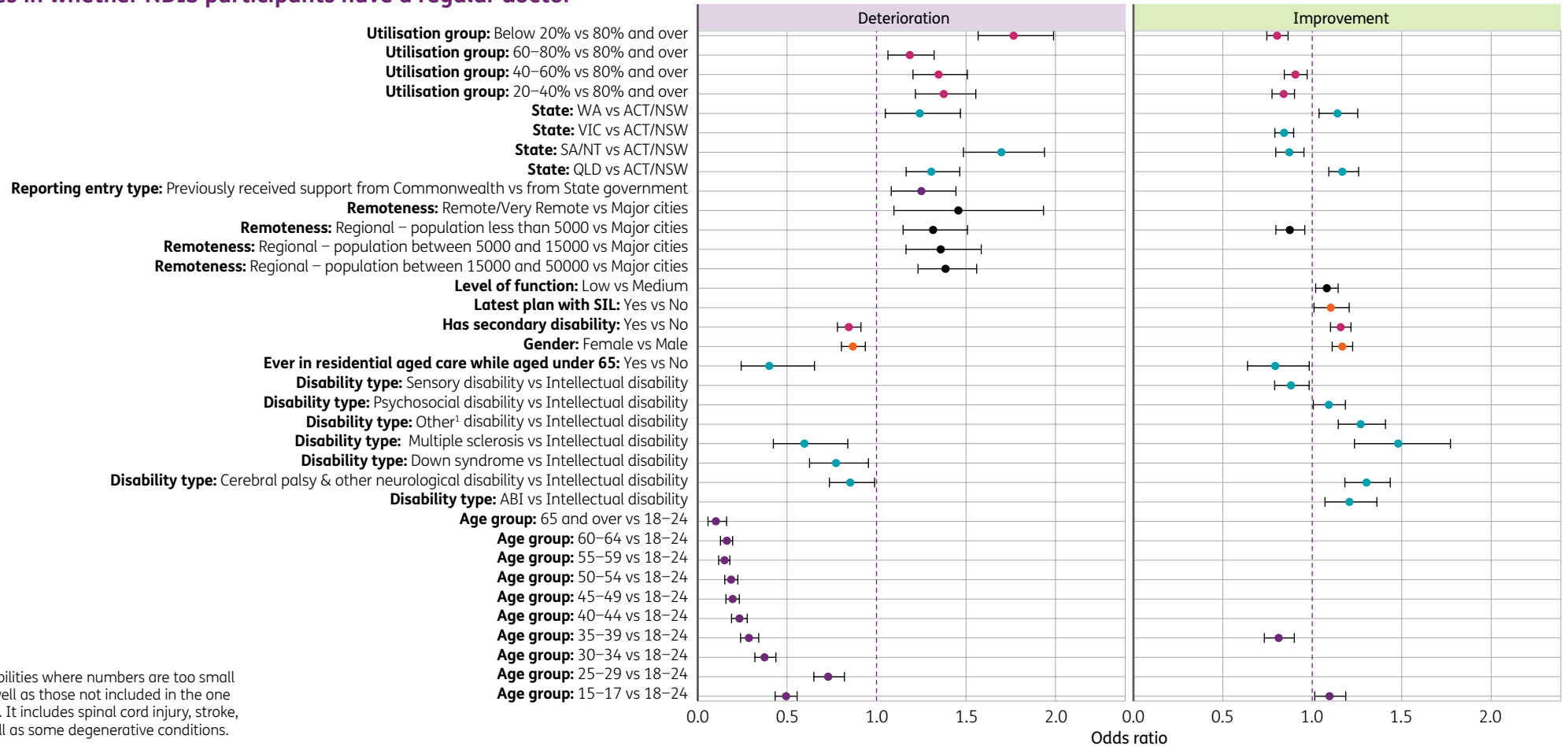


<sup>1</sup> Data labels displayed in the graph relate to the “All” series.

# Regular doctor (6/7)

Longitudinal outcomes – change in percentage having a regular doctor  
Modelling results and odds ratios

## Key drivers of changes in whether NDIS participants have a regular doctor



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Regular doctor (7/7)

### Longitudinal outcomes – change in percentage having a regular doctor

#### Comments on modelled results

##### Key drivers of changes in whether NDIS participants have a regular doctor cont.

Participants with the following characteristics are more/less likely to experience changes in whether they have a regular doctor:

- Participants who utilise less than 80% of their plan are more likely to deteriorate and less likely to improve compared to participants who utilise 80% and over
- Participants living in WA or QLD are more likely to experience changes (positive and negative) in response compared to participants living in ACT or NSW
- Participants living in VIC, SA or NT are less likely to improve compared to participants living in ACT or NSW, however, participants living in SA or NT are also more likely to deteriorate compared to participants living in ACT or NSW
- Participants who previously received support from the Commonwealth government are more likely to deteriorate compared to those previously received support from State government
- Participants living in regional areas or remote or very remote areas are more likely to deteriorate compared to participants living in major cities
- Participants with low level of function are more likely to improve compared to participants with medium level of function
- Participants with Supported Independent Living funds in their latest plan are more likely to improve compared to those who do not
- Participants have one or more secondary disabilities are more likely to improve and less likely to deteriorate compared to participants have no secondary disability
- Female participants are more likely to improve and less likely to deteriorate compared to male participants
- Participants who have lived in residential aged care while aged under 65 are less likely to experience changes (positive and negative) in response compared to participants who never have
- Participants with primary disability of psychosocial disability, ABI or other disabilities are more likely to improve than participants with primary disability of intellectual disability. Those with a sensory disability are less likely to improve
- Participants with primary disability of Down syndrome are less likely to deteriorate than participants with primary disability of intellectual disability
- Participants with primary disability of multiple sclerosis, cerebral palsy and other neurological conditions are more likely to improve and less likely to deteriorate than participants with primary disability of intellectual disability
- Participants aged 25 and above are less likely to deteriorate compared to participants aged between 18 and 24
- Participants aged between 15 and 17 are more likely to improve and less likely to deteriorate compared to participants aged between 18 and 24
- Likelihood of improvement jumped up at the beginning of the first COVID lockdown, and the end of the first and second COVID lockdowns
- Likelihood of deterioration increased during the two COVID lockdown periods with later Scheme entry.

# Difficulty accessing health services (1/9)

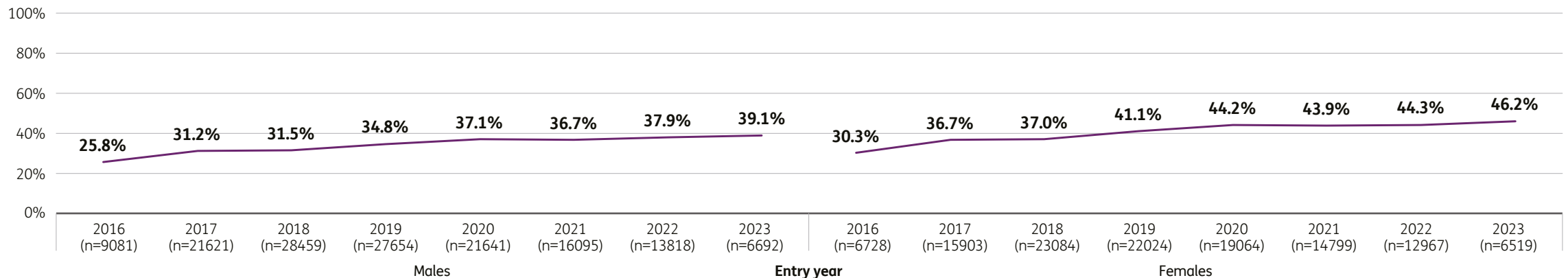
## Baseline outcomes – percentage having difficulty accessing health services By entry year and gender

There is strong entry year effect. The proportion of NDIS participants who said they have encountered difficulty accessing health services at Scheme entry has increased steadily between 2016 and 2022.

Percentages having difficulty are lower for males than females across all entry years.

### Time series: NDIS participants from 2016 to 2023 (age standardised)<sup>1,2</sup>

#### Baseline: Percentage have difficulty accessing health services



1 No Australian population benchmark is available for this indicator.

2 NDIS respondents each year are standardised to aggregate (all years and genders) NDIS respondent age distribution.

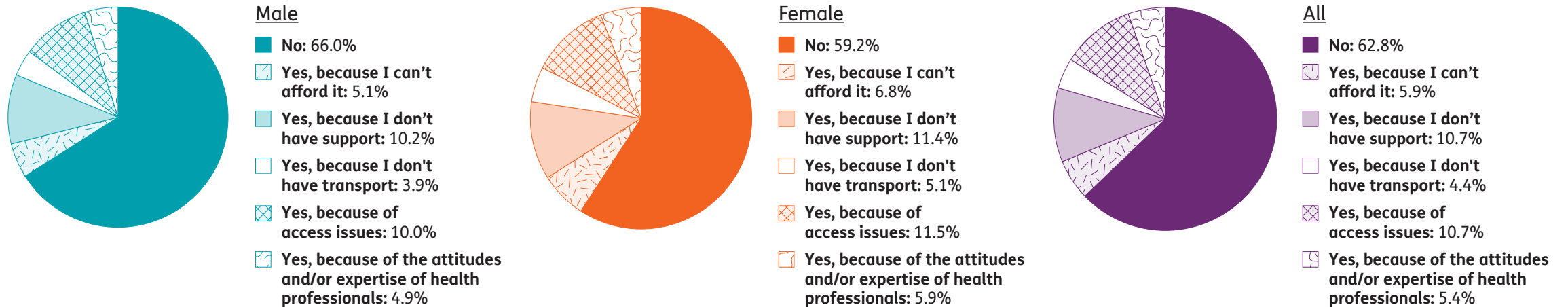
# Difficulty accessing health services (2/9)

Baseline outcomes – percentage having difficulty accessing health services

## Response options by gender

At Scheme entry, **66.0%** of male NDIS participants have **no** difficulty accessing health services, compared to **59.2%** of females. Of those encountering difficulties, lack of support and access issues are the most common barriers reported for both genders.

### Difficulty accessing health services at baseline – NDIS participants (unstandardised)

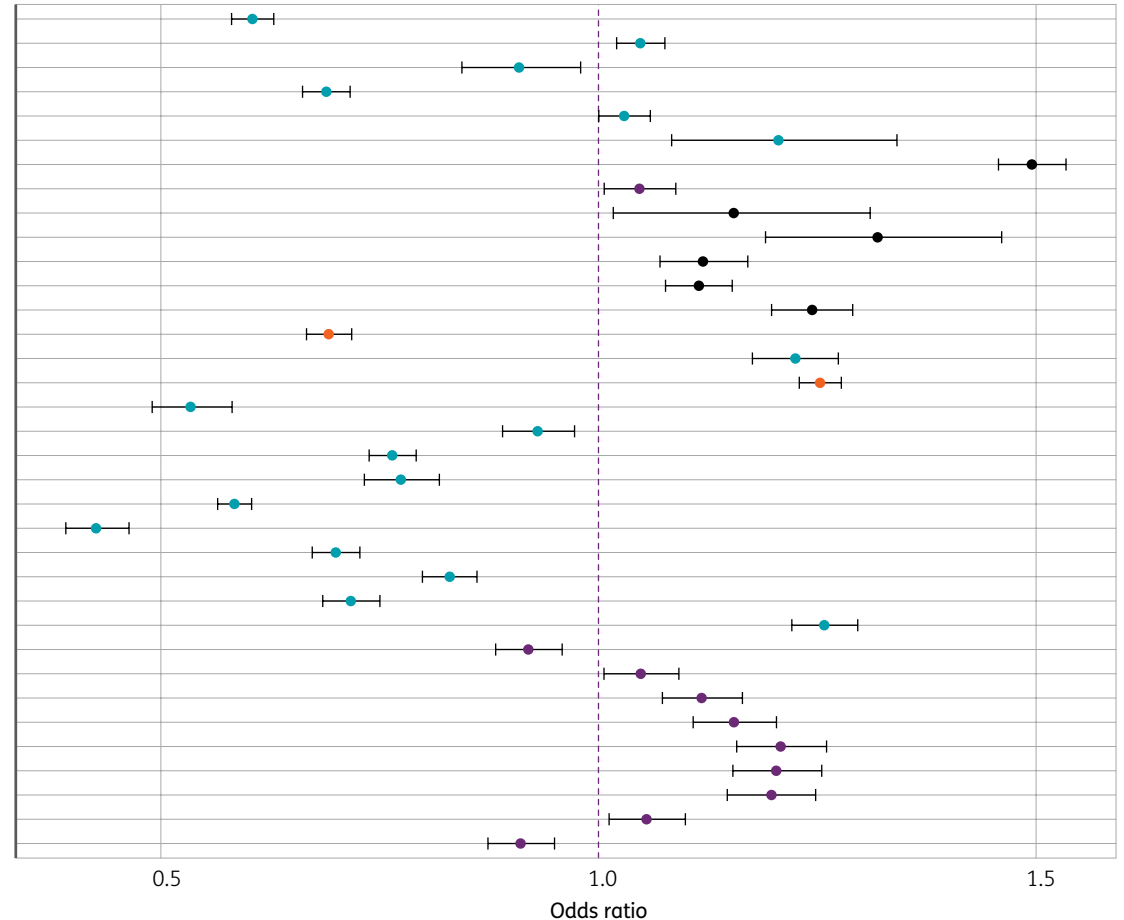


# Difficulty accessing health services (3/9)

Baseline outcomes – percentage having difficulty accessing health services  
Modelling results and odds ratios

## Key drivers of NDIS participants having difficulty getting health services

- State:** WA vs NSW
- State:** VIC vs NSW
- State:** TAS vs NSW
- State:** SA vs NSW
- State:** QLD vs NSW
- State:** NT vs NSW
- Secondary psychosocial disability:** Yes vs No
- Reporting entry type:** Previously received support from Commonwealth vs No previous support
- Remoteness:** Very remote vs Major city
- Remoteness:** Remote vs Major city
- Remoteness:** Regional – population 5,000 to 15,000 vs Major city
- Remoteness:** Regional – population 15,000 to 50,000 vs Major city
- Remoteness:** Regional – population < 5,000 vs Major city
- Latest plan with SIL:** Yes vs No
- Indigenous status:** Yes vs No
- Gender:** Female vs Male
- Ever in residential aged care while aged under 65:** Yes vs No
- Disability type:** Sensory disability vs Psychosocial disability
- Disability type:** Other<sup>1</sup> disability vs Psychosocial disability
- Disability type:** Multiple sclerosis vs Psychosocial disability
- Disability type:** Intellectual disability vs Psychosocial disability
- Disability type:** Down syndrome vs Psychosocial disability
- Disability type:** Cerebral palsy & other neurological disability vs Psychosocial disability
- Disability type:** Autism vs Psychosocial disability
- Disability type:** ABI vs Psychosocial disability
- CALD status:** Yes vs No
- Age group:** 60–64 vs 18–24
- Age group:** 55–59 vs 18–24
- Age group:** 50–54 vs 18–24
- Age group:** 45–49 vs 18–24
- Age group:** 40–44 vs 18–24
- Age group:** 35–39 vs 18–24
- Age group:** 30–34 vs 18–24
- Age group:** 25–29 vs 18–24
- Age group:** 15–17 vs 18–24



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Difficulty accessing health services (4/9)

### Baseline outcomes – percentage having difficulty accessing health services

#### Comments on modelled results

##### Key drivers of NDIS participants having difficulty getting health services cont.

Participants with the following characteristics are **more likely** to have difficulty accessing health services:

- Before the start of first lockdown and after the end of second lockdown, there is an increasing time trend with later Scheme entry date
- Living in VIC, QLD or NT compared to living in NSW
- Having lower level of function (increasing trend with decreasing level of function)
- Having a secondary psychosocial disability compared to those without a secondary psychosocial disability
- Having previously received support from Commonwealth government compared to those who have not previously received any support
- Living in very remote, remote or regional area with population less than 50,000 compared to living in major city
- Living in LGA with higher unemployment rate (increasing trend with increasing unemployment rate in the LGA lived in)
- Female compared to male
- Coming from an Indigenous background compared to non-Indigenous background.
- Comes from a CALD background compared to a non-CALD background
- Aged between 25 and 59 compared to those aged between 18 and 24.

Participants with the following characteristics are **less likely** to have difficulty accessing health services:

- Between the start of first lockdown and the end of second lockdown, there is a decreasing time trend with later Scheme entry date
- Living in WA, TAS or SA compared to living in NSW
- Having SIL funding in the latest plan compared to those without
- Having been in residential aged care before age 65 compared to those who have not
- Having primary disability that is not psychosocial disability compared to having primary disability of psychosocial disability. For participants with Down syndrome, there is a stronger difference between ages 40 and 49. For participants with a sensory disability, there is a stronger effect for those aged 15 to 17
- Being in the 15 to 17 or 60 to 64 age group compared to being in the 18 to 24 age group.

# Difficulty accessing health services (5/9)

## Longitudinal outcomes – change in percentage having difficulty accessing health services By longitudinal cohort and gender

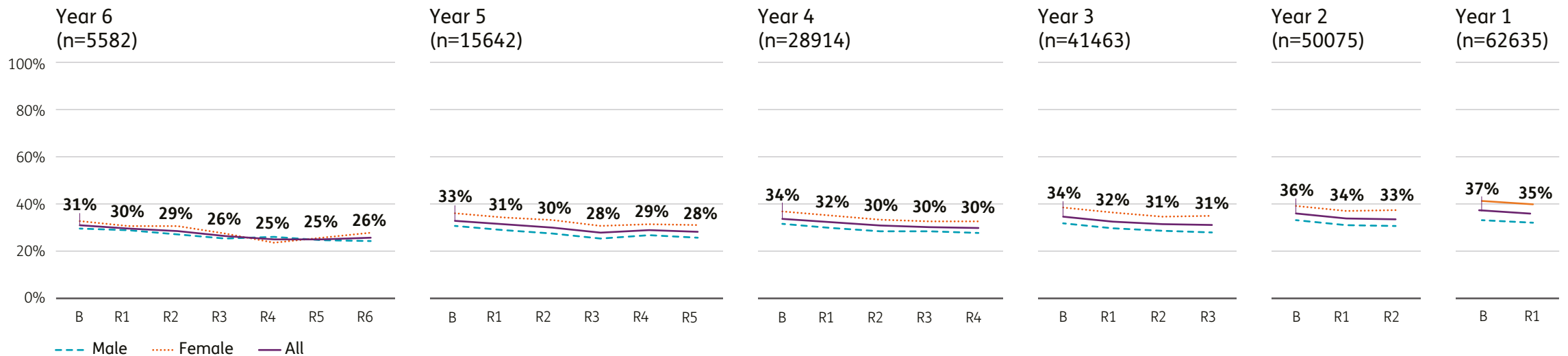
There are decreases over time across all cohorts in the percentage of participants who said they have difficulty accessing health services, with most of the decreases (improvements) occurring towards earlier reassessments.

After six years in the Scheme, there was a 5.2 percentage point decrease from 31.0% to 25.8% with the largest decrease of 2.3 percentage points at third reassessment. The largest decrease from baseline to latest reassessment is evident for male

participants, with a decrease of 5.4 percentage points over six years from 29.7% to 24.3%. Percentages for females are generally higher than for males, although there is less difference for the 6-year cohort.

The change between baseline and the latest reassessment is statistically significant for both males and females who have been in the Scheme for 1 to 6 years.

### Percentage of participants who have had difficulty accessing health services<sup>1</sup>



<sup>1</sup> Data labels displayed in the graph relate to the "All" series.



# Difficulty accessing health services (6/9)

Cross-sectional<sup>1</sup> outcomes – barriers to access for those encountering difficulty<sup>2</sup>

By time in Scheme and gender

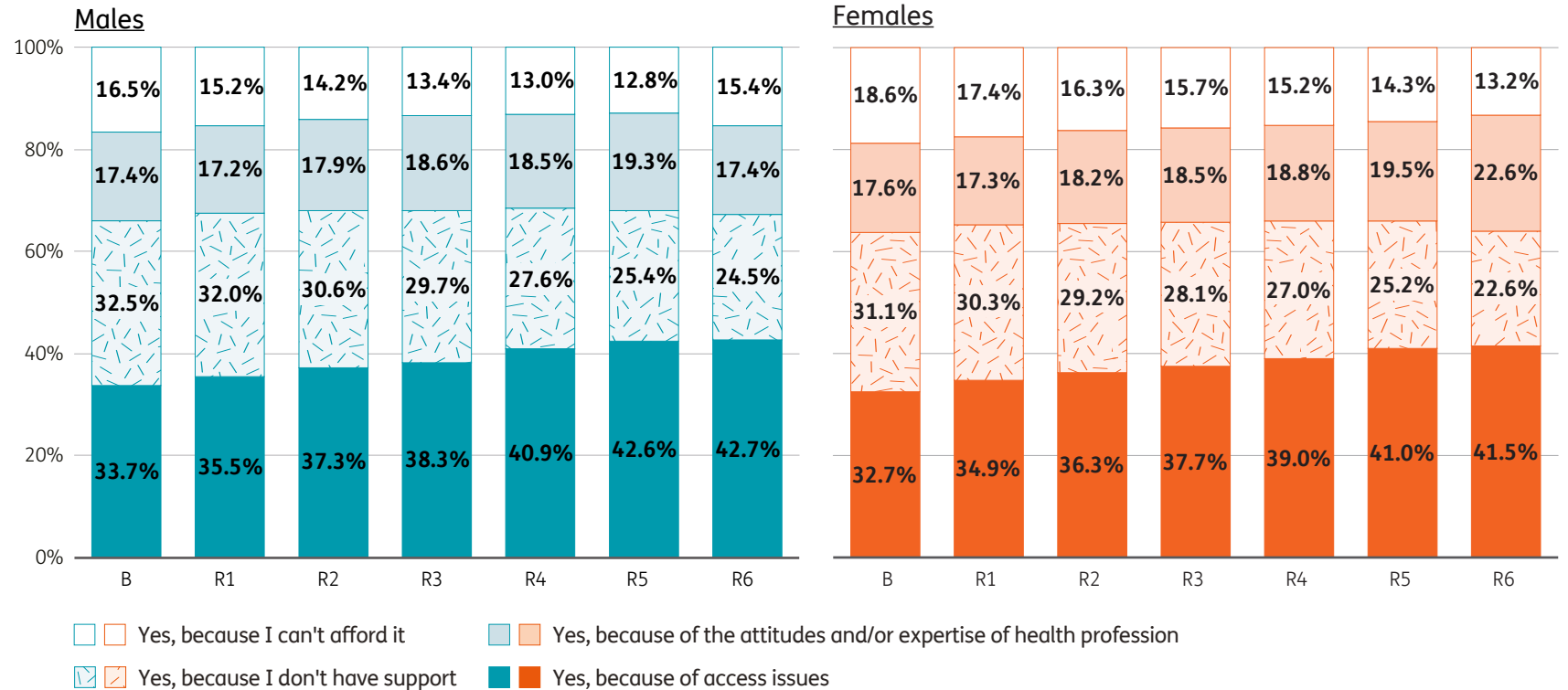
Reasons why NDIS participants have difficulty accessing health services vary by time in Scheme.

The percentage responding “because of access issues” was highest and increased for both male and female participants (Over six years, 33.7% increasing to 42.7% for male participants, 32.7% increasing to 41.5% for female participants).

The percentage responding “because I can’t afford it” was lowest and decreased for both male and female participants (Over six years, 16.5% decreasing to 15.4% for male participants, 18.6% decreasing to 13.2% for female participants).

The percentage responding “because I don’t have support” has also seen notable decreases over six years for both genders, decreasing from 32.5% to 24.5% for males, and from 31.1% to 22.6% for females.

Of those encountering difficulty, barriers to getting health services

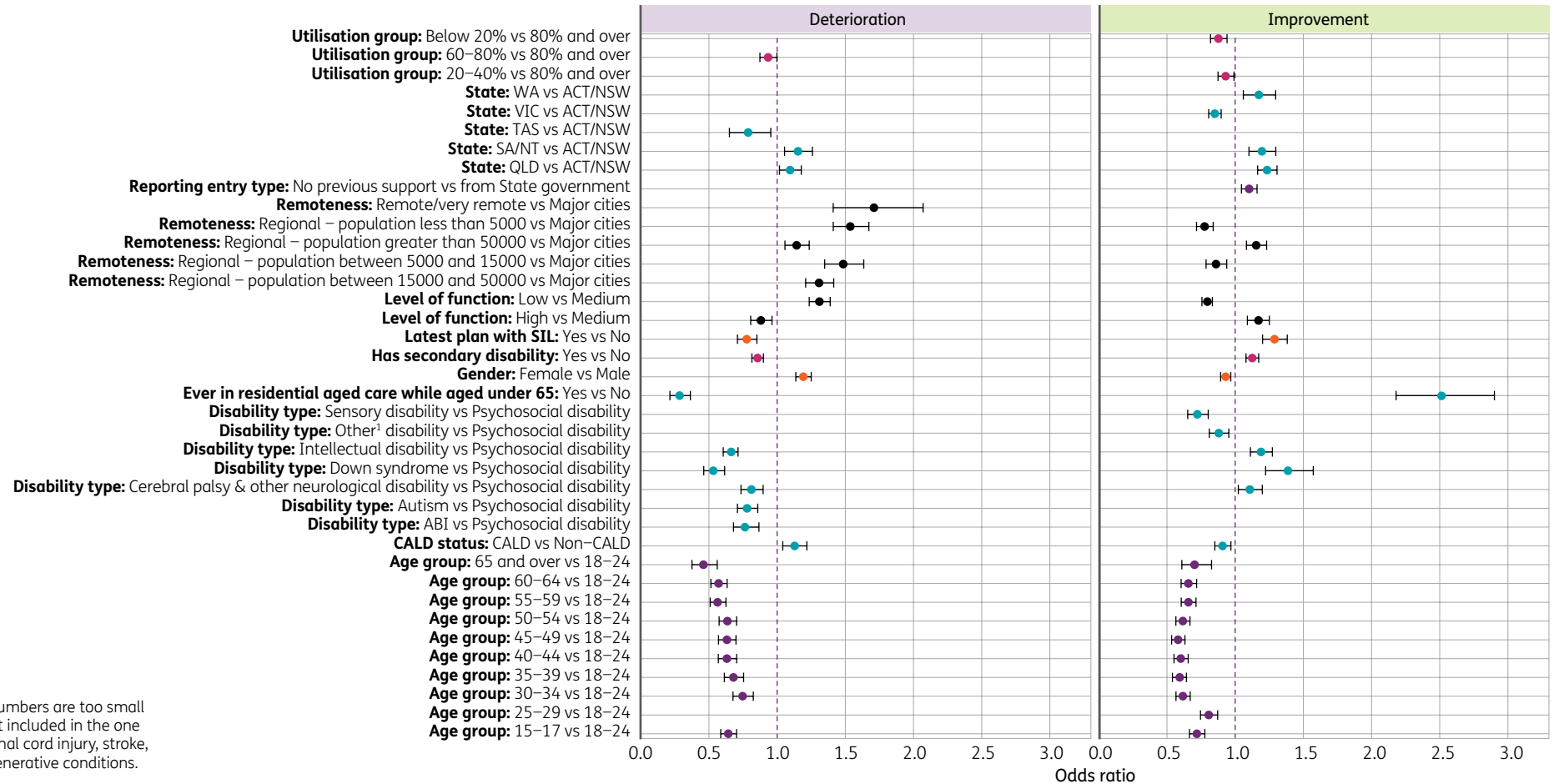


<sup>1</sup> The cross-sectional presentation here is by reassessment time points rather than response year. Therefore, it differs from that of the Healthy Living and Preventative Health sections.  
<sup>2</sup> These results exclude participants who said they had no difficulty accessing health services.

# Difficulty accessing health services (7/9)

Longitudinal outcomes – change in percentage having difficulty accessing health services  
 Modelling results and odds ratios

## Key drivers of changes in whether NDIS participants had difficulty getting health services



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Difficulty accessing health services (8/9)

### Longitudinal outcomes – change in percentage having difficulty accessing health services

#### Comments on modelled results

##### Key drivers of changes in whether NDIS participants had difficulty getting health services cont.

Participants with the following characteristics are more/less likely to experience changes in whether they have difficulty accessing health services:

- Participants who utilise less than 40% of their plans are less likely to improve compared to participants who utilise 80% and over
- Participants living in WA are more likely to improve compared to participants living in ACT or NSW and participants living in VIC are less likely to improve compared to participants living in ACT or NSW
- Participants living in TAS are less likely to deteriorate compared to participants living in ACT or NSW
- Participants living in QLD, SA or NT are more likely to experience changes (positive and negative) in response compared to participants living in ACT or NSW
- Participants who previously received no support from governments are more likely to improve than those who previously received support from the State government
- Participants living in regional areas or remote or very remote areas are more likely to deteriorate than participants living in major cities
- Participants with high level of function are more likely to improve and less likely to deteriorate than participants with medium level of function
- Participants with low level of function are more likely to deteriorate and less likely to improve than participants with medium level of function
- Participants who have Supported Independent Living funds in their latest plans are more likely to improve and less likely to deteriorate compared to those who do not
- Participants have no secondary disability are more likely to improve and less likely to deteriorate compared to participants have one or more secondary disabilities
- Female participants are less likely to improve and more likely to deteriorate compared to male participants
- Participants who have lived in residential aged care while aged under 65 are more likely to improve and less likely to deteriorate compared to participants who never have
- Participants with primary disability of intellectual disability, Down syndrome or cerebral palsy and other neurological conditions are more likely to improve and less likely to deteriorate than participants with primary disability of psychosocial disability
- Participants with primary disability of a sensory disability or other disabilities are less likely to improve than participants with primary disability of psychosocial disability
- Participants with primary disability of autism or ABI are less likely to deteriorate than participants with primary disability of psychosocial disability
- Participants from a CALD background are less likely to improve and more likely to deteriorate compared to participants from a non-CALD background

## Difficulty accessing health services (9/9)

Longitudinal outcomes – change in percentage having difficulty accessing health services

Comments on modelled results cont.

### Key drivers of changes in whether NDIS participants had difficulty getting health services cont.

- Participants aged between 15 and 17 or aged 25 and above are less likely to experience changes (positive and negative) in response than participants aged between 18 and 24
- Participants who have been in the Scheme longer are more likely to improve and less likely to deteriorate.
- After the start of the COVID pandemic, the likelihood of deterioration increases, and the increasing trend continues even after the end of the second lock down. There is also a general time trend towards a lower likelihood of improvement (unrelated to COVID).

## 3.4.2

Accessing Medicare-subsidised  
Health Services –  
PLIDA data linkage

## Methodology

The **NDIS participant cohort** comprises all distinct participants (linked) who:

- were part of the Scheme as of 30 June 2021
- had age band information reported
- had disability type information reported
- had gender information reported.

The **Australian population cohort** comprises all distinct individuals who:

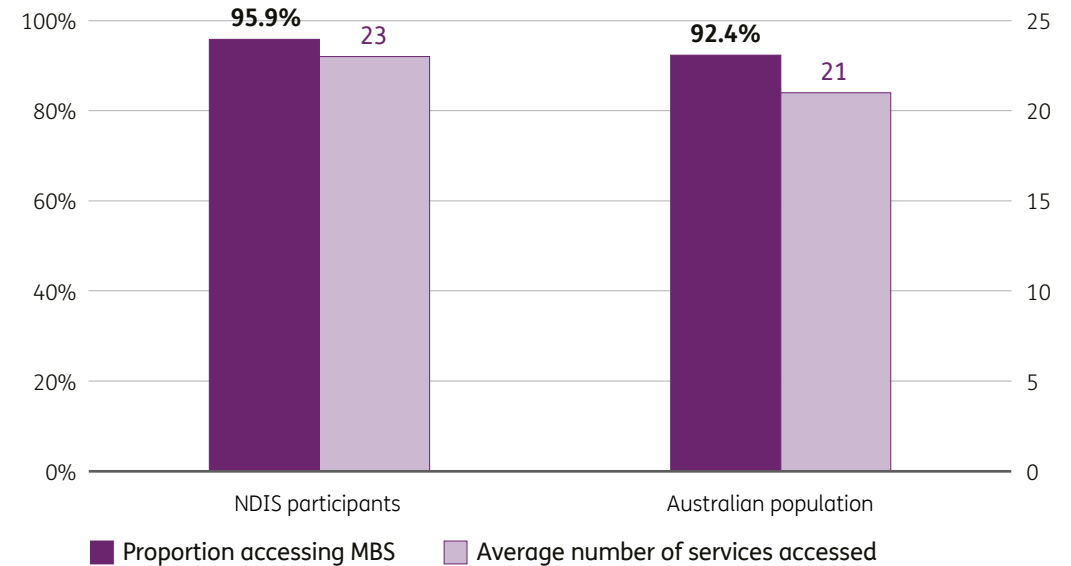
- were recorded on the Census 2021
- were not an overseas visitor
- had age band information reported.

## PLIDA data linkage<sup>1,2</sup>

During FY2021–22, Medicare-subsidised services were accessed by a higher proportion of NDIS participant population compared to the Australian population (almost 96% of participants compared to 92% of Australian population).

Similarly, NDIS participants accessed more Medicare-subsidised services compared to the Australian population (on average 23 times for participants compared to 21 times for Australian population).

**Accessing Medicare services in FY21/22**



1 Results shown on this slide do not account for differences in the age distributions for NDIS participants and the Australian population.  
 2 Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

## By service groups

In evaluating NDIS participants' access to Medicare-subsidised health services, services have been categorised into three groups: GP services, Allied health services and Mental health services. It is important to note that Mental health services includes service items that are part of both GP services and Allied health services.

Medicare-subsidised GP attendances include Enhanced Primary Care, After-hours GP attendances, Practice Incentive Program (PIP) services, and Other GP services. These services are Medicare-subsidised patient/doctor encounters, such as visits and consultations, for which the patient has not been referred by another doctor.<sup>1</sup>

Medicare-subsidised Allied health services includes Medicare-subsidised primary health services provided by a broad range of health professionals who are not doctors, nurses, or dentists, comprising all services provided in the Optometry, Mental Health Care, Physical Health Care, and 'Other' allied health subtotals. Apart from optometry, these services are generally only available to patients with chronic, mental, developmental, and/or complex health conditions with a referral from a GP or specialist medical practitioner.<sup>1</sup>

Medicare-subsidised Mental health-specific services are delivered by psychiatrists, GPs, psychologists and other allied health professionals. These services are delivered in a range of settings – for example, hospitals, consulting rooms, home visits, and telehealth – as defined in the MBS.<sup>2</sup>

<sup>1</sup> Medicare-subsidised GP, allied health and specialist health care across local areas: FY2021–22, technical information (2022) Australian Institute of Health and Welfare.

Available at: <https://www.aihw.gov.au/reports/primary-health-care/medicare-subsidised-gp-allied-health-and-specialis/contents/technical-information> (Accessed: 28 July 2023).

<sup>2</sup> Medicare-subsidised services - mental health (2023) Australian Institute of Health and Welfare. Available at: <https://www.aihw.gov.au/mental-health/topic-areas/medicare-subsidised-services> (Accessed: 27 July 2023).



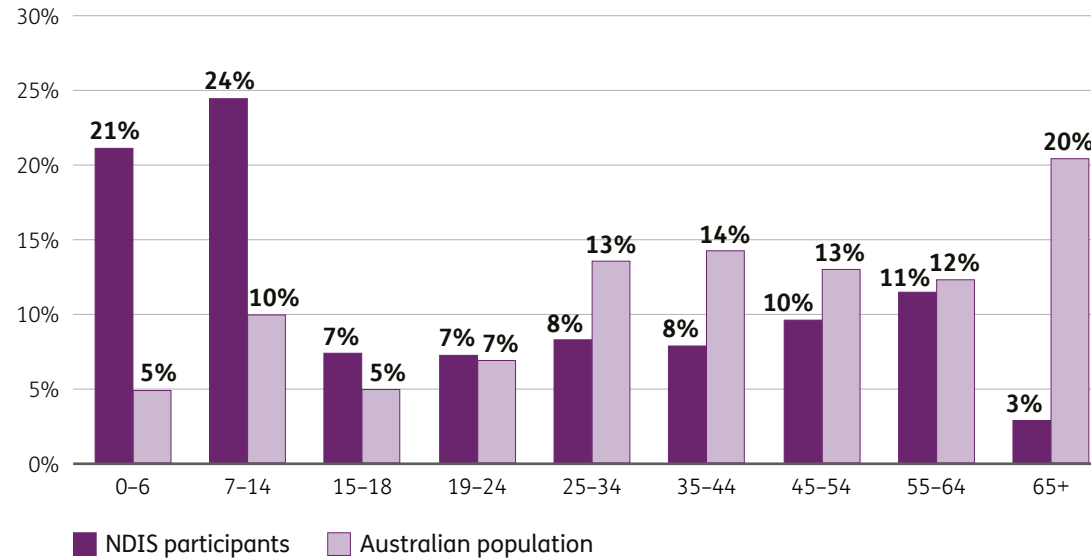
# Comparison between NDIS participants and the Australian population

## Impact of age distributions

When comparing NDIS participants' Medicare usage with that of the Australian population, it is important to keep in mind their different age distributions, since health service usage is heavily dependent on age.

The graph shows the over-representation of children and under-representation of the 65 and over age group in the NDIS population compared to the Australian population:

- 45% of NDIS participants are aged 14 or under, compared to only 15% of the Australian population
- Due to eligibility rules, only 3% of NDIS participants are aged 65 or older, compared to 20% of the Australian population.



# Accessing GP services<sup>1</sup>

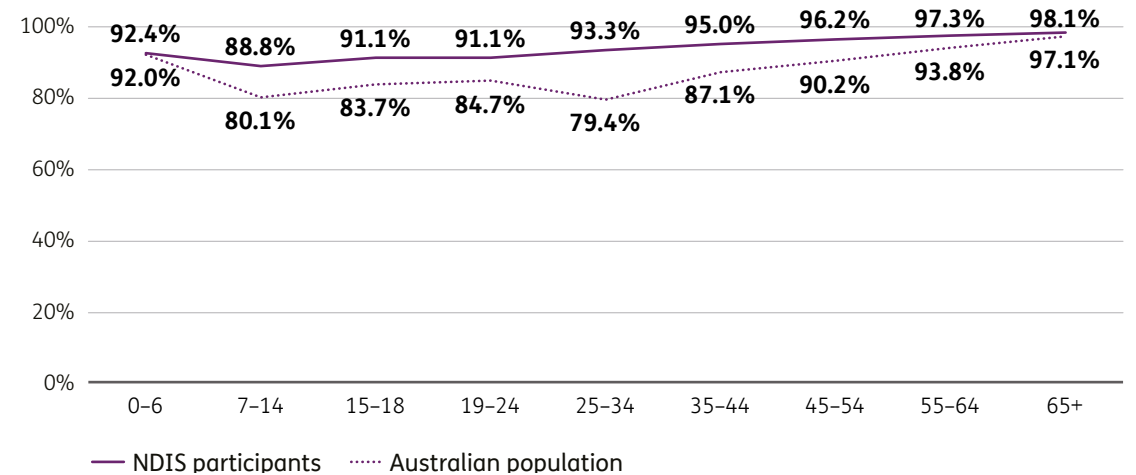
## By age group

The top graph shows age-specific rates of accessing GP services for NDIS participants and the Australian population. The percentage of NDIS participants accessing GP services is higher than for the Australian population for each age group. The differences are larger for the middle age groups, 7 to 54. By contrast, the percentages are very similar for both the 0 to 6 age group (around 92%) and the 65 and over age group (97% to 98%).

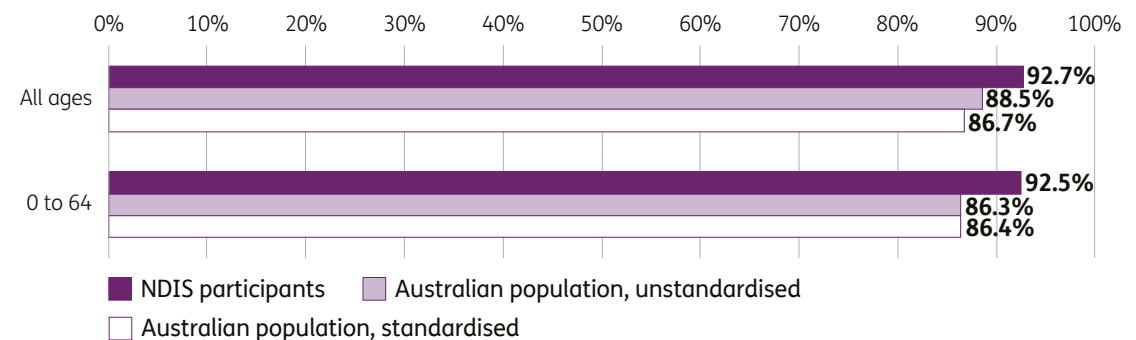
The general shape by age is a drop between age groups 0 to 6 and 7 to 14, followed by a generally increasing trend with age. The initial drop is less pronounced for NDIS participants than for the Australian population.

The bottom graph compares summary rates. The overall rate for NDIS participants was 92.7%, about 6 percentage points higher than the Australian population rate of 86.7% standardised to the NDIS age distribution. Excluding age group 65 and over, the rate for NDIS participants is 92.5% compared to a standardised rate of 86.4% for the Australian population.

Percentage accessing GP services by age group



Percentage accessing GP services – overall rates



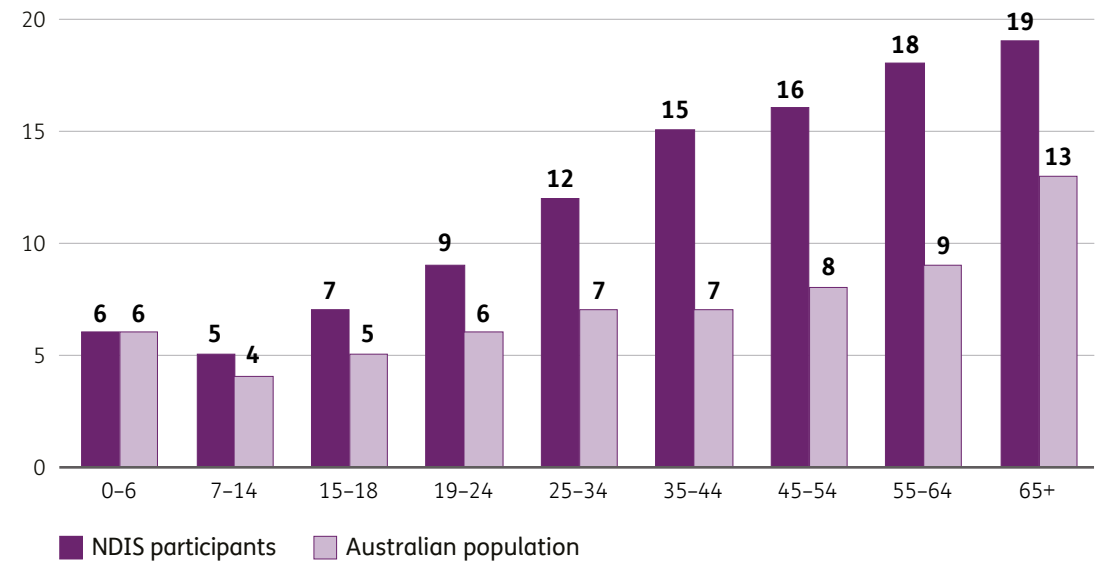
<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

# Accessing GP services

By age group cont.

The average number of services accessed is 10 for NDIS participants and 8 (standardised) for the Australian population. By age group, averages increase with age from age 7 and vary from 5 to 19 for NDIS participants and from 4 to 13 for the Australian population.

**Average number of GP services accessed by age group**



# Accessing allied health services<sup>1</sup>

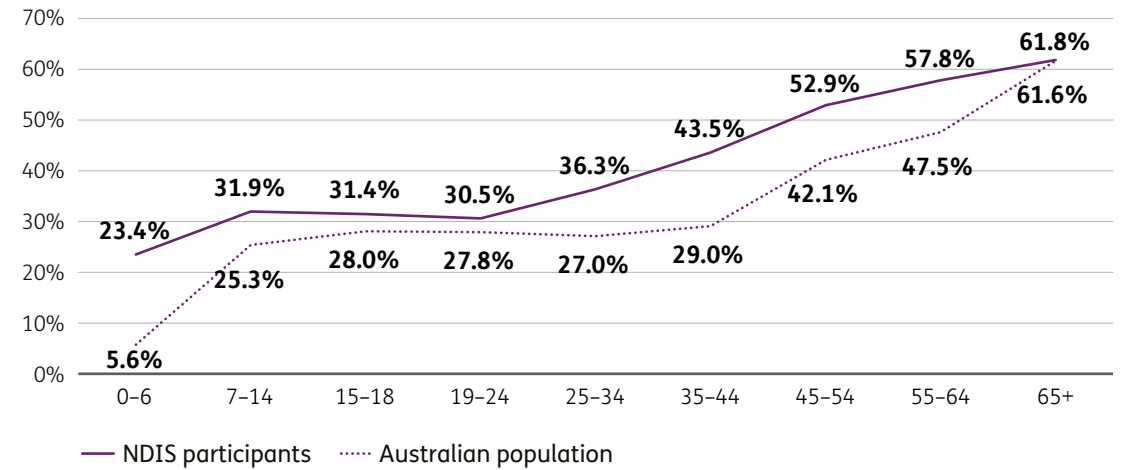
## By age group

The top graph shows age-specific rates of accessing allied health services for NDIS participants and the Australian population. The percentage of NDIS participants accessing allied health services is higher than for the Australian population for each age group. The difference is particularly striking for the youngest age group: 23.4% of NDIS participants aged 0 to 6 accessed allied health services compared to only 5.6% of Australians aged 0 to 6. By contrast, the percentages are very similar for the 65 and over age group (approximately 62% for both NDIS participants and the Australian population).

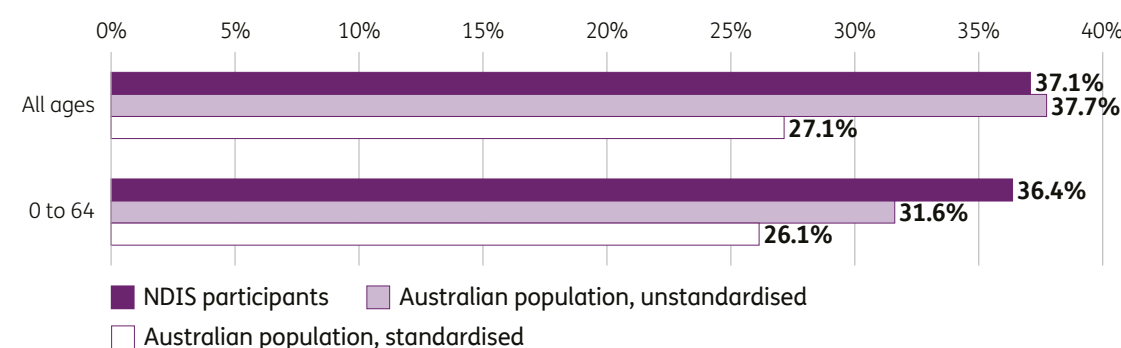
The general shape by age is an increase to age 7 to 14, followed by a plateau, then a steady increase with age. The second increase starts earlier for NDIS participants than for the Australian population.

The bottom graph compares summary rates. The crude rate for the Australian population across all ages was 37.7%, higher than the 37.1% for NDIS participants, despite the lower rates at each age group. However, when standardised to the NDIS age distribution, the Australian population rate is 27.1%, 10 percentage points lower than for NDIS participants. Excluding age group 65 and over, the rate for NDIS participants is 36.4% compared to a standardised rate of 26.1% for the Australian population.

Percentage accessing allied health services by age group



Percentage accessing allied health services – overall rates



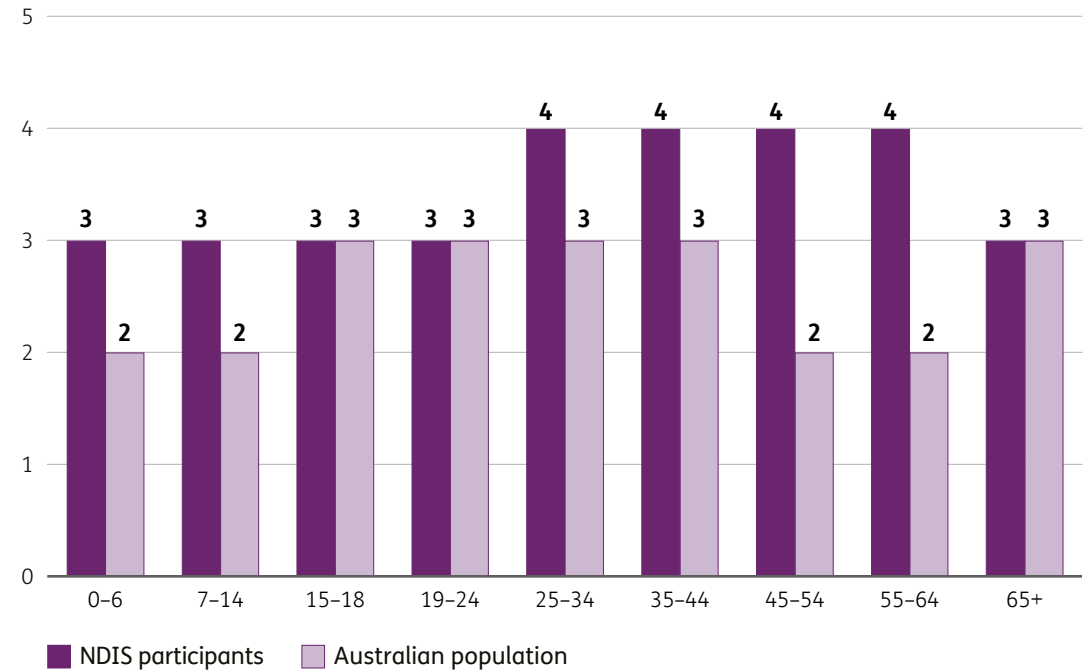
<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

# Accessing allied health services

By age group cont.

The average number of services accessed is 3 for NDIS participants and 2 (standardised) for the Australian population. By age group, averages vary from 3 to 4 for NDIS participants and from 2 to 3 for the Australian population.

**Average number of allied health services accessed by age group**



# Accessing mental health services<sup>1</sup>

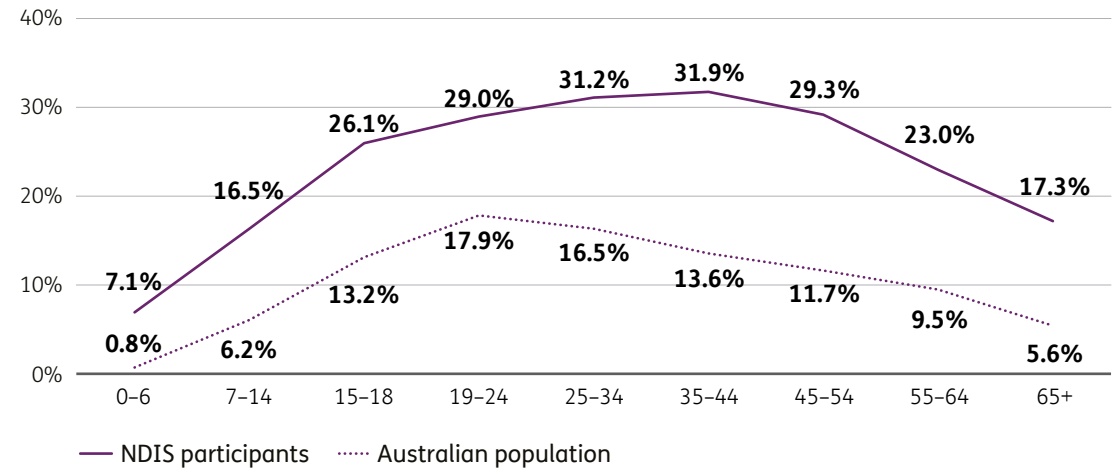
## By age group

The top graph shows age-specific rates of accessing mental health services for NDIS participants and the Australian population. The percentage of NDIS participants accessing mental health services is higher than for the Australian population for each age group. The largest difference of about 18 percentage points occurs for the age range 35 to 54, but there are substantial differences for all age groups. Of note, for the youngest age group, 7.1% of NDIS participants aged 0 to 6 access mental health services compared to only 0.8% of Australians aged 0 to 6.

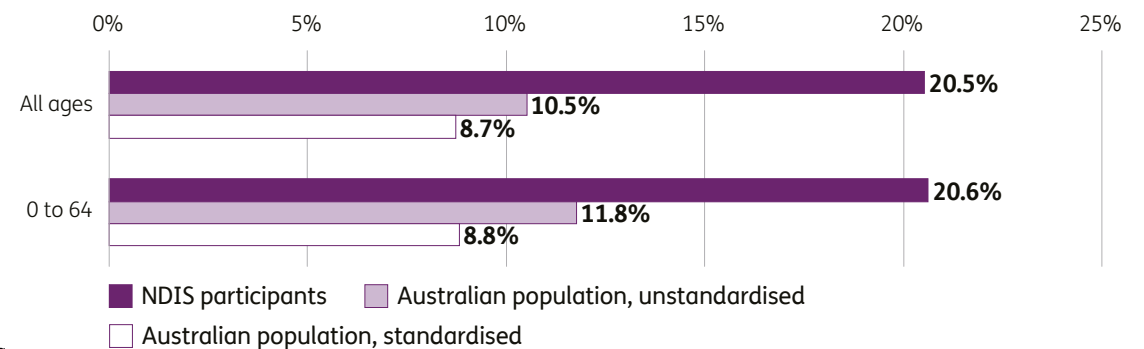
The general shape by age is an increasing trend to age 19 to 24 (Australian population) or age 35 to 44 (NDIS participants), followed by a steady decrease with age.

The bottom graph compares summary rates. The overall rate for NDIS participants was 20.5%, about 12 percentage points higher than the Australian population rate of 8.7% standardised to the NDIS age distribution. Excluding age group 65 and over, the rate for NDIS participants is 20.6% compared to a standardised rate of 8.8% for the Australian population.

Percentage accessing mental health services by age group



Percentage accessing mental health services – overall rates



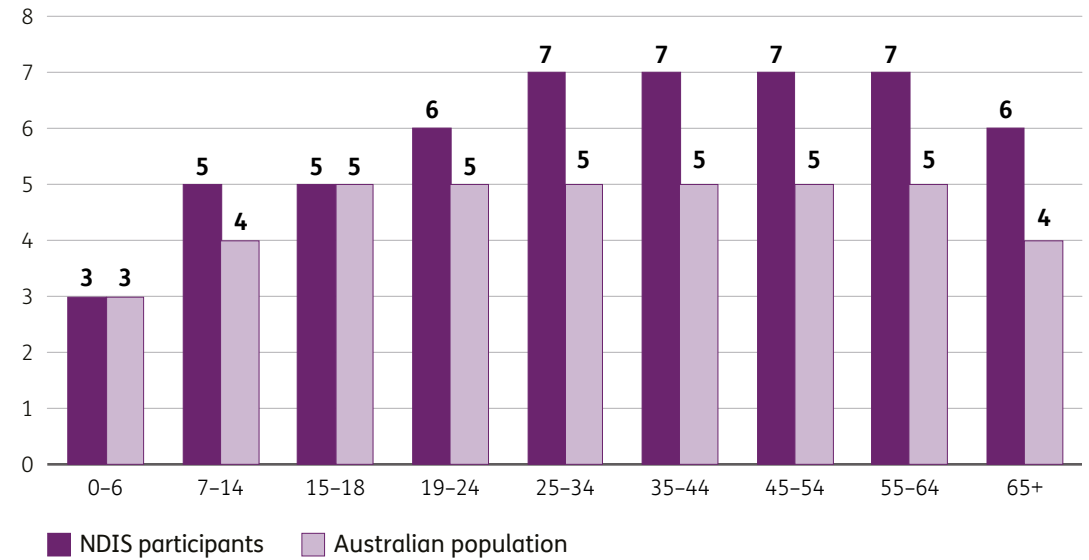
<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021-22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

# Accessing mental health services

By age group cont.

The average number of services accessed is 5 for NDIS participants and 4 (standardised) for the Australian population. By age group, averages vary from 3 to 7 for NDIS participants and from 3 to 5 for the Australian population.

**Average number of mental health services accessed by age group**



# Proportion accessing GP services<sup>1</sup>

## By disability<sup>2</sup>

Amongst NDIS participants, those with multiple sclerosis had the highest proportion accessing Medicare-subsidised GP services, almost 99%. This may be due to the GP's role in diagnosing and coordinating treatment for patients with multiple sclerosis. It may also reflect a higher average age for these participants.

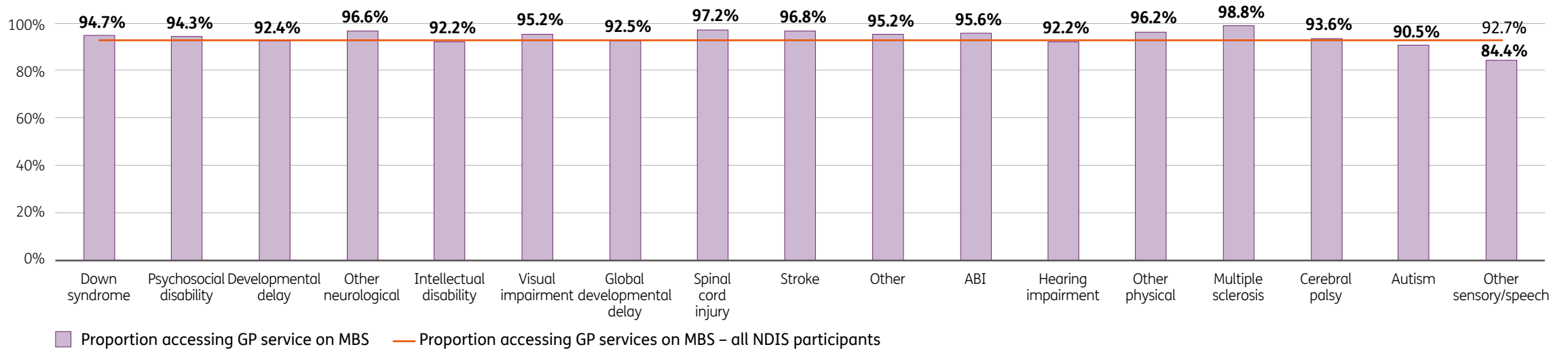
Participants with spinal cord injury and stroke also have very high proportions accessing Medicare-subsidised GP services. Again, this may be associated with the complexity of these disabilities and the multidisciplinary nature of their care.

Participants with stroke tend to be older on average, and this may also be a contributing factor.

For most disability types, the proportion accessing Medicare-subsidised GP services is generally in line with the overall NDIS participant population.

Participants with autism had lower than average usage of Medicare-subsidised GP services (90.5%) during the financial year. This could be due to various factors, one possible factor being the relatively younger age of participants with autism.

**Proportion of NDIS participants accessing Medicare-subsidised GP services by disability type**



1 Person Level Integrated Data Asset (PLIDA), FY2021-22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

2 Results shown do not control for any other factors, in particular, age. Since age distributions can vary considerably by disability (for example, those with developmental delay will be much younger and those with stroke tend to be older), the results should be interpreted with caution.



# Number of GP services accessed<sup>1</sup>

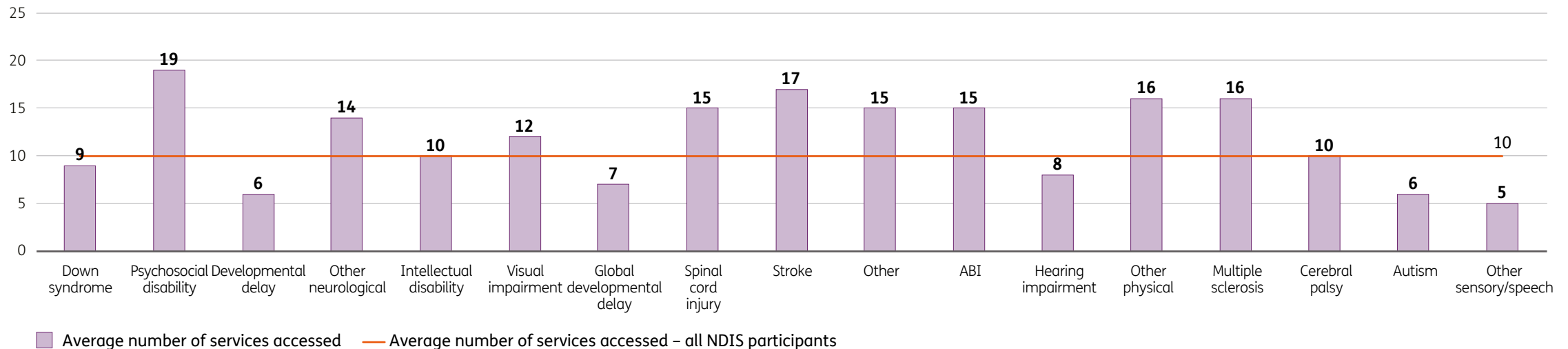
## By disability<sup>2</sup>

Participants with psychosocial disability accessed Medicare-subsidised GP services the most often, on average 19 times during the financial year, compared to 10 times for NDIS participants overall.

Participants with stroke had the second highest average number of GP consultations during the financial year (17). Participants with stroke tend to be older than average, which may be a contributing factor.

Participants with autism, developmental delay, global developmental delay, or other sensory/speech accessed Medicare-subsidised GP services the least often (5 to 7 times on average during the financial year). This may partly reflect the younger age distributions for these participant groups.

### Number of Medicare-subsidised GP services accessed on MBS by disability type



<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

<sup>2</sup> Results shown do not control for any other factors, in particular, age. Since age distributions can vary considerably by disability (for example, those with developmental delay will be much younger and those with stroke tend to be older), the results should be interpreted with caution.

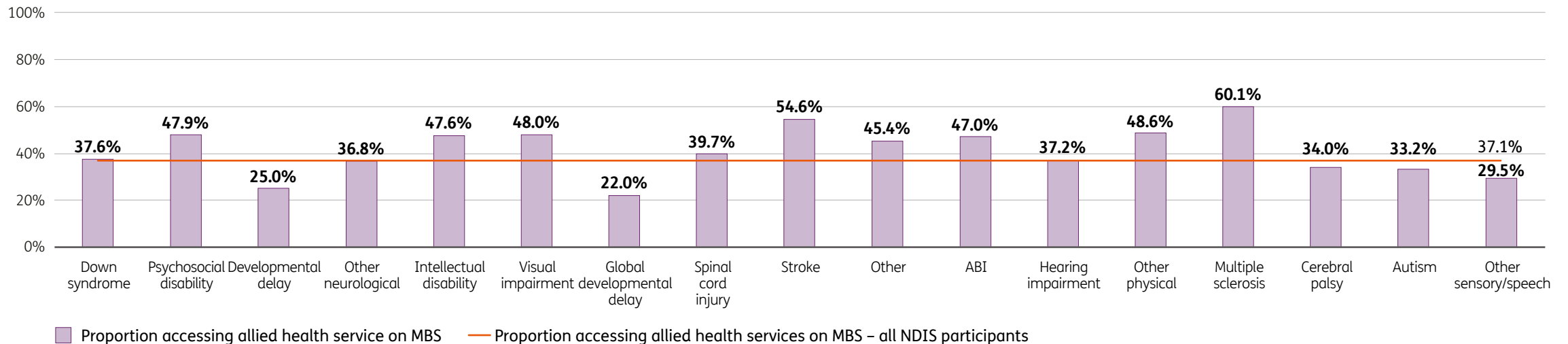
# Proportion accessing allied health services<sup>1</sup>

## By disability<sup>2</sup>

Over half of the participants with multiple sclerosis and stroke accessed a Medicare-subsidised allied health service during FY2021–22 – the highest among the disability types. The complex nature of these disabilities requires a multidisciplinary approach, with allied health professionals playing a crucial role in rehabilitation and management of symptoms. Older average age may also be a factor, since allied health service usage increases with age.

In contrast, participants with global developmental delay and developmental delay were the least likely to attend Medicare-subsidised allied health services. Less than a quarter of them saw an allied health professional during FY2021–22. This is likely to be age-related, since all of these participants are between the ages of 0 and 6 years old and allied health service usage is lower in this age group (as seen previously).

**Proportion of NDIS participants accessing Medicare-subsidised allied health services by disability type**



<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.  
<sup>2</sup> Results shown do not control for any other factors, in particular, age. Since age distributions can vary considerably by disability (for example, those with developmental delay will be much younger and those with stroke tend to be older), the results should be interpreted with caution.

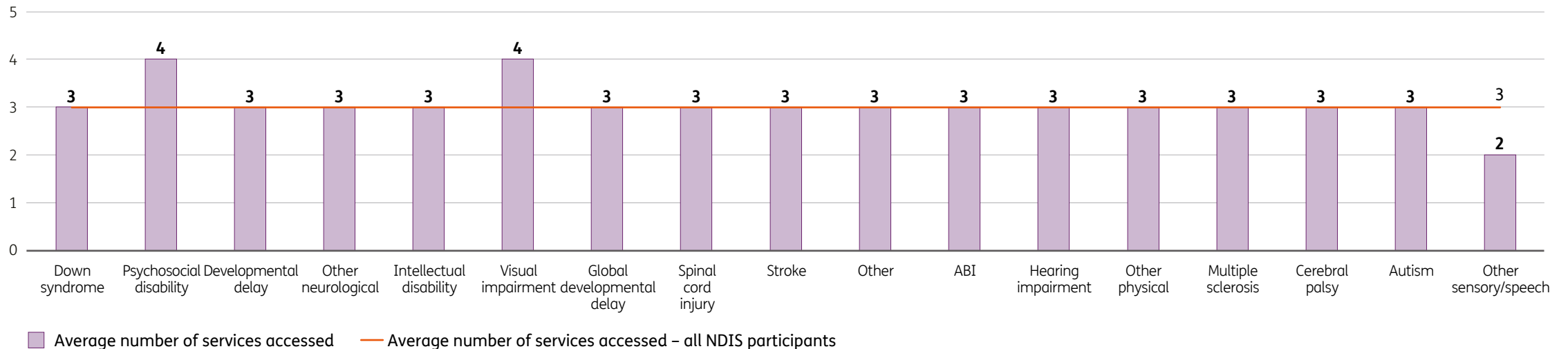
# Number of allied health services accessed<sup>1</sup>

## By disability<sup>2</sup>

Noting that access to Medicare-subsidised services is limited to five annual services across all allied health professions, most of the primary disability groups engaged with an allied health professional on average 3 times during the financial year (in line with the overall NDIS participant average).

Exceptions were participants with psychosocial disability or visual impairment, who accessed Medicare-subsidised allied health services on average 4 times during FY2021–22, and those with other sensory/speech (an average of 2 times).

**Number of Medicare-subsidised allied health services accessed by disability type**



<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.  
<sup>2</sup> Results shown do not control for any other factors, in particular, age. Since age distributions can vary considerably by disability (for example, those with developmental delay will be much younger and those with stroke tend to be older), the results should be interpreted with caution.

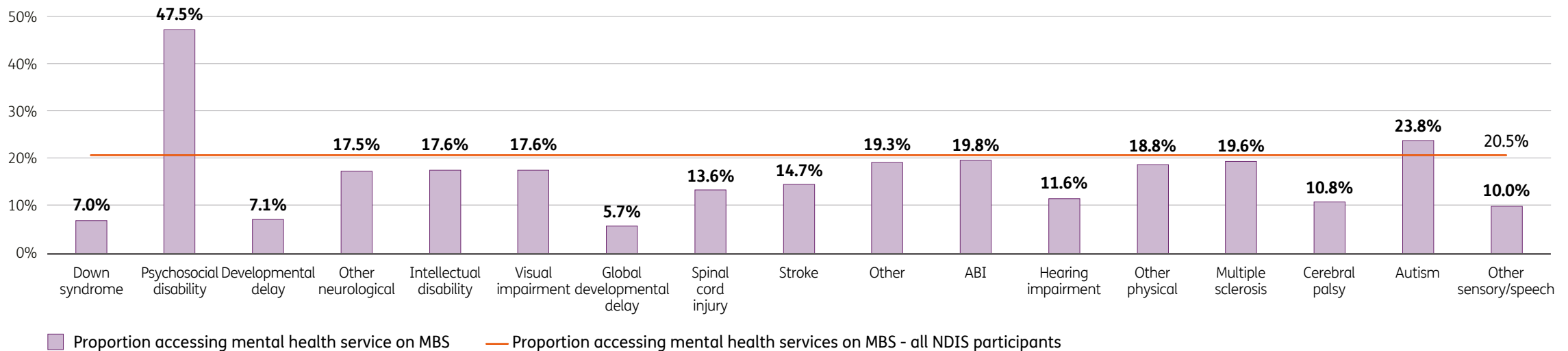
# Proportion accessing mental health services<sup>1</sup>

## By disability<sup>2</sup>

The proportion of participants with psychosocial disability (47.5%) consulting a mental health specialist is nearly double that of participants with autism (23.8%), the second largest disability group accessing Medicare subsidised mental health services. This compares to an average of 20.5% for all NDIS participants.

Participants with developmental delay and global developmental delay had two of the lowest percentages accessing mental health services, at 7.1% and 5.7%, respectively. This is likely to be age-related, since all of these participants are aged 0 to 6 where mental health service usage is much lower. Participants with Down syndrome also had low mental health service usage (7.0%) in FY2021–22.

**Proportion of NDIS participants accessing Medicare-subsidised mental health services by disability type**



<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.  
<sup>2</sup> Results shown do not control for any other factors, in particular, age. Since age distributions can vary considerably by disability (for example, those with developmental delay will be much younger and those with stroke tend to be older), the results should be interpreted with caution.

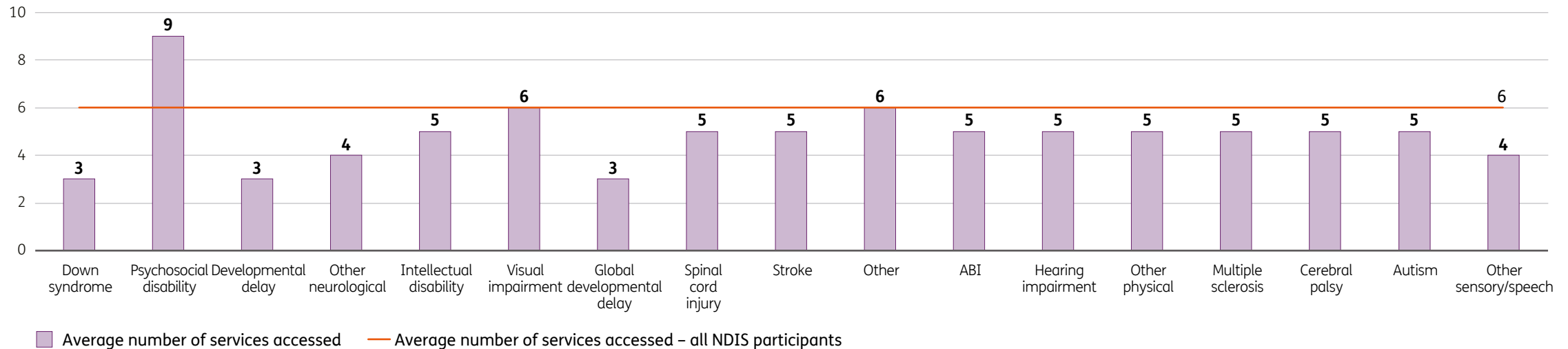
# Number of mental health services accessed<sup>1</sup>

## By disability<sup>2</sup>

Participants with psychosocial disability accessed Medicare-subsidised mental health services the most often among the disability groups, on average 9 times during FY2021–22. This is 50% more than the overall average for NDIS participants (6 times).

Participants with developmental delay, global developmental delay, or Down syndrome accessed mental health services 3 times on average during FY2021–22, the lowest among the disability groups. Lower average age may be a factor in this result.

### Number of Medicare-subsidised mental health services accessed by disability type



<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

<sup>2</sup> Results shown do not control for any other factors, in particular, age. Since age distributions can vary considerably by disability (for example, those with developmental delay will be much younger and those with stroke tend to be older), the results should be interpreted with caution.

# Accessing GP services<sup>1</sup>

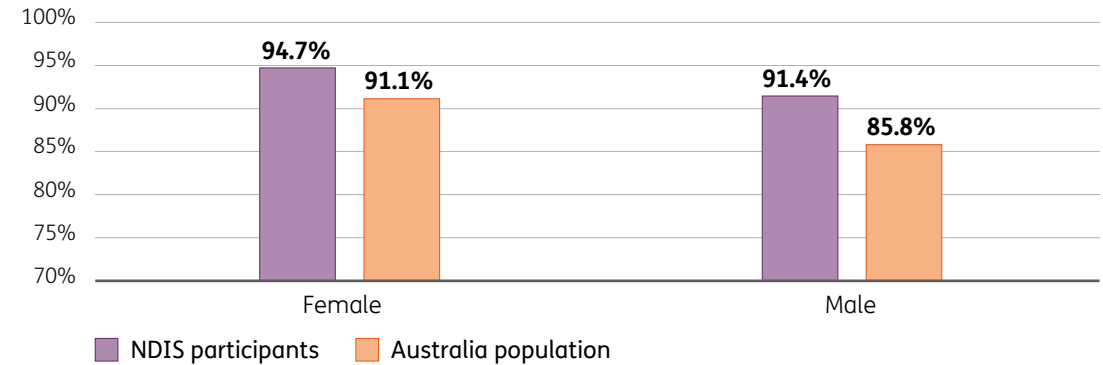
## By gender<sup>2</sup>

In the NDIS, males constitute 62% of all participants, whereas females represent 37% and other 1%. Conversely, within the Australian population, males make up 49% and females comprise 51%.

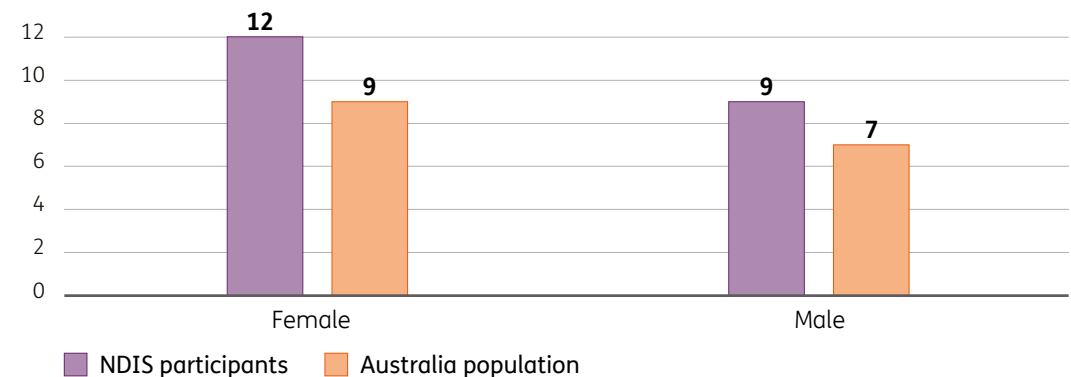
A higher proportion of NDIS participants access Medicare-subsidised **GP services** compared to the Australian population for both females and males. Moreover, during the financial year, a higher number of females had a GP consultation compared to males, for both the NDIS participant population and the broader Australian population.

On average the number of GP consultations is higher for NDIS participants compared to the Australian population, for both females and males. During the financial year, females tended to visit the GP more frequently than males for both the NDIS participant population and the Australian population.

**Proportion accessing Medicare-subsidised GP services during FY21/22 by gender**



**Average number of Medicare-subsidised GP services accessed during FY21/22 by gender**



<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

<sup>2</sup> Results shown by gender do not control for any other factors, in particular, age and disability type. Hence the results should be interpreted with caution.

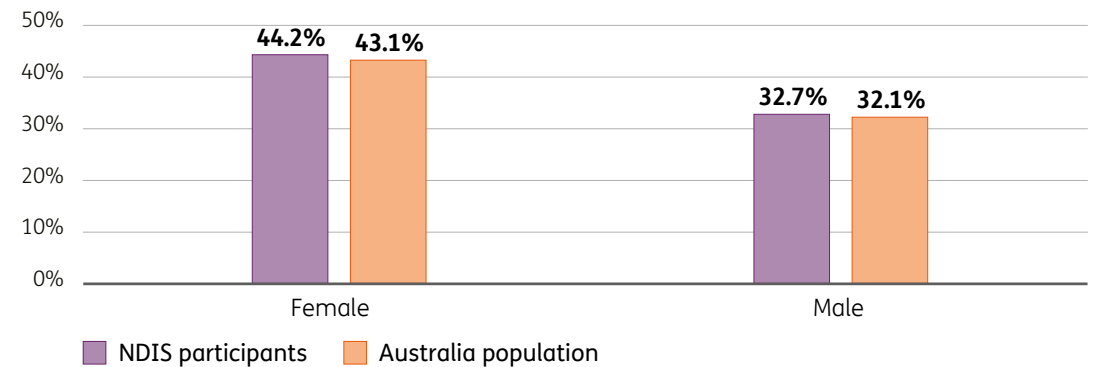
# Accessing allied health services<sup>1</sup>

## By gender<sup>2</sup>

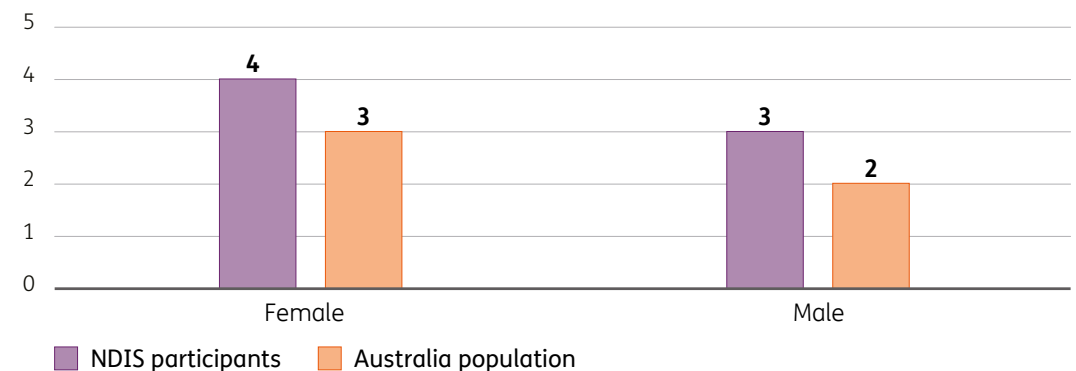
The proportion of NDIS participants accessing Medicare-subsidised allied health services were marginally higher compared to the Australian population for both females and males. Females were more likely to see an allied health professional than males for both the NDIS participant population and the Australian population.

NDIS participants accessed Medicare-subsidised allied health services on average more times during the financial year than the Australian population, for both females and males. Females consulted an allied health professional more frequently than males for both the NDIS participant population and the Australian population.

**Proportion accessing Medicare-subsidised allied health services during FY21/22 by gender**



**Average number of Medicare-subsidised allied health services accessed during FY21/22 by gender**



<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

<sup>2</sup> Results shown by gender do not control for any other factors, in particular, age and disability type. Hence the results should be interpreted with caution.

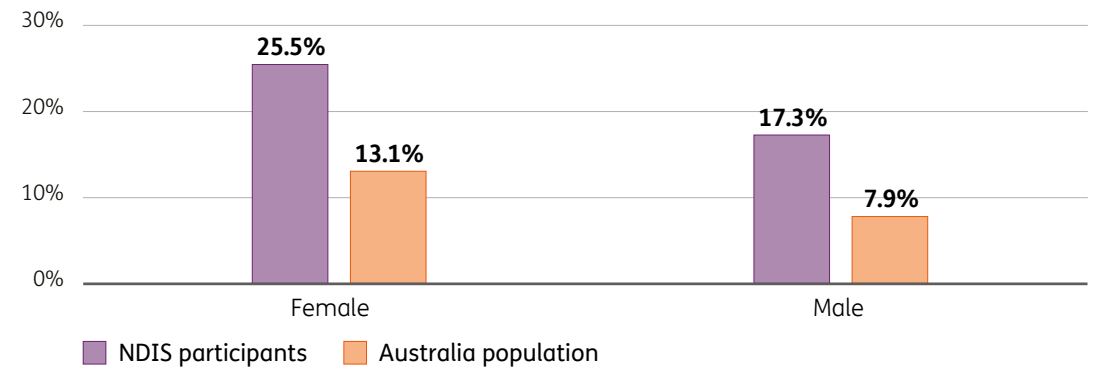
# Accessing mental health services<sup>1</sup>

## By gender<sup>2</sup>

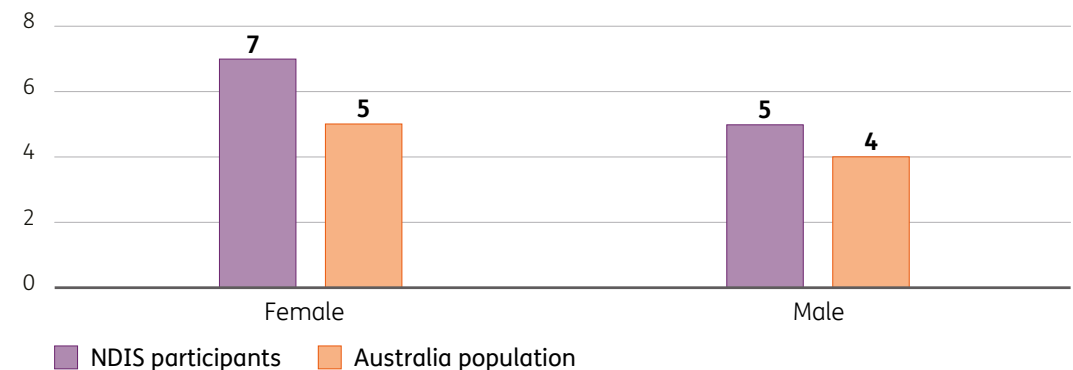
The percentage of NDIS participants accessing Medicare-subsidised mental health services is nearly double that of the Australian population for females, and more than double for males. Females were more likely to see a mental health professional than males either for both the NDIS participant population and the Australian population.

NDIS participants accessed Medicare-subsidised mental health services on average more times during the financial year than the Australian population, for both females and males. Females consulted a mental health professional more frequently than males for both the NDIS participant population and the Australian population.

**Proportion accessing Medicare-subsidised mental health services during FY21/22 by gender**



**Average number of Medicare-subsidised mental health services accessed during FY21/22 by gender**



<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

<sup>2</sup> Results shown by gender do not control for any other factors, in particular, age and disability type. Hence the results should be interpreted with caution.



# Accessing GP services<sup>1</sup>

## By Indigenous status<sup>2</sup>

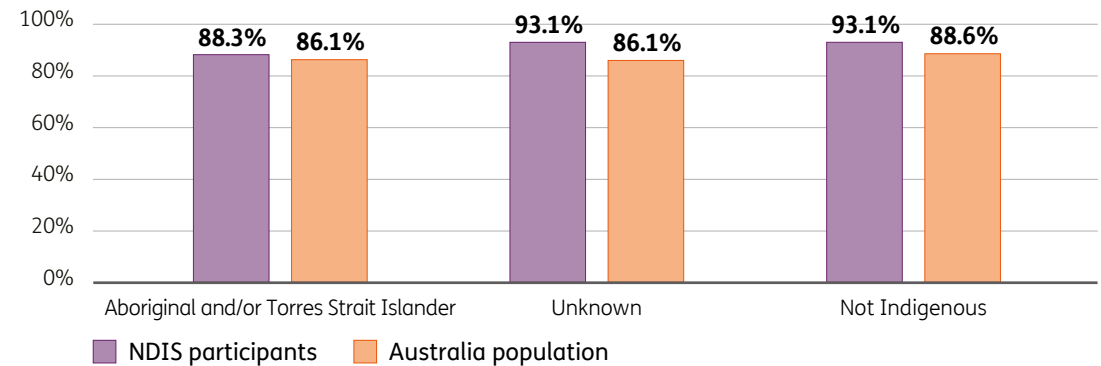
Within NDIS, 7% of participants identified as Aboriginal and/or Torres Strait Islander, 76% as not Indigenous and 16% had unknown Indigenous status. In comparison, 3% of the Australian population identified as Aboriginal and/or Torres Strait Islander, 96% as Non-Indigenous, and for 1% Indigenous status was unknown.

Amongst those identifying as Aboriginal and/or Torres Strait Islander, the proportion accessing Medicare-subsidised GP services was higher for those who were also NDIS participants (88.3%), compared to the Australian Aboriginal and/or Torres Strait Islander population (86.1%). During the financial year, the proportion accessing GP services was lower for those who identify as Aboriginal and/or Torres Strait Islander compared to those who do not. This was observed in both the NDIS participant population and the broader Australian population.

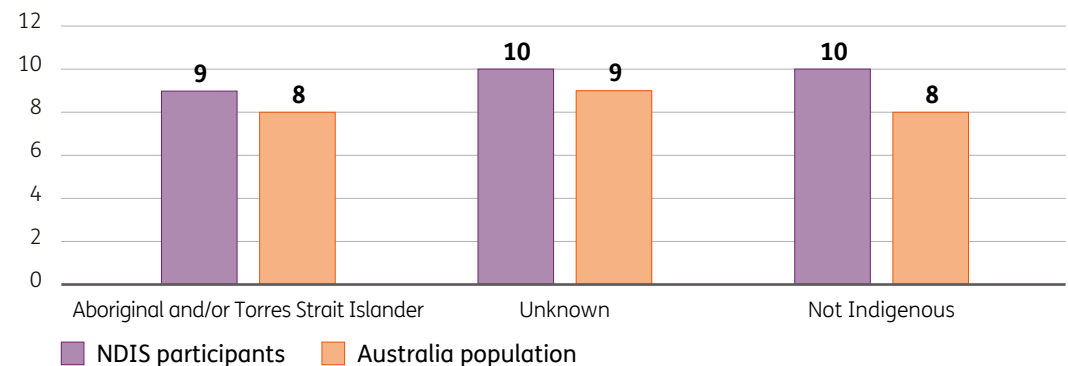
The average number of GP consultations is marginally higher for Aboriginal and/or Torres Strait Islander on the NDIS (9) compared to Aboriginal and/or Torres Strait Islander in the Australian population (8). In the NDIS, the average number of consultations was marginally lower for those who identify as Aboriginal and/or Torres Strait Islander compared to those who do not, whereas for the broader Australian population there was no difference between those who identify as Aboriginal and/or Torres Strait Islander and those who do not.

<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.  
<sup>2</sup> Results shown by Indigenous status do not control for any other factors, in particular, age. Since Indigenous populations tend to have younger age distributions than non-Indigenous populations, the results should be interpreted with caution.

**Proportion accessing Medicare-subsidised GP services during FY21/22 by Indigenous status**



**Average number of Medicare-subsidised GP services accessed during FY21/22 by Indigenous status**



# Accessing allied health services<sup>1</sup>

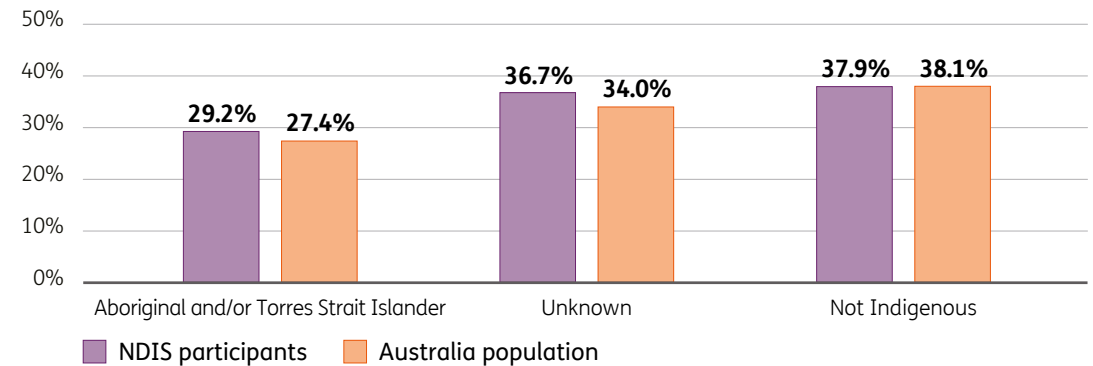
## By Indigenous status<sup>2</sup>

Amongst those who identify as Aboriginal and/or Torres Strait Islander, the proportion of NDIS participants accessing Medicare-subsidised allied health services (29.2%) was marginally higher than for the Australian population (27.4%).

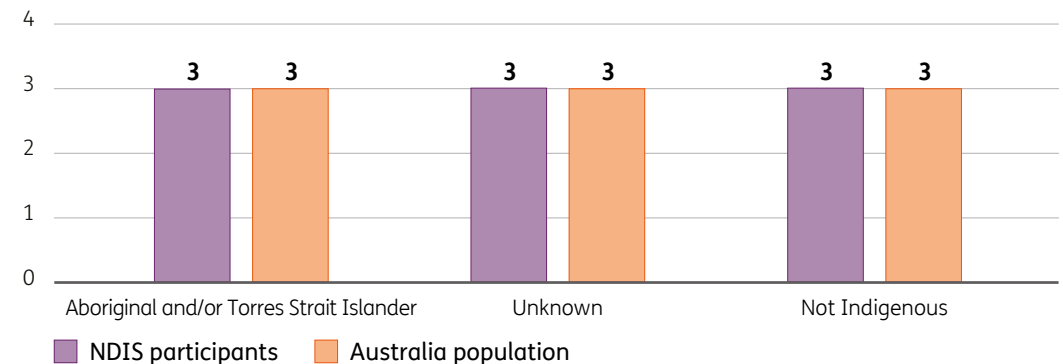
Those who identify as Aboriginal and/or Torres Strait Islander were less likely to engage an allied health professional during the financial year than those who do not identify as Aboriginal and/or Torres Strait Islander, for either the NDIS participant population or the Australian population.

During the financial year, all groups within the NDIS participant population and the broader Australian population demonstrated uniform levels of engagement with allied health professional – on average 3 times.

**Proportion accessing Medicare-subsidised allied health services during FY21/22 by Indigenous status**



**Average number of Medicare-subsidised allied health services accessed during FY21/22 by Indigenous status**



<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

<sup>2</sup> Results shown by Indigenous status do not control for any other factors, in particular, age. Since Indigenous populations tend to have younger age distributions than non-Indigenous populations, the results should be interpreted with caution.

# Accessing mental health services<sup>1</sup>

## By Indigenous status<sup>2</sup>

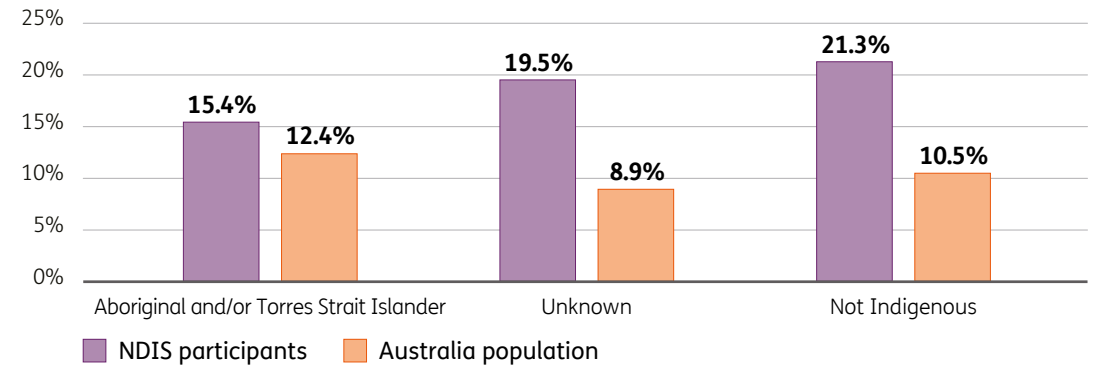
Amongst those who identify as Aboriginal and/or Torres Strait Islander, the proportion of NDIS participants accessing Medicare-subsidised mental health services (15.4%) was higher than for the Australian population (12.4%).

In the Australian population, the proportion accessing mental health services is higher for those who identify as Aboriginal and/or Torres Strait Islander (12.4%) than for those who do not (10.5%). However, in the NDIS participant population, the proportion accessing mental health services is lower for those who identify as Aboriginal and/or Torres Strait Islander (15.4%) than for those who do not (21.3%).

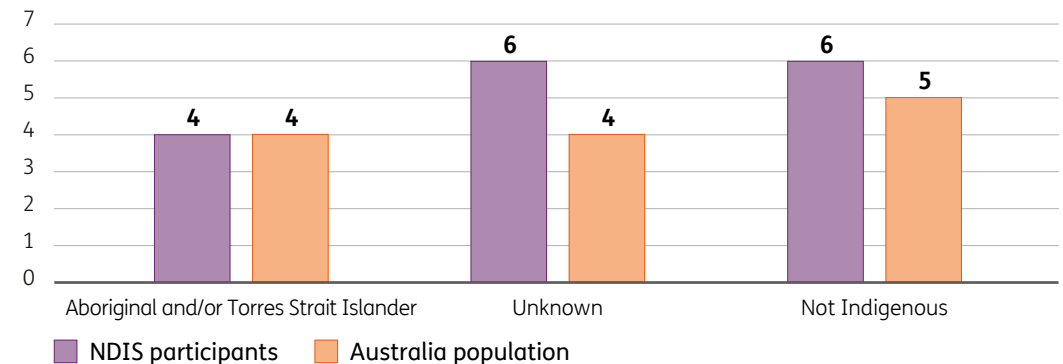
The average numbers of mental health consultations are equivalent for Aboriginal and/or Torres Strait Islander on the NDIS and in the wider Australian population.

Non-Indigenous individuals had higher average numbers of mental health consultations compared to Aboriginal and/or Torres Strait Islanders, for both the NDIS participant population and the broader Australian population.

**Proportion accessing mental health services during FY21/22 by Indigenous status**



**Average number of mental health accessed during FY21/22 by Indigenous status**



<sup>1</sup> Person Level Integrated Data Asset (PLIDA), FY2021–22, Medicare Benefits Schedule, ABS DataLab. Findings based on use of PLIDA data.

<sup>2</sup> Results shown by Indigenous status do not control for any other factors, in particular, age. Since Indigenous populations tend to have younger age distributions than non-Indigenous populations, the results should be interpreted with caution.

3.5

Life satisfaction

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## Key statistics (1/2)

Outcome indicators	Participant feeling “delighted”, “pleased” or “mostly satisfied” <sup>3,4</sup>		Family/carer feeling “delighted”, “pleased” or “mostly satisfied” <sup>4</sup>					Participant vs family/carer <sup>5</sup>
	Males	Females	Mothers	Fathers	Siblings	Spouse/partner	Grandparents	
NDIS percentage at baseline <sup>1</sup>	48.5%	44.8%	52.6%	58.6%	58.8%	51.0%	56.3%	Positive relationship
Baseline to latest reassessment changes by cohort <sup>2</sup>	==↑↑==	↑↑=↑==	↑=↑↑↑=	====XX	===XXX	====XX	XXXXXX	Positive relationship

1 All baseline entry years are aggregated.

2 Arrows denote the direction of percentage change from baseline to latest reassessment if the change is statistically significant; an equal sign denotes that the change is not significant; an “X” denotes the cohort is not graphed due to small numbers. Position in the text string represents time in the Scheme, ordered (left to right) from 1 to 6 years.

3 The analysis only concerns participants aged 15 to 64. Baseline analysis is not applicable to participants aged 65 and over (only people under 65 are eligible to join the Scheme).

4 Excludes respondents who answered “Don’t know”.

5 The conclusions are based on observation from graphs, and do not control for other factors.

## Key statistics (2/2)

Modelled results <sup>1</sup>	Baseline		Trend (one-step)			
			Improvement		Deterioration	
	Strongest negative effect <sup>2</sup>	Strongest positive effect <sup>2</sup>	Least likely to improve <sup>2</sup>	Most likely to improve <sup>2</sup>	Least likely to deteriorate <sup>2</sup>	Most likely to deteriorate <sup>2</sup>
Participant feeling “delighted”, “pleased” or “mostly satisfied”	Primary disability: <b>Psychosocial disability</b>	Remoteness: <b>Very remote</b>	Has secondary disability: <b>Yes</b>	Primary disability: <b>Down syndrome</b>	Primary disability: <b>Down syndrome</b>	Age group: <b>Aged 15–17</b>
Family/carer feeling “delighted”, “pleased” or “mostly satisfied”	Primary disability: <b>Psychosocial disability</b>	Respondent relationship to participant: <b>Carer (not a family member)</b>	Carer age group: <b>45–49</b>	Participant age group: <b>45–54</b>	Participant age group: <b>45–54</b>	Respondent relationship to participant: <b>Spouse/partner</b>

1 Amongst categorical variables with coefficient estimates significantly different from zero at the 0.05 level. Based on central estimates of the coefficients, without regard to precision of estimation. All the characteristics mentioned in this table are compared to their respective reference categories, which are specified on slides 157, 160, 164 and 167.

2 The effect is considered “less likely” when the coefficient estimate is below 1 (less likely than the reference category); “more likely” when the coefficient estimate is above 1 (more likely than the reference category).

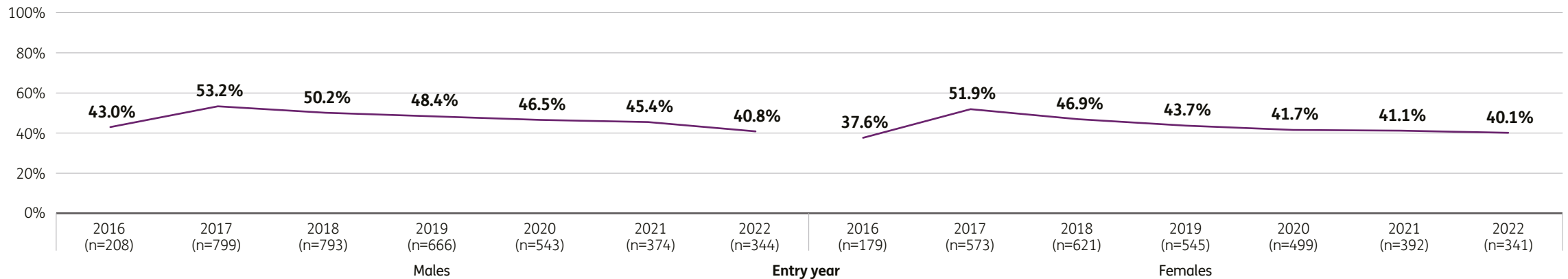
# Participants (1/7)

## Baseline outcomes – percentage with positive life satisfaction<sup>1</sup> By entry year and gender

Between 2017 and 2022, there has been a decline in the proportion of new NDIS participants (both males and females) who feel “delighted”, “pleased” or “mostly satisfied” when they were asked about how they felt about life in general now and in the future.

### Time series: NDIS participants from 2016 to 2022 (age standardised)<sup>2,3</sup>

Baseline: Percentage of participants feeling “delighted”, “pleased” or “mostly satisfied” thinking about life in general now and in the future



n = represents the number of NDIS participants responded to the LFOF survey

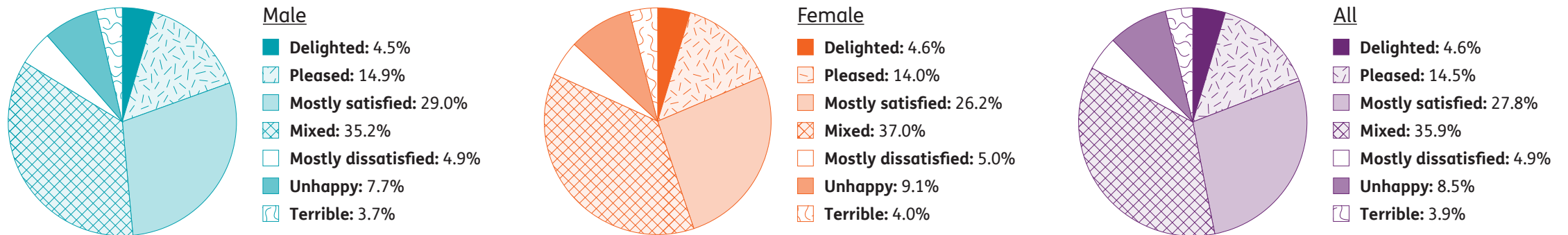
1 These results exclude participants who responded “Don’t know”.  
 2 No Australian population benchmark is available for this indicator.  
 3 NDIS respondents each year are standardised to aggregate (all years and genders) NDIS respondent age distribution.

# Participants (2/7)

## Baseline outcomes – percentage with positive life satisfaction Response options by gender

At Scheme entry considering all entry years, **48.5%** of NDIS males feel “delighted”, “pleased” or “mostly satisfied” about life in general now and in the future, compared to **44.8%** of NDIS females.

### Life satisfaction at baseline – NDIS participants<sup>1</sup> (unstandardised)

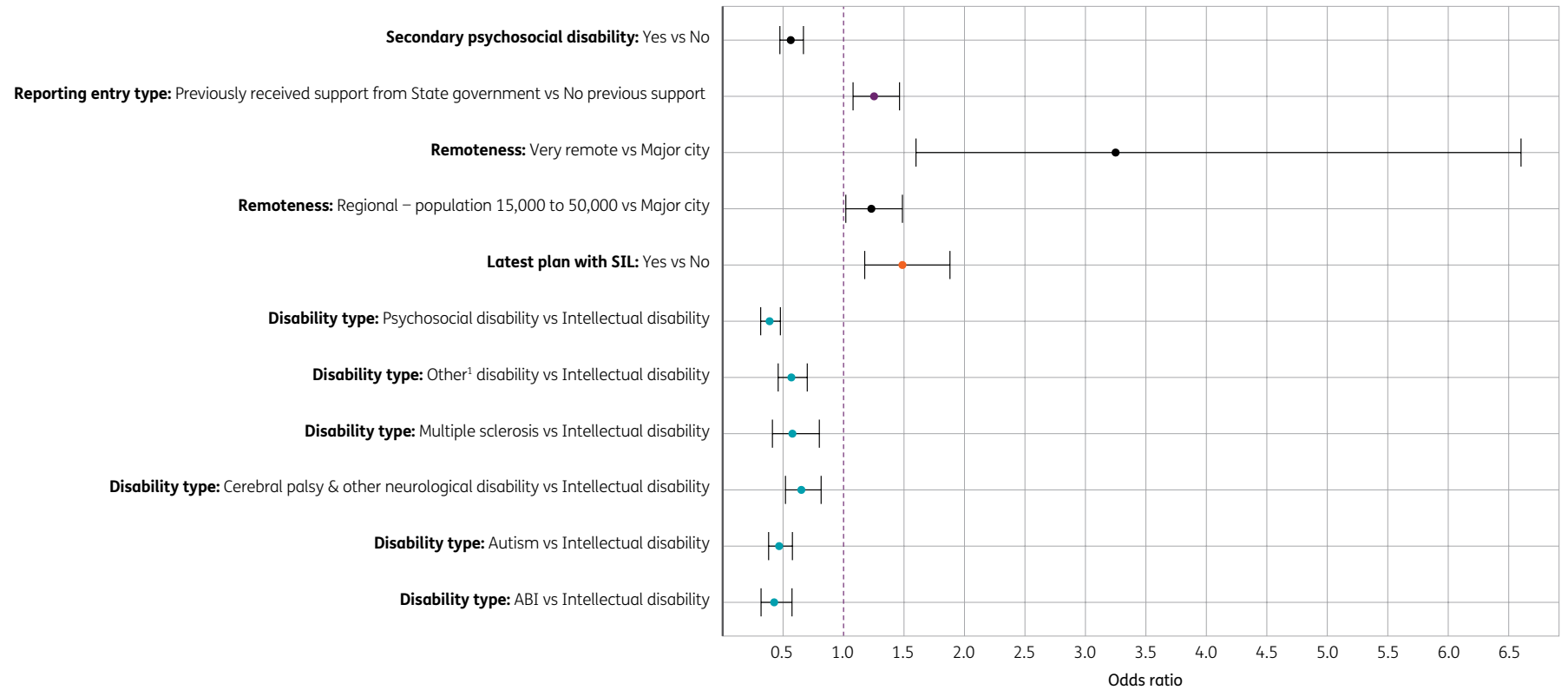




# Participants (3/7)

Baseline outcomes – percentage with positive life satisfaction  
Modelling results and odds ratios

## Key drivers of NDIS participants’ positive life satisfaction (responding “delighted”, “pleased” or “mostly satisfied”)



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Participants (4/7)

### Baseline outcomes – percentage with positive life satisfaction Comments on modelled results

#### Key drivers of NDIS participants' positive life satisfaction (responding “delighted”, “pleased” or “mostly satisfied”) cont.

Participants with the following characteristics are **more likely** to respond positively to the life satisfaction question:

- Having previously received support from State government compared to those who have not previously received any support
- Living in very remote or regional area with population between 15,000 and 50,000 people compared to living in a major city
- Having SIL funding in their latest plan compared to those without
- Before the end of second COVID lockdown, there is an increasing trend with later Scheme entry date.

Participants with the following characteristics are **less likely** to respond positively to the life satisfaction question:

- Having lower level of function (decreasing trend with decreasing level of function)
- Having a secondary psychosocial disability compared to those without a secondary psychosocial disability
- Having primary disability of psychosocial disability, multiple sclerosis, autism, cerebral palsy and other neurological conditions, acquired brain injury, or a disability in the “other”<sup>1</sup> group compared to primary disability of intellectual disability
- Females aged 15 to 24 are less likely to respond positively to the life satisfaction question
- After the end of second lockdown, there is a decreasing time trend with later Scheme entry date

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

# Participants (5/7)

## Longitudinal outcomes – change in percentage with positive life satisfaction<sup>1</sup> By longitudinal cohort and gender

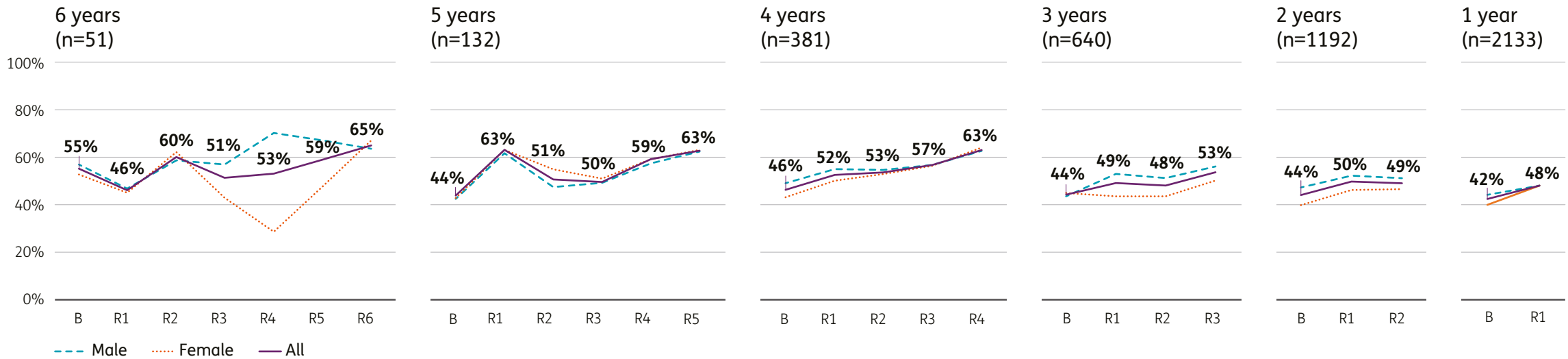
There are large increases across all cohorts in the percentage of participants feeling delighted, pleased or mostly satisfied about their life in general, now and in the future. After six years in the Scheme, there was a 9.8 percentage point increase from 54.9% to 64.7% in the percentage of participants with a positive life outlook (although there is some volatility due to small numbers for the 6-year cohort).

Notably, at the latest reassessment, higher percentages participants of those who have been in the Scheme for longer reported positive life satisfaction.

Due to small numbers, differences by gender are difficult to discern for the 5- and 6-year cohorts. For those in the Scheme 1 to 4 years, life satisfaction appears lower for females than males, although in some cases the increase for females appears slightly stronger.

The change between baseline and the latest reassessment is statistically significant for males who have been in the Scheme for 3 and 4 years, and females who have been in the Scheme for 1, 2 and 4 years.

### Percentage of participants who are delighted, pleased or mostly satisfied about their life in general<sup>2</sup>

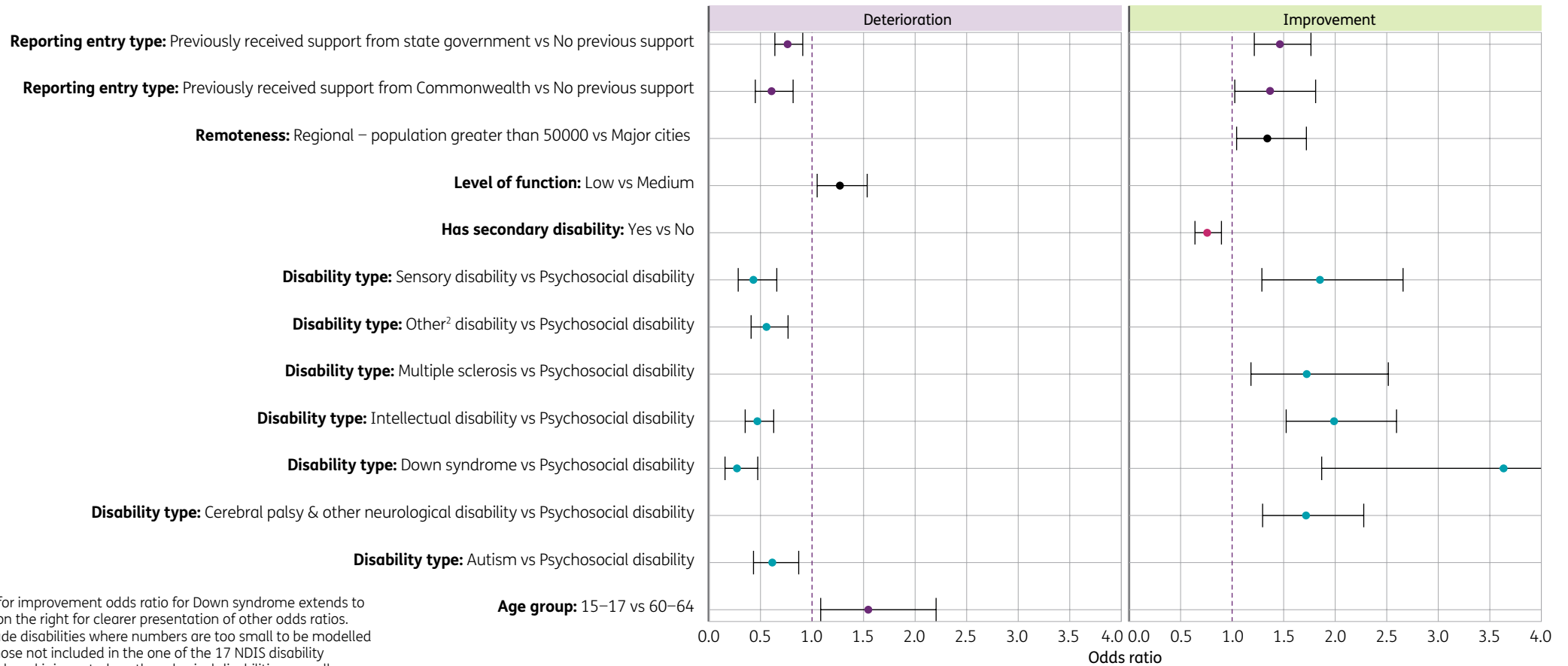


<sup>1</sup> These results exclude participants who responded "Don't know".  
<sup>2</sup> Data labels displayed in the graph relate to the "All" series.

# Participants (6/7)

## Longitudinal outcomes – change in percentage with positive life satisfaction Modelling results and odds ratios

### Key drivers of changes in NDIS participants' life satisfaction<sup>1</sup>



1 Upper confidence limit for improvement odds ratio for Down syndrome extends to 7 and has been cut off on the right for clearer presentation of other odds ratios.  
 2 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Participants (7/7)

### Longitudinal outcomes – change in percentage with positive life satisfaction

#### Comments on modelled results

##### Key drivers of changes in NDIS participants' life satisfaction cont.

Participants with the following characteristics are more/less likely to experience changes in their life satisfaction:

- Participants who previously received support from the Commonwealth government or a State government are more likely to improve and less likely to deteriorate than those who previously received no support
- Participants living in regional areas with population greater than 50000 are more likely to improve than participants living in major cities
- Participants with low level of function are more likely to deteriorate than participants with medium level of function
- Participants with primary disability of a sensory disability, intellectual disability or Down syndrome are more likely to improve and less likely to deteriorate than participants with primary disability of psychosocial disability
- Participants with primary disability of autism or other disabilities are less likely to deteriorate than participants with primary disability of psychosocial disability
- Participants with primary disability of multiple sclerosis or cerebral palsy and other neurological disability are more likely to improve than participants with primary disability of psychosocial disability
- Participants aged between 15 and 17 are more likely to deteriorate than participants aged between 60 and 64
- The likelihood of deterioration increases with later Scheme entry.

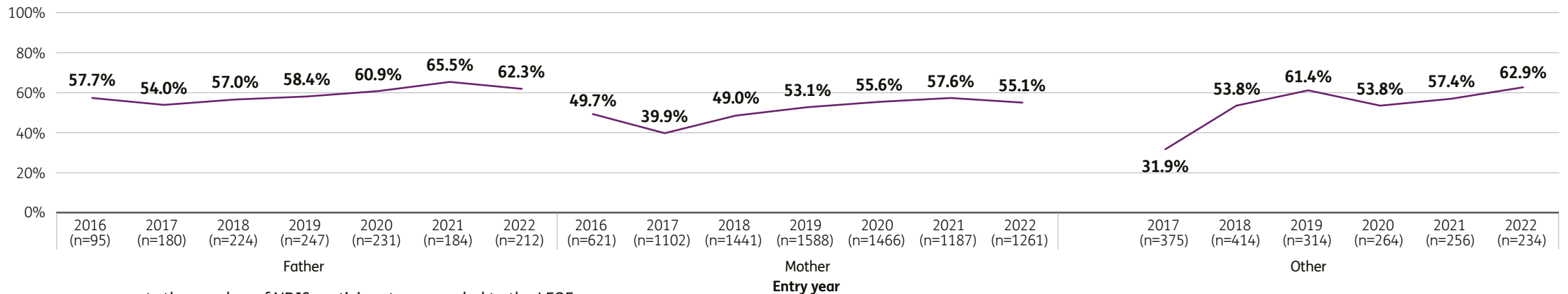
# Family/carer (1/7)

## Baseline outcomes – percentage with positive life satisfaction<sup>1</sup> By entry year and carer relationship

There has been an increase in the percentage of mothers and fathers of new participants with a positive life outlook between 2017 and 2021, followed by a small decrease in 2022.

### Time series: NDIS families and carers from 2016 to 2022 (age standardised)<sup>2,3,4</sup>

Baseline: Percentage of families and carers feeling “delighted”, “pleased” or “mostly satisfied” thinking about life in general now and in the future



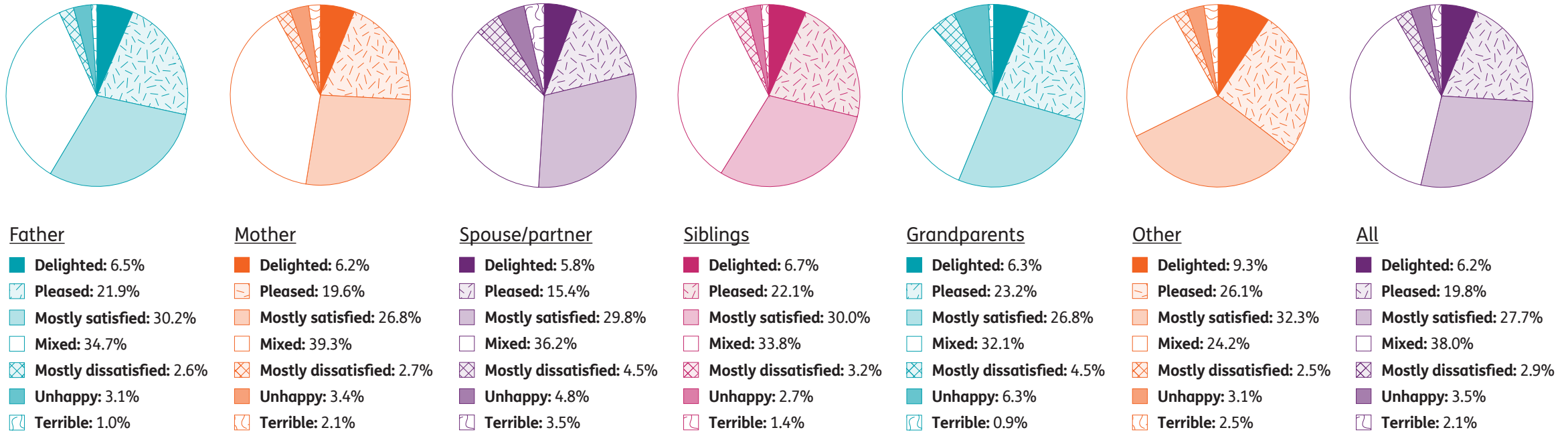
1 These results exclude families and carers who responded “Don't know”.  
 2 No Australian population benchmark is available for this indicator.  
 3 Numbers for other carer types are too small therefore are combined into “Other”. Numbers for “Other” carer relationships (other than parents) in 2016 are too small therefore not shown.  
 4 NDIS respondents each year are standardised to aggregate (all years and genders) NDIS respondent age distribution.

# Family/carer (2/7)

## Baseline outcomes – percentage with positive life satisfaction<sup>1</sup> Response options by carer relationship

Family/carer’s self-rated health varies by carer type. Spouses/partners of new NDIS participants have the lowest proportion with a positive life outlook, at **51.0%**, followed by **52.6%** of mothers, **56.3%** of grandparents, **58.6%** of fathers, and **58.8%** of siblings. “Other” relationship have the most positive life outlook at **67.7%**, a lot of whom are not a family member of the participant.

### Life satisfaction at baseline – NDIS families and carers<sup>1</sup> (unstandardised)

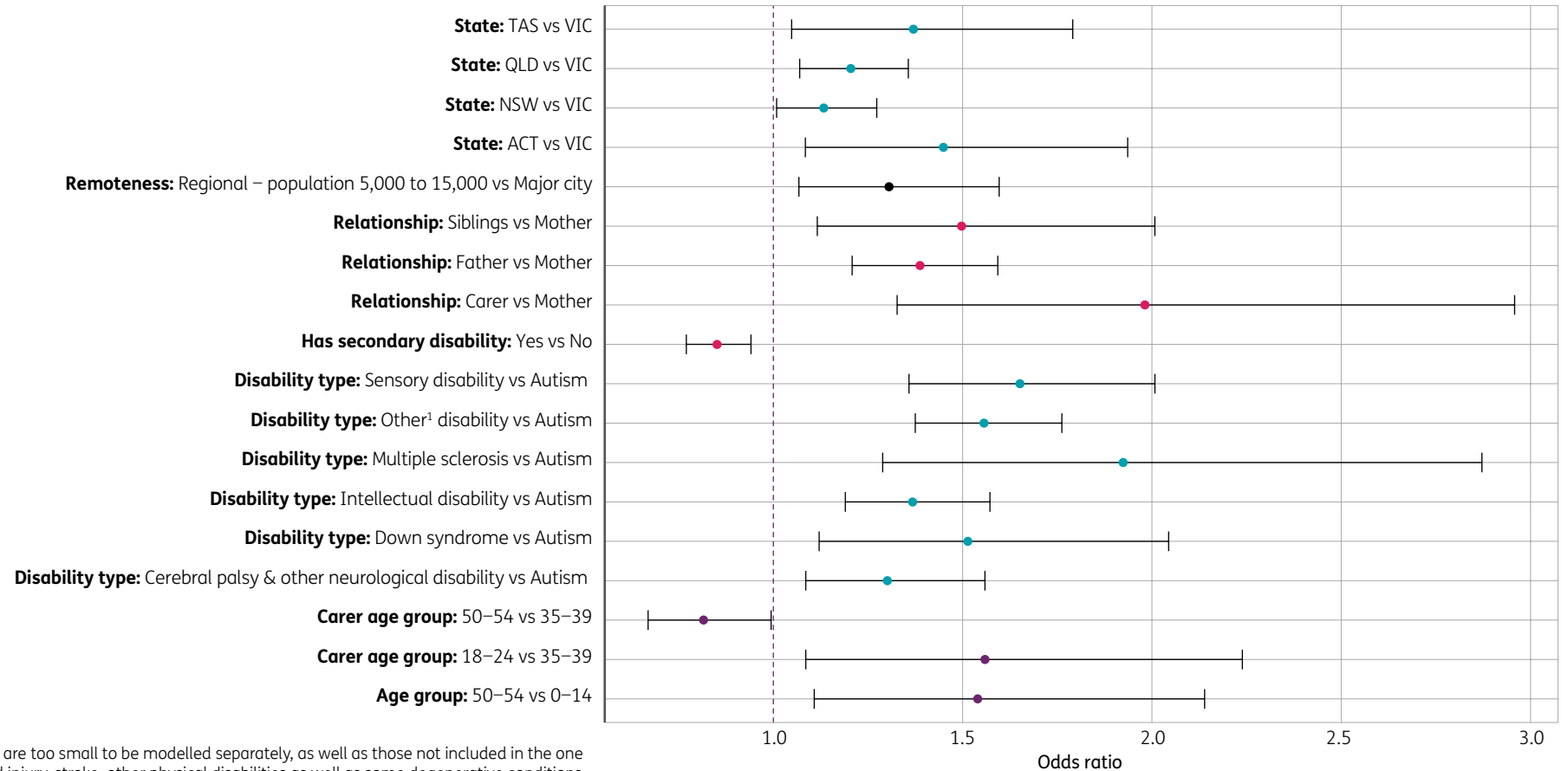


<sup>1</sup> These results exclude families and carers who responded “Don’t know”.

# Family/carer (3/7)

Baseline outcomes – percentage with positive life satisfaction  
Modelling results and odds ratios

## Key drivers of NDIS family/carers' positive life satisfaction (responding “delighted”, “pleased” or “mostly satisfied”)



<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.



## Family/carer (4/7)

### Baseline outcomes – percentage with positive life satisfaction Comments on modelled results

#### Key drivers of NDIS family/carers' positive life satisfaction (responding “delighted”, “pleased” or “mostly satisfied”) cont.

Family/carers of participants are **more likely** to have a positive life outlook if the participants/carers have the following characteristics:

- Participant living in NSW, QLD, TAS or ACT compared to living in VIC
- Family/carers are siblings aged under 65, father or carer of the participant compared to mother of the participant
- Participant has primary disability of a sensory disability, multiple sclerosis, intellectual disability, Down syndrome, cerebral palsy and other neurological conditions or disabilities in the “other”<sup>1</sup> group compared to having primary disability of autism
- Participants in the 50 to 54 age group compared to those in the 0 to 14 age group
- Stronger effect of a sensory disability for those aged 55 to 59
- Participant living in regional area with population between 5,000 and 15,000 people compared to living in a major city
- Family/carers in the 18 to 24 age group compared to those in the 35 to 39 age group
- Increasing calendar time trend with later Scheme entry date.

Family/carers of participants are **less likely** to have a positive life outlook if the participants/carers have the following characteristics:

- Participant having one or more secondary disabilities compared to those without
- Participants in the 25 to 29 age group with primary disability of psychosocial disability compared to those with autism in the same age group
- Family/carers in the 50 to 54 age group compared to those in the 35 to 39 age group
- Family/carers and spouses aged 55 to 64 or siblings aged 65 and over compared to mothers in the corresponding age groups.

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

# Family/carer (5/7)

## Longitudinal outcomes – change in percentage with positive life satisfaction<sup>1</sup> By longitudinal cohort and carer relationship

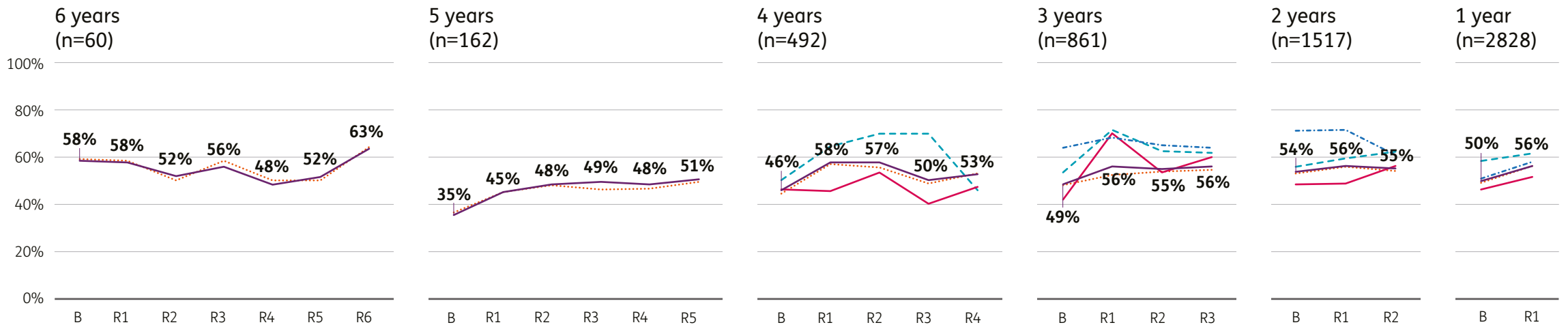
There is an improvement from baseline to latest reassessment across all cohorts in the percentage of families and carers feeling delighted, pleased or mostly satisfied about their life in general, now and in the future. After five years in the Scheme, there was a 15.4 percentage point increase from 35.2% to 50.6%. For those who have been in the Scheme for six years, the increase was by 5.0 percentage points, from 58.3% to 63.3%, but most of the increase was in the last year. However, results from both cohorts are volatile due to small numbers.

Higher percentages of fathers and siblings of NDIS participants are delighted, pleased or mostly satisfied about their life in general, now and in the future compared to mothers, at all reassessment time points for participants who have been in the Scheme for 1 to 3 years.

Spouses and partners are less optimistic than other respondent relationships in cohorts 1, 2 and 4 at most time points.

The change between baseline and the latest reassessment is only statistically significant for mothers who have been in the Scheme for 1, 3, 4 and 5 years.

### Percentage of families/carers who are “delighted”, “pleased” or “mostly satisfied” about their life in general<sup>2,3</sup>



1 These results exclude families and carers who responded “Don't know”.

2 Data labels displayed in the graph relate to the “All” series.

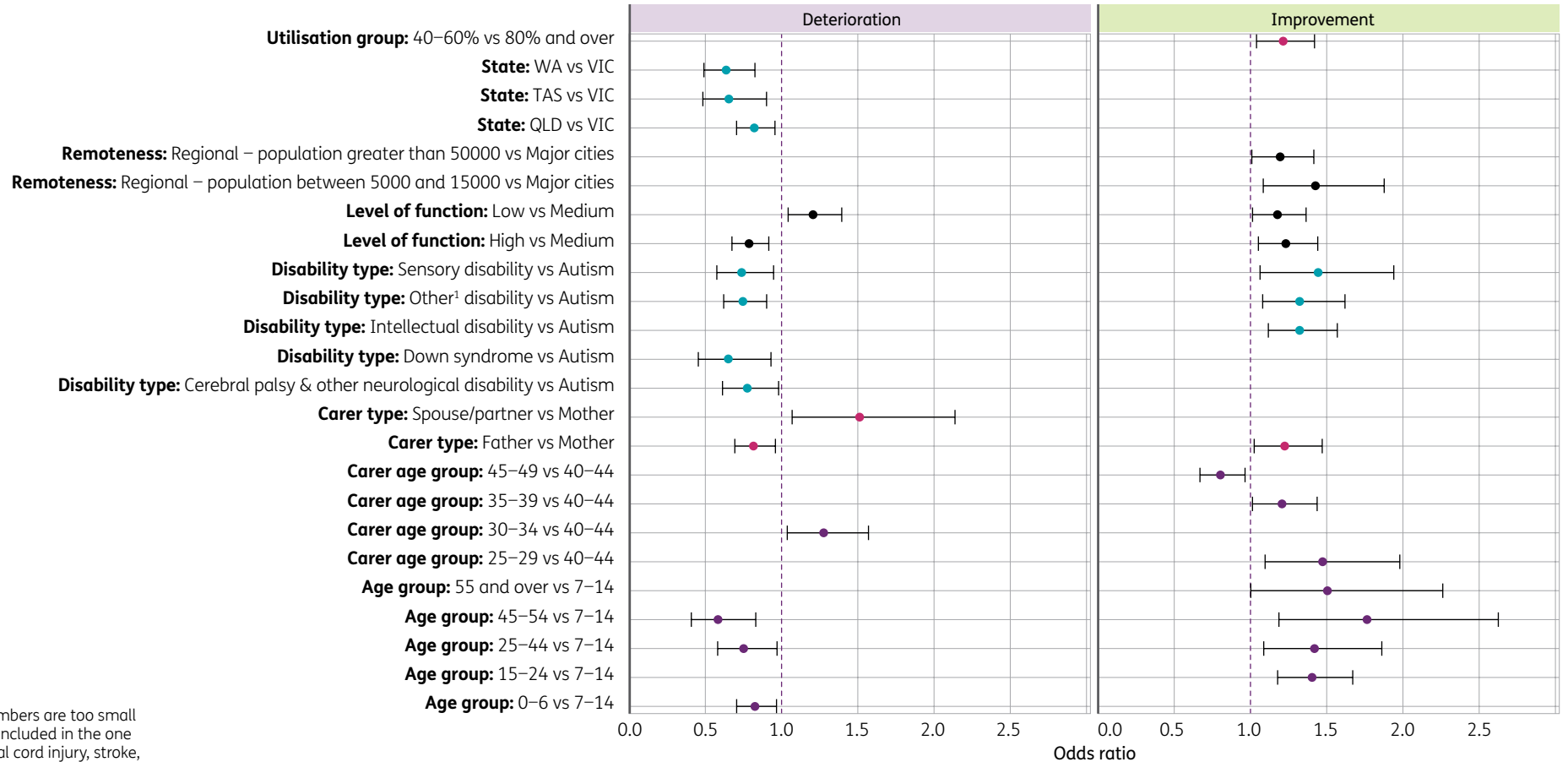
3 Numbers for the following carer relationships and cohorts are too small therefore not shown: fathers for cohorts 5 and 6; spouse/partners for cohorts 5 and 6; siblings for cohorts 4 to 6.

--- Father    ..... Mother    — Spouse/partner    - - - Siblings combined    — All

# Family/carer (6/7)

Longitudinal outcomes – change in percentage with positive life satisfaction  
Modelling results and odds ratios

## Key drivers of changes in NDIS family/carers' life satisfaction



<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Family/carer (7/7)

### Longitudinal outcomes – change in percentage with positive life satisfaction

#### Comments on modelled results

##### Key drivers of changes in NDIS family/carers' life satisfaction cont.

Family/carers of participants are more/less likely to experience changes in life satisfaction if the participants/carers have the following characteristics:

- Participant living in WA, TAS or QLD: less likely to deteriorate compared to those living in NSW
- Participant living in regional area with population between 5,000 and 15,000 or regional area with population greater than 50,000: more likely to improve compared to those living in a major city
- Participant having low level of function: more likely to both improve or deteriorate, compared to those with medium level of function
- Participant having high level of function: more likely to improve and less likely to deteriorate, compared to those with medium level of function
- Participant having primary disability of a sensory disability or “other”<sup>1</sup> disabilities: more likely to improve and less likely to deteriorate compared to those with primary disability of autism
- Participant having primary disability of intellectual disability: more likely to improve compared to those with primary disability of autism.
- Participant having primary disability of cerebral palsy and other neurological conditions or Down syndrome: less likely to deteriorate compared to those with primary disability of autism
- Family/carers who are fathers are more likely to improve and less likely to deteriorate compared to those who are mothers
- Family/carers who are spouse/partners are more likely to deteriorate compared to those who are mothers
- Family/carers aged 25 to 29 or 35 to 39 are more likely to improve, family/carers aged 45 to 49 are less likely to improve, and family/carers aged 30 to 34 are more likely to deteriorate, compared to those aged 40 to 44
- Where participant is aged 25 to 54, family/carer is more likely to improve and less likely to deteriorate; aged 15 to 24 more likely to improve; and aged 0 to 6 less likely to deteriorate, all compared to where participant is aged 7 to 14
- Used 40–60% of the previous plan: more likely to improve compared to those having plan utilisation rate of over 80%.

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

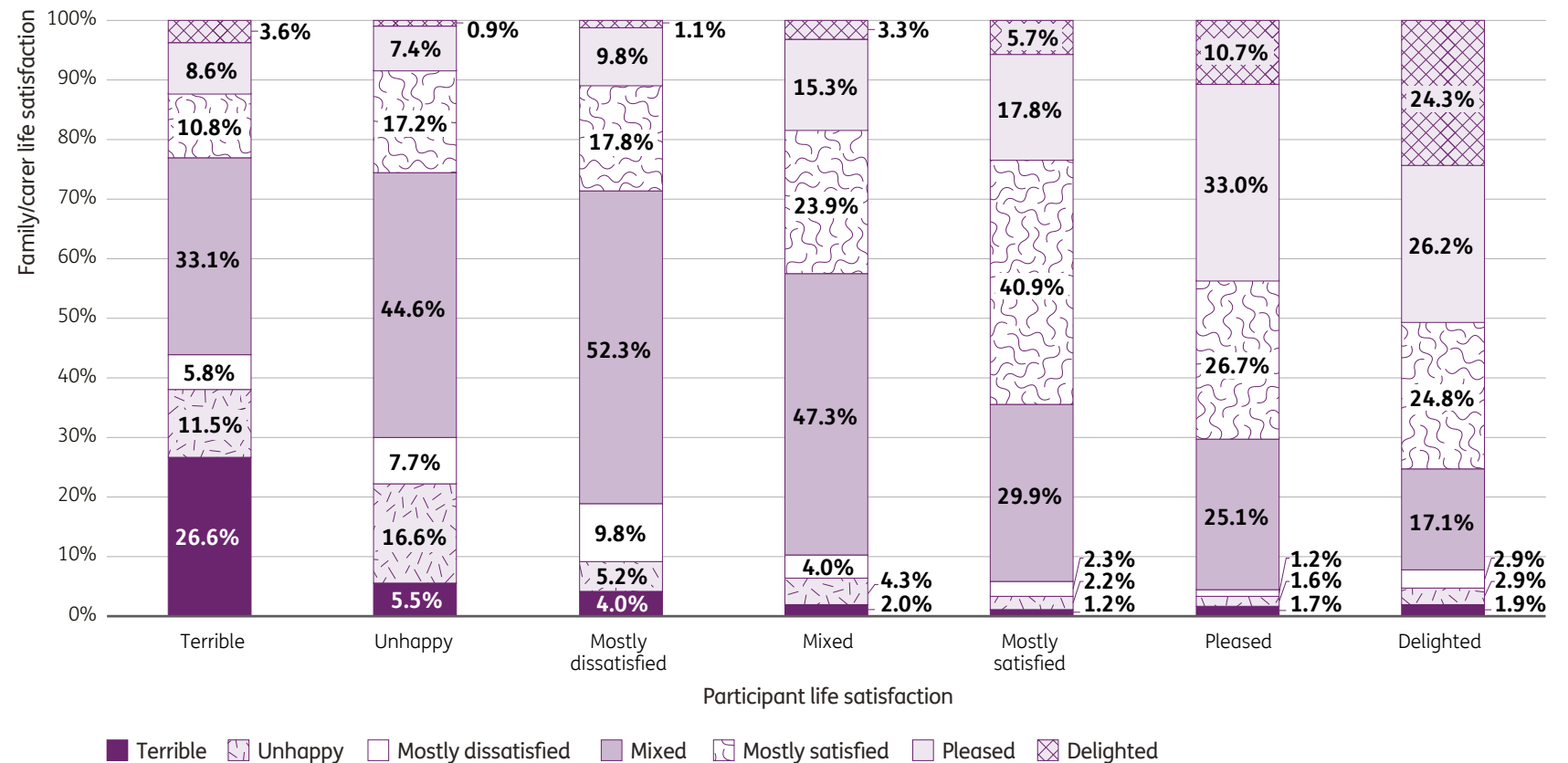
# Participant, family/carer correlation

## Baseline aggregates

At baseline, participants' and their family/carers' life satisfaction have a strong positive relationship. In particular, among participants who said they felt "Terrible", just 23.0% of families and carers say they felt "Delighted", "Pleased" or "Mostly Satisfied", compared to 75.2% among participants who felt "delighted".

### Responses by NDIS participants versus family/carers at baseline

#### Correlation between participant and family/carer life satisfaction



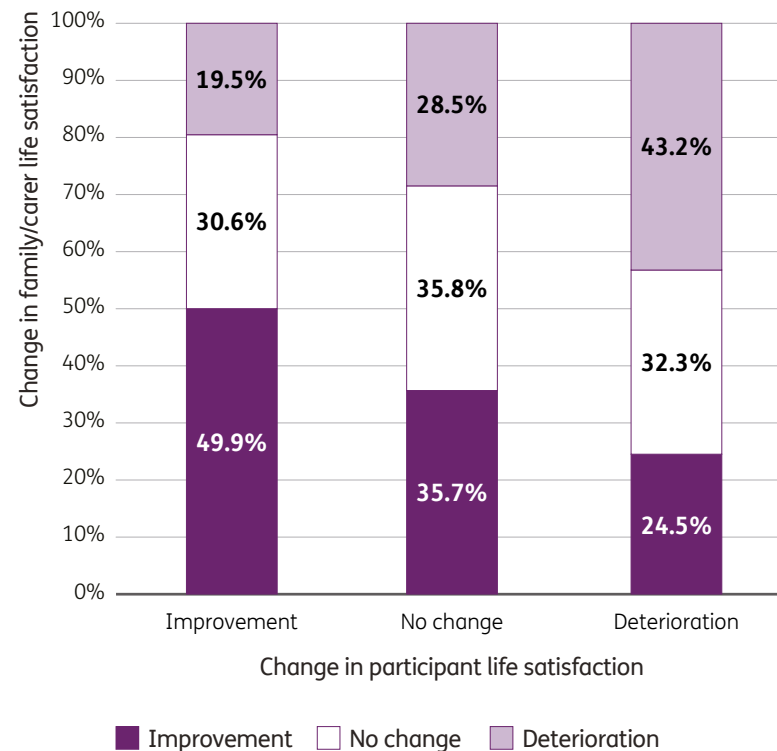
# Participant, family/carer correlation

## Longitudinal aggregates

From baseline to latest reassessment, changes in life satisfaction of participants and their family/carers move somewhat in line with each other. For example, of participants whose life satisfaction improved, 49.9% of families and carers also improved, compared to 24.5% where participants' life satisfaction deteriorated.

### Change in responses by NDIS participants versus family/carers longitudinally<sup>1,2</sup>

#### Correlation between changes in participant and family/carer life satisfaction from baseline



1 Caveat: some participants' and/or their family/carers' life satisfaction were already at "delighted" or "terrible" at baseline which means they cannot improve/deteriorate further. This has not been explicitly accounted for in this analysis.

2 This analysis does not control for time in Scheme and combines all results from baseline to latest reassessment regardless of time in Scheme.

3.6

Self-rated health

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## Key statistics (1/2)

Outcome indicators	Participant feeling “excellent”, “very good” or “good” <sup>5</sup>		Family/carer feeling “excellent”, “very good” or “good”					Participant vs family/carer <sup>6</sup>
	Males	Females	Mothers	Fathers	Siblings	Spouse/partner	Grandparents	
NDIS percentage at baseline <sup>2</sup>	51.6%	40.6%	72.8%	77.0%	73.3%	61.5%	48.7%	Positive relationship
NDIS Baseline compared to Australian population <sup>1,4</sup>	Much lower	Much lower	Notably lower	Somewhat lower	Not applicable <sup>7</sup>	Not applicable <sup>7</sup>	Not applicable <sup>7</sup>	Not applicable
Baseline to latest reassessment changes by cohort <sup>3</sup>	↓↓↓↓↓↓	↓↓↓↓↓↓	↓↓↓↓↓↓	↓↓↓↓↓=	=↓↓↓=X	↓↓↓↓↓X	=↓↓↓XX	Positive relationship

1 “Much Higher” if NDIS percentage is over 15 pp higher than the Australian population; “Notably Higher” if NDIS percentage is 5–15 pp higher than the Australian population; “Slightly Higher” if NDIS percentage is 2–5 pp higher than the Australian population; “Similar” if NDIS percentage is +/-2 pp of the Australian population; “Slightly Lower” if NDIS percentage is 2–5 pp lower than the Australian population; “Notably Lower” if NDIS percentage is 5–15 pp lower than the Australian population; “Much Lower” if NDIS percentage is over 15 pp lower than the Australian population.

2 All baseline entry years are aggregated.

3 Arrows denote the direction of percentage change from baseline to latest reassessment if the change is statistically significant; an equal sign denotes that the change is not significant; an “X” denotes the cohort is not graphed due to small numbers. Position in the text string represents time in the Scheme, ordered (left to right) from 1 to 6 years.

4 Comparisons are performed at the latest timepoint where the population benchmark is available.

5 The analysis only concerns participants aged 15 to 64. Baseline analysis is not applicable to participants aged 65 and over (only people under 65 are eligible to join the Scheme).

6 Correlation coefficients have not been calculated. These conclusions are based on observation of graphs.

7 Benchmarking for family/carer are only performed on parents (fathers benchmarked against Australian males and mothers against Australian females).



## Key statistics (2/2)

Modelled results <sup>1</sup>	Baseline		Trend (one-step)			
			Improvement		Deterioration	
	Strongest negative effect <sup>2</sup>	Strongest positive effect <sup>2</sup>	Least likely to improve <sup>2</sup>	Most likely to improve <sup>2</sup>	Least likely to deteriorate <sup>2</sup>	Most likely to deteriorate <sup>2</sup>
Participant rating their health as “excellent”, “very good” or “good”	Age Group: <b>50–54</b>	Primary disability: <b>Down syndrome</b>	State/Territory: <b>TAS</b>	Age Group: <b>18–24</b>	Level of function: <b>High</b>	Level of NDIA support: <b>Complex support structure</b>
Family/carer rating their health as “excellent”, “very good” or “good”	Primary disability: <b>Multiple sclerosis</b>	Respondent relationship to participant: <b>Other family member<sup>3</sup></b>	Level of NDIA support: <b>High/very high</b>	Carer Age Group: <b>Under 25</b>	Respondent relationship to participant: <b>Siblings</b>	Response time relative to the start of Delta COVID lockdown: <b>After</b>

1 Amongst categorical variables with coefficient estimates significantly different from zero at the 0.05 level. Based on central estimates of the coefficients, without regard to precision of estimation.

All the characteristics mentioned in this table are compared to their respective reference categories, which are specified on slides 176, 179, 184 and 189.

2 The effect is considered “less likely” when the coefficient estimate is below 1 (less likely than the reference category); “more likely” when the coefficient estimate is above 1 (more likely than the reference category).

3 “Other family member” is a respondent to the family/carer questionnaire that is a family member, but not a parent, grandparent, sibling or spouse/partner of the participant.

# Participants (1/8)

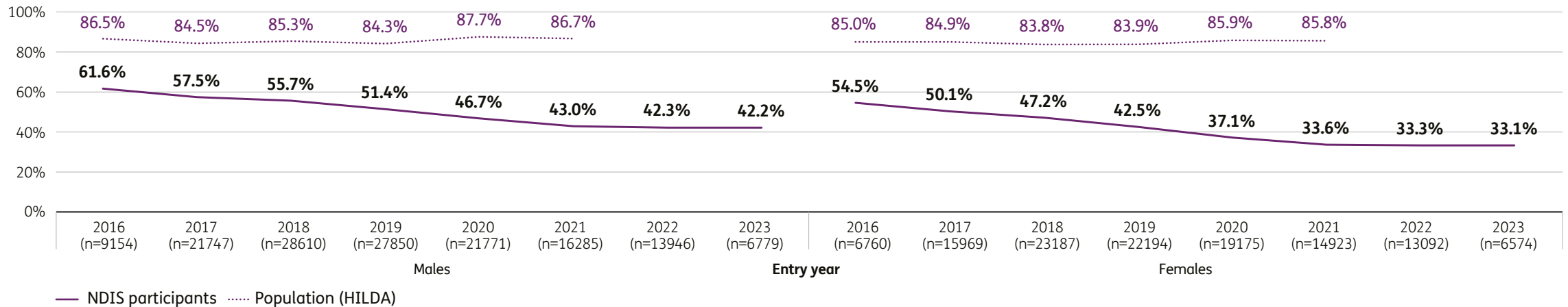
## Baseline outcomes – percentage with positive self-rated health By entry year and gender

Compared to the general Australian population, the percentage of NDIS participants rating their health as “excellent”, “very good” or “good” is notably lower.

There has also been a steady decline in the percentage of new participants rating their health positively from 2016 to 2021, by close to 20 percentage points for both males and females. By contrast, this percentage in the Australian population remained steady from 2016 to 2021.

### Time series: NDIS participants compared to HILDA (2016 to 2021) (age standardised)<sup>1</sup>

#### Baseline: Percentage of participants rating their health as “excellent”, “very good” or “good”



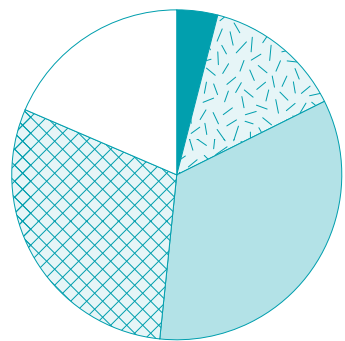
<sup>1</sup> Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

# Participants (2/8)

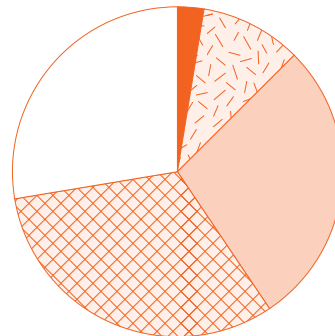
## Baseline outcomes – percentage with positive self-rated health Response options by gender

At Scheme entry considering all entry years, **51.6%** of NDIS males rated their health as “excellent”, “very good”, or “good”, compared to **40.6%** of NDIS females.

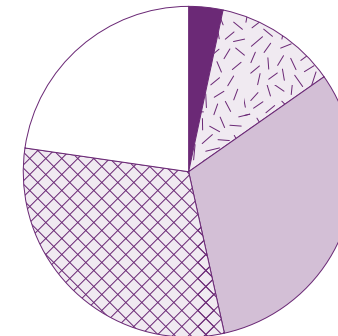
### Self-rated health at baseline – NDIS participants (unstandardised)



- Male**
- Excellent: 4.0%
  - Very good: 13.7%
  - Good: 34.0%
  - Fair: 29.8%
  - Poor: 18.5%



- Female**
- Excellent: 2.6%
  - Very good: 9.9%
  - Good: 28.1%
  - Fair: 31.8%
  - Poor: 27.6%

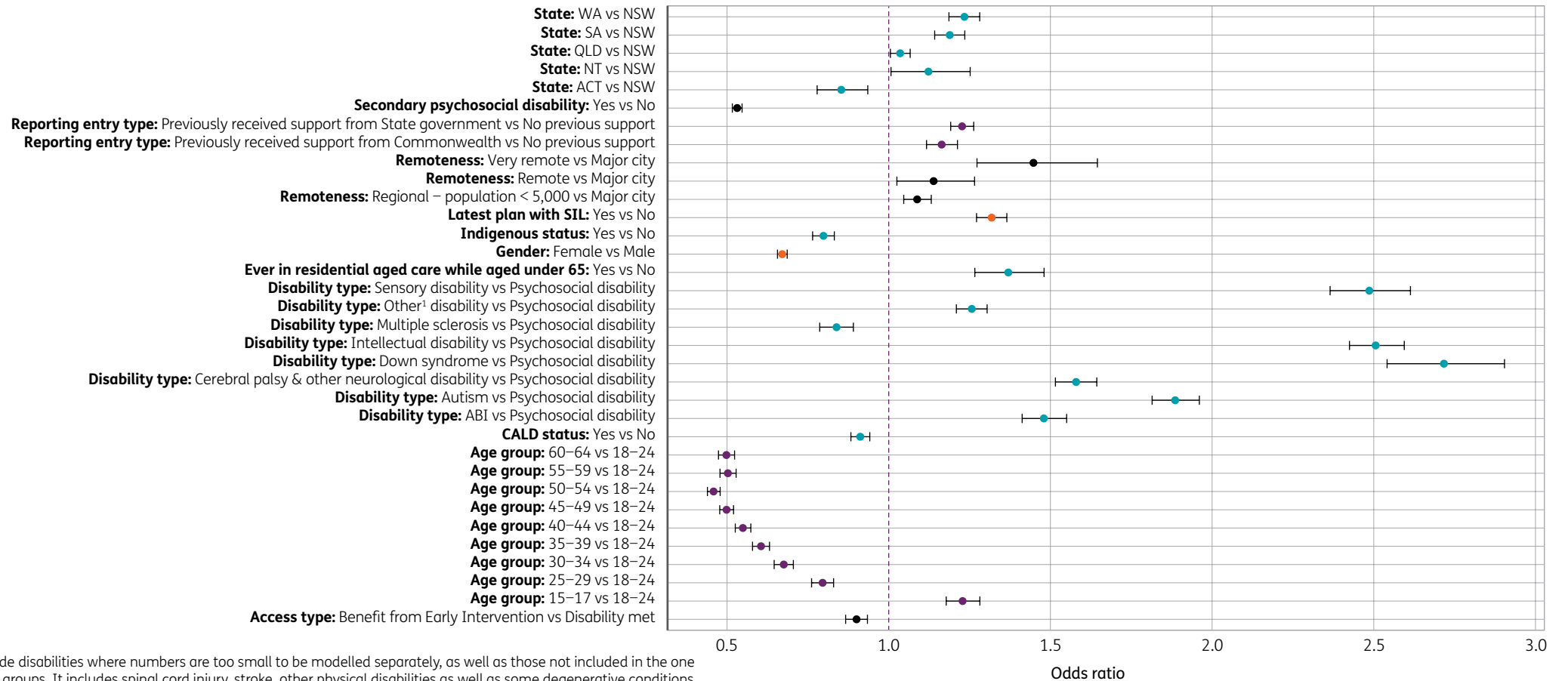


- All**
- Excellent: 3.3%
  - Very good: 11.9%
  - Good: 31.3%
  - Fair: 30.8%
  - Poor: 22.7%

# Participants (3/8)

## Baseline outcomes – percentage with positive self-rated health Modelling results and odds ratios

### Key drivers of NDIS participants' positive self-rated health (responding “excellent”, “very good” or “good”)



## Participants (4/8)

### Baseline outcomes – percentage with positive self-rated health Comments on modelled results

#### Key drivers of NDIS participants' positive self-rated health (responding “excellent”, “very good” or “good”) cont.

Participants with the following characteristics are **more likely** to self-rate their health positively:

- Living in WA, SA, NT or QLD compared to living in NSW
- Having previously received support from State government or Commonwealth government compared to those who have not received any support
- Living in a very remote, remote or regional area with population less than 5,000, compared to those living in a major city
- Having primary disability that is neither multiple sclerosis nor psychosocial disability compared to having primary disability of psychosocial disability
- Younger participants (those aged 15 to 34) with primary disability of a sensory disability are more likely to rate their health positively
- Having been in residential aged care while aged under 65 compared to those have not
- Aged 15 to 17 compared to those aged 18 to 24
- Having SIL funding in the latest plan compared to those without.

Participants with the following characteristics are **less likely** to self-rate their health positively:

- Living in the ACT compared to living in NSW
- Having lower level of function (decreasing trend with decreasing level of function)
- Having secondary psychosocial disability compared to those without
- Female compared to male, although the gap between females and males narrows between ages 55 and 64
- Having primary disability of multiple sclerosis compared to having primary disability of psychosocial disability
- Entered the Scheme on a later date. There is a general decreasing calendar time trend, with a one-off fall for participants entering the Scheme after the end of first lockdown
- Coming from a CALD background compared to a non-CALD background
- Coming from an Indigenous background compared to a non-Indigenous background
- Aged 25 or older compared to those aged 18 to 24, with a generally decreasing trend by age up to the 50 to 54 age group
- Accessed the Scheme through early intervention (S25) compared to permanent disability (S24).

# Participants (5/8)

## Longitudinal outcomes – change in percentage with positive self-rated health By longitudinal cohort and gender

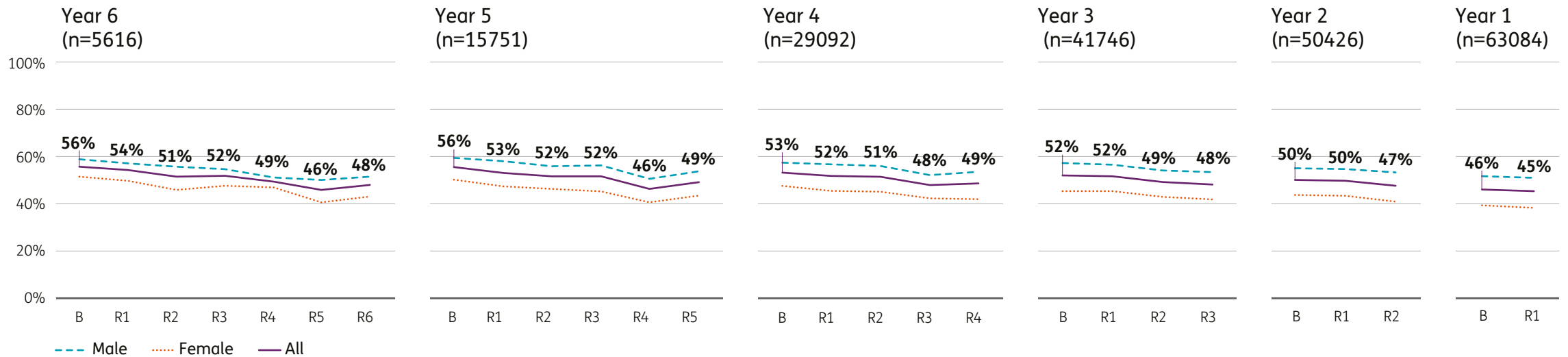
The percentage of participants rating their health as “excellent”, “very good”, or “good” declined slightly over time with a 7.9 percentage point drop after six years from 55.7% to 47.8%, with the largest decrease of 3.4 percentage points occurring in the fifth year. In general, longer time in Scheme is associated with larger decreases in the percentage of participants rating their health positively.

Across most cohorts, the largest decline in the percentage rating their health positively occurred in the second-last reassessment time point, which roughly corresponds to FY 2021–22.

Whilst females had lower percentages rating their health positively than males across all time points, males and females experienced similar changes (decreases) in the percentage rating their health positively from baseline to latest reassessment across all cohorts.

The change between baseline and the latest reassessment is statistically significant for both males and females who have been in the Scheme for 1 to 6 years.

### Percentage of participants rating their health as “excellent”, “very good” or “good”<sup>1</sup>



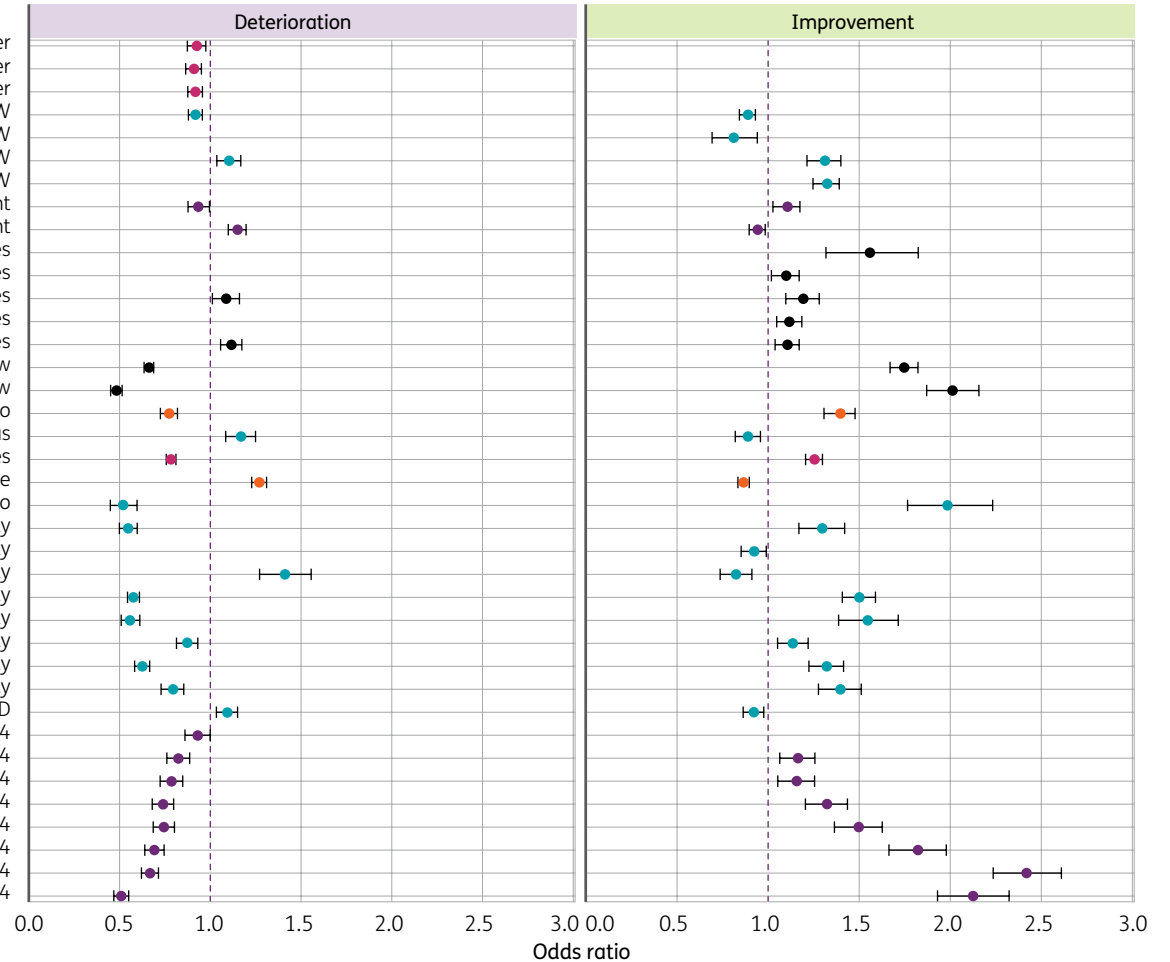
<sup>1</sup> Data labels displayed in the graph relate to the “All” series.

# Participants (6/8)

Longitudinal outcomes – change in percentage with positive self-rated health  
Modelling results and odds ratios

## Key drivers of changes in NDIS participants' self-rated health

- Utilisation group:** Below 20% vs 80% and over
- Utilisation group:** 40–60% vs 80% and over
- Utilisation group:** 60–80% vs 80% and over
- State:** VIC vs ACT/NSW
- State:** TAS vs ACT/NSW
- State:** SA/NT vs ACT/NSW
- State:** QLD vs ACT/NSW
- Reporting entry type:** Previously received support from Commonwealth vs From State government
- Reporting entry type:** No previous support vs From State government
- Remoteness:** Remote/very remote vs Major cities
- Remoteness:** Regional – population less than 5000 vs Major cities
- Remoteness:** Regional – population between 5000 and 15000 vs Major cities
- Remoteness:** Regional – population between 15000 and 50000 vs Major cities
- Remoteness:** Regional – population greater than 50000 vs Major cities
- Level of function:** Medium vs Low
- Level of function:** High vs Low
- Latest plan with SIL:** Yes vs No
- Indigenous status:** Indigenous vs Non-Indigenous
- Has secondary disability:** No vs Yes
- Gender:** Female vs Male
- Ever in residential aged care while aged under 65:** Yes vs No
- Disability type:** Sensory disability vs Psychosocial disability
- Disability type:** Other<sup>1</sup> disability vs Psychosocial disability
- Disability type:** Multiple sclerosis vs Psychosocial disability
- Disability type:** Intellectual disability vs Psychosocial disability
- Disability type:** Down syndrome vs Psychosocial disability
- Disability type:** Cerebral palsy & other neurological disability vs Psychosocial disability
- Disability type:** Autism vs Psychosocial disability
- Disability type:** ABI vs Psychosocial disability
- CALD status:** CALD vs Non-CALD
- Age group:** 50–54 vs 60–64
- Age group:** 45–49 vs 60–64
- Age group:** 40–44 vs 60–64
- Age group:** 35–39 vs 60–64
- Age group:** 30–34 vs 60–64
- Age group:** 25–29 vs 60–64
- Age group:** 18–24 vs 60–64
- Age group:** 15–17 vs 60–64



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Participants (7/8)

### Longitudinal outcomes – change in percentage with positive self-rated health Comments on modelled results

#### Key drivers of changes in NDIS participants' self-rated health cont.

Participants with the following characteristics are more/less likely to experience change in self-rated health:

- Living in LGA with higher unemployment rate: less likely to improve
- Having been in the Scheme for longer: more likely to improve
- Entering the Scheme on a later date: less likely to either improve or deteriorate
- Those living in VIC are less likely to either improve or deteriorate, those living in TAS are less likely to improve, those living in SA/NT are more likely to either improve or deteriorate, and those living in QLD are more likely to improve, compared to those living in ACT/NSW
- Those having previously received support from Commonwealth government are more likely to improve and less likely to deteriorate, and those having previously received no support are less likely to improve and more likely to deteriorate, compared to those who have previously received support from State government
- Those living in areas other than major city are more likely to improve, while those living in regional area with population between 5,000 and 15,000 or regional area with population greater than 50,000 are more likely to deteriorate, compared to those living in a major city.
- Having medium or high level of function: more likely to improve and less likely to deteriorate compared to those with low level of function
- Having SIL in their latest plan: more likely to improve and less likely to deteriorate compared to those without
- Having primary disability other than multiple sclerosis, psychosocial disability, or primary disability in the “other”<sup>1</sup> group: more likely to improve and less likely to deteriorate compared to those having primary disability of psychosocial disability
- Having primary disability of multiple sclerosis: less likely to improve and more likely to deteriorate compared to those having primary disability of psychosocial disability
- Having primary disability of “other”<sup>1</sup> disabilities: less likely to improve, compared to those having primary disability of psychosocial disability
- Having one or more secondary disabilities: less likely to improve and more likely to deteriorate compared to those without
- Coming from Indigenous background: less likely to improve and more likely to deteriorate compared to those coming from a non-Indigenous background
- Females are less likely to improve and more likely to deteriorate compared to males

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.



## Participants (8/8)

Longitudinal outcomes – change in percentage with positive self-rated health

Comments on modelled results cont.

### Key drivers of changes in NDIS participants' self-rated health cont.

- Having been in residential aged care while aged under 65: more likely to improve and less likely to deteriorate compared to those who have not
- Coming from CALD background: less likely to improve and more likely to deteriorate compared to those coming from non-CALD background
- Those aged 15 to 49 are more likely to improve, and those aged 15 to 54 are less likely to deteriorate, compared to those aged 60 to 64
- Used 0–20% or 40–80% of the previous plan: less likely to deteriorate compared to those having plan utilisation rate of over 80%.

# Family/carer (1/10)

## Baseline outcomes – percentage with positive self-rated health By entry year and carer relationship

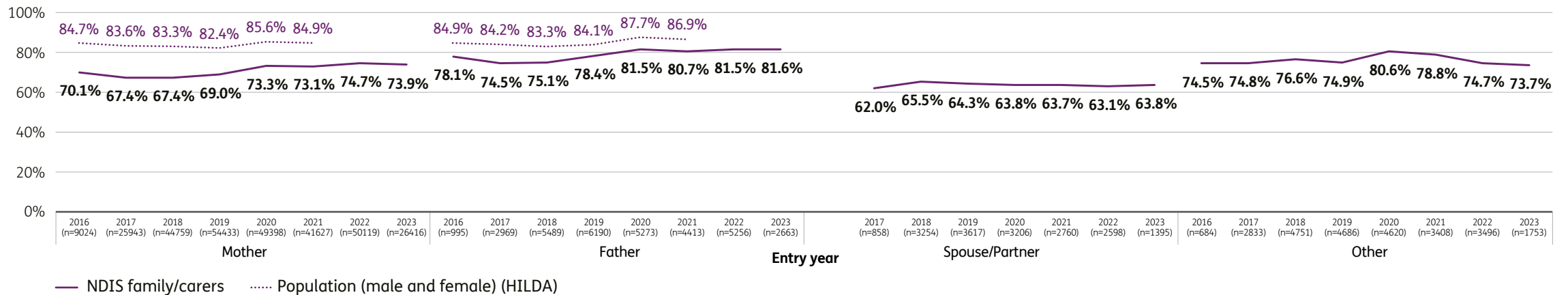
Family/carer's self-rated health varies by carer relationship to participant. Spouse and partners of new NDIS participants have a lower percentage rating their health positively compared to parents (but see slide 185 on modelled results), while fathers have a higher percentage than mothers.

Comparing new participants' mothers and fathers' self-rated health to females and males of the general Australian population, NDIS parents' self-rated health is less positive.

There has been an increase in the percentage of mothers and fathers reporting positive self-rated health between 2017 and 2022.

### Time series: NDIS families and carers compared to HILDA (2016 to 2021) (age standardised)<sup>1,2,3</sup>

#### Baseline: Percentage of families and carers rating their health as “excellent”, “very good” or “good”



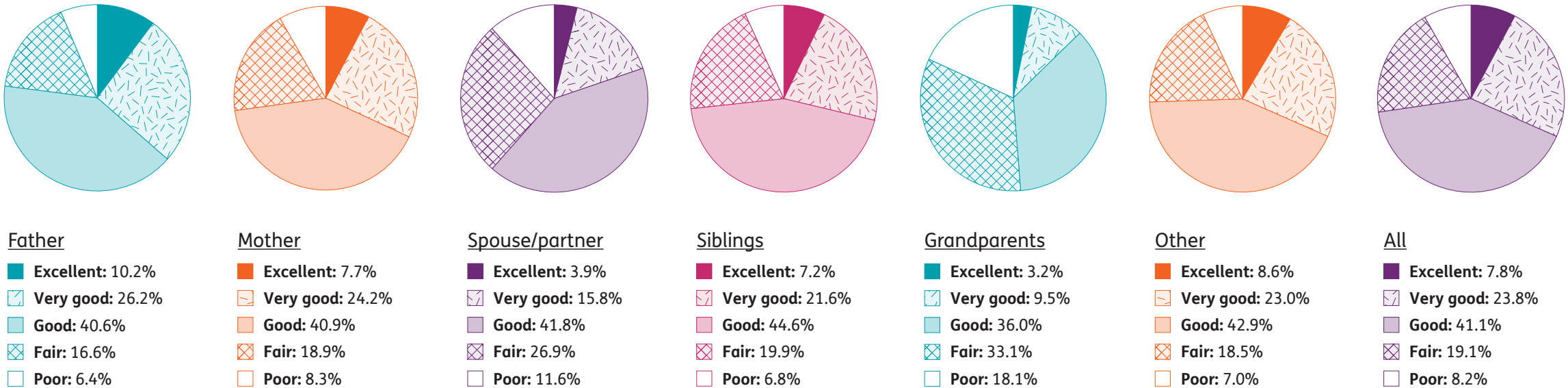
1 No Australian population benchmark for spouse/partner and other is available for this indicator. NDIS mothers are benchmarked against Australian females and NDIS fathers are benchmarked against Australian males.  
 2 Numbers for spouse/partners in 2016 are too small therefore are not shown.  
 3 Both NDIS respondents each year and the population benchmark are standardised to aggregate (all years and genders) NDIS respondent age distribution.

# Family/carer (2/10)

## Baseline outcomes – percentage with positive self-rated health Response options by carer relationship

Considering all entry years, **77.0%** of fathers rated their health as “excellent”, “very good” or “good” at baseline, followed by **73.3%** of siblings, **72.8%** of mothers, **61.5%** of spouse/partners and **48.7%** of grandparents (possibly due to old age).

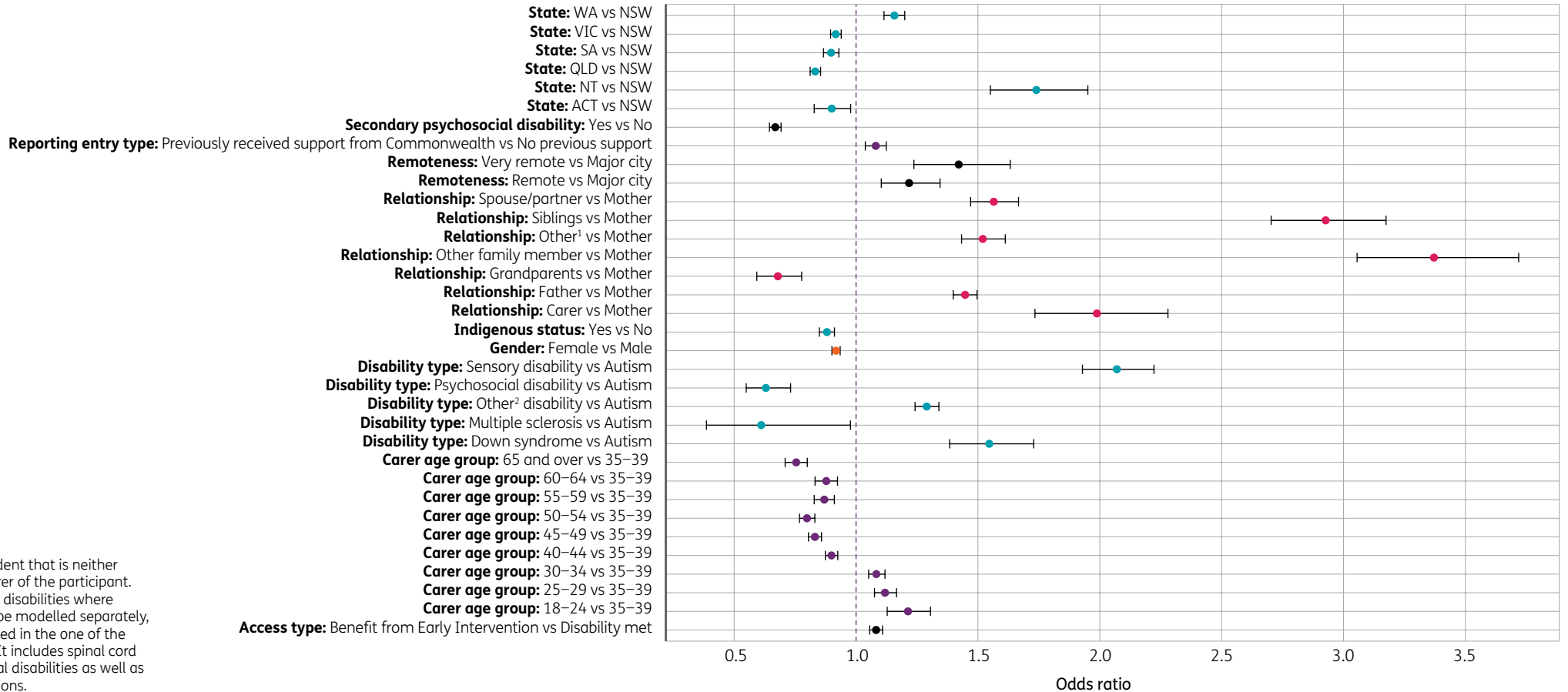
### Self-rated health at baseline – NDIS families and carers (unstandardised)



# Family/carer (3/10)

Baseline outcomes – percentage with positive self-rated health  
Modelling results and odds ratios

## Key drivers of NDIS family/carer' positive self-rated health (responding “excellent”, “very good” or “good”)



1 “Other” refers to a respondent that is neither a family member nor a carer of the participant.  
2 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Family/carer (4/10)

### Baseline outcomes – percentage with positive self-rated health

#### Comments on modelled results

##### Key drivers of NDIS family/carer' positive self-rated health (responding “excellent”, “very good” or “good”) cont.

Family/carers of participants are **more likely** to respond positively to the self-rated health question if participants/carers have the following characteristics:

- Participant living in WA or NT compared to living in NSW
- Participant living in remote or very remote area compared to living in a major city
- When the respondents are spouse/partners, fathers, siblings, other family members, carers, or respondents that are neither family members nor carers of the participant compared to mothers. There are some interactions with respondent age, leading to a stronger difference for siblings compared to mothers in the age range 40 to 44, and a weaker difference for spouse/partners in the age range 35–39 as well as for all other disabilities compared to mothers in the over 65 age group. Note that the modelled result for spouse/partners (more likely to rate positively than mothers) is different to the one-way result on slide 182 (less likely to rate positively). The modelled result controls for other variables, whereas the one-way result is impacted by confounding, in particular, by participant age and primary disability type
- Participant has primary disability of a sensory disability, Down syndrome, or a disability in the “other”<sup>1</sup> group compared to primary disability of autism. For participant entry ages after the mid to late teens, family/carers of participants with primary disability of psychosocial disability or multiple sclerosis are also more likely to respond positively compared to family/carers of participants with primary disability of autism
- Family/carers age group 18 to 34 compared to age group 35 to 39
- Accessed the Scheme through early intervention (S25) compared to permanent disability (S24)
- After the start of second lockdown, there is an increasing time trend with later entry date. There is also one-off jump in likelihood for entry date after the start of first lockdown.

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Family/carer (5/10)

### Baseline outcomes – percentage with positive self-rated health

#### Comments on modelled results cont.

#### Key drivers of NDIS family/carer' positive self-rated health (responding “excellent”, “very good” or “good”) cont.

Family/carers of participants are **less likely** to respond positively to the self-rated health question if participants/carers have the following characteristics:

- Participant living in VIC, SA, QLD or ACT compared to living in NSW
- Respondents are grandparents compared to mothers
- Lower level of function (decreasing trend with decreasing level of function)
- Participant has a secondary psychosocial disability compared to those without a secondary psychosocial disability
- Participant living in LGA with higher unemployment rate (decreasing trend with increasing unemployment rate in the LGA lived in)
- Coming from an Indigenous background compared to a non-Indigenous background
- There is a decreasing trend with participant entry age. The rate of decline is different for different disabilities, with a significantly steeper decline where the participant has autism compared to other disabilities
- For participant entry ages up to the mid to late teens, family/carers of participants with primary disability of psychosocial disability or multiple sclerosis are less likely to respond positively compared to family/carers of participants with primary disability of autism
- Participant is female compared to male
- Family/carers aged 40 and older compared to aged 35 to 39
- Before the start of first lockdown and between the start of first lockdown and the start of second lockdown, there is a decreasing time trend with later entry date.

## Family/carer (6/10)

### Longitudinal outcomes – change in percentage with positive self-rated health By longitudinal cohort and carer relationship

The percentage of families or carers of NDIS participants rating their health as “excellent”, “very good”, or “good” has declined over time with drops of more than 10 percentage points from baseline to latest reassessment for those who have been in the Scheme for 4 or more years. In general, longer time in Scheme is associated with larger decreases in the percentage of families and carers rating their health positively. These results may be partly due to increasing carer and participant age over time in the Scheme.

Fathers rate their health more positively than average at almost all time points of all cohorts, while spouse/partners and grandparents consistently rate their health less positively than average.

Grandparents’ self-rated health also tend to deteriorate faster. In particular, for participants who have been in the Scheme for 3 years, the percentage of grandparents rating their health positively decreased by 23.9 percentage points. This decline is likely to be age-related.

The change between baseline and the latest reassessment is statistically significant for:

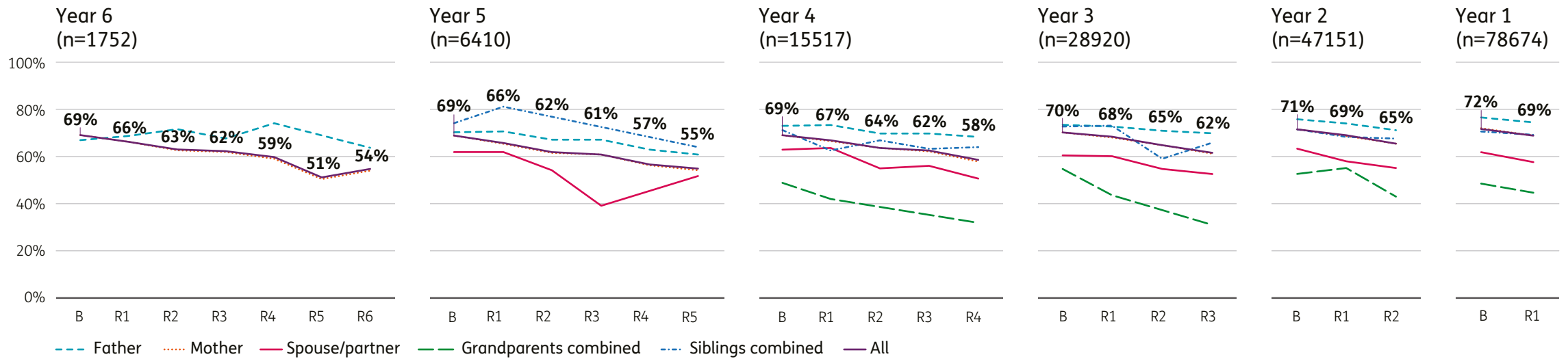
- Mothers of participants in the Scheme for 1–6 years
- Fathers and spouses of participants in the Scheme for 1–5 years
- Grandparents and siblings of participants in the Scheme for 2–4 years.

**The relevant graph is available on the next slide.**

# Family/carer (7/10)

Longitudinal outcomes – change in percentage with positive self-rated health  
By longitudinal cohort and carer relationship cont.

Percentage of participants rating their health as “excellent”, “very good” or “good”<sup>1,2</sup>



1 Data labels displayed in the graph relate to the “All” series.

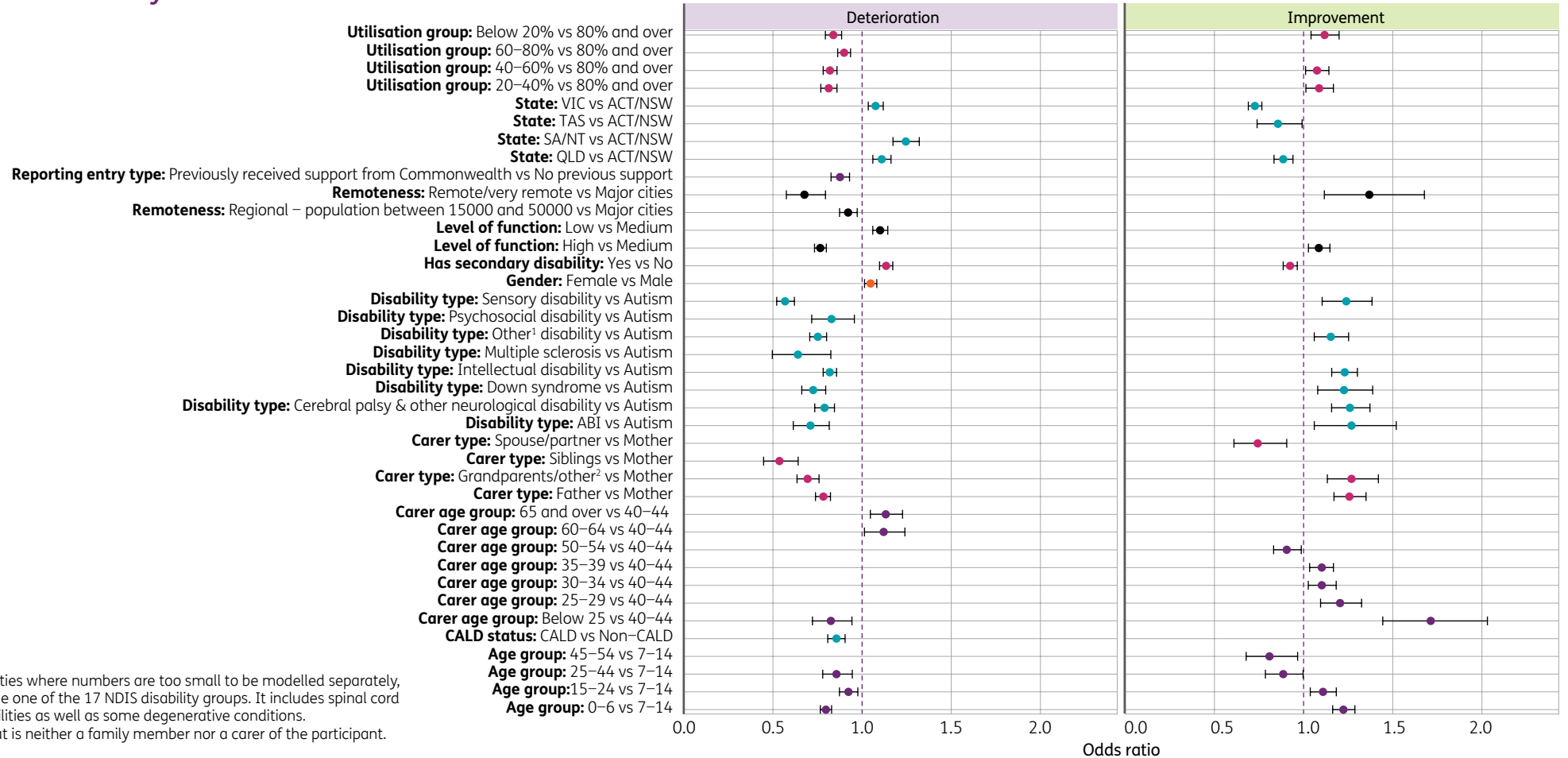
2 Numbers for the following carer relationships and cohorts are too small therefore not shown: spouse/partners for cohort 6; siblings for cohort 6; grandparents for cohorts 5 and 6. Mothers comprise the vast majority of families and carers across all cohorts therefore overall results track very closely to that of mothers.



# Family/carer (8/10)

## Longitudinal outcomes – change in percentage with positive self-rated health Modelling results and odds ratios

### Key drivers of changes in NDIS family/carers' self-rated health



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.  
2 “Other” refers to a respondent that is neither a family member nor a carer of the participant.

## Family/carer (9/10)

### Longitudinal outcomes – change in percentage with positive self-rated health

#### Comments on modelled results

##### Key drivers of changes in NDIS family/carers' self-rated health cont.

Family/carers of participants are more/less likely to experience change in self-rated health if the participants/carers have the following characteristics:

- Those who have utilised 0–60% of their previous plan are more likely to improve, and those utilising 0–80% of their previous plan are less likely to deteriorate, compared to those having plan utilisation rate over 80%
- Participant living in LGA with higher unemployment rate: less likely to improve
- Having been in the Scheme for longer: more likely to both improve or deteriorate
- Those living in VIC or QLD are less likely to improve and more likely to deteriorate, those living in TAS are less likely to improve, and those living in SA/NT are more likely to deteriorate, compared to those living in NSW or ACT
- Those with low level of function are more likely to deteriorate, and those with high level of function are more likely to improve and less likely to deteriorate, compared to those with medium level of function
- Having previously received support from the Commonwealth government: less likely to deteriorate compared to those who have previously received support from the State government
- Those living in remote/very remote area are more likely to improve and less likely to deteriorate, and those living in regional area with population between 15,000 and 50,000 are less likely to deteriorate, compared to those living in a major city
- Having one or more secondary disabilities: more likely to deteriorate and less likely to improve compared to those without
- Participant is female: more likely to deteriorate compared to male
- Participant primary disability that is not autism, psychosocial disability or multiple sclerosis: more likely to improve and less likely to deteriorate
- Participant primary disability of psychosocial disability or multiple sclerosis: less likely to deteriorate, compared to those having primary disability of autism
- Family/carers who are grandparents, fathers, or respondents that are neither family members nor carers of the participant are more likely to improve and less likely to deteriorate, those who are spouse/partners are less likely to improve, and those who are siblings are less likely to deteriorate, compared to mothers
- Coming from a CALD background: less likely to deteriorate compared to those coming from non-CALD background
- Family/carers aged below 25 are more likely to improve and less likely to deteriorate, family/carers aged 25 to 39 are more likely to improve, family/carers aged 45 to 49 are less likely to improve, and family/carers aged over 60 are more likely to deteriorate, compared to those aged 40 to 44
- Participant aged 0 to 6 or 15 to 24: more likely to improve and less likely to deteriorate; aged 25 to 44: less likely to both improve or deteriorate; aged 45 to 54: less likely to improve, compared to participants aged 7 to 14

## Family/carer (10/10)

Longitudinal outcomes – change in percentage with positive self-rated health

Comments on modelled results cont.

### Key drivers of changes in NDIS family/carers' self-rated health cont.

- Entered the Scheme after the first lockdown or after the end of second lockdown: more likely to deteriorate compared to those who entered before either time points. However, there is a decreasing likelihood of deterioration with later entry date for participants entering prior to the first lockdown, between the start of first and start of second lockdown, and after the start of second lockdown period
- Entered the Scheme on a later date: less likely to improve.

# Participant, family/carer correlation

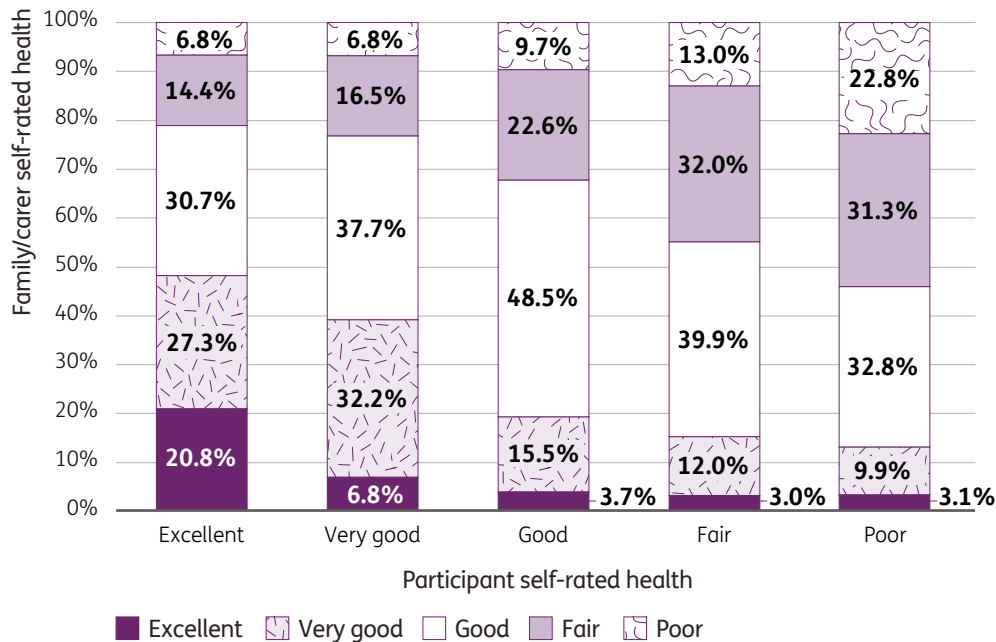
## Baseline aggregates

At baseline, family/carer self-rated health has a strong positive relation to that of their participants. Of participants rating their health as “excellent”, 78.9% of their families and carers said their health was “excellent”, “very good” or “good”; while this percentage is 45.9% for participants who said their health was “poor”. Mothers’

self-rated health seems particularly sensitive to participant self-rated health: the percentage of mothers rating their health positively is similar to that of other carer relations for participants who said their health was “excellent” or “very good”, but is over 10 percentage points lower for participants who said their health was “poor”.

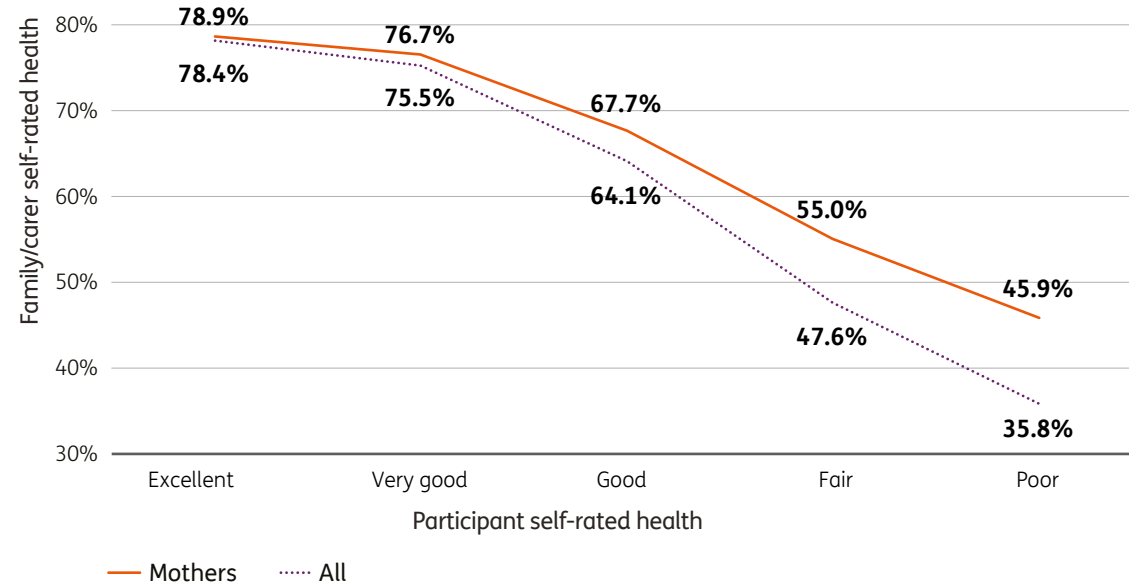
### Responses by NDIS participants versus all family/carers at baseline

#### Correlation between participant and family/self-rated health at baseline



### Responses by NDIS participants versus mothers at baseline

#### Percentage of mothers rating their health positively versus all carers, by participant self-rated health



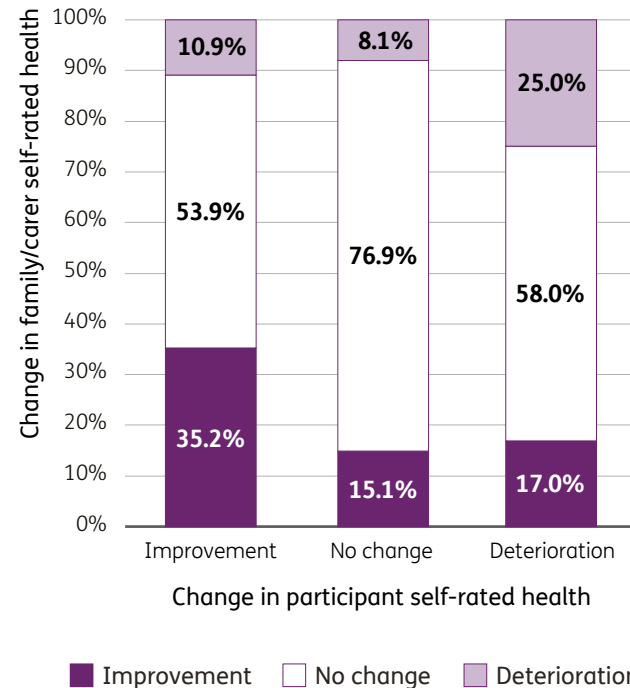
# Participant, family/carer correlation

## Longitudinal aggregates

From baseline to latest reassessment, higher percentages of family/carers' self-rated health improved, among participants whose self-rated health also improved.

### Change in responses by NDIS versus all family/carers longitudinally<sup>1,2</sup>

#### Correlation between changes in participant and family/carer self rated health from baseline to latest reassessment



1 Caveat: some participants' and/or their family/carers' self-rated health were already at "excellent" or "poor" at baseline which means they cannot improve/deteriorate further. This has not been explicitly accounted for in this analysis.

2 This analysis does not control for time in Scheme and combines all results from baseline to latest reassessment regardless of time in Scheme.

3.7

Has the NDIS helped?

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## Key statistics (1/2)

Outcome indicators	Participant saying the NDIS improved their health and wellbeing		Family/carer saying the NDIS improved their health and wellbeing					Participant vs family/carer <sup>4</sup>
	Males	Females	Mothers	Fathers	Siblings	Spouse/partner	Grandparents	
NDIS percentage at reassessment 1 <sup>1</sup>	50.5%	53.1%	45.2%	46.5%	45.1%	45.6%	28.0%	Positive relationship
Change from reassessment 1 to reassessment 6 <sup>2</sup>	8.70%	9.30%	-11.40%	-10.30%	+11.3% (R5)	+9.6% (R5)	+8.6% (R4)	Positive relationship

<sup>1</sup> All reassessment years are aggregated; baseline measure is not available for this question since the Scheme has not had an opportunity to help at baseline.

<sup>2</sup> Where numbers are too small for reassessment 6, results are shown for the latest reassessment with sufficient sample size, and a bracket denoting the reassessment time point.

<sup>3</sup> Excludes respondents who answered "It's my first plan".

<sup>4</sup> The conclusions are based on observation from graphs, and do not control for other factors.

## Key statistics (2/2)

Modelled results <sup>1</sup>	Reassessment 1		Trend (one-step)			
			Improvement		Deterioration	
	Least likely <sup>2</sup>	Most likely <sup>2</sup>	Least likely to improve <sup>2</sup>	Most likely to improve <sup>2</sup>	Least likely to deteriorate <sup>2</sup>	Most likely to deteriorate <sup>2</sup>
Participant saying the NDIS improved their health and wellbeing	Primary disability: <b>Sensory disability</b>	State/Territory: <b>ACT</b>	Utilisation of the previous plan budget: <b>0–20%</b>	Primary disability: <b>Multiple sclerosis</b>	Age group: <b>65+</b>	Utilisation of the previous plan budget: <b>0–20%</b>
Family/carer saying the NDIS improved their health and wellbeing	State/Territory: <b>TAS</b>	Participant age group: <b>60–64</b>	Utilisation of the previous plan budget: <b>0–20%</b>	Primary disability: <b>Multiple sclerosis</b>	Participant age group: <b>0–6</b>	Utilisation of the previous plan budget: <b>0–20%</b>

<sup>1</sup> Amongst categorical variables with coefficient estimates significantly different from zero at the 0.05 level. Based on central estimates of the coefficients, without regard to precision of estimation.

All the characteristics mentioned in this table are compared to their respective reference categories, which are specified on slides 200, 203, 210 and 213.

<sup>2</sup> The effect is considered “less likely” when the coefficient estimate is below 1 (less likely than the reference category); “more likely” when the coefficient estimate is above 1 (more likely than the reference category).



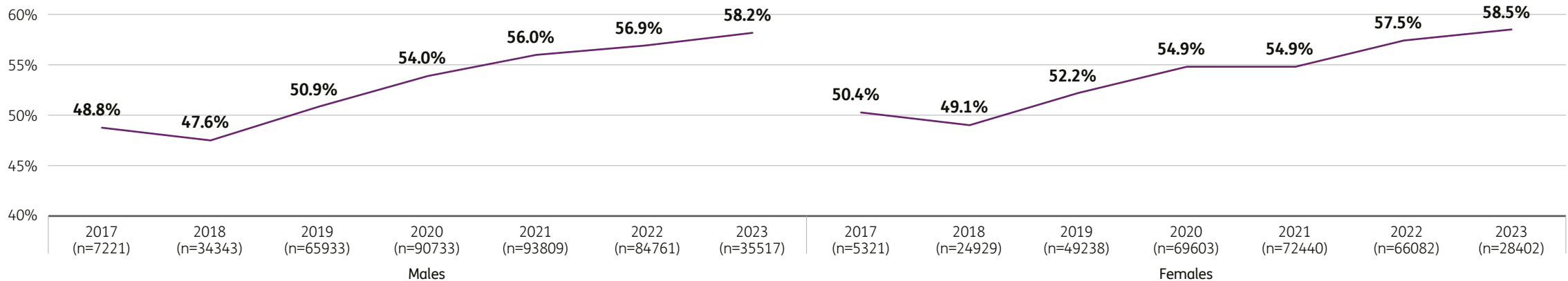
# Participants (1/8)

## Reassessment 1 outcomes – percentage saying the NDIS helped By entry year and gender

The percentage of NDIS participants saying the NDIS improved their health and wellbeing at reassessment 1 has increased each year from 2018 to 2023. This percentage increased from 47.6% to 58.2% for males, and 49.1% to 58.5% for females. The percentage of females responding positively is slightly higher than that of males every year.

### Time series: NDIS participants from 2017 to 2023 (age standardised)<sup>1,2,3</sup>

#### Participants saying NDIS helped



1 No Australian population benchmark is available for this indicator.

2 The earliest timepoint available for reassessment 1 is in 2017, as regular collection of outcomes framework data commenced in 2016, for participants entering the Scheme from 1 July 2016.

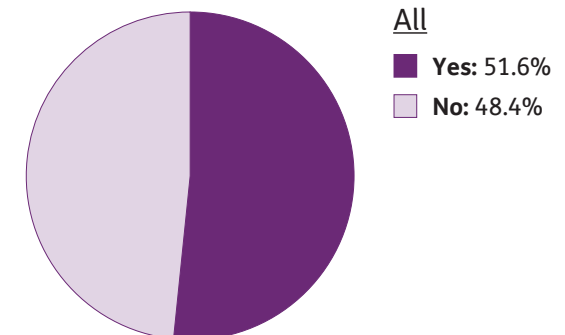
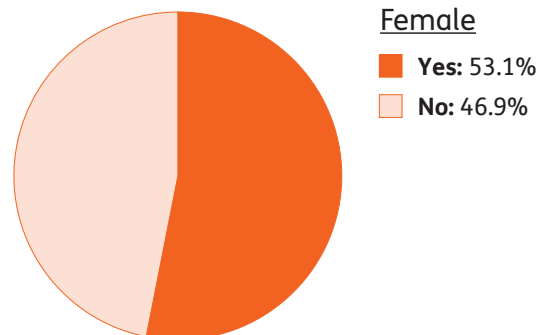
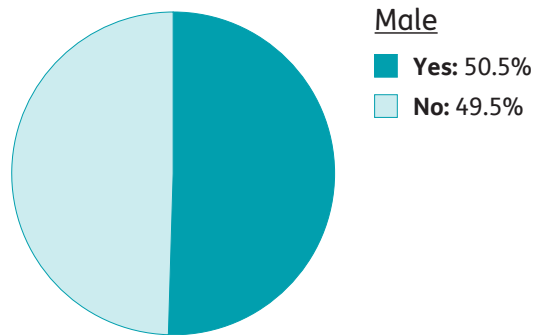
3 NDIS respondents each year are standardised to aggregate (all years and genders) NDIS respondent age distribution.

## Participants (2/8)

### Reassessment 1 outcomes – percentage saying the NDIS helped Response options by gender

Overall, from 2016 to 2023, **50.5%** of male participants said the NDIS improved their health and wellbeing at reassessment 1, compared to **53.1%** of females.

#### Has the NDIS helped at reassessment 1 – NDIS participants (unstandardised)



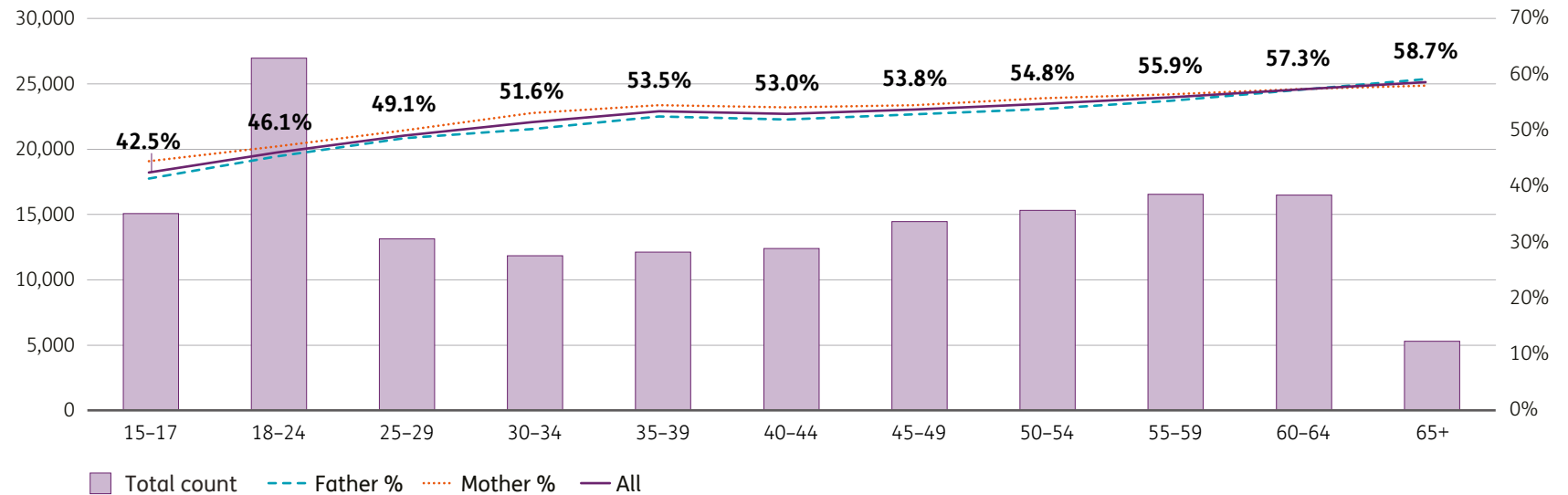
# Participants (3/8)

## Reassessment 1 outcomes – percentage saying the NDIS helped By participant age and gender

The percentage of participants saying the NDIS helped at reassessment 1 is higher for older participants: 42.5% of participants aged 15–17 said the NDIS improved their health and wellbeing, compared to 58.7% for those aged 65+.

Before age 60, the percentage of male participants saying the NDIS helped is lower than that of females; however, for the 65 and over age group, the percentage of males saying the NDIS helped is higher.

Has the NDIS helped at reassessment 1 – NDIS participants aged 15 and over<sup>1</sup>

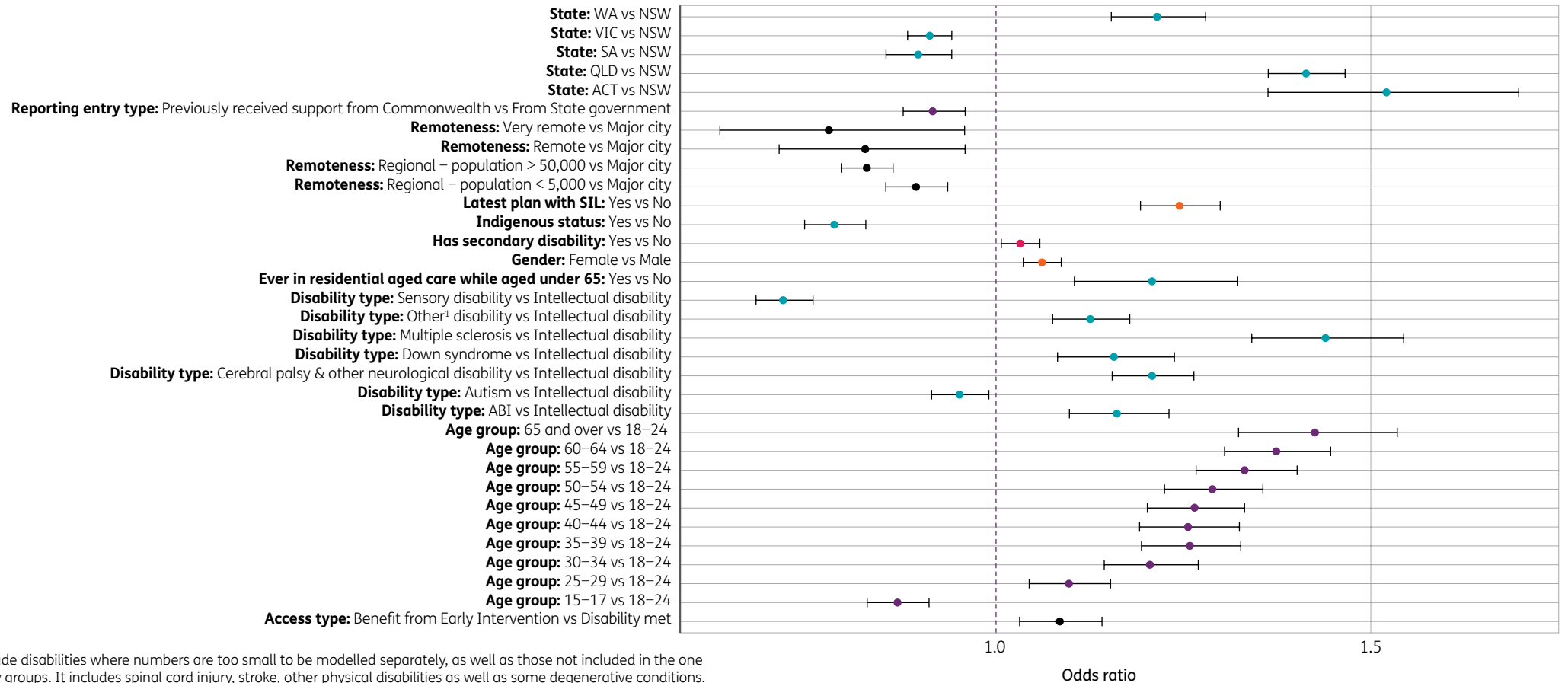


<sup>1</sup> Data labels displayed in the graph relate to the “All” series.

# Participants (4/8)

## Reassessment 1 outcomes – percentage saying the NDIS helped Modelling results and odds ratios

### Key drivers of NDIS participants saying the NDIS helped them improve their health and wellbeing



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Participants (5/8)

### Reassessment 1 outcomes – percentage saying the NDIS helped Comments on modelled results

#### Key drivers of NDIS participants saying the NDIS helped them improve their health and wellbeing cont.

Participants with the following characteristics are **more likely** to say the NDIS improved their health and wellbeing at reassessment 1:

- Living in WA, QLD or ACT compared to living in NSW
- Having SIL funding in the latest plan compared to those without
- Having one or more secondary disabilities compared to those without
- Female compared to male
- Primary disability of multiple sclerosis, Down syndrome, cerebral palsy and other neurological disabilities, acquired brain injury, or a disability in the “other”<sup>1</sup> group compared to having primary disability of intellectual disability
- Having been in residential aged care while under 65 compared to those who have not.
- Being in an older age group compared to being in the 18 to 24 age group
- Accessed the Scheme through early intervention (S25) compared to permanent disability (S24)
- Having lower levels of function (increasing trend with decreasing level of function)
- Entered the Scheme after the start first lockdown compared to before, and after the start of second lockdown compared to before
- Before the start of first lockdown and between the start of first lockdown and end of first lockdown, there is an increasing time trend with later Scheme entry date.

Participants with the following characteristics are **less likely** to say the NDIS improved their health and wellbeing at reassessment 1:

- Living in VIC or SA compared to NSW
- Have previously received support from the Commonwealth government, compared to previously receiving supports from the State government
- Living in remote or very remote areas, a regional area with population less than 5,000, or a regional area with population greater than 50,000, compared to living in a major city
- Coming from Indigenous background compared to non-Indigenous background
- Primary disability of a sensory disability or autism compared to intellectual disability
- Aged 15 to 17 compared to those aged 18 to 24
- Between the end of first lockdown and start of second lockdown, and after the start of second lockdown, there is a decreasing time trend with later Scheme entry date.

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

# Participants (6/8)

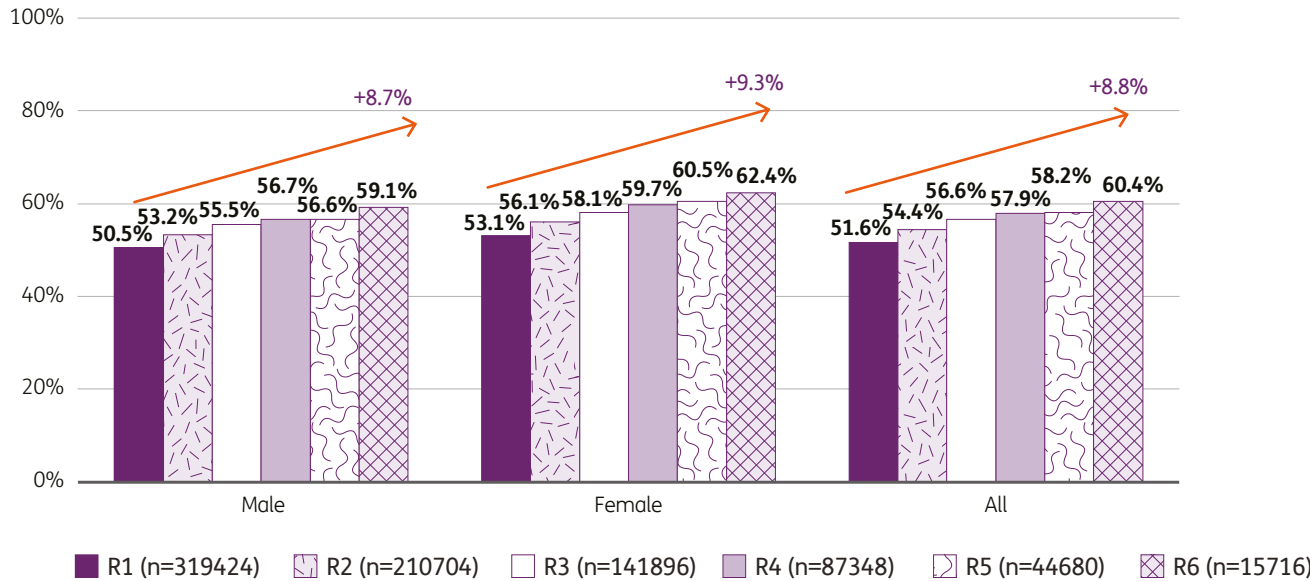
## Cross-sectional<sup>1</sup> outcomes – change in percentage saying the NDIS helped By time in Scheme and gender

There is an increasing trend in the percentage of participants who said the NDIS has helped improve their health and wellbeing, with an 8.8 percentage point increase over six years from 51.6% to 60.4% and the largest increase of 2.8 percentage points at first reassessment.

A higher percentage of female participants over time said the NDIS has helped improved their health and wellbeing compared to male group.

The largest increase over time is for females, with an increase of 9.3 percentage points over six years from 53.1% to 62.4% and the largest increase of 3.0% at first reassessment.

### Percentage of participants saying the NDIS helped improve their health and wellbeing

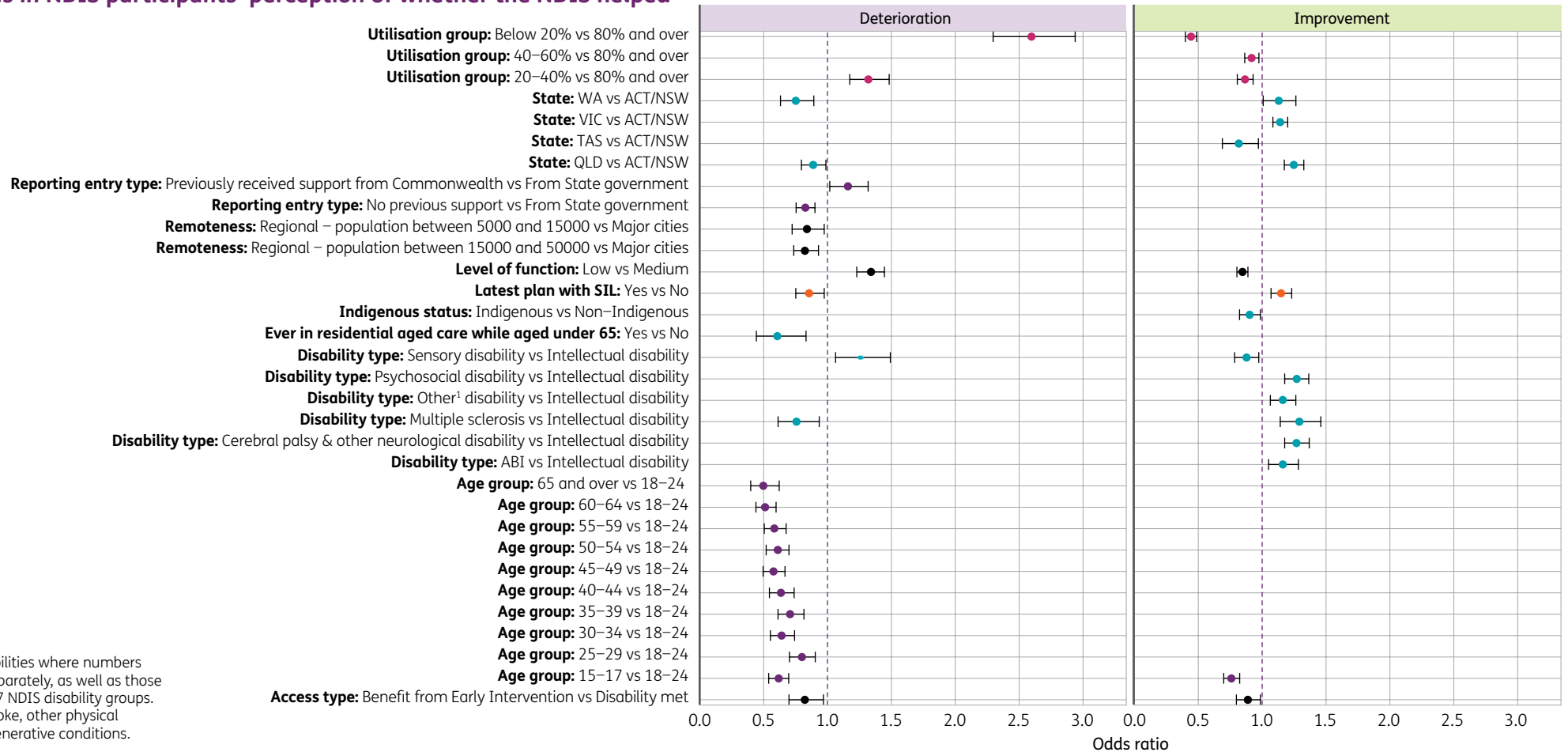


1 The cross-sectional presentation here is by reassessment time points rather than response year. Therefore, it differs from that of the Healthy Living and Preventative Health sections.  
 2 Percentage changes have been rounded to the nearest 1 decimal place; differences are calculated from unrounded metrics.

# Participants (7/8)

Longitudinal outcomes – change in percentage saying the NDIS helped  
Modelling results and odds ratios

## Key drivers of changes in NDIS participants’ perception of whether the NDIS helped



1 “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

## Participants (8/8)

### Longitudinal outcomes – change in percentage saying the NDIS helped Comments on modelled results

#### Key drivers of changes in NDIS participants' perception of whether the NDIS helped cont.

Participants with the following characteristics are more/less likely to experience changes in perception of whether the NDIS helped improve their health and wellbeing:

- Those with plan utilisation rate below 60% are less likely to improve, and those with plan utilisation rate below 40% are more likely to deteriorate, compared to those having plan utilisation rate over 80%
- Those in the Scheme for longer are less likely to both improve or deteriorate
- Those living in WA or QLD are more likely to improve and less likely to deteriorate, those living in VIC are more likely to improve, and those living in TAS are less likely to improve, compared to those living in ACT/NSW
- Those who previously received support from Commonwealth government are more likely to deteriorate, and those who previously received no support are less likely to deteriorate, compared to those having previously received support from State government
- Living in regional area with population between 5,000 and 50,000: less likely to deteriorate compared to a major city
- Having low level of function: less likely to improve and more likely to deteriorate compared to those having medium level of function
- Having SIL in their latest plan: more likely to improve and less likely to deteriorate compared to those without
- Coming from Indigenous background: less likely to improve compared to those coming from non-Indigenous background
- Having been in residential aged care while aged under 65: less likely to deteriorate compared to those who have not
- Those with primary disability of a sensory disability are less likely to improve and more likely to deteriorate; those with primary disability of multiple sclerosis are more likely to improve and less likely to deteriorate; those with primary disability of psychosocial disability, cerebral palsy and other neurological conditions, acquired brain injury, or disabilities in the “other”<sup>1</sup> group are more likely to improve, compared to those with primary disability of intellectual disability
- Those in age groups other than 18 to 24 are less likely to deteriorate, and those aged 15 to 17 are also less likely to improve, compared to those aged 18 to 24
- Those who accessed the Scheme through early intervention (S25) are less likely to either improve or deteriorate compared to those accessing through permanent disability (S24)
- Those who entered the Scheme on a later date are less likely to improve (i.e. decreasing time trend with later Scheme entry date)
- Before the start of second lockdown and after the end of second lockdown, those entering the Scheme on a later date are less likely to deteriorate. Between the start and end of second lockdown, those entering the Scheme on a later date are more likely to deteriorate.

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.



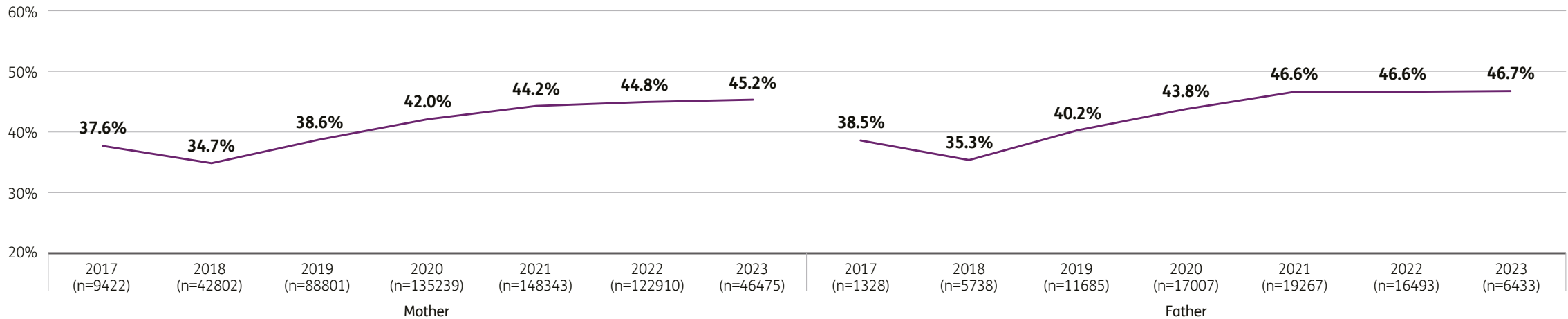
## Family/carer (1/9)

### Reassessment 1 outcomes – percentage saying the NDIS helped By entry year and carer relationship

The percentage of NDIS parents saying the NDIS improved their health and wellbeing at reassessment 1 increased by around 10 percentage points between 2018 and 2021, and remained at a similar level in 2022 and 2023. The percentage of fathers saying the NDIS helped is slightly higher than that of mothers.

**Time series: NDIS families and carers from 2017 to 2023 (age standardised)**<sup>1,2,3</sup>

#### Parents saying NDIS helped



1 No Australian population benchmark is available for this indicator.

2 The earliest timepoint available for reassessment 1 is in 2017, as regular collection of outcomes framework data commenced in 2016, for participants entering the Scheme from 1 July 2016.

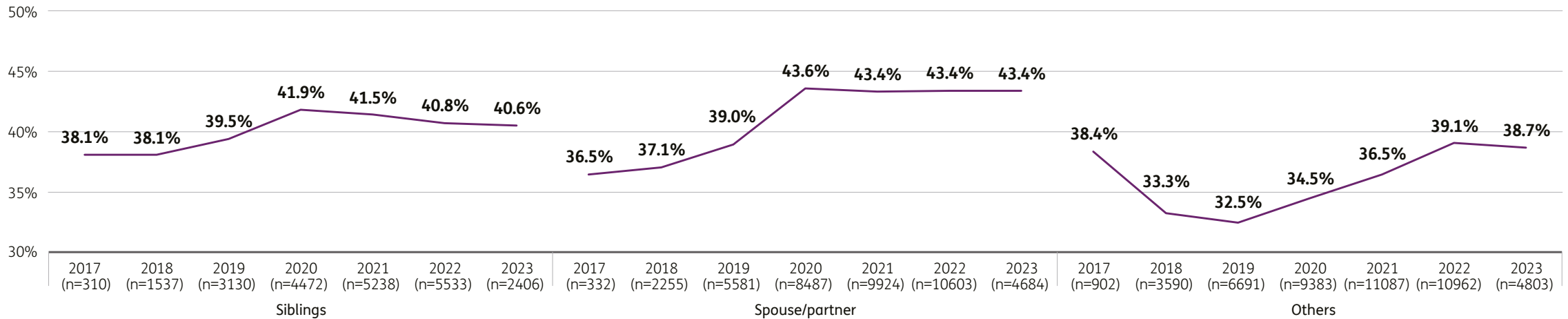
3 NDIS respondents each year are standardised to aggregate (all years and genders) NDIS respondent age distribution.

## Family/carer (2/9)

### Reassessment 1 outcomes – percentage saying the NDIS helped By entry year and carer relationship cont.

The percentage of NDIS siblings and spouses/partners saying the NDIS improved their health and wellbeing at reassessment 1 increased between 2017 to 2020 by 3.8 and 7.1 percentage points, respectively. This percentage declined slightly after 2020 for siblings, and remained relatively stable for spouses/partners. For “other” carer relationships (including grandparents, other family members, or carers that are not a family member of the participant), the percentage saying the NDIS helped decreased from 2017 to 2019, then increased from 2019 to 2022.

#### Other family/carers saying NDIS helped



## Family/carer (3/9)

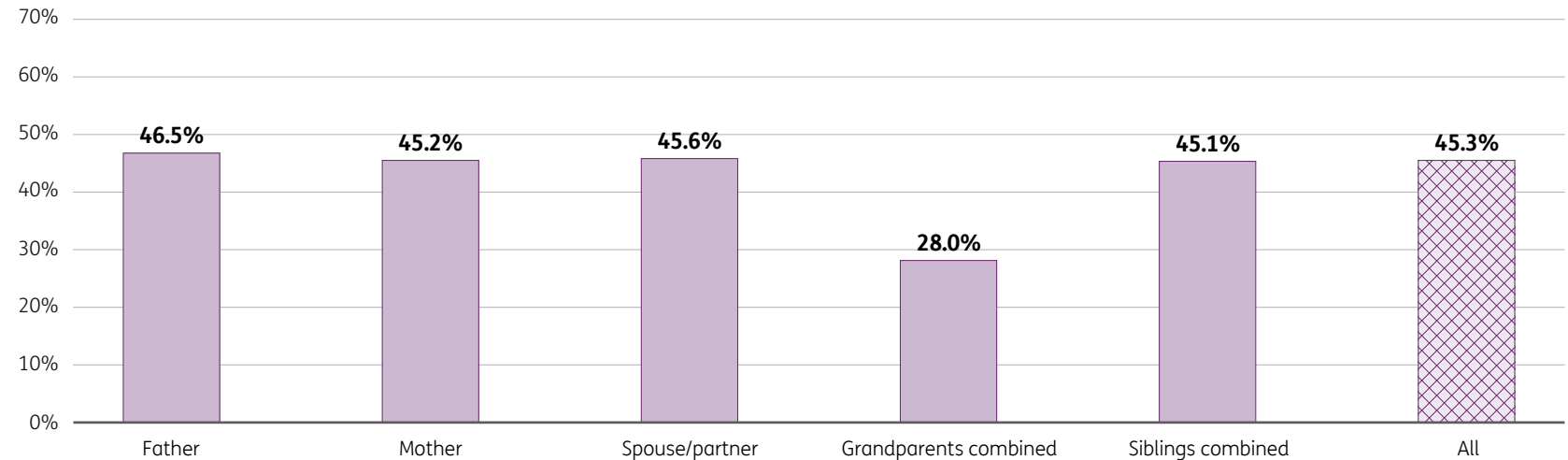
### Reassessment 1 outcomes – percentage saying the NDIS helped By carer relationship

Considering all response years, the percentage of NDIS fathers, mothers, spouses/partners and siblings saying the NDIS improved their health and wellbeing at reassessment 1 are quite similar, at just above 45%; while just 28.0% of grandparents responded positively (possibly age-related).

The percentage of NDIS fathers and mothers saying the NDIS helped at R1 notably decreased from age 18 to 54, and remained at a similar level thereafter. The proportion of spouses/partners responding positively increased from age 18 to 44, and remained at a similar level for older ages. For siblings, the percentage responding positively is not notably distinguished by age.

#### Has the NDIS helped at reassessment 1 – NDIS families and carers (unstandardised)

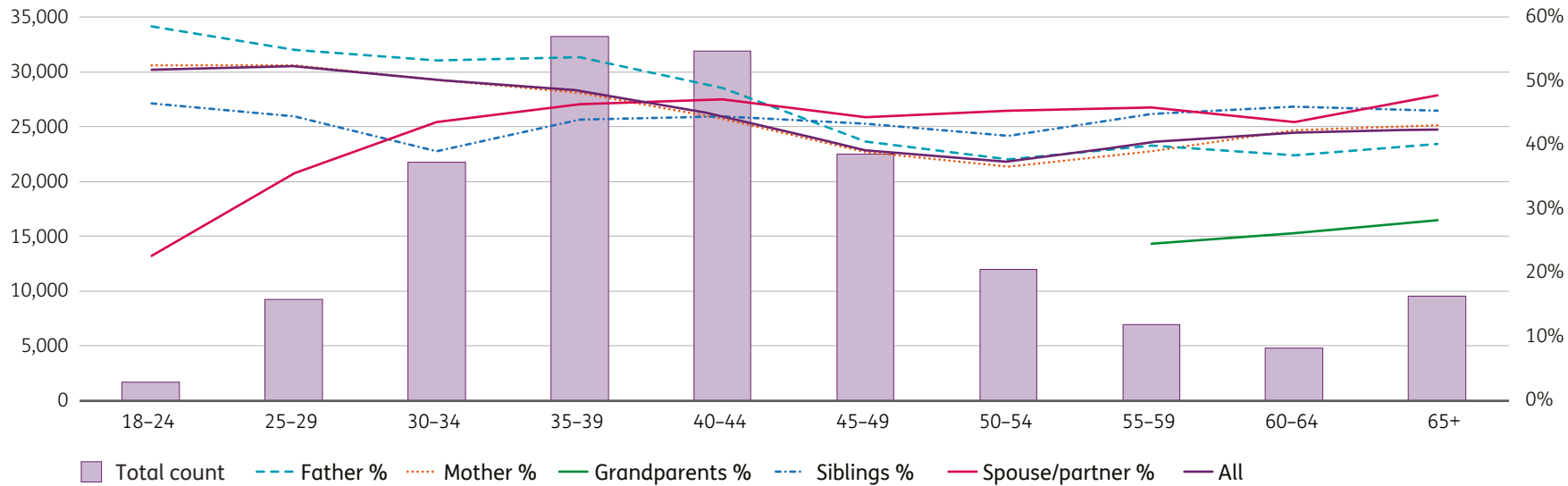
##### Family/carer saying the NDIS helped



# Family/carer (4/9)

## Reassessment 1 outcomes – percentage saying the NDIS helped By carer age and carer relationship

Has the NDIS helped at reassessment 1 – NDIS families and carers aged 18+

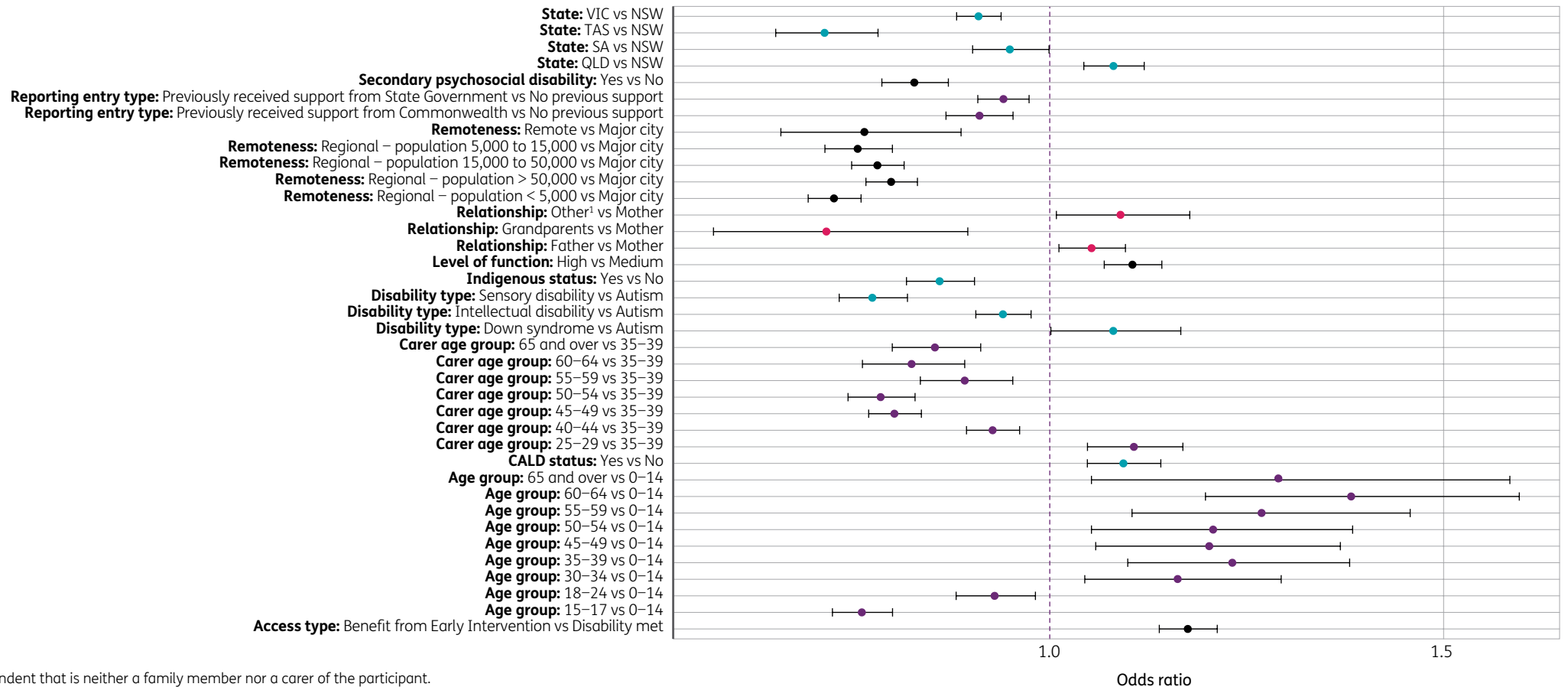


Carer age group	Percentage saying the NDIS helped: All respondents
18-24	52.0%
25-29	52.3%
30-34	50.2%
35-39	48.6%
40-44	44.6%
45-49	39.2%
50-54	37.4%
55-59	40.4%
60-64	41.9%
65+	42.5%

# Family/carer (5/9)

## Reassessment 1 outcomes – percentage saying the NDIS helped Modelling results and odds ratios

### Key drivers of NDIS families and carers saying the NDIS helped them improve their health and wellbeing



1 “Other” refers to a respondent that is neither a family member nor a carer of the participant.

## Family/carer (6/9)

### Reassessment 1 outcomes – percentage saying the NDIS helped Comments on modelled results

#### Key drivers of NDIS families and carers saying the NDIS helped them improve their health and wellbeing cont.

Family/carers of participants are **more likely** to respond positively when the participants/carers have the following characteristics:

- Living in QLD compared to living in NSW
- Family/carer is father or respondents that are neither family members nor carers of the participant compared to mother
- Having high level of function compared to medium
- Having primary disability of Down syndrome compared to having primary disability of autism
- Participant aged over 30 compared to aged 0–14
- Participant aged below 15 with primary disability of “other”<sup>1</sup> disabilities
- Family/carer is in the 25–29 age group compared to being in the 35–39 age group
- Coming from a CALD background compared to non-CALD background
- Accessed the Scheme through early intervention (S25) compared to permanent disability (S24)
- Before the end of first lockdown, there is an increasing time trend with later Scheme entry date. In addition, there is a one-off jump in likelihood for participants who entered the Scheme just after the start of second lockdown compared to before.

Family/carers of participants are **less likely** to respond positively when participants/carers have the following characteristics:

- Living in LGA with higher unemployment rate (decreasing trend with increasing unemployment rate in LGA lived in)
- Living in VIC, TAS or SA compared to NSW
- Having a secondary psychosocial disability compared to those without a secondary psychosocial disability
- Having previously received support from the Commonwealth government or State government compared to those who have not
- Living in a remote area or a regional area (of any size) compared to living in a major city
- Family/carers are grandparents compared to mother
- Coming from Indigenous background compared to non-Indigenous background
- Having primary disability of a sensory disability or intellectual disability compared to autism
- Family/carer is in an older age group compared to the 35–39 age group
- Participant is aged 15 to 17 or 18 to 24 compared to aged 0 to 14.
- Between the end of first lockdown and start of second lockdown, and after the start of second lockdown, there is a decreasing time trend with later Scheme entry date.

<sup>1</sup> “Other” disabilities include disabilities where numbers are too small to be modelled separately, as well as those not included in the one of the 17 NDIS disability groups. It includes spinal cord injury, stroke, other physical disabilities as well as some degenerative conditions.

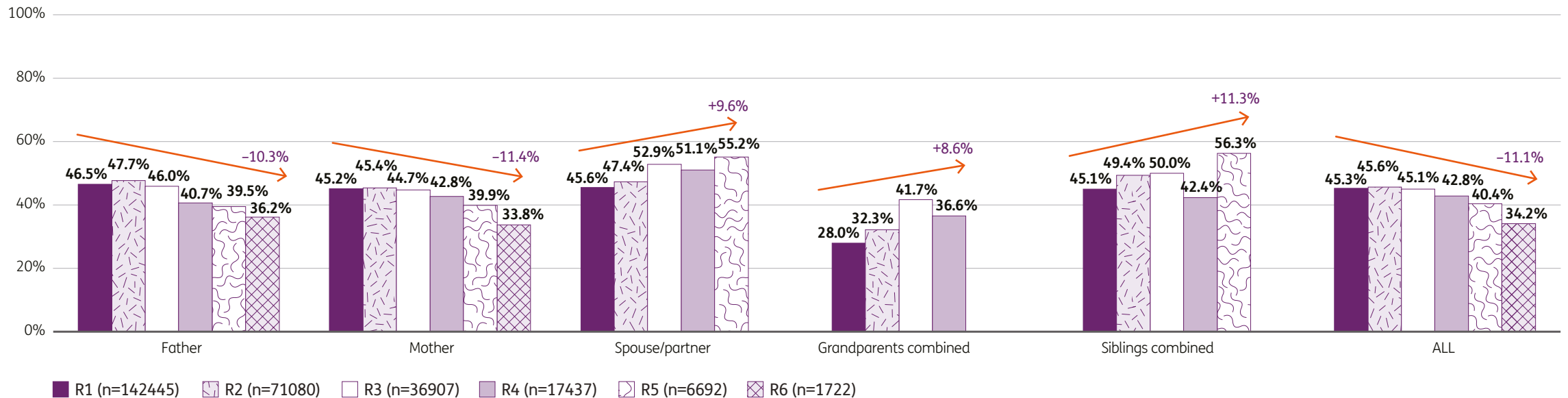
# Family/carer (7/9)

## Cross-sectional<sup>1</sup> outcomes – change in percentage saying the NDIS helped By time in Scheme and carer relationship

Overall, the percentage of families/carers of NDIS participants who said the NDIS has helped improve their health and wellbeing has declined by 11.1 percentage point over six years from 45.3% to 34.2%, with the largest decrease of 6% at latest reassessments.

The largest decrease over time is associated with mothers of participants, with a decrease of 11.4 percentage points over six years from 45.2% to 33.8%. However, there is an increasing trend for spouse/partner, grandparents, and siblings.

Percentage of families and carers saying the NDIS helped improve their health and wellbeing<sup>2,3</sup>

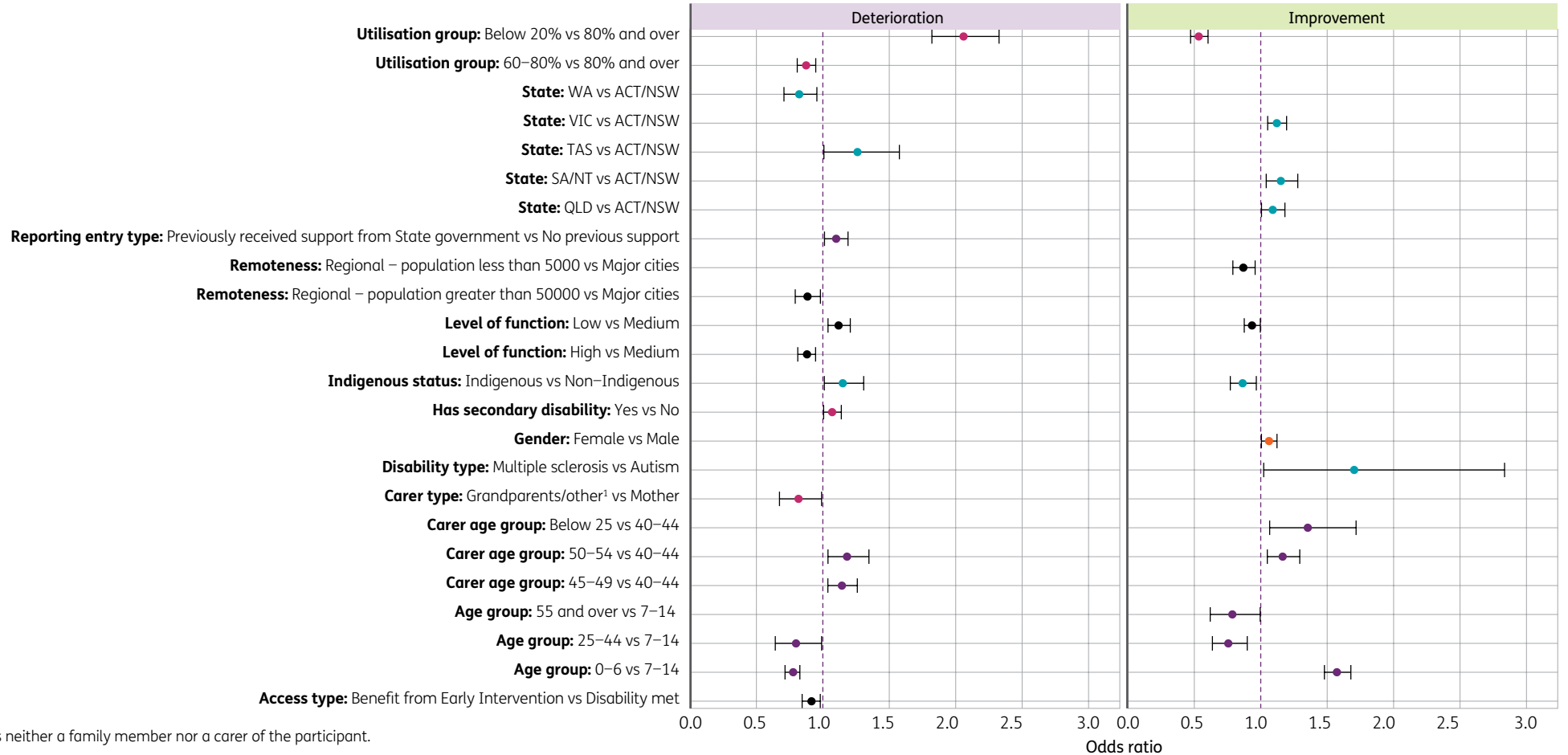


1 The cross-sectional presentation here is by reassessment time points rather than response year. Therefore, it differs from that of the Healthy Living and Preventative Health sections.  
 2 R5 for grandparents and R6 for spouse/partner, grandparents, and siblings are not shown for this indicator due to insufficient numbers. The change percentages shown above the arrows are based on the differences between first reassessment and latest shown reassessment.  
 3 Percentage changes have been rounded to the nearest 1 decimal place; differences are calculated from unrounded metrics.

# Family/carer (8/9)

Longitudinal outcomes – change in percentage saying the NDIS helped  
Modelling results and odds ratios

## Key drivers of changes in NDIS family/carers' perception of whether the NDIS helped



1 "Other" refers to a respondent that is neither a family member nor a carer of the participant.



## Family/carer (9/9)

### Longitudinal outcomes – change in percentage saying the NDIS helped Comments on modelled results

#### Key drivers of changes in NDIS family/carers' perception of whether the NDIS helped cont.

Families/carers of participants with the following characteristics are more/less likely to experience changes in perception of whether the NDIS helped improve their health and wellbeing:

- Having plan utilisation rate below 20%: less likely to improve and more likely to deteriorate; having plan utilisation rate between 60–80%: less likely to deteriorate, compared to those having plan utilisation rate over 80%
- Living in VIC, SA/NT or QLD: more likely to improve; living in TAS: more likely to deteriorate, compared to those living in ACT/NSW
- Having previously received support from State government: more likely to deteriorate compared to those having previously received no support
- Living in regional area with population less than 5,000: less likely to improve; living in regional area with population greater than 50,000: less likely to deteriorate, compared to living in a major city
- Having low level of function: less likely to improve and more likely to deteriorate; having high level of function: less likely to deteriorate, compared to having medium level of function
- Coming from Indigenous background: less likely to improve and more likely to deteriorate compared to those coming from non-Indigenous background
- Having one or more secondary disabilities: more likely to deteriorate compared to those without
- Females more likely to improve compared to males
- Having primary disability of multiple sclerosis: more likely to improve compared to those with primary disability of autism
- Family/carers who are grandparents or respondents that are neither family members nor carers of the participant: less likely to deteriorate compared to mother
- Family/carers aged 45 to 54: more likely to deteriorate; family/carers aged under 25 or 50 to 54: more likely to improve compared to those aged 40 to 44
- Participant aged 0 to 6: more likely to improve and less likely to deteriorate; aged 25 to 44: less likely to either improve or deteriorate; aged 55 and over: less likely to deteriorate, compared to those aged 7 to 14
- Accessed the Scheme through early intervention (S25): less likely to deteriorate compared to permanent disability (S24)
- Entered the Scheme on a later date: less likely to deteriorate (i.e. decreasing time trend with later Scheme entry date).

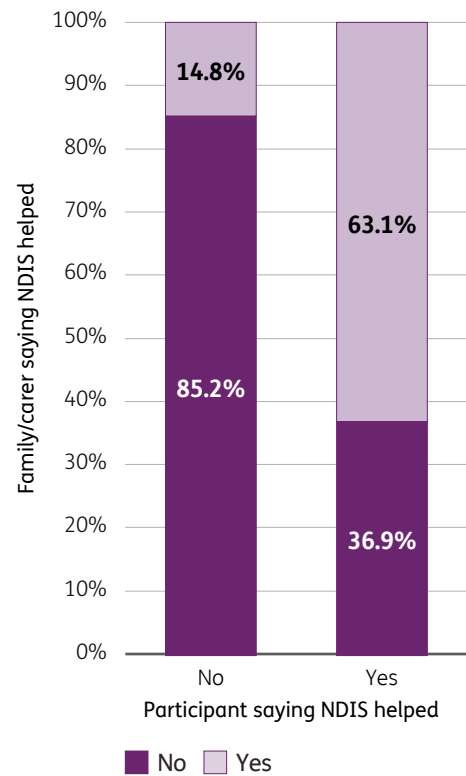
# Participant, family/carer correlation

## Reassessment 1 and longitudinal aggregates

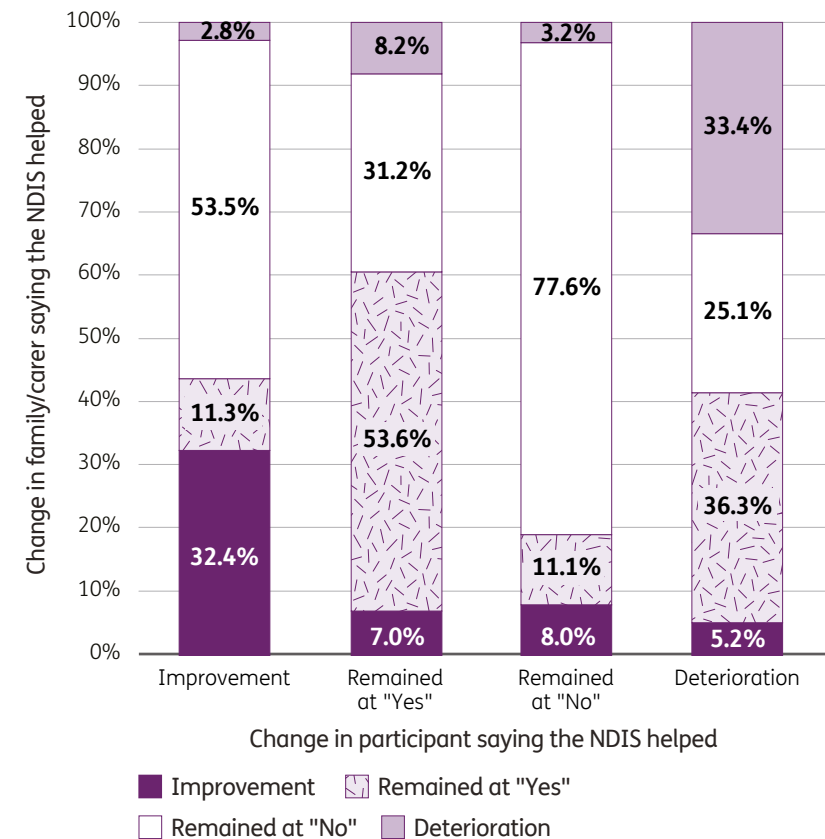
At reassessment 1, of participants who said the NDIS did not help improve their health and wellbeing, just 14.8% of families and carers said the NDIS helped. By contrast, of participants who said the NDIS helped, 63.1% of families and carers also said so.

Longitudinally, from reassessment 1 to latest reassessment, of participants who switched from saying the NDIS did not help to saying the NDIS helped (an improvement), 32.4% of their families and carers experienced the same change. Just 5.2% of families and carers improved, among participants who said the NDIS helped at R1 but not at latest reassessment.

**Responses by NDIS participants versus family/carers at reassessment 1**



**Change in responses by NDIS participants versus family/carers longitudinally<sup>1</sup>**



<sup>1</sup> This analysis does not control for time in Scheme and combines all results from reassessment 1 to latest reassessment regardless of time in Scheme.

# Participant, family/carer correlation

## Cross-sectional<sup>1</sup> aggregates

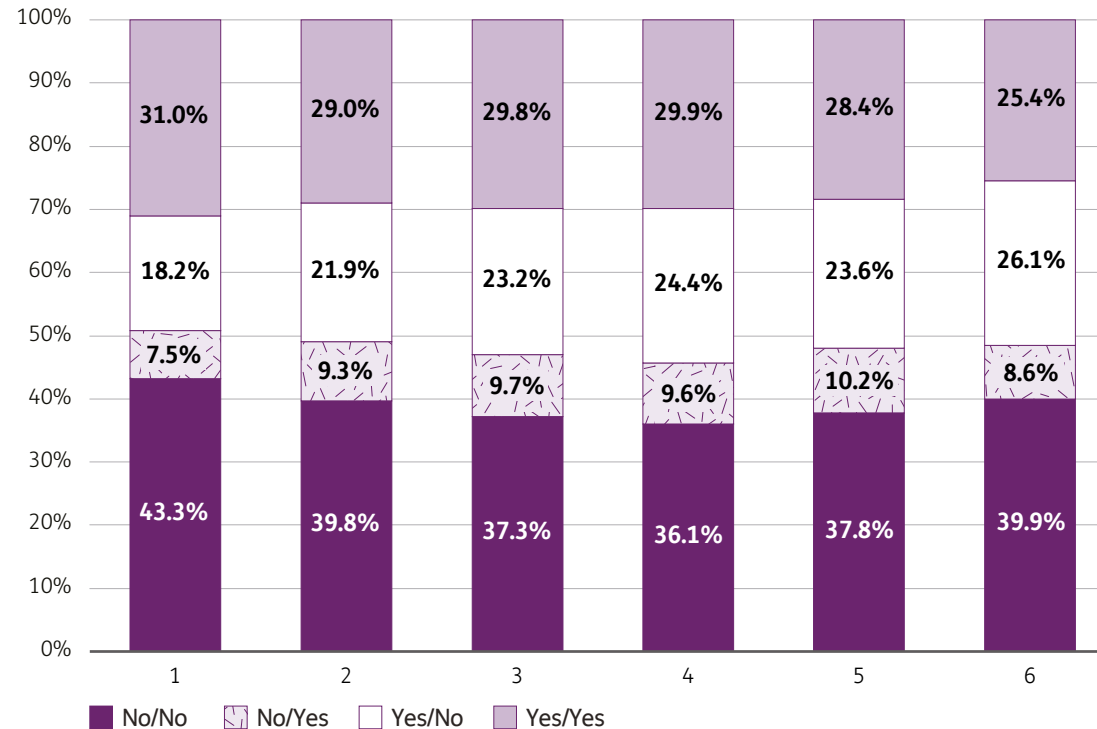
From reassessment 1 to reassessment 6, the percentage of participant-family/carer pairings where the participant said the NDIS helped while the family carer did not (Yes/No), has increased from 18.2% to 26.1%. Pairs where both the participant and the family/carer said the NDIS helped (Yes/Yes) decreased from 31.0% to 25.4%.

The percentage where both the participant and the family/carer saying the NDIS did not help (No/No) decreased from 43.3% at R1 to 36.1% at R4 but increased to 39.9% by R6.

The percentage where the participant said the NDIS did not help but the family/carer said the NDIS helped (No/Yes) has been relatively stable (and smaller than the other categories).

### Responses by NDIS participants versus family/carers by time in Scheme

#### Correlation between participant and family/carer saying the NDIS helped



<sup>1</sup> The cross-sectional presentation here is by reassessment time points rather than response year. Therefore, it differs from that of the Healthy Living and Preventative Health sections.



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