

Health and wellbeing of NDIS participants and their families and carers

Based on data collected from the Outcomes Framework questionnaires (Short Form and Long Form) | Data at 31 December 2020



Contents



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- Outcomes framework questionnaires
- Health and wellbeing outcomes measured by the questionnaires
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Key messages

Detailed report, including:

- Baseline health and wellbeing outcomes of participants and their families or carers versus the general Australian population benchmark (where available), and highlighting sub-groups where there are significant differences in experience.
- Longitudinal changes in health and wellbeing outcomes, comparing responses provided at baseline, year 1, year 2 and year 3 reviews from the same group of respondents.

Introduction

Outcomes framework questionnaires

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

Birth to starting school

School to 14 years old

15 to 24 years old

25 years old and over

Domain 1: Daily living

Domain 2: Choice and control

Domain 3: Relationships

Domain 4: Social, community

and civic participation

Domain 5: Specialist services

Domain 1: Daily living

Domain 2: Lifelong learning

Domain 3: Relationships

Domain 4: Social, community

and civic participation

Domain 1: Choice and control

Domain 2: Daily living

Domain 3: Relationships

Domain 4: Home

Domain 5: Health and wellbeing

Domain 6: Lifelong learning

Domain 7: Work

Domain 8: Social, community and civic participation

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/carer 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:

Birth to 14 years old

15 to 24 years old

25 years old and over



Domain 2: Support

Domain 3: Access to services

Domain 4: Development

Domain 5: Health and wellbeing

Domain 6: Understanding of child's strengths, abilities and special needs

Domain 1: Rights and advocacy

Domain 2: Support

Domain 3: Access to services

Domain 4: Independence

Domain 5: Health and wellbeing

Domain 6: Understanding of

family member's strengths, abilities

and special needs

Domain 1: Rights and advocacy

Domain 2: Support

Domain 3: Access to services

Domain 4: Succession plans

Domain 5: Health and wellbeing

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/carer 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.

Health and wellbeing outcomes measured by the questionnaires

Areas of health and wellbeing



- · Alcohol use
- Undertaking of light exercise
- Daily fruit and vegetable intake
- · Smoking status
 - Risk of psychological distress (measured by Kessler 6 scores)
 - Level of resilience (measured by Brief Resilience Scale)

Health and wellbeing of NDIS participants and their families or carers

Has the NDIS helped?

Mental

health

 Has involvement with the NDIS improved the health and wellbeing of participants and their families/carers? Participant and family/ carer selfrated health

 Participant and family/carer health, rated from "Excellent" to "Poor"

Utilisation of and access to health services:

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

Participation in preventative health:

Health

services

Health check

Preventative

health

- Flu vaccination
- Cervical cancer screening (Pap Test)
- Mammography screening
- Prostate specific antigen (PSA) test

Analysis of outcomes

Baseline outcomes (at Scheme entry)



Baseline health and wellbeing outcomes for participants and families/carers are measured at point of Scheme entry.

Those baseline outcomes are then compared to the general Australian population where population benchmark data is available.

Health outcomes at Scheme entry	Population benchmarks			
Daily fruit intake	National Health Survey (NHS) 2017-18			
Daily vegetable intake				
Alcohol use				
Undertaking of light exercise				
Smoking status				
Risk of psychological distress				
Participants' self-rated health				
Families/carers' self-rated health				
Seen a dentist in the last 12 months	Dantisinant Experience in Assetualia (DETA) 2010-20			
Hospital visits made in the last 12 months	Participant Experience in Australia (PEIA) 2019-20			
Had a health check in the last 12 months	Survey of Health Care (SUC) 2016			
Have a regular doctor	Survey of Health Care (SHC) 2016			
Difficulty accessing health services	Survey of Disability, Ageing and Carers (SDAC) 2018			
Had a flu shot in the past 12 months	Estimated by News-poll Omnibus in June 2014 on Behalf of Department of Health			
Screened for Breast Cancer in the past 12 months	National Cancer Control Indicators (NCCI) 2016-2017			
Screened for Cervical Cancer in the past 12 months				

Longitudinal outcomes



- Success should be measured on how far participants and their families and carers have come since entering the Scheme, acknowledging different starting points.
- Longitudinal results for participant and family/carer outcome indicators are considered for **participants who have been in** the Scheme for three years at 31 December 2020.
- The family/carer longitudinal analysis is also restricted to instances where the same person responded at each of the time points being considered.
- For the regression models which consider factors affecting changes in outcomes (such as improvement or deterioration in self-rated health), the analysis includes changes between Scheme entry and end of 3 years.

COVID-19 pandemic



The global pandemic that took hold from early 2020 is likely to have had an impact on at least some participant and family/carer outcomes, including health and wellbeing.

To investigate which outcomes may have been affected by the pandemic via quantitative modelling, additional time-related terms were included in the regression models.

These terms allow for:

- 1. A step change in the response probability at the date the pandemic is assumed to start affecting outcomes (23 March 2020 the date that stronger restrictions were announced by the Prime Minister, such as closure of restaurants and gyms)
- 2. A general time trend (not related to the pandemic)
- 3. Different time trends before and after the start of the pandemic.

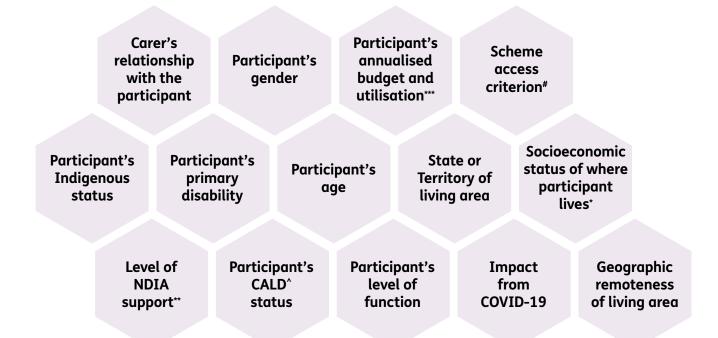
The analysis identified a number of health and wellbeing indicators potentially impacted by the pandemic, although the effects (some of which were positive and some negative) were generally slight.

The likelihood of saying that the NDIS has helped with health and wellbeing showed a strong increasing trend after the onset of the pandemic, for both participants and their families and carers.

Outcome analysis by participant characteristics



Baseline outcomes and longitudinal outcomes for participants and families/carers could vary by a number of factors (shown below), and multiple regression analysis has been used to identify subgroups of participants with significantly different experiences.



^{*} Socio-economic level of living area is represented by the unemployment rate of the Local Government Area of participant's living area.

^{**} Support required from NDIA by participants to co-ordinate their support, participate in community, reach decisions and develop relationships with their service providers.

Culturally and Linguistically Diverse

[#] Whether a participant enters the Scheme for early intervention (section 25 of the NDIS Act) or due to permanent disability (section 24).

^{***} Longitudinal outcomes only.

Key messages

Key messagesHealthy living





Participant

Significant changes over three years:

- Female participants are eating more servings of fruit daily (+9.1% eating recommended two serves per day).
- Male participants are exercising more often (+8.5% undertaking light exercise weekly or more often).

Comparison with Australian population at Scheme entry:

Fruit and vegetable consumption:

Daily fruit and vegetable consumption of NDIS participants is similar to the Australian population.

Alcohol consumption:

NDIS participants tend to drink less frequently, and consume less when they do drink. The difference between females and males is less pronounced for NDIS participants than for Australians generally.

Smoking:

The proportion of NDIS participants who smoke is similar to the Australian population. 16% of female participants smoke, the same as for Australian females overall. 20% of male participants smoke, slightly less than 23% of Australian males overall.

Key messagesHealth services





Participant

Significant changes over three years:

- NDIS participants are becoming more likely to have a doctor they see regularly (+7.4% for females and +8.8% for males).
- NDIS participants are becoming less likely to have visited the hospital in the past 12 months (-7.6% for females and -7.1% for males).

Comparison with Australian population at Scheme entry:

Dentist and hospital visits:

NDIS participants are more likely than the Australian population to have seen a dentist (59% of female participants and 53% of male participants, compared to 54% and 46% of Australian females and males, respectively) or to have visited the hospital (45% of female participants and 39% of male participants, compared to 8% and 7% of Australian females and males, respectively) in the past 12 months.

Regular doctors:

91% of female participants and 89% of male participants have a doctor they see on a regular basis, compared to 81% and 85% for Australian females and males, respectively.

Key messages

Preventative health





Participant

Significant changes over three years:

• NDIS participants receive flu shots at much higher rates (+11.2% for females and +20.2% for males).

Comparison with Australian population at Scheme entry:

Flu vaccination:

NDIS participants are much more likely than the Australian population to get a flu vaccination. 59% of females and 52% of males report to have done so in the 12 months before they enter the Scheme between 2016 and 2020, compared to 34% of the Australian population between age 18 and 64 estimated in 2014*^.

Breast cancer and cervical cancer screening:

NDIS females are less likely than the Australian population to have been screened for breast cancer (37% compared to 42%) or cervical cancer (34% compared to 60%) in the past 12 months.

^{*} News poll Ominibus survey on flu vaccination conducted on behalf of Department of Health in June 2014.

[^] It has been estimated that the percentage of total Australian population who wanted to get a flu vaccination has increased from 41% in 2019 to 62% in 2020 due to the impact of the pandemic.

Key messages

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Mental health, self-rated health and has the NDIS helped



Participant and families or carers

Significant changes over three years:

- Significant reduction in the proportion of participants scoring in the low resilience range based on the Brief Resilience Scale (-14.1% for females and -11.1% for males).
- Female participants are becoming less likely to experience high psychological distress (-8.3%).
- NDIS participants are becoming more likely to say that the NDIS improved their health and wellbeing (+9.9% for females and +10.0% for males).

Comparison with Australian population at Scheme entry:

Mental health (psychological distress):

NDIS participants are more likely than the Australian general population to experience high or very high risk of psychological distress.

Self-rated health:

NDIS participants and families/carers rate their health less positively than the Australian population. In particular, NDIS participants fall almost 35% short of the Australian population in positive self-rated health.

Key messagesPost-COVID vs Pre-COVID



The impact of COVID-19* on the health and wellbeing of participants and their families or carers



Participant Healthy lifestyle



Participant and families or carers Self-rated health & Has the NDIS helped?



ParticipantHealth services & preventative health

- Reduction in daily number of servings of vegetables
- Increase in the number of standard alcoholic drinks consumed per occasion
- Increase in the frequency of light exercise

- Improvement in families or carers' self-rated health
- More participants said their involvement with the NDIS has helped improve their health and wellbeing
- More families or carers said their involvement with the NDIS has helped improve their health and wellbeing

- Reduction in the percentage who have a regular doctor
- Less have seen a dentist in the 12 months prior to entering the NDIS
- More have difficulty accessing health services in the 12 months prior to entering the NDIS
- Less have had education on sexual health

^{*} The impact of COVID-19 is assessed by comparing the baseline health and wellbeing outcomes of participants and their families and carers who entered the NDIS before the 23rd of March 2020 to those entered on and after the 23rd of March 2020. The significance of the impact is measured through multiple regression modelling and controls for participants' characteristics.

Detailed report

Healthy living



The table below compares NDIS participants' healthy living outcome indicators with population benchmarks at Scheme entry. Significant* three year changes are also included:

Outcome indicators	Females			Males		
	Scheme entry (Baseline)		3 year change	Scheme entry (Baseline)		3 year change
	NDIS	Australian Population	Scheme entry to Year 3 Review	NDIS	Australian Population	Scheme entry to Year 3 Review
Eating two servings of fruit per day	34%	32%	+9.1%	29%	26%	
Eating five or more servings of vegetables per day	11%	11%		7%	8%	
Drinking weekly or more frequently	16%	34%		18%	49%	
Having two or less standard drinks per occasion	75%	60%		65%	45%	
Currently smoking	16%	16%		20%	23%	
Undertaking light exercise weekly or more frequently	68%	46%		71%	46%	+8.5%

^{*}McNemar test p-value < 0.05

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Baseline outcomes

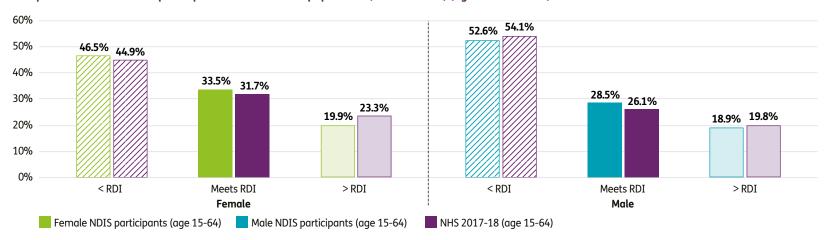
Healthy living: Daily fruit intake (1/3)

Key findings at baseline:

- In general, females are more likely to meet the recommended daily intake (RDI)* of two servings of fruit a day than males (this is also observed for Australians generally).
- NDIS participants' daily fruit intakes for females and males are similar to those of the Australian population:
 - 33.5% of female NDIS participants consume the recommended daily intake of two servings of fruit per day, compared to 31.7% of the Australian female population.
 - 28.5% of male NDIS participants meet the recommended daily intake of two serving of fruit per day compared to 26.1% of the Australian male population.

Percentage meeting, exceeding or falling short of recommended daily intake (RDI) of two servings

Comparison between NDIS participants and Australian population (NHS 2017-18) (age standardised)



^{*}According to 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.



Baseline outcomes by participant characteristics

Healthy living: Daily fruit intake (2/3)

The likelihood of consuming the recommended two servings of fruit daily at baseline varies significantly with participants' primary disability and gender. There is also a significant impact from COVID-19.

- **Primary disability:** Participants with psychosocial disabilities are least likely to consume the recommended two servings of fruit a day, followed by participants with acquired brain injuries. Participants with Down Syndrome are most likely to consume the recommended two servings of fruit a day.
- **Gender:** Female participants are more likely to eat the recommended two servings of fruit a day compared to male participants.
- Impact of COVID-19: Comparing baseline outcomes between participants who entered the NDIS before and after the COVID-19 date of 23 March 2020, those who entered after the Covid-19 date are less likely to eat two servings of fruit per day.

^{*}According to 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.



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Healthy living: Daily fruit intake (3/3)

Looking at longitudinal change for participants who have been in the NDIS for three or more years:

- Between baseline and year 1, the percentage who met the recommended daily fruit intake of two servings per day increased for females but decreased for males. Increases were observed for both females and males between year 1 and year 3.
- The change between baseline and year 3 review for female participants was statistically significant.

Daily fruit intake (recommended daily intake* is two servings) – NDIS participants Female participants 45% 38.4% 40% 35.5% 34.8% 35% 33.3% 29.3% 30% 26.4% 27.8% 25.8% 25% 20% 17.7% 17.3% 16.7% 14.1% 12.2% 12.1% 12.6% 15% 10% 5% 0% ARG recommended: 2 servings 0 servings 1 serving 3 servings 4 servings 5 servings or more Baseline n=198 Year 1 n=197 Year 2 n=198 Year 3 n=198 Male participants 45% 40% 33.8% 35% 29.8% 28.6% 30% 25% 16.9% 15.8% 18.3% 18.6% 20% 15% 12.8% 10% 5% 0% 1 servina ARG recommended: 2 servings 0 servings 3 servings 4 servings 5 servings or more Baseline n=290 Year 1 n=279 Year 2 n=290 Year 3 n=290

^{*}According to 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.

Baseline outcomes



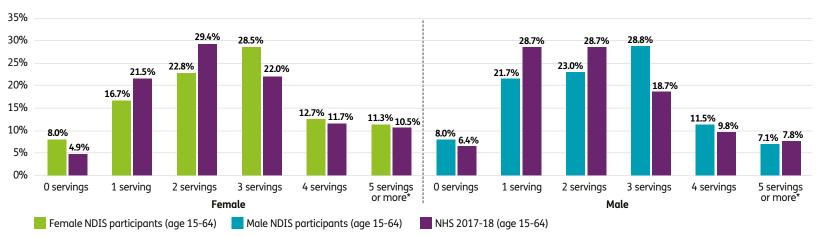
Healthy living: Daily vegetable intake (1/3)

Key findings at baseline:

- Low percentages of NDIS participants and of the Australian population consume five or more servings of vegetables per day*.
- The percentages are lower for NDIS participants than the Australian population. 11.3% of female participants and 7.1% of male participants consume five or more servings of vegetable daily compared to 10.5% and 7.8% of the Australian population.

Daily vegetable intake (number of servings)

Comparison between NDIS participants and Australian population (NHS 2017-18) (age standardised)



^{*} According to Australian Recommended Guidelines (ARG) (2013), the recommended number of servings of vegetables daily for girls/women aged nine and over is five servings, for boys age 14 to 18 is five and one-half servings, for men age 19 to 50 is six servings, and for men age 70 and over is five servings.



Baseline outcomes by participant characteristics

Healthy living: Daily vegetable intake (2/3)

At baseline, the overall percentages of female and male participants consuming five or more servings of vegetables per day was low: 11.3% for female participants and 7.1% for male participants. Participants' daily consumption of vegetables at baseline varies significantly by their primary disability, gender, and where they live. There has also been a significant change pre-/post-onset of COVID-19.

- **Primary disability:** Participants' consumption of vegetables daily varies by primary disability. In particular, participants with psychosocial disability tend to consume the lowest number of servings of vegetables compared to participants from other primary disability groups.
- Impact of COVID-19: Comparing baseline outcomes between participants who entered the NDIS before and after the COVID-19 date of 23rd of March 2020, those who entered after the Covid-19 date tend to eat less servings of vegetables daily.
- Gender: Female participants are more likely to eat more servings of vegetables per day compared to male participants.
- Socioeconomic status of where participant lives: Participants living in areas of lower socioeconomic status, represented by higher unemployment rate, tend to consume less servings of vegetables daily compared to participants living in areas of higher socioeconomic status.

^{*} According to Australian Recommended Guidelines (ARG) (2013), the recommended number of servings of vegetables daily for girls/women aged nine and over is five servings, for boys age 14 to 18 is five and one-half servings, for men age 19 to 50 is six servings, and for men age 70 and over is five servings.





Healthy living: Daily vegetable intake (3/3)

Comparison of longitudinal outcomes between baseline and year 3 review:

- For female NDIS participants, there has been an increase in the proportion of participants who consume three or four servings of vegetables a day, however the proportion eating 5 or more servings has reduced slightly.
- For male NDIS participants, vegetable consumption remains stable across all serving levels.
- Changes between baseline and year 3 review were not statistically significant for female or male participants.

Daily vegetable intake (number of servings*) – NDIS participants Female participants 35% 33.3% 32.4% 30.2% 29.7% 30% 25.0% 25% 24.0% 21.1% 20.6% 19.6% 19.1% 20% 16.3% 14.2% 14.2% 15% 12.3% 11.8% 11.3% 10.3% 10% 5% 1 serving 2 servings 3 servings 4 servings 5 servings or more? Year 3 n=204 Baseline n=204 Year 1 n=202 Year 2 n=204 Male participants 35% 32.9% 30.2% 30% 27.4% 23.7% 21.9% 21.6% 25% 21.2% 17.1% ^{18.5}% 20% 18.2% 12.3% -14.4% 14.7% 15% 13.1% 10.3% 10.7% 10.6% 11.0% 10% 5.1% 4.1% 5.1% 4.8% 5% 0% 1 serving 2 servings 0 servings 3 servings 4 servings 5 servings or more* Year 3 n=292 Baseline n=292 Year 1 n=291 Year 2 n=292

^{*} According to Australian Recommended Guidelines (ARG) (2013), the recommended number of servings of vegetables daily for girls/women aged nine and over is five servings, for boys age 14 to 18 is five and one-half servings, for men age 19 to 50 is six servings, and for men age 70 and over is five servings.





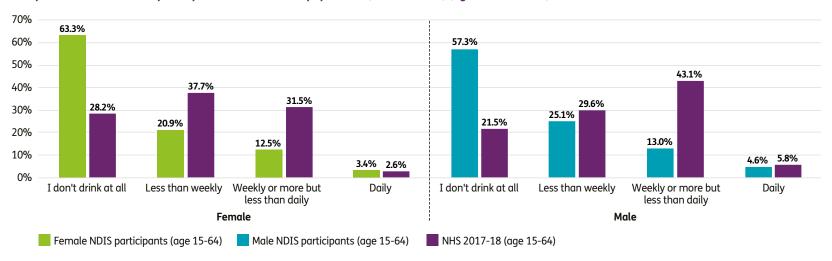
Healthy living: Frequency of alcohol consumption (1/3)

Key findings at baseline:

- For both males and females, the frequency of alcohol consumption is significantly lower for NDIS participants compared to the Australian population.
- Higher proportions of NDIS participants (63.3% of females and 57.3% of males) do not drink alcohol at all compared to the Australian general population (28.2% of females and 21.5% of males).

Frequency of alcohol consumption

Comparison between NDIS participants and Australian population (NHS 2017-18) (age standardised)





Baseline outcomes by participant characteristics

Healthy living: Frequency of alcohol consumption (2/3)

Participants' alcohol consumption frequency at baseline varies significantly by their primary disability, gender, level of function, age and Culturally and Linquistically Diverse (CALD) status.

- Participant's age: Compared to participants from other age groups, participants aged between 15 and 17 are least likely to consume alcohol weekly or more often.
- Level of function: Controlling for other factors, participants' frequency of alcohol consumption increases with higher level of function. Participants with high level of function are most likely to consume alcohol weekly, while participants with low level of function are least likely to consume alcohol weekly or more often.
- **Primary disability:** Participants with sensory disabilities and multiple sclerosis are most likely to consume alcohol weekly or more often. Participants with Down syndrome are least likely to consume alcohol weekly followed by participants with intellectual disability.
- Gender: Male participants are more likely to consume alcohol weekly or more often than female participants.
- Culturally and Linguistically Diverse status: CALD participants are less likely to consume alcohol weekly
 or more often.

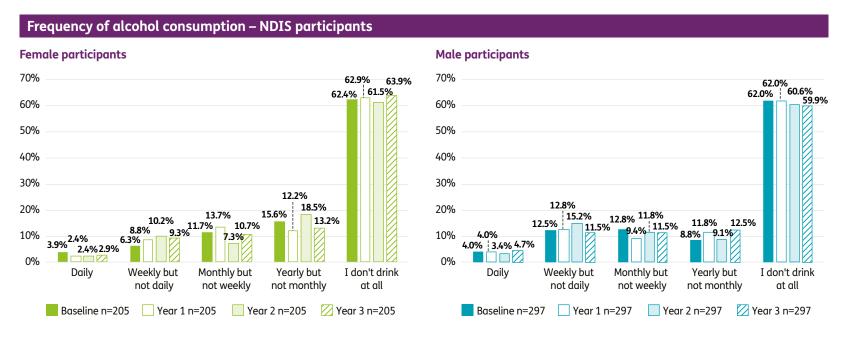


Longitudinal outcomes

Healthy living: Frequency of alcohol consumption (3/3)

Longitudinal comparisons:

- For both female and male participants, there has been very little change in alcohol consumption frequency between baseline and year 3 review.
- The small changes between baseline and year 3 review are not statistically significant.



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Baseline outcomes

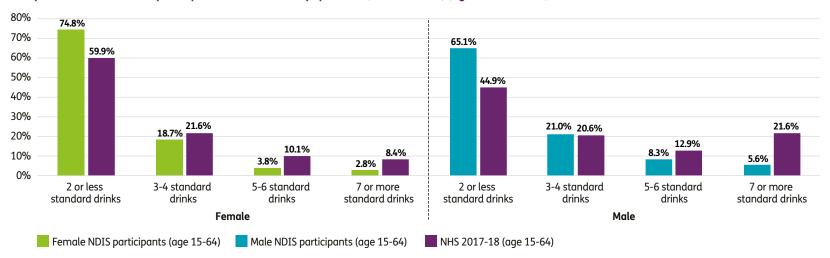
Healthy living: Number of standard drinks per occasion (1/3)

Key findings at baseline:

- For both NDIS participants and the Australian population, on average when drinking, males drink a higher number
 of standard drinks than females.
- When drinking, less alcohol is consumed by NDIS participants compared to the general Australian population.

Number of standard alcohol drinks per occasion

Comparison between NDIS participants and Australian population (NHS 2017-18) (age standardised)





Baseline outcomes by participant characteristics

Healthy living: Number of standard drinks per occasion (2/3)

Participants' alcohol consumption per occasion at baseline varies significantly by their primary disability, gender, level of function, age, CALD status, Indigenous status, and geographic remoteness. There has also been a significant COVID-19 impact.

- **Primary disability:** Participants with psychosocial disability tend to consume the most alcohol per occasion, followed by participants with other types of disabilities[^], and participants with acquired brain injury. Participants with Down syndrome tend to consume the least amount of alcohol per occasion.
- Gender: Female participants tend to consume less alcohol per occasion than males.
- Age: Participants aged between 15 and 17 tend to consume the lowest number of drinks per occasion, followed by participants aged between 55 and 59 and participants aged between 60 and 64.
- CALD status: CALD participants tend to consume a lower number of drinks per occasion compared to non-CALD participants.
- **Indigenous status:** Indigenous participants tend to consume a higher number of drinks per occasion compared to non-Indigenous participants.
- Level of function: The amount of alcohol consumed per occasion increases with the participants' level of function.

 Participants with higher level of function tend to consume a higher number of drinks per occasion than participants with lower level of function.
- **Geographic remoteness of living area:** Indigenous participants tend to consume a higher number of drinks per occasion compared to non-Indigenous participants.
- Impact of COVID-19: Comparing baseline outcomes between participants who entered the NDIS before and after the COVID-19 date of 23rd of March 2020, those who entered after the Covid-19 date tend to consume a higher number of standard drinks per occasion.

[^] Mostly includes participants with degenerative disease or chronic health conditions.

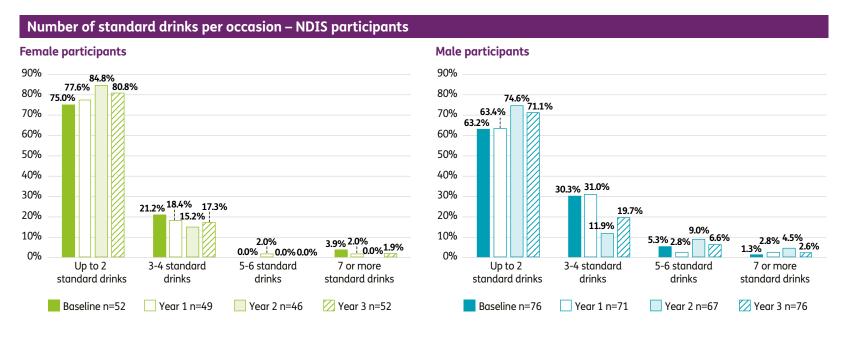
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Longitudinal outcomes

Healthy living: Number of standard drinks per occasion (3/3)

Longitudinal comparisons:

- Comparing baseline to year 3 review responses from the same group of participants:
 - There have been increases in the percentages of female and male participants who drink up to two standard drinks per occasion and reductions in the percentages who drink three to four standard drinks per occasion.
 - There has also been a small increase in the percentage of male participants who drink five or more standard drinks per occasion.
 - However, those changes are not statistically significant.







Healthy living: Smoking status (1/3)

Key findings at baseline:

- The percentages of NDIS participants and Australian population who currently smoke or who have previously smoked is higher for males than for females.
- Compared to the general Australian population, a higher proportion of NDIS participants have never smoked.

Smoking status Comparison between NDIS participants and Australian population (NHS 2017-18) (age standardised) 80% 70.3% 70% 65.2% 63.7% 60% 53.8% 50% 40% 30% 23.1% 23.1% 20.6% 20.2% 20% 16.1% 15.7% 14.6% 13.7% 10% 0% Never a smoker Current smoker Past smoker Never a smoker Past smoker Current smoker Female Male Female NDIS participants (age 15-64) Male NDIS participants (age 15-64) NHS 2017-18 (age 15-64)



Baseline outcomes by participant characteristics

Healthy living: Smoking status (2/3)

Participants' smoking status at baseline varies significantly by their primary disability, gender, level of function, age, CALD status, Indigenous status and the level of NDIA support needed.

- **Primary disability:** Participants with psychosocial disability are most likely to smoke, followed by participants with acquired brain injuries, participants with multiple sclerosis and participants with sensory disabilities. Participants with autism are least likely to smoke.
- Gender: Female participants are less likely to smoke than male participants.
- Age: Participants aged between 50 and 54 are most likely to smoke, whereas participants aged between 15 and 17 are least likely to smoke.
- CALD status: CALD participants are less likely to smoke than non-CALD participants.
- Indigenous status: Indigenous participants are more likely to smoke than non-Indigenous participants.
- Level of NDIA support: Participants who require a high or very high level of support from the NDIA are more likely to smoke than participants who require a low or medium level of support.
- Level of function: Participants with medium level of function are more likely to smoke than participants with low or high level of function.

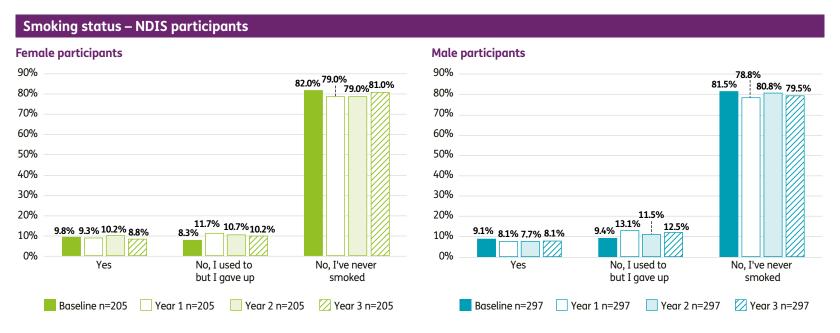
Longitudinal outcomes



Healthy living: Smoking status (3/3)

Longitudinal comparisons:

- Comparing responses from the same group of NDIS participants between baseline and year 3 review, the proportion of participants who said they smoke remained stable for both genders.
- The small changes observed between baseline and year 3 review are not statistically significant.





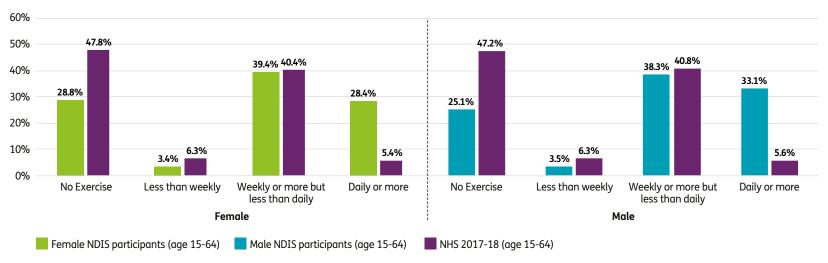


Healthy living: Light exercise (1/3)

- Compared to the Australian population:
 - Lower percentages of female and male NDIS participants said they did no exercise.
 - Higher percentages of female and male NDIS participants said they exercised daily or more.
- Compared to female participants, male participants were more likely to exercise, and more likely to exercise daily or more often.

Frequency of light exercise

Comparison between NDIS participants and Australian population (NHS 2017-18) (age standardised)





Baseline outcomes by participant characteristics

Healthy living: Light exercise (2/3)

The frequency of light exercise undertaken by participants at baseline varies significantly by their primary disability, level of function, age, level of NDIA support required, and Scheme access criterion. There is also a significant COVID impact.

- **Primary disability:** Participants with Down syndrome are most likely to undertake light exercise weekly or more often, followed by participants with intellectual disability. Participants with other types of disabilities^ are least likely to undertake light exercise weekly or more often, followed by participants with psychosocial disability.
- Level of function: Participants with higher level of function are more likely to undertake light exercise weekly or more often compared to participants with lower level of function.
- **Age group:** Participants aged 30 to 34 are most likely to undertake light exercise weekly or more often, followed by participants aged 25 to 29 and participants aged 15 to 17.
- Level of NDIA support: Participants who require a very high or high level of NDIA support are less likely to exercise weekly or more often compared to participants who require less support.
- Impact of COVID-19: Participants who entered the NDIS after 23 March 2020 are more likely to exercise weekly or more often compared to participants who entered before 23 March 2020.
- Scheme access criterion: Participants who entered the NDIS for early intervention are more likely to exercise weekly or more often compared to participants who entered due to permanent disability.

[^] Mostly includes participants with degenerative disease or chronic health conditions.

ndis

Longitudinal outcomes

Healthy living: Light exercise (3/3)

Comparing responses from the same group of participants between baseline and year 3 review:

- Female participants are less likely to exercise, and to exercise frequently, than male participants.
- For female participants, the percentage who do not exercise decreased between baseline and year 3 review, and the percentage who exercise daily or three to five times a week increased. **These changes are not statistically significant**.
- For male participants, the percentage who do not exercise also decreased between baseline and year 3 review, and there was a larger increase in the percentage who exercise daily. **These changes are statistically significant**.

Frequency of light exercise undertaken by NDIS participants Female participants 45% 40% 35% 29.3% 29.8% 30% 25% 22.0% 19.5% 21.5% 20% 14.2% 15% 12.2%11.7%9.8% 9.8% 10.7% 12.2% 10% 2.<mark>4%</mark> 2.0%^{2.4%} 2.4% 5% 0.0% % 0.0% 0.0% 1.0% 1.5% 1.0% 1.0% 0.0% 1.5% 1.0% 0.5% 0% Twice per week Weekly Fortnightly Daily 3-5 times per week Monthly Every couple of months Annually I don't exercise at all Year 3 n=205 Baseline n=205 Year 1 n=205 Year 2 n=205 Male participants 45% 40% 38.2% 32.8% ... ¦ 32.1% 30.7% 30% 22.0% 21.3%^{23.0%} 22.0% 23.7% 17.9% 18.9% 17.6% 25% 20% 70 10.5% 10.8% 10.8% 15% 11.2% 10% ,0.0% U 0.0% 5% 2.0% 1.0% 1.0% 0.3% Twice per week Daily 3-5 times per week Weekly Fortnightly Every couple of months Annually I don't exercise at all Baseline n=296 Year 3 n=296 Year 1 n=296 Year 2 n=296

Mental health



The table below compares NDIS participants' mental health outcome indicators at Scheme entry with population benchmark (where possible). Significant three year changes are also included:

Outcome indicators	Females			Males			
	Baseline		Longitudinal	Baseline		Longitudinal	
	NDIS Baseline	Australian Population	Baseline to Year 3 Review	NDIS Baseline	Australian Population	Baseline to Year 3 Review	
Low resilience	45%	N/A	-14.1%	39%	N/A	-11.1%	
High/very high risk of psychological distress	29%	14%	-8.3%	20%	10%		

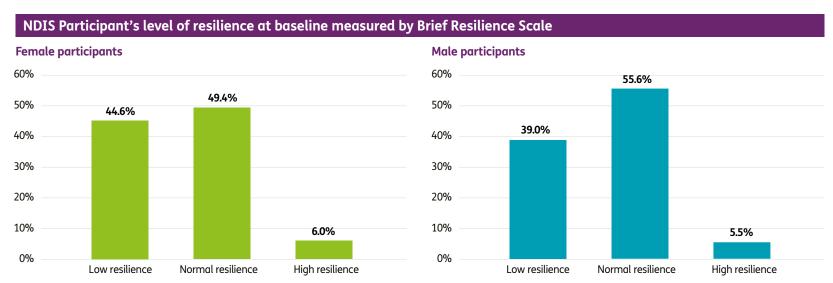
Baseline outcomes



Mental health: Resilience (1/3)

Key findings at baseline:

- A higher proportion of female participants (44.6%) have low resilience at Scheme entry compared to male participants (39.0%).
- A lower proportion of female participants (49.4%) have normal resilience compared to male participants (55.6%).
- There is currently no Australian population benchmark data on resilience.





Baseline outcomes by participant characteristics

Mental health: Resilience (2/3)

Participants' level of resilience (measured by Brief Resilience Scale score) at baseline varies significantly by their primary disability, age, gender, level of function, CALD status, State or Territory of residence. Resilience of participants who entered the Scheme later is lower than participants who entered earlier.

- **Primary disability:** Participants with a primary disability of Down syndrome tend to have greater resilience, followed by participants with other types of disabilities^, and participants with a sensory disability. Lower resilience scores were observed from participants with a primary disability of psychosocial disability and participants with autism.
- Level of function: Participants with higher level of function are more likely to have higher resilience than participants with lower level of function.
- Gender: Female participants tend to have lower resilience than male participants.
- Age: Resilience changes with age. Participants age between 15 and 18 tend to have the lowest level of resilience, and participants aged between 55 and 64 tend to have the highest level of resilience.
- CALD status: CALD participants have a lower level of resilience compared to non-CALD participants.
- State or Territory of living area: Higher resilience has been observed from participants living in Western Australia and South Australia compared to participants living in other States or Territories.
- **General time trend:** There has been a decreasing trend in resilience with Scheme entry time, i.e. the resilience scores of participants who entered the Scheme later tend to be lower than the resilience scores of participants who entered earlier.

[^] Mostly includes participants with degenerative disease or chronic health conditions.

Longitudinal outcomes

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Mental health: Resilience (3/3)

Comparing responses from the same group of participants between baseline and year 3 review:

- For both male and female participants, there has been a consistent reduction in the proportion of participants with low resilience, and an increase in the proportion who scored in the normal resilience range.
- Changes observed between baseline and year 3 review for male and female participants are statistically significant.

Percentage of NDIS participants by resilience level measured by Brief Resilience Scale (excludes incompletes*) Female participants Male participants 70% 70% 63.8% 59.7% 57.1% 59.9% 60% 60% 53.6% 55.6% 50.4% 49.7% 50% 50% 43.0% 41.6% 38.8% 40% 40% 36.0% 35.6% 32.2% 31.9% 30% 30% 20% 20% 8.7% 7.8% 8.5% 10% 8.2% 10% 1.6% 0% 0% Iow Normal High Low Normal High resilience resilience resilience resilience resilience resilience Baseline n=149 Year 3 n=149 Year 3 n=207 Year 1 n=141 Year 2 n=129 Baseline n=207 Year 1 n=189 Year 2 n=174

^{*} Some of the participants did not complete one or more sub-questions of Brief Resilience Scale. The incompletes were not missing at random. Higher percentage of incompletes were found among participants with low level of function, participants with Down Syndrome, Cerebral Palsy, intellectual disability, and participants who came from a Culturally and Linguistically Diverse background and participants who entered prior to the COVID-19 period marked by the 23rd of March 2020.

Baseline outcomes



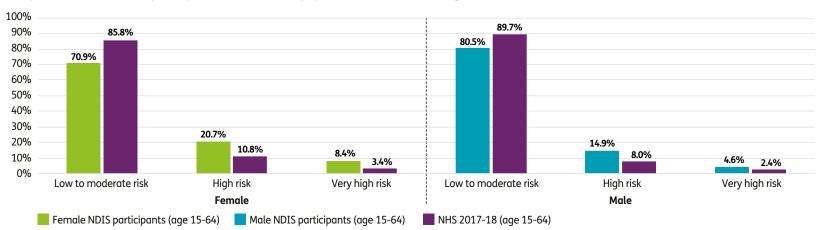
Mental health: Psychological distress (1/3)

Key findings at baseline:

- The proportion of NDIS participants who experience a high or very high risk of psychological distress is greater than for the Australian population.
- For participants aged 18 to 64, higher proportions of females than males experienced a high (20.7% compared to 14.9%) or very high (8.4% compared to 4.6%) risk of psychological distress.
- There is less difference between females and males in the Australian population: 10.8% and 3.4% of the female Australian population between age 18 and 64 experience high and very high risk of psychological distress compared to 8.0% and 2.4% of the male Australian population.

Risk of psychological distress measured by Kessler 6 (excludes incompletes*)

Comparison between NDIS participants and Australian population (NHS 2017-18) (age standardised)



^{*} Some of the participants did not complete one or more sub-questions of Kessler 6. The incompletes were not missing at random. Higher percentage of incompletes were found among participants with low level of function, participants with Down Syndrome, Cerebral Palsy, intellectual disability, and participants who came from a Culturally and Linguistically Diverse background and participants who entered prior to the COVID-19 period marked by the 23rd of March 2020.



Baseline outcomes by participant characteristics

Mental health: Psychological distress (2/3)

Participants' Kessler 6 scores at baseline vary significantly by their primary disability, gender, level of function and age. Participants who entered the Scheme later tended to have higher levels of psychological distress than participants who entered the Scheme earlier.

- **Primary disability:** Participants with psychosocial disabilities tend to experience the highest level of distress followed by participants with autism. Participants with Down syndrome tend to experience the lowest level of distress followed by participants with intellectual disability.
- **Gender:** Overall, female participants tend to experience higher levels of psychological distress than males across all age groups.
- Level of function: Participants with lower level of function tend to experience more psychological distress compared to participants with higher level of function.
- Age: Levels of psychological distress vary significantly with age, with younger participants tending to experience higher levels of distress. Participants aged 15 to 17 experienced the highest levels of distress, followed by age group 18 to 24 and age group 30 to 34. Participants aged 50 or older had lower levels of psychological distress.
- State or Territory of living area: Higher levels of psychological distress were observed for participants living in the Australian Capital Territory and lower levels were observed for participants living in Western Australia.
- **General time trend:** There has been an increasing trend in the level of psychological distress experienced by participants at Scheme entry over time, i.e. participants who entered the Scheme later showed higher psychological distress than participants who entered the Scheme earlier.

Longitudinal outcomes

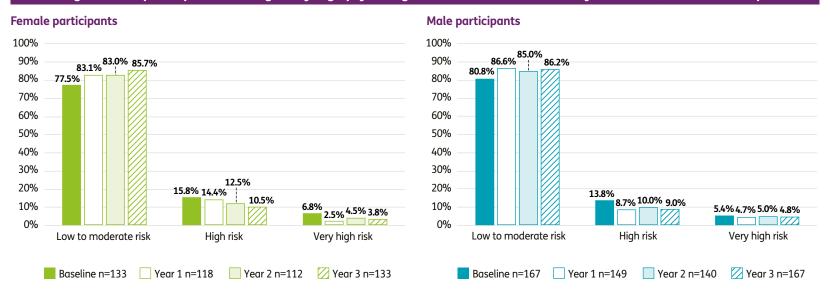


Mental health: Psychological distress (3/3)

Comparing responses from the same group of participants between baseline and year 3 review:

- For both male and female participants, there has been a reduction in the proportion of participants who experience high
 and very high risks of psychological distress and an increase in the proportion of participants who are in the low to moderate risk
 category.
- Only changes observed for female participants are statistically significant.

Percentage of NDIS participants with high/very high psychological distress risk measured by Kessler 6 (excludes incompletes*)



^{*} Some of the participants did not complete one or more sub-questions of Kessler 6. The incompletes were not missing at random. Higher percentages of incompletes were found among participants with low level of function, participants with Down syndrome, cerebral palsy, acquired brain injury, intellectual disability, and participants who entered prior to the COVID-19 period marked by the 23rd of March 2020.

Health services



Access, utilisation and satisfaction

The table below compares NDIS participants' health service outcome indicators at Scheme entry with population benchmark (where possible). Significant three year changes are also included:

	Females			Males			
	Baseline		Longitudinal	Baseline		Longitudinal	
	NDIS Baseline	Australian Population	Baseline to Year 3 Review	NDIS Baseline	Australian Population	Baseline to Year 3 Review	
Satisfied with health services	87%	N/A		88%	N/A		
Did not visit the hospital in the past 12 months	55%	92%	+7.6%	61%	93%	+7.1%	
Have a doctor they see regularly	91%	81%	+7.4%	89%	85%	+8.8%	
Have no difficulty accessing health services	61%	N/A	+4.5%	67%	N/A	+4.5%	
Seen a dentist in the past 12 months	59%	54%		53%	46%		

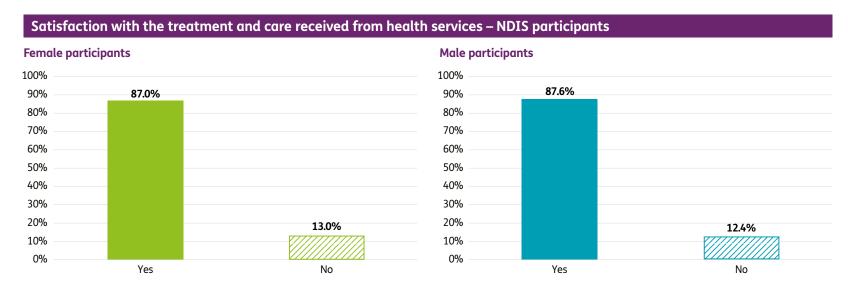




Health services: Satisfaction with health services (1/3)

Key findings at baseline:

• High proportions of female participants (87.0%) and male participants (87.6%) said they were happy with the health services they received in the last 12 months.





Baseline outcomes by participant characteristics

Health services: Satisfaction with health services (2/3)

Participants' satisfaction with health services at Scheme entry varies significantly by their primary disability, and level of function.

- **Primary disability:** Participants with Down syndrome are most likely to say they are satisfied with health services, followed by participants with intellectual disability. Participants with psychosocial disability are least likely to say that they are satisfied with health services, followed by participants with autism.
- Level of function: Participants with higher level of function are more likely to say they are satisfied with health services compared to participants with lower level of function.

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Longitudinal outcomes

Health Services: Satisfaction with health services (3/3)

Comparing responses from the same group of participants between baseline and year 3 review:

- The percentages of female and male participants who are satisfied with the treatment and care received from health services remained stable.
- The small changes observed between baseline and year 3 review are not statistically significant.

Satisfaction with the treatment and care received from health services – NDIS participants Female participants Male participants 100% 100% 92.8% 93.5% 91.0% 90.2% 87.8% 88.8% 90% 90% 80% 80% 70% 70% 60% 60% 50% 50% 40% 40% 30% 30% 20% 20% 12.2% 11.2% 9.0% 9.8% 10% 10% 0% 0% Yes No Yes Baseline n=205 Year 1 n=205 Year 2 n=199 Year 3 n=193 Baseline n=297 Year 1 n=297 Year 2 n=290 Year 3 n=279

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Baseline outcomes

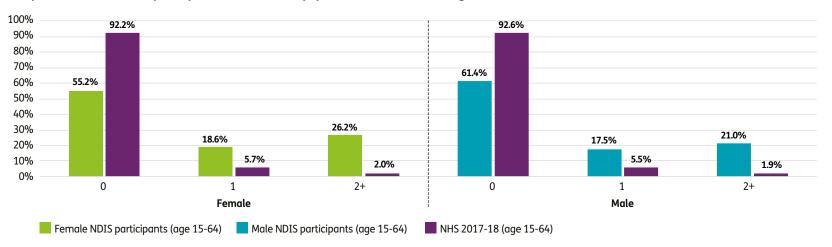
Health Services: Number of hospital visits made in the past 12 months (1/5)

Key findings at baseline:

- Compared to the Australian population where females and males are equally likely to visit hospitals, a higher proportion of female participants have visited hospitals in the last 12 months compared to male participants.
- In particular, 26.2% of female participants have visited hospitals two or more times in the past 12 months compared to 21.0% of male participants.
- NDIS participants are much more likely to visit hospitals, and much more likely to have multiple visits, compared to the general population.

Number of hospital visits made in the past 12 months

Comparison between NDIS participants and Australian population (PEIA 2019-20) (age standardised)





Baseline outcomes by participant characteristics

Health services: Have visited hospital in the past 12 months (2/5)

The likelihood of a participant having been to hospital in the 12 months prior to entering the Scheme varies significantly by their age, gender, primary disability, level of function, CALD status, Indigenous status, level of NDIA support, and where they live. An increasing trend has also been observed with Scheme entry time, and this trend became stronger post-COVID.

- **Primary disability:** Participants with other types of disability^ are most likely to have visited hospital in the past 12 months, followed by participants with multiple sclerosis and those with psychosocial disability. Participants with autism are least likely to visit hospital, followed by participants with Down syndrome or an intellectual disability.
- Level of function: Participants with higher level of function are less likely to have visited hospital compared to those with lower level of function.
- **Gender:** Female participants are more likely to visit hospital than male participants, however the gap narrows for ages 55 and over.
- CALD status: CALD participants are less likely to have visited hospital compared to non-CALD participants.
- Age: The chance that a participant would visit a hospital increases with age, and the increases are larger from age 50.
- Indigenous status: Indigenous participants are more likely to visit hospital compared to non-Indigenous participants.
- Level of NDIA support: Participants with a higher level of NDIA support are more likely to visit hospital compared to participants with a lower level of NDIA support.
- Socioeconomic status of where participant lives: Participants living in areas with a higher unemployment rate are more likely to visit hospital.



Baseline outcomes by participant characteristics cont.

Health services: Have visited hospital in the past 12 months (3/5)

- State or Territory of living area: Compared to participants living in NSW, those living in the Australian Capital Territory or Queensland are more likely to visit hospital, whereas participants living in Tasmania, South Australia or Western Australia are less likely to visit hospital.
- **Geographic remoteness:** Compared to those living in major cities, participants living in regional centres or large rural towns are more likely to visit hospital, whereas those in medium rural towns or very remote areas are less likely to visit hospital.
- General time trend/COVID: There was a significant but very slight increasing trend with Scheme entry time in the probability of having been to hospital prior to the onset of the pandemic (for example, less than a 1% increase in the nine months prior to the pandemic). This increasing trend became stronger after the onset of the pandemic (an increase of around 3% in the nine months after the start of the pandemic).

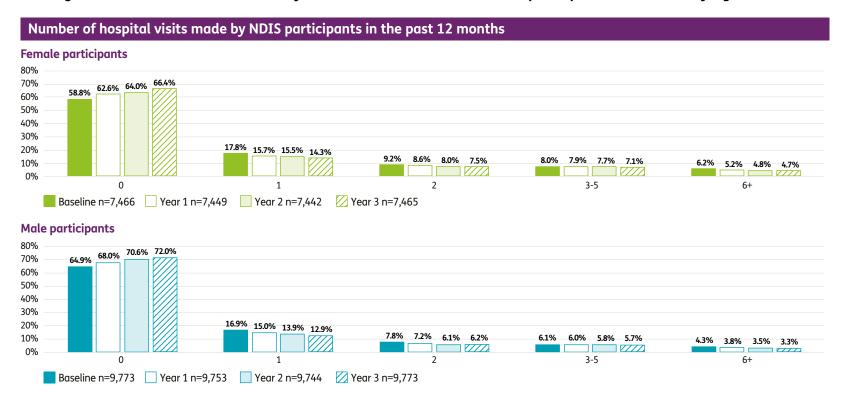


Longitudinal outcomes

Health services: Number of hospital visits made in the past 12 months (4/5)

Comparing responses from the same group of participants between baseline and year 3 review:

- The proportion of participants who have not visited hospitals in the past 12 months has steadily increased from 58.8% to 66.4% for female participants, and from 64.9% to 72.0% for male participants.
- Changes observed between baseline and year 3 review from male and female participants are statistically significant.





Longitudinal outcomes by participant characteristics*

Health services: Number of hospital visits made in the past 12 months (5/5)

Between baseline and year 3, changes in hospital visits in the last 12 months varied significantly with participant's primary disability, level of function, gender, required level of NDIA support, Indigenous status, and socioeconomic status of where they live.

- Primary disability: Participants with a psychosocial disability, multiple sclerosis, acquired brain injury or "other" disability were more likely to have an increase and less likely to have a decrease in the number of hospital visits in the last 12 months from baseline to year 3, compared with participants with an intellectual disability. Participants with cerebral palsy were also more likely to increase in the number of hospital visits. These results suggest that the observed decline in number of hospital visits noted in the aggregate is in larger part due to participants with an intellectual disability, Down syndrome or autism.
- Level of function: Participants with a high or medium level of function were less likely to have an increase and more likely to have a reduction in the number of hospital visits from baseline to year 3, compared with participants with a low level of function.
- **Gender:** Female participants were more likely to increase hospital visits between baseline and year 3 compared with male participants.
- Level of NDIA support: Participants with a very high level of NDIA support were less likely to reduce hospital visits between baseline and year 3, compared to participants with a medium level of NDIA support.
- Indigenous status: Indigenous participants were more likely to increase hospital visits between baseline and year 3, and were less likely to reduce hospital visits compared with non-Indigenous participants.
- Socioeconomic status of where participant lives: Participants living in areas of lower socioeconomic status, represented by higher unemployment rate, are more likely to experience an increase in the number of hospital visits in year 3 relative to baseline, but they were also more likely to see a decrease in the number of hospital visits (i.e. more likely to experience change of any type).

^{*} Models whether a participant reported less or more hospital visits in year 3 than at baseline. For modelling reductions, participants who report zero hospital visits at both baseline and year 3 are excluded as they have no more room for improvement. For modelling increases, participants who report "6 or more" visits at both baseline and year 3 are likewise excluded.

^ Mostly includes participants with degenerative disease or chronic health conditions.

Baseline outcomes



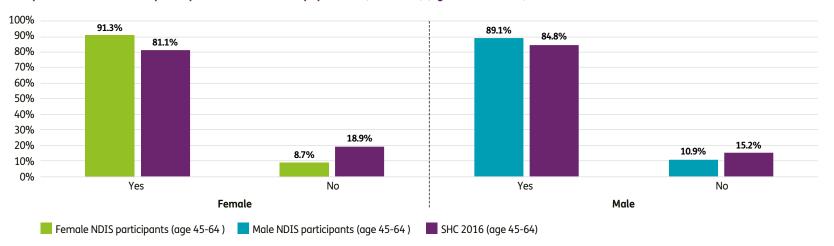
Health services: Have a regular doctor (1/5)

Key findings at baseline:

- Higher percentages of NDIS participants aged between 45 and 64 have a doctor they see regularly compared to the Australian population estimated by the Survey of Health Care (SHC).
- 91.3% of NDIS female participants aged 45 to 64 have a doctor they see regularly compared to 81.1% of the Australian female population from the same age group. 89.1% of NDIS male participants aged 45 to 64 have a doctor they see regularly compared to 84.8% of the Australian male population from the same age group.

Percentage who have a doctor they see regularly

Comparison between NDIS participants and Australian population (SHC 2016) (age standardised)





Baseline outcomes by participant characteristics

Health services: Have a regular doctor (2/5)

At baseline, whether participants have a doctor they see regularly varies significantly by their age, primary disability, gender, level of function, CALD status, Indigenous status, level of NDIA support, geographic remoteness and State or Territory of living area. A decreasing trend has been observed over time. There has also been a significant impact from COVID-19.

- Age: Between age 15 and 64, the likelihood of a participant having a doctor they see regularly at baseline increases with age.
- **Primary disability:** Participants with intellectual disability are least likely to have a doctor they see regularly, followed by participants with sensory disability and participants with autism. Participants with multiple sclerosis are most likely to have a doctor they see regularly, followed by participants with cerebral palsy and participants with other types of disability^.
- Gender: Female participants are more likely to have a doctor they see regularly than male participants.
- Level of NDIA support: Participants who require a higher level of NDIA support are less likely to have a doctor they see regularly compared to participants who require a lower level of NDIS support.
- **COVID-19**: Participants who entered the NDIS after 23 March 2020 are less likely to have a doctor they see regularly compared to participants who entered the NDIS before 23 March 2020.
- Level of function: Participants with higher level of function are less likely to have a doctor they see regularly compared to participants with lower level of function

[^] Mostly includes participants with degenerative disease or chronic health conditions.



Baseline outcomes by participant characteristics cont.

Health services: Have a regular doctor (3/5)

- Indigenous status: Indigenous participants are less likely to have a doctor they see regularly, compared to non-Indigenous participants.
- CALD status: CALD participants are less likely to have a doctor they see regularly compared to non-CALD participants.
- Geographic remoteness of living area: Compared to participants living in major cities, participants living in very remote areas are least likely to have a doctor they see regularly, followed by participants living in remote areas and participants living in regional areas with population less than 5000.
- State or Territory of living area: Compared to participants living in New South Wales, participants living in Tasmania and Queensland are more likely to have a doctor they see regularly, participants living in the Australian Capital Territory and Western Australia are less likely to have a regular doctor.
- **General time trend:** A decreasing trend has been observed over time, i.e. participants who entered the NDIS later are less likely to have a doctor they see regularly compared to participants who entered the NDIS earlier.
- Socioeconomic status of where participant lives: Participants living in areas of lower socioeconomic status, represented by higher unemployment rate, are less likely to have a doctor they see regularly compared to participants living in areas of higher socioeconomic status.

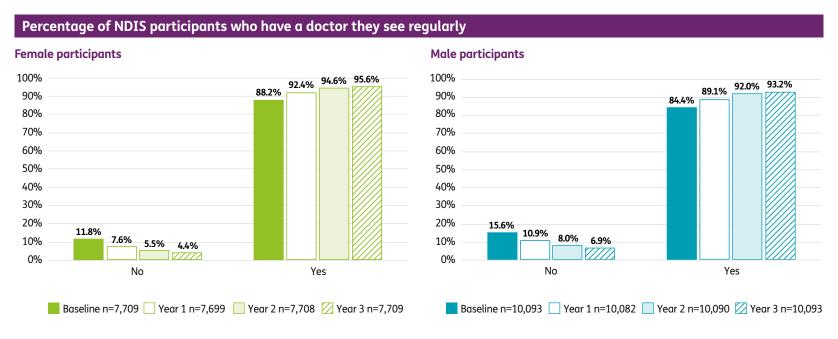
Longitudinal outcomes



Health services: Have a regular doctor (4/5)

Comparing responses for the same group of participants between baseline and year 3 review:

- The percentage of participants who have a doctor they see regularly has increased steadily from 88.2% to 95.6% for female participants, and from 84.4% to 93.2% for male participants.
- Changes observed between baseline and year 3 review from both male and female participants are statistically significant.





Longitudinal outcomes by participant characteristics

Health services: Have a regular doctor (5/5)

Between baseline and year 3, improvements and deteriorations in having a doctor to see regularly vary significantly with participants' primary disability, age, gender, Indigenous status, annualised plan budget, utilisation of funding at year 3, and State or Territory of residence.

- **Primary disability:** Participants with cerebral palsy and other disability type[^] were more likely to improve in having doctor to see regularly between baseline and year 3 when compared with participants with an intellectual disability.
- Age: Generally, older participants were less likely to deteriorate between baseline and year 3 compared with participants aged 18 to 24.
- **Gender:** Female participants were more likely to improve in having doctor to see regularly in year 3 than at baseline compared with male participants.
- Indigenous status: Indigenous participants were less likely to improve from baseline to year 3 than non-Indigenous participants.
- Annualised plan budget: Participants with annualised total budgets less than \$50,000 were more likely to deteriorate from baseline to year 3 than participants with budgets over \$100,000.
- **Utilisation:** Participants who utilised between 20-60% of their year 3 budgets were less likely to improve and more likely to deteriorate between baseline and year 3 compared with participants who use at least 80% of their year 3 annualised budgets.
- State or Territory of living area: Participants in Queensland, South Australia and the Northern Territory were more likely to deteriorate from baseline to year 3 compared with New South Wales participants. Queensland participants were also more likely to improve, and Victorian participants were less likely to improve from baseline to year 3.

[^] Mostly includes participants with degenerative disease or chronic health conditions.

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Baseline outcomes

Health services: Having difficulty getting health services (1/5)

Key findings from baseline:

- Approximately two thirds of participants said they didn't have difficulty accessing health services.
- A slightly higher proportion of male participants (67.0%) than female participants (60.6%) said they had no difficulty getting health services.
- There is no Australian population benchmark data.

Percentage of NDIS participants having difficulty getting health services Male participants Female participants 80% 80% 70% 67.0% 70% 60.6% 60% 60% 50% 50% 39.4% 40% 40% 33.0% 30% 30% 20% 20% 10% 10% 0% 0% Yes No Yes



Baseline outcomes by participant characteristics

Health services: Having difficulty getting health services (2/5)

At baseline, the chance of a participant having difficulty accessing health services varies significantly by their age, primary disability, gender, level of function, level of NDIA support, CALD status, Indigenous status, and the socioeconomic status, geographic remoteness, and State or Territory of where they live. A significant trend towards increasing difficulty has been observed over time. There was also a significant impact from COVID-19.

- **Primary disability:** Participants with primary disability of Down syndrome are least likely to say they have difficulty accessing health care, followed by participants with intellectual disability. Participants with psychosocial disability are most likely to say they experience difficulty accessing health care, followed by participants with sensory disabilities, and participants with other disabilities*.
- Level of function: Participants with lower level of function are more likely to say they have difficulty accessing health care services.
- State or Territory of living area: Participants living in Northern Territory are most likely to say they have difficulty accessing health services, largely due to "access issues" and "lack of transport". Participants living in Western Australia are least likely to say they have difficulty getting health services followed by participants living in South Australia and participants living in Tasmania, due to lower percentages of participants in those states saying they have "access issues", "lack of support", "lack of transport" and "affordability issues" compared to participants living in the Australian Capital Territory, New South Wales and Victoria.
- Gender: Female participants are more likely say they have difficulty accessing health services than male participants.
- **General time trend:** There has been an increasing trend over time, i.e. participants who entered the NDIS later are more likely to say they have difficulty accessing health services than participants who entered the NDIS earlier.

^{*} Most includes participants with degenerative conditions and chronic health conditions such as Renal Failure.



Baseline outcomes by participant characteristics cont.

Health services: Having difficulty getting health services (3/5)

- Level of NDIA support: Participants who require a higher level of support from the NDIA are more likely to say they have difficulty accessing health services compared to participants who require less support.
- Age: Participants aged 60 to 64 are least likely to say they have difficulty accessing health services, followed by participants aged 55-59 and participants aged 15 to 17. Participants aged 30 to 34 are most likely to say they have difficulty, followed by participants aged 35 to 39.
- Geographic remoteness of living area: Participants living in regional areas with population less than 50,000 and remote areas are more likely to say they have difficulties, due to access issues, however less participants say it is due to lack of support and affordability issues.
- Indigenous status: Indigenous participants are more likely to say they have difficulty accessing health services compared to non-Indigenous participants.
- CALD status: CALD participants are also more likely to say they have difficulty accessing health services compared to non-CALD participants.
- Impact from COVID-19: Participants who entered the NDIS after 23 March 2020 are more likely to say they have difficulty accessing health services compared to participants who entered before 23 March 2020.
- Socio-economic status of where participant lives: Participants from areas of higher unemployment are more likely to say they have difficulty accessing health services than participants living in lower unemployment areas.

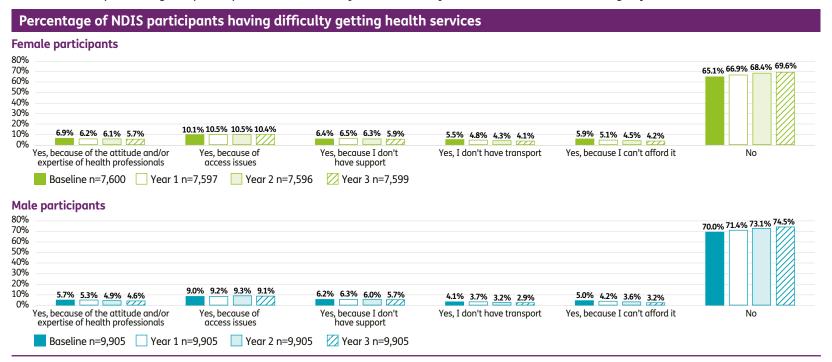


Longitudinal outcomes

Health services: Having difficulty getting health services (4/5)

Comparing responses from the same group of participants who have been in the NDIS between baseline and year 3 review:

- There has been an increase in the percentage of participants who said they have no difficulty accessing health services (65.1% to 69.6% for female participants, 70.0% to 74.5% for male participants).
- Most of the improvement comes from reductions in percentages of participants who said they have difficulty due to the attitude or expertise of the health professionals, lack of support, transport and affordability.
- Changes observed between baseline and year 3 for both males and females are statistically significant.
- However the percentage of participants who said they have difficulty due to access issues has slightly increased.





Longitudinal outcomes by participant characteristics

Health services: Having difficulty getting health services (5/5)

Between baseline and year 3, improvements and deteriorations in difficulty accessing health services varied significantly with participant's primary disability, age, gender, level of function, geographic remoteness, and State or Territory of residence. There was also a significant impact from COVID-19.

- **Primary disability:** Participants with a psychosocial disability, sensory disability or other disability type^ were less likely to improve and more likely to deteriorate in having difficulty accessing health services between baseline and year 3 when compared with participants with an intellectual disability. Participants with Down syndrome were more likely to deteriorate from baseline to year 3.
- Age: Generally, older participants were less likely to improve between baseline and year 3 compared with participants aged 18 to 24.
- **Gender:** Female participants were less likely to improve and more likely to deteriorate between baseline and year 3 in having difficulty accessing health services, compared with male participants.
- Level of function: Participants with high and medium level of function were more likely to improve and less likely to deteriorate from baseline to year 3 compared with participants with a low level of function.
- Geographic remoteness of living area: Participants living in regional areas with population between 5,000 and 15,000 were less likely to improve and more likely to deteriorate between baseline and year 3 compared with participants living in major cities.
- State or Territory: Participants living in Queensland and the Northern Territory were more likely to improve from baseline to year 3 compared with participants in New South Wales. Participants in Queensland were also more likely to deteriorate.
- Impact from COVID-19: Participants who had their year 3 review in the COVID-19 period were more likely to improve and deteriorate from baseline compared with participants who had their review before 23 March 2020.

^{*} Most includes participants with degenerative conditions and chronic health conditions such as Renal Failure.





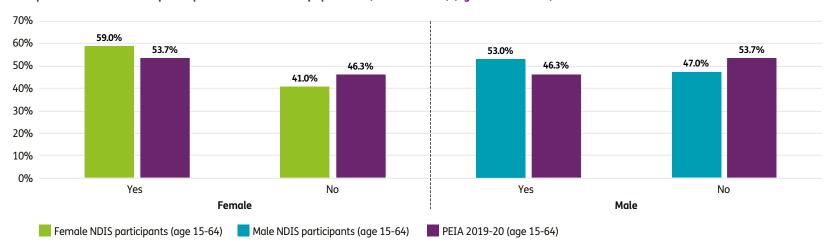
Health services: Have seen a dentist in the past 12 months (1/3)

Key findings at baseline:

- Higher percentages of NDIS participants from both genders have seen a dentist in the past 12 months, compared to the Australian population represented by Patient Experience In Australia (PEIA) 2019-20.
- For both NDIS participants and the Australian population, females are more likely to have seen a dentist in the past 12 months.

Percentage who have seen a dentist in the past 12 months

Comparison between NDIS participants and Australian population (PEIA 2019-20) (age standardised)





Baseline outcomes by participant characteristics

Health services: Have seen a dentist in the past 12 months (2/3)

At baseline, the chance that a participant has seen a dentist in the past 12 months varies significantly by the participant's age, primary disability, gender, CALD status, Indigenous status, socioeconomic status of where they live (represented by rate of unemployment in the LGA) and level of NDIA support. There was also a significant impact from COVID-19.

- Primary disability: Participants with primary disability of Down syndrome are most likely to have seen a dentist in the 12 months prior to entering the NDIS. Participants with other disabilities* are least likely to have seen a dentist in the 12 months prior to entering the NDIS, followed by participants with psychosocial disability and participants with sensory disabilities.
- Age: Participants in age group 15 to 17 are significantly more likely to have seen a dentist 12 months prior to entering the NDIS, compared to participants from other age groups.
- Gender: Female participants are more likely to have seen a dentist in the 12 months prior to entering the NDIS than male participants.
- Impact from COVID-19: Participants who entered the NDIS after 23 March 2020 are less likely to have seen a dentist in the 12 months prior to entering the NDIS compared to participants who entered before 23 March 2020.
- Socio-economic status of where participant lives: Participants living in LGAs with higher unemployment are less likely to have seen a dentist in the 12 months prior to entering the NDIS.
- Level of NDIA support: Participants who require a higher level of NDIA support are less likely to have seen a dentist in the 12 months prior to entering the NDIS.
- CALD status: CALD participants are less likely to have seen a dentist 12 months prior to entering the NDIS compared to non-CALD participants.
- Indigenous status: Indigenous participants are less likely to have seen a dentist 12 months prior to entering the NDIS compared to non-Indigenous participants.

^{*} Most includes participants with degenerative conditions and chronic health conditions such as Renal Failure.



Longitudinal outcomes

Health services: have seen a dentist in the past 12 months (3/3)

Comparing responses from the same group of participants who have been in the NDIS from baseline to year 3 review:

- There has been a reduction in the percentage of participants who have seen a dentist in the past 12 months. The reduction is larger for male participants than female participants (62.9% to 59.0% for female participants, 52.2% to 48.2% for male participants).
- These changes observed from baseline to year 3 review are not statistically significant.

Percentage of NDIS participants who have seen a dentist in the past 12 months Female participants Male participants 70% 70% % 61.0% 59.5% 62.9% 59.0% 60% 60% 54.9% 50.8% 49.5% 50% 48.2% 50% 46.5% 42.8% 41.4% 37.1% _{37.1%} 38.5% 40% 40% 34.2% 30% 30% 20% 20% 10% 10% 5.1% 3.7% 2.7% 2.4% 2.9% 3.4% 2.0% 2.4% 0% 0% Yes No Yes No Not sure Not sure Baseline n=205 Year 1 n=205 Year 2 n=205 Year 3 n=205 Baseline n=297 Year 1 n=297 Year 2 n=297 Year 3 n=297

Preventative health



The table below compares NDIS participants' preventative health service outcome indicators at Scheme entry with population benchmark (where possible). Significant three year changes are also included.

	Females			Males		
Outcome indicators	Baseline		Longitudinal	Baseline		Longitudinal
	NDIS Baseline	Australian Population	Baseline to Year 3 Review	NDIS Baseline	Australian Population	Baseline to Year 3 Review
Had a health check in the past 12 months	91%	94%		87%	88%	
Offered support for sexual health education	31%	N/A		29%	N/A	
Had a flu shot in the past 12 months	59%	34%*	+11.2%	52%	34%*	+20.2%
Screened for cervical cancer in the past 12 months	34%	60%		N/A	N/A	N/A
Screened for breast cancer in the past 12 months	37%	42%		N/A	N/A	N/A
Have been screened for prostate cancer before	N/A	N/A	N/A	59%	N/A	

^{*} Benchmark data on flu shot is not distinguished by gender





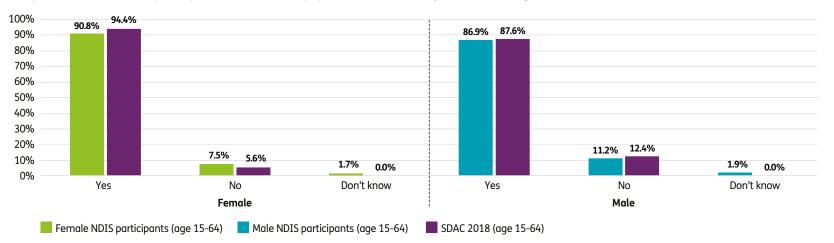
Preventative health: Had a health check in the past 12 months (1/3)

Key findings at baseline:

• Close to ninety percent of NDIS participants and the Australian population with disability have had a health check in the past 12 months. The percentage is higher for females than males (90.8% for female vs. 86.9% for male NDIS participants, 94.4% for females vs. 87.6% for males in the Australian population with disability).

Percentage who have had a health check in the past 12 months

Comparison between NDIS participants and Australian population with disability (SDAC 2018) (age standardised)





Baseline outcomes by participant characteristics

Preventative health: Had a health check in the past 12 months (2/3)

At baseline, the chance participants have had a health check in the past 12 months varies significantly by their age, primary disability, gender, level of function and State or Territory of their living area.

- Age: The chance that a participant has had a health check 12 months prior to entering the NDIS increases with age.

 Participants aged 50 and over are significantly more likely to have had a health check than participants from younger ages.
- Level of function: A participant's chance of having had a health check in the past 12 months reduces with their level of function.
- **Primary disability:** Participants with primary disability of Down syndrome are most likely to have had a health check in the 12 months prior to entering the NDIS followed by participants with other types of disabilities*.
- **Gender:** Female participants are more likely to have had a health check in the 12 months prior to entering the NDIS than male participants.
- State or Territory of living area: Participants living in South Australia are least likely to have had a health check in the 12 months prior to entering the NDIS, followed by participants living in the Australian Capital Territory.

^{*} Most includes participants with degenerative conditions and chronic health conditions such as Renal Failure.

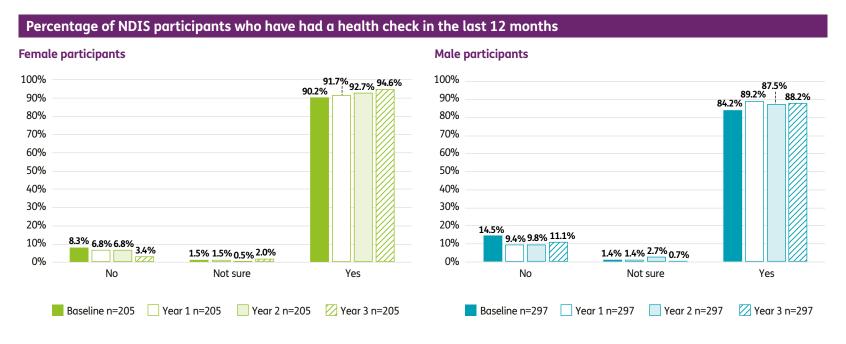


Longitudinal outcomes

Preventative health: Had a health check in the past 12 months (3/3)

Comparing responses from the same group of participants who have been in the NDIS from baseline to year 3 review:

- There has been a small increase in the percentage of participants who have had a health check in the past 12 months (from 90.2% to 94.6% for female participants, and from 84.2% to 88.2% for male participants).
- Changes observed between baseline and year 3 review for both male and female participants are not statistically significant.



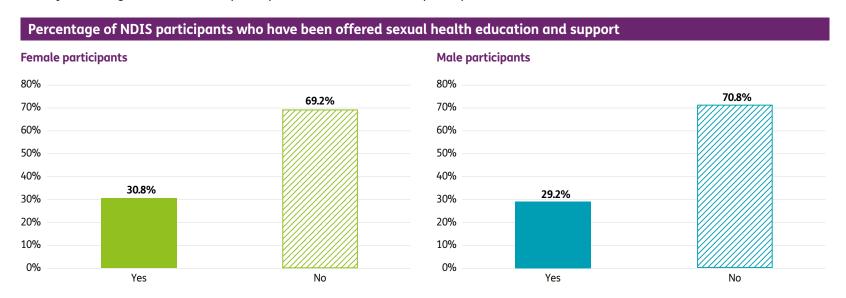




Preventative health: Have been offered sexual health education and support (1/3)

Key findings at baseline:

• Only around a third of female and male participants said they have been given sexual health education and support at Scheme entry, including 30.8% of female participants and 29.2% of male participants.





Baseline outcomes by participant characteristics

Preventative health: Have been offered sexual health education and support (2/3)

At baseline, the chance of a participant saying they have received sexual health education varies significantly by the participant's age, gender, level of function and CALD status. There has also been a significant COVID-19 impact.

- Age: Participants aged between 15 and 17 are most likely to say they have received sexual health education, followed by those aged 18 to 24, beyond which the chance decreases with increasing age.
- **COVID-19:** Participants who entered the NDIS after 23 March 2020 are less likely to say they have had sexual health education than participants who entered prior to 23 March 2020.
- Gender: Female participants are more likely to have had sexual health education than male participants.
- CALD status: CALD participants are less likely to say they have received sexual health education compared to non-CALD participants.
- Level of function: Participants with medium level of function are more likely to say they have had sexual health education than participants with high or low level of function.

^{*} Most includes participants with degenerative conditions and chronic health conditions such as Renal Failure.



Longitudinal outcomes

Preventative health: Have been offered sexual health education and support (3/3)

Comparing longitudinal responses from the same group of participants who have been in the NDIS from baseline to year 3 review:

- The percentage of female participants who said they have had sexual health education decreased slightly, from 28.8% to 26.8%.
- The percentage of male participants who said they have had sexual health education reduced from 28.0% to 22.9%, while the percentage unsure increased slightly, from 18.5% to 20.5%.
- Changes observed between baseline and year 3 review for both male and female participants are not statistically significant.

Percentage of NDIS participants who have been offered education and support for sexual health Female participants Male participants 70% 70% 55.1% **58.1**% 60% 60% 54.6% ^{56.6%} 53.5% 50% 50% 40% 40% 28.3% 29.3% 26.8% 28.8% 28.0% 28.3% 30% 30% 23.9% 22.9% 17.1% 18.5% 17.2% 16.1% 18.1% 17.1% 20% 20% 10% 10% 0% 0% No Not sure Yes No Yes Not sure Baseline n=205 Year 1 n=205 Year 2 n=205 Year 3 n=205 Baseline n=297 Year 1 n=297 Year 2 n=297 Year 3 n=297





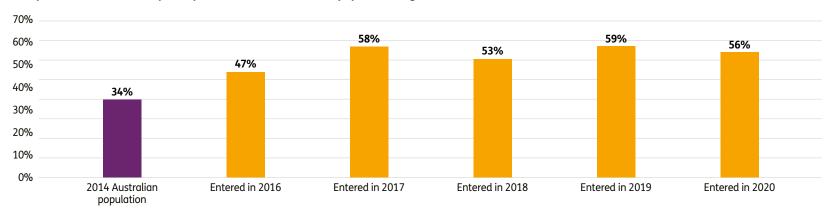
Preventative health: Flu vaccination in the past 12 months (1/3)

Key findings at baseline:

- Flu vaccination coverage rates for NDIS participants between 2016 and 2020 are higher than the coverage rate estimated* for the 2014 Australian population for the same age group of 18 to 64.
- It has been estimated that the percentage of total Australian population who wanted to get a flu vaccination has increased from 41% in 2019 to 62% in 2020 due to the impact of the pandemic**.

Percentage who have had a flu vaccination in the last 12 months

Comparison between NDIS participants and 2014 Australian population (age standardised)



2014 Australian population - estimated by newspoll on behalf of Department of Health

NDIS participants

^{*} Estimated by News-poll Omnibus in June 2014 on behalf of Department of Health. To date there is no published data on adult flu vaccination. The Australian Immunisation Register only collects data on government funded immunisations which only includes flu vaccinations for children under the age of five and population age 65 and over. This data is not distinguished by gender.

^{**} Healthcare & Medical Research Study Australian General Population March 2020, APMI Partners



Baseline outcomes by participant characteristics

Preventative health: Flu vaccination in the past 12 months (2/3)

The chance that participants have had a flu vaccination in the 12 months prior to entering the NDIS varies significantly by their gender, age, level of function and State or Territory of their living area.

- Gender: Female participants are more likely to have had a flu vaccination in the past 12 months than male participants.
- Age: The chance that a participant has had a flu vaccination in the past 12 months increases steadily with age.
- Level of function: Participants with lower level of function are more likely to have had a flu vaccination in the past 12 months compared to participants with higher level of function.
- State or Territory of living area: Participants living in Western Australia are most likely to have received a flu vaccination in the past 12 months followed by participants living in Victoria.



Longitudinal outcomes

Preventative health: Flu vaccination in the past 12 months (3/3)

Comparing longitudinal changes from the same group of participants who have been in the NDIS from baseline to year 3 review:

- The percentage of participants who have had a flu vaccination in the past 12 months increased steadily between baseline and year 3 review (from 60.5% to 71.7% for female participants, and from 46.5% to 66.7% for male participants).
- Changes observed between baseline and year 3 review for both female and male participants are statistically significant.

Percentage of NDIS participants who have had a flu vaccination in the last 12 months Female participants Male participants 80% 80% 68.8% 71.7% 70% 70% 66.7% 64.9% 60.5% 59.6% 60% 60% 50% 48.2% 46.8% 50% 46.5% 38.4% 40% 40% 36.1% 30.7% _{28.3%} 30.3% 30% 30% 22.9% 20% 20% 10% 10% 0% 0% Yes No Not sure Yes No Not sure Baseline n=205 Year 2 n=205 Year 3 n=205 Year 1 n=297 Year 3 n=297 Year 1 n = 205Baseline n=297 Year 2 n=297





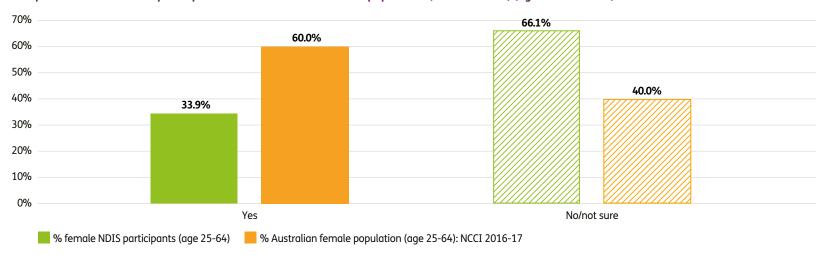
Preventative health: Cervical cancer screening (pap test) (1/3)

Key findings at baseline:

• 33.9% of NDIS female participants have undertaken cervical cancer screening (Pap Test)* in the past 12 months, compared to 60.0% of the Australian female population who have undertake the test in the past 18 months.

Percentage of female participants and female Australian population age between 25 and 64 who have had a cervical cancer screening (PAP Test) in the past 12 months

Comparison between NDIS participants and the Australian female population (NCCI 2016-17) (age standardised)



^{*} Since 2017, Cervical Cancer Screen Test has replaced Pap Test for cervical cancer screening. The Cervical Cancer Screen Test looks and feels the same as the Pap test, but it is done every five years instead of every 2 years if the previous result is normal.



Baseline outcomes by participant characteristics

Preventative health: Cervical cancer screening (pap test) (2/3)

Participants' rate of use of Pap Test at baseline varies significantly by their level of function.

• Level of function: Participants who have higher level of function are more likely to say they have had a Pap Test in the 12 months prior to entering the NDIS compared to participants who have lower level of function.



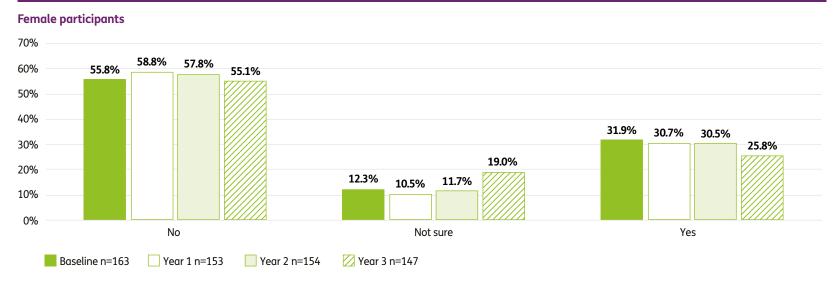
Longitudinal outcomes

Preventative health: Cervical cancer screening (pap test) (3/3)

Comparing responses from the same group of participants who have been in the NDIS from baseline to year 3 review:

- There has been a small decrease in the percentage of female participants who said they have had a cervical cancer screening test in the past 12 months (from 31.9% to 25.8%).
- Changes observed between baseline and year 3 review are not significant.

Percentage of female participants over 18 who have had a cervical cancer screening in the last 12 months



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Longitudinal outcomes

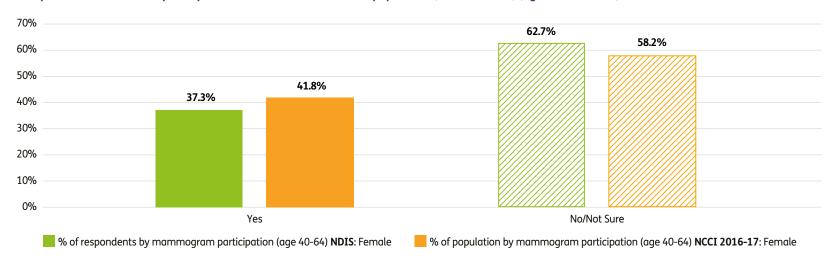
Preventative health: Breast cancer screening (mammogram) (1/3)

Key findings at baseline:

• During 2016 and 2017, 41.8% of the Australian female population aged over 40 had a mammogram in the last 24 months*. By comparison, 37.3% of female NDIS participants aged over 40 have had a mammogram in the last 12 months.

Percentage of female participants over 40 who have taken a mammogram in the last 12 months

Comparison between NDIS participants and the Australian female population (NCCI 2016-17) (age standardised)



 ^{*} Estimated by NCCI (National Cancer Control Indicators).



Baseline outcomes by participant characteristics

Preventative health: Breast cancer screening (mammogram) (2/3)

At baseline, the chance that a female participant has had a mammogram in the last 12 months varies significantly by the participant's age and level of function.

- Age: The chance a participant has had a mammogram in the 12 months prior to entering the NDIS is significantly higher for those aged 50 and over compared to participants aged 40 to 49.
- Level of function: Participants with higher level of function are more likely to have had a mammogram in the last 12 months compared to participants with lower level of function.



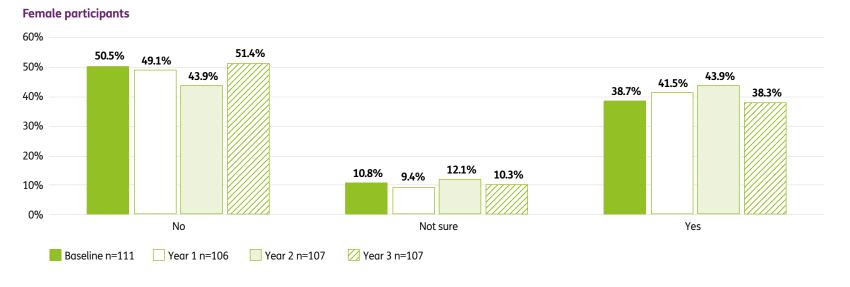
Longitudinal outcomes

Preventative health: Breast cancer screening (mammogram) (3/3)

Comparing responses from the same group of female participants over age 40 who have been in the NDIS from baseline to year 3 review:

- There has been a steady increase in the percentage of female participants over 40 who said they have had a mammogram in the last 12 months between baseline and year 2 review (increased from 38.7% to 43.9%).
- However there has been a decline from year 2 review to year 3 review (reduced from 43.9% to 38.3%) and an increase in the percentage who said they haven't had one in the last 12 months (from 43.9% to 51.4%).
- Changes observed between baseline and year 3 review are not statistically significant.

Percentage of female participants over 40 who have taken a mammogram in the last 12 months





Baseline outcomes

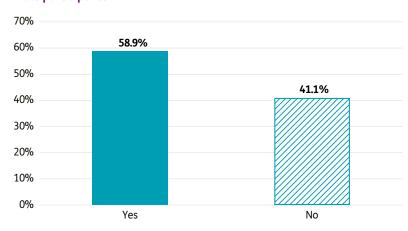
Preventative health: Prostate Specific Antigen (PSA) test (1/3)

Key findings at baseline:

• 58.9% of male participants age over 50 said they have had a PSA test in the past.

Percentage of male participants over 50 who have had a PSA test in the past

Male participants





Baseline outcomes by participant characteristics

Preventative health: Prostate Specific Antigen (PSA) test (2/3)

At baseline, the chance of male participants over age 50 having had a PSA test in the past varies significantly by their age and required level of NDIA support.

- Age: Between age 50 and 64, the chance of a male participant responding that he has had a PSA test in the past increases with age.
- Level of NDIA support: Male participants who require a very high level of NDIA support are significantly less likely to say that they have had a PSA test in the past compared to male participants who require less support.



Longitudinal outcomes

Preventative health: Prostate Specific Antigen (PSA) test (3/3)

Comparing longitudinal responses from male participants aged 50 and over who have been in the NDIS from baseline to year 3 review:

- The percentage who said they have ever had a PSA test has reduced from 50.6% at baseline to 43.8% at year 3 review. The decline may be due to imperfect recall over time.
- Changes observed between baseline and year 3 review are not statistically significant.

Percentage of male participants over 50 who have had a PSA test Male participants 60% 56.6% 50.6% 50% 43.8% 43.4% 41.0% 37.5% 40% 30.1% 28.9% 30% 19.3% 18.8% 20% 15.7% 14.5% 10% 0% No Yes Not sure Baseline n=83 Year 3 n=80 Year 1 n=83 Year 2 n=83

Self-rated health



Both participants and their family or carers (who were available) were asked to rate their health on a five-point scale from "Excellent" to "Poor".

Outcome indicators	Females			Males		
	Baseline		Longitudinal	Baseline		Longitudinal
	NDIS Baseline	Australian Population	Baseline to Year 3 Review	NDIS Baseline	Australian Population	Baseline to Year 3 Review
Participant rating their health as "Excellent", "Very Good" or "Good"	43%	88%	-4.9%	54%	87%	-4.2%
Family/carer rating their health as "Excellent", "Very Good" or "Good"	71%	84%	-10.1%	70%	88%	-9.5%



Baseline outcomes

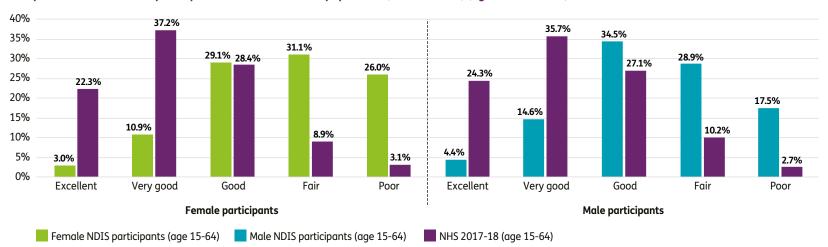
Self-rated health: Participant's self-rated health (1/5)

Key findings at baseline:

• Comparing NDIS participants' self-rated health to the general Australian population, lower proportions of NDIS participants rated their health as "Excellent" or "Very Good", and higher proportions of NDIS participants rated their health as "Fair" or "Poor".

Participant's self-rated health

Comparison between NDIS participants and the Australian population (NHS 2017-18) (age standardised)





Baseline outcomes by participant characteristics

Self-rated health: Participant's self-rated health (2/5)

Participants' self-rated health at baseline varies significantly by their age, primary disability, gender, level of function, CALD status, Indigenous status, geographic remoteness and State or Territory of living area, and Scheme access criterion. A decreasing trend has been observed for participants who entered the NDIS later in time.

- **Primary disability:** Participants with Down syndrome are most likely to rate their health as "Excellent", "Very Good" or "Good", followed by participants with intellectual disability. Participants with psychosocial disability are least likely to rate their health as "Excellent", "Very Good" or "Good", followed by participants with multiple sclerosis and other disabilities.
- Level of function: Participants with higher level of function are more likely to rate their health well.
- Gender: Male participants are more likely to rate their health well compared to females.
- Age: Self-rated health deteriorates with increasing participant age.
- CALD status: CALD participants are less likely to rate their health well compared to non-CALD participants.
- Indigenous status: Indigenous participants are less likely to rate their health well compared to non-Indigenous participants.
- General time trend: At baseline, there has been a deteriorating trend in self-rated health from participants newly entering the NDIS over time, i.e. participants who entered the NDIS later are less likely to rate health their health as "Excellent", "Very Good" and "Good", compared to participants who entered the NDIS earlier.
- **Geographic remoteness of living area:** Participants living in very remote areas are most likely to rate their health as "Excellent", "Very Good" or "Good", followed by participants living in remote areas.



Baseline outcomes by participant characteristics

Self-rated health: Participant's self-rated health (3/5)

- State or Territory of living area: Participants living in Western Australia are most likely to rate their health well, followed by participants living in Northern Territory and Tasmania. Participants living in the Australian Capital Territory are least likely to rate their health as "Excellent", "Very Good" or "Good", followed by participants living in New South Wales.
- Scheme access criterion: Participants who access the NDIS for early intervention are less likely to rate their health as "Excellent", "Very Good" or "Good" compared to participants who access the NDIS due to permanent disability.

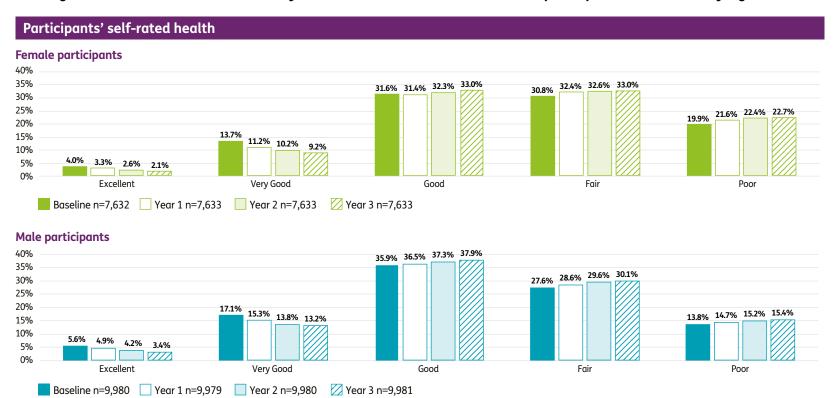
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Longitudinal outcomes

Self-rated health: Participant's self-rated health (4/5)

Comparing responses from the same group of participants from baseline to year 3 review:

- There have been consistent reductions in the percentages of participants who rated their health as "Excellent" and "Very Good", and increases in the percentages of participants who rated their health as "Good", "Fair" and "Poor".
- Changes observed between baseline and year 3 review for both female and male participants are statistically significant.





Longitudinal outcomes by participant characteristics

Self-rated health: Participant's self-rated health (5/5)

Between baseline and year 3, improvements and deteriorations in self-rated health varied significantly by the participant's primary disability, gender, level of function, CALD status, Indigenous status, and geographic remoteness of their living area.

- **Primary disability:** Participants with an acquired brain injury, psychosocial disability, cerebral palsy, multiple sclerosis, or other disability type[^] were less likely to improve and more likely to deteriorate in their self-rated health from baseline to year 3 compared with participants with an intellectual disability.
- Level of function: Participants with a high or medium level of function were more likely to improve and less likely to deteriorate from baseline to year 3 compared to participants with a low level of function.
- **Gender:** Female participants were less likely to report improvements and more likely to report deteriorations in their health between baseline and year 3 compared with male participants.
- CALD status: CALD participants were more likely to deteriorate from baseline to year 3 compared with non-CALD participants.
- Indigenous status: Indigenous participants were more likely to deteriorate in their self-rated health between baseline and year 3 compared with non-Indigenous participants.
- Geographic remoteness of living area: Participants from regional centres with population greater than 50,000 were more likely to improve from baseline to year 3 than participants in major cities. Participants from very remote regions were less likely to deteriorate than participants from major cities.

[^] Mostly includes participants with degenerative disease or chronic health conditions.



Baseline outcomes

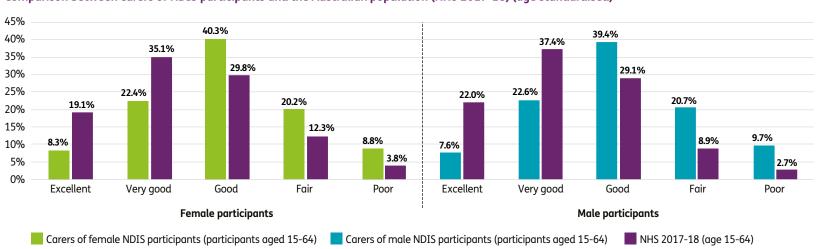
Self-rated health: Family/carer's self-rated health (1/5)

Key findings at baseline:

• Comparing the self-rated health of families/carers of NDIS participants to the Australian population, a lower proportion of families/carers rated their health as "Excellent" or "Very Good", and a higher proportion rated their health as "Fair" or "Poor".

Family/carer's self-rated health

Comparison between carers of NDIS participants and the Australian population (NHS 2017-18) (age standardised)





Baseline outcomes by participant characteristics

Self-rated health: Family/carer's self-rated health (2/5)

Families'/carers' self-rated health at baseline varies significantly with carer type, participant's age, primary disability, gender, level of function, CALD status, Indigenous status, Scheme access criterion, required level of NDIA support, and the socioeconomic level, geographic remoteness and State or Territory of living area. A deteriorating trend has been observed over time. There is also a significant impact from COVID-19.

- Level of function: Families and carers of participants with higher level of function are more likely to rate their health well.
- Level of NDIA support: Families and carers of participants with higher level of NDIA support are less likely to rate their health well.
- **Primary disability:** Families and carers of participants with primary disability of autism are least likely to rate their health well, followed by families and carers of participants with psychosocial disability. Families and carers of participants with primary disability of multiple sclerosis are most likely to rate their health well, followed by families and carers of participants with sensory disabilities.
- Carer type: Mothers of participants are least likely to rate their health as "Excellent", "Very Good" or "Good", followed by grandfathers and fathers. Brothers are most likely to rate their health as "Excellent", "Very Good" or "Good", followed by sisters, and other family members.
- **Gender of participant:** Families and carers of female participants are less likely to rate their health as "Excellent", "Very Good" or "Good" compared to families and carers of male participants.
- Age: Families' and carer's self-rated health deteriorates with increasing participant age.
- State or Territory of living area: Families and carers of participants living in Northern Territory are most likely to rate their health as "Excellent", "Very Good" or "Good", followed by families and carers of participants living in Western Australia. Families and carers of participants living in Queensland are least likely to rate their health well, followed by participants living in South Australia and Victoria.

[^] Mostly includes participants with degenerative disease or chronic health conditions.



Baseline outcomes by participant characteristics cont.

Self-rated health: Family/carer's self-rated health (3/5)

- Scheme access criterion: Families and carers of participants who access the NDIS for early intervention are more likely to self rate their health as "Excellent", "Very Good" or "Good" compared to families or carers of participants who access the NDIS due to permanent disability.
- Socioeconomic status of where participant lives: Families and carers of participants living in lower socioeconomic areas, represented by higher unemployment, are less likely to rate their health as "Excellent", "Very Good" or "Good" compared to families and carers of participants living in higher socioeconomic areas.
- **Geographic remoteness of living area:** Families and carers of participants living in very remote areas are most likely to rate their health as "Excellent", "Very Good" or "Good", followed by participants living in remote areas.
- CALD status: Families and carers of CALD participants are more likely to rate their health positively than those of non-CALD participants.
- **Indigenous status:** Families and carers of Indigenous participants are less likely to rate their positively than their non-Indigenous counterparts.
- General time trend: There has been a deteriorating trend in self rated health over time, i.e. families or carers of participants who entered the NDIS later are less likely to rate their health as "Excellent", "Very Good" or "Good" compared to families or carers of participants who entered earlier.
- COVID-19: There was a significant step increase in the likelihood of families/carers rating their health well at 23 March 2020. However, this was followed by a steeper decline in the likelihood of rating their health well than was observed before 23 March 2020.

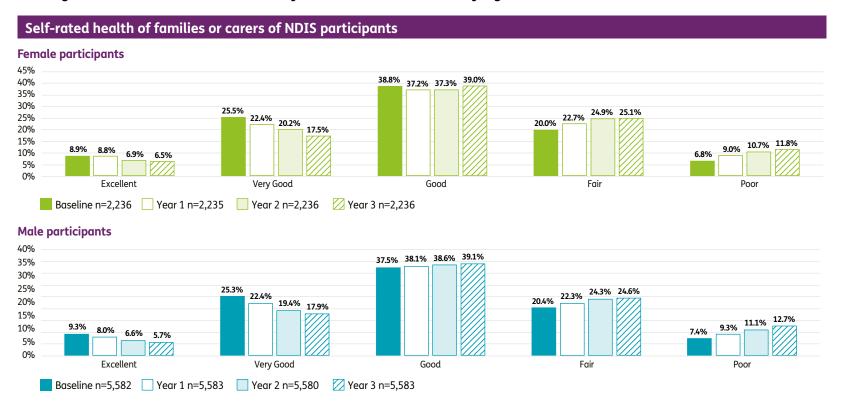
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Longitudinal outcomes

Self-rated health: Family/carer's self-rated health (4/5)

Comparing responses from the same group of participants from baseline to year 3 review:

- There have been consistent reductions in the percentages of participants who rated their health as "Excellent" and "Very Good", and increases in the percentages of participants who rated their health as "Fair" and "Poor".
- Changes observed between baseline and year 3 review are statistically significant.





Longitudinal outcomes by participant characteristics

Self-rated health: Family/carer's self-rated health (5/5)

Between baseline and year 3, improvements and deteriorations in self-rated health for families and carers varied significantly by carer type as well as the participant's primary disability, level of function, annualised plan budget, level of NDIS support, and geographic remoteness.

- Carer type: Fathers and grandmothers of participants were less likely to deteriorate from baseline to year 3 than mothers.
- Level of function: Family and carers of participants with a high level of function were less likely to deteriorate in their self-rated health from baseline to year 3 than families and carers of participants with a low level of function. However, participants with a medium level of function were less likely to improve from baseline to year 3.
- **Primary disability:** Family and carers of participants with autism were more likely to deteriorate in their self-rated health from baseline to year 3 than family and carers of participants with an intellectual disability.
- Level of NDIA support: Family and carers of participants with high and very high levels of NDIS support were more likely to deteriorate from baseline to year 3 than family and carers of participants with medium level of NDIS support. As well, family and carers of participants with a low level NDIS support were less likely to deteriorate than carers of participants with a medium level of support.
- Annualised plan budget: Families and carers of participants with annualised budgets under \$50,000 were less likely to
 deteriorate in their self-rated health from baseline to year 3 than families and carers of participants with budgets over
 \$100,000.
- Geographic remoteness of living area: Families and carers of participants in regional towns with population less than 5,000 were less likely to improve from baseline to year 3 but were also less likely to deteriorate over that time period than families and carers of participants in major cities. Additionally, families and carers of participants in remote areas were more likely to improve.

Has the NDIS helped?



Both participants and their families or carers (where available) were asked whether their involvement with the NDIS has improved their health and wellbeing.

	Females			Males		
	First Review		Longitudinal	First Review		Longitudinal
	NDIS First Review	Australian Population	Year 1 to Year 3 Review	NDIS First Review	Australian Population	Year 1 to Year 3 Review
Participant saying the NDIS improved their health and wellbeing	55%	N/A	+9.9%	53%	N/A	+10.0%
Family/Carer saying the NDIS improved their health and wellbeing	41%	N/A	+6.0%	39%	N/A	+2.1%



Year 1 review outcomes

Has the NDIS helped improve participants' health and wellbeing? (1/6)

Key findings at first review:

• Just over half of the participants said at first review that their involvement with the NDIS has improved their health and wellbeing. The proportions are similar for male and female participants (54.5% versus 53.1%).

Percentage of participants who said the NDIS has helped improved their health and wellbeing Female participants Male participants 56% 56% 54.5% 54% 54% 53.1% 52% 52% 50% 50% 48% 48% 46.9% 45.5% 46% 46% 44% 44% 42% 42% 40% 40% Yes Yes No No



Year 1 review outcomes by participant characteristics

Has the NDIS helped improve participants' health and wellbeing? (2/6)

Participants' responses to whether the NDIS has helped improve their health and wellbeing after one year in the Scheme vary significantly by their baseline plan utilisation, annualised plan budget, plan management type, types of supports in their plan, State or Territory and remoteness of residence, primary disability, age, Indigenous status, level of function, level of NDIA support, and whether they had previously received supports from State/Territory or Commonwealth programs. There has also been a trend towards responding more positively with Scheme entry date, and a significant impact from COVID-19.

- **Plan utilisation:** The likelihood of a participant saying that the NDIS has helped with their health and wellbeing after one year in the Scheme shows a strong increasing trend with higher utilisation of their baseline plan budget.
- Annualised plan budget: There is also an increasing trend with annualised plan budget: participants with higher annualised baseline plan budgets are more likely to say the NDIS helped improve their health and wellbeing.
- Plan management type: Participants who fully self-manage their baseline plan are the most likely to say the NDIS helped improve their health and wellbeing, followed by participants who partly self-manage, then those who use a plan manager. Participants with Agency-managed plans are the least likely to response positively.
- Types of supports in plan: Participants with a higher percentage of capacity building supports in their baseline plan are less likely to say that the NDIS has helped with health and wellbeing.
- State or Territory of living area: Participants who live in Queensland are most likely to say that the NDIS has improved their health and wellbeing, followed by participants who live in Western Australia. Participants who live in South Australia or Victoria are least likely to say that the NDIS has helped with their health and wellbeing.
- Remoteness: Participants living in very remote areas are least likely to say that the NDIS has improved their health and wellbeing. Participants living in small rural towns (population less than 5000) are also significantly less likely than those living in major cities to respond positively, however, so are participants living in regional centres (population greater than 50,000).



Year 1 review outcomes by participant characteristics cont.

Has the NDIS helped improve participants' health and wellbeing? (3/6)

- **Primary disability:** Participants with sensory disabilities are least likely to say that the NDIS has helped improve their health and wellbeing. Participants with multiple sclerosis are most likely to say the NDIS has helped their health and wellbeing, followed by those with an acquired brain injury or cerebral palsy.
- Age: Older participants are more likely to say the NDIS has helped improve their health and wellbeing.
- Indigenous status: Indigenous participants are significantly less likely to say that the NDIS has improved their health and wellbeing compared to non-Indigenous participants.
- Level of function: Participants with higher level of function are more likely to say the NDIS helped improve their health and wellbeing.
- Level of NDIA support: Participants requiring a very high level of NDIA support are less likely than those with a low level of NDIA support to say the NDIS helped improve their health and wellbeing.
- Previously received State/Territory or Commonwealth supports: Participants who had not received supports from State/ Territory or Commonwealth programs prior to entering the NDIS were significantly more likely to say the NDIS helped improve their health and wellbeing.
- **General time trend:** Participants who entered the NDIS later are more likely than those who entered earlier to say that the NDIS has helped with their health and wellbeing (although the trend was slight pre-COVID).
- **COVID-19**: The trend towards more positive responses for later Scheme entry times was stronger after the onset of the pandemic.



Longitudinal outcomes

Has the NDIS helped improve participants' health and wellbeing? (4/6)

Comparing responses from the same group of participants who have been in the NDIS from year 1 to year 3 review:

- There has been an increase in the percentage of participants who said the NDIS has helped improve their health and wellbeing.
- An increase from 47.5% at year 1 review to 57.4% at year 3 review has been observed for female participants.
- An increase from 45.2% at year 1 review to 55.2% at year 3 review has been observed for male participants.
- The increases between year 1 review and year 3 review are statistically significant for female and male participants.

Percentage of participants who said the NDIS has helped improved their health and wellbeing Female participants Male participants 70% 70% 60% 57.4% 60% 55.2% 54.8% 53.2% 52.5% 51.0% 49.0% 50% 47.5% 50% 46.8% 45.2% 44.8% 42.6% 40% 40% 30% 30% 20% 20% 10% 10% 0% 0% Yes No Yes No Year 1 n=7,010 Year 2 n=7,687 Year 3 n=7,734 Year 1 n=9.157 Year 2 n=10.064 Year 3 n=10.132



Longitudinal outcomes by participant characteristics

Has the NDIS helped improve participants' health and wellbeing? (5/6)

Between year 1 and year 3, improvement and deterioration in responses to whether the NDIS has helped varied significantly by the respondent's primary disability, age, level of function, annualised plan budget, utilisation of year 3 funding, geographic remoteness and State or Territory of living area.

- **Primary disability:** Participants with cerebral palsy, multiple sclerosis and psychosocial disabilities were more likely to improve in saying the NDIS helped their health and wellbeing between year 1 and 3 compared to participants with an intellectual disability. However, participants with a sensory disability were less likely to improve in saying the NDIS helped them than participants with an intellectual disability.
- Age: Generally, participants in older age groups were more likely to improve in saying the NDIS helped improve their health and wellbeing between year 1 and year 3 compared with participants aged 18 to 24.
- Level of function: Participants with high and medium level of function were more likely to improve in saying the NDIS helped them from year 1 to year 3 compared with participants with a low level of function.
- Annualised plan budget: Participants with annualised plan budget less than \$100,000 were less likely to improve in saying the NDIS helped them from year 1 to year 3 compared with participants with annualised budgets of at least \$100,000.
- Utilisation of year 3 funding: Participants who used less than 60% of their year 3 funding were less likely to improve in saying the NDIS helped them from year 1 to year 3 compared with participants who used over 80% of their budgets. As well, participants who used less than 40% of their budgets were more likely to deteriorate in their opinion of whether the NDIS helped their health and wellbeing between year 1 and year 3.



Longitudinal outcomes by participant characteristics cont.

Has the NDIS helped improve participants' health and wellbeing? (6/6)

- Geographic remoteness: Participants living in regional towns with population between 5,000 and 50,000 were less likely to deteriorate in saying the NDIS helped their health and wellbeing between year 1 and year 3 compared with participants living in major cities.
- State or Territory of living area: Participants in the Australian Capital Territory and Western Australia were less likely to deteriorate from year 1 to year 3 compared with New South Wales participants. Northern Territory participants were more likely to deteriorate, Queensland participants were more likely to improve and Victorian participants were less likely to improve than New South Wales participants between year 1 and 3.

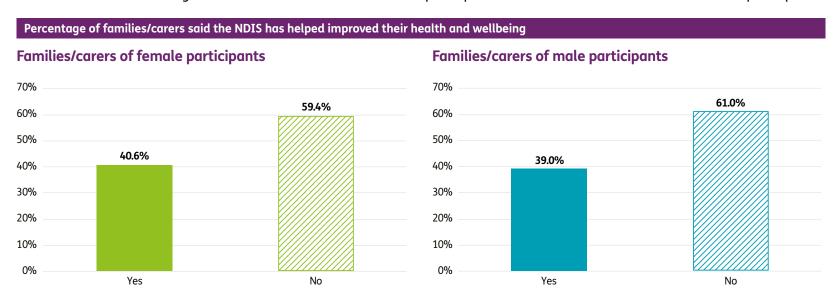


Year 1 review outcomes

Has the NDIS helped improve family/carer's health and wellbeing? (1/5)

Key findings at first review:

• Around forty percent of the families or carers of female and male participants said their involvement with the NDIS has improved their health and wellbeing: 40.6% of families or carers of female participants and 39.0% of families or carers of male participants.





Year 1 review outcomes by participant characteristics

Has the NDIS helped improve family/carer's health and wellbeing? (2/5)

Family/carers' responses to whether the NDIS has helped improve their health and wellbeing vary significantly by the participants' baseline plan utilisation, annualised plan budget, plan management type, types of supports in their plan, State or Territory and remoteness of residence, primary disability, age, level of function, level of NDIA support, Scheme access criterion, and whether they had previously received supports from State/Territory or Commonwealth programs. There has also been a trend towards responding more positively with Scheme entry date, and a significant impact from COVID-19.

- Plan utilisation: Families or carers of participants who use a higher percentage of their baseline plans are more likely to say the NDIS improved their health and wellbeing.
- Annualised plan budget: Families/carers of participants with higher annualised baseline plan budgets are more likely to say the NDIS helped improve their health and wellbeing.
- Plan management type: Families/carers of participants who fully self-manage their baseline plan are significantly more likely than those with Agency-managed plans to say the NDIS helped improve their health and wellbeing. However, families/carers of participants who use a plan manager are significantly less likely to say the NDIS helped than those with Agency-managed plans.
- Types of supports in plan: Families/carers of participants with more than 15% of capacity building supports in their baseline plan, as well as those with capital supports in their plan, are less likely to say that the NDIS has helped with health and wellbeing compared to families/carers of participants with less than 15% of capacity building supports in their baseline plan.
- State or Territory of living area: Families or carers of participants who live in Queensland are most likely to say that the NDIS has improved their health and wellbeing, followed by participants who live in the Australian Capital Territory or Western Australia. Results for other States/Territories are not significantly different to those for New South Wales.
- **Geographic remoteness of residence:** Families or carers of participants who live in regional areas are less likely to say the NDIS has helped improve their health and wellbeing compared to families or carers of participants living in major cities.

^{*} Mostly includes participants with degenerative conditions and chronic health conditions such as Renal Failure.



Year 1 review outcomes by participant characteristics cont.

Has the NDIS helped improve family/carer's health and wellbeing? (3/5)

- **Primary disability:** Families or carers of participants who have other disabilities* are most likely to say that the NDIS has helped improve their health and wellbeing, followed by families or carers of participants who have multiple sclerosis or an acquired brain injury.
- Age: Families/carers of participants in age groups 25 to 29, 35 to 39, and 60 to 64 are significantly more likely to say the NDIS helped improve their health and wellbeing than families/carers of participants aged 18 to 24.
- Level of function: Families/carers of participants with high level of function are more likely to say the NDIS helped improve their health and wellbeing than families/carers of participants with medium or low level of function.
- Level of NDIA support: Families/carers of participants requiring higher levels of NDIA support are less likely to say the NDIS helped improve their health and wellbeing.
- Scheme access criteria: Families/carers of participants who entered the Scheme for early intervention are more likely to say the NDIS helped improve their health and wellbeing than families/carers of those entering due to disability.
- Previously received State/Territory or Commonwealth supports: Families/carers of participants who had not received supports
 from State/Territory or Commonwealth programs prior to entering the NDIS, and families/carers of participants who previously
 received supports from Commonwealth programs, were significantly more likely to say the NDIS helped improve their health and
 wellbeing, compared to families/carers of participants who previously received supports from State/Territory programs.
- **General time trend:** Families/carers of participants who entered the NDIS later are more likely to say that the NDIS has helped improve their health and wellbeing, compared to participants who entered earlier (although the trend was slight pre-COVID).
- Impact from COVID-19: The trend towards more positive responses for later Scheme entry times was considerably stronger after the onset of the pandemic.

^{*} Mostly includes participants with degenerative conditions and chronic health conditions such as Renal Failure.



Longitudinal outcomes

Has the NDIS helped improve family/carer's health and wellbeing? (4/5)

- Comparing responses from the same group of carers from review 1 to review 3:
 - There has been an increase in the percentage of families and carers who said the NDIS has helped improve their health and wellbeing.
 - The percentage responding that the NDIS has helped from families or carers of female participants increased from 34.4% to 40.4%, and from families or carers of male participants increased from 35.7% to 37.8%.
- The increases from review 1 to review 3 are statistically significant for carers of both female and male participants.

Percentage of families/carers said the NDIS has helped improved their health and wellbeing Female participants Male participants 70% 70% 65.6% 64.3% 63.5% 63.6% 62.2% 59.6% 60% 60% 50% 50% 40.4% 37.8% 40% 40% 36.4% 36.5% 35.7% 34.4% 30% 30% 20% 20% 10% 10% 0% 0% Yes No Yes No Year 2 n=2,240 Year 3 n=2.245 Year 3 n=5.602 Year 1 n=2.146 Year 1 n=5.317 Year 2 n=5.579



Longitudinal outcomes by participant characteristics

Has the NDIS helped improve family/carer's health and wellbeing? (5/5)

Between year 1 and year 3, responses to whether the NDIS helped improve family and carers' health and wellbeing varied significantly by participant's primary disability, gender, CALD status, utilisation of year 3 funding, State or Territory and socioeconomic status of where the participant lives.

- **Primary disability:** Families and carers of participants with an other disability type[^] were more likely to deteriorate in saying the NDIS helped their health and wellbeing from year 1 to year 3 than family and carers of participants with an intellectual disability.
- **Gender:** Families and carers of female participants were more likely to improve in saying the NDIS helped their health and wellbeing from year 1 to year 3 than families and carers of male participants.
- CALD status: Families and carers of CALD participants were more likely to improve in saying the NDIS helped their health and wellbeing from year 1 to year 3 than families and carers of non-CALD participants.
- Utilisation of year 3 funding: Families and carers of participants who utilised less than 20% of their year 3 funding were less likely to improve and more likely to deteriorate in saying the NDIS helped them from year 1 to year 3 compared with family and carers of participants who used over 80% of their budgets. However, participants who utilised between 60-80% of their year 3 funding were more likely to improve.
- Socioeconomic status of where participant lives: Families and carers of participants living in areas of lower socioeconomic status, represented by higher unemployment rate, were more likely to deteriorate in saying the NDIS helped their health and wellbeing from year 1 to year 3.
- State or Territory of living area: Families and carers of participants from Victoria, South Australia and the Australian Capital Territory were more likely to improve in saying the NDIS helped their health and wellbeing from year 1 to year 3 compared to families and carers of participants in New South Wales.

[^] Mostly includes participants with degenerative disease or chronic health conditions.



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