# Longitudinal outcomes for NDIS Participants

30 June 2020



ndis.gov.au

30 June 2020 | Longitudinal Outcomes

# **Contents**

Exe	cutive summary	3
1.	Introduction	34
2.	Participants from birth to before starting school: outcome indicators	38
3.	Participants from birth to before starting school: Has the NDIS helped?	74
4.	Participants from starting school to age 14: outcome indicators	86
5.	Participants from starting school to age 14: Has the NDIS helped?	128
6.	Participants aged 15 to 24: outcome indicators	143
7.	Participants aged 15 to 24: Has the NDIS helped?	185
8.	Participants aged 25 and over: outcome indicators	208
9.	Participants aged 25 and over: Has the NDIS helped?	262

Copyright notice

© National Disability Insurance Scheme Launch Transition Agency

Copyright and use of the material in this document

Copyright in the material in this document, with the exception of third party material, is owned and protected by the National Disability Insurance Scheme Launch Transition Agency (National Disability Insurance Agency).

Insurance Scheme Launch Transition Agency' and you must not use the material for commercial purposes.

Reproduction of any material contained in this document is subject to the CC BY NC ND licence conditions available on the Creative Commons Australia site, as is the full legal code for this material.

Please see Copyright | NDIS for further details about the use of logos and third party material.

The material in this document, with the exception of logos, trade marks, third party material and other content as specified is licensed under Creative Commons Attribution Non-Commercial No Derivatives (CC BY NC ND) licence, version 4.0 International. You may share, copy and redistribute the document in any format. You must acknowledge the National Disability Insurance Agency as the owner of all intellectual property rights in the reproduced material by using '© National Disability

The National Disability Insurance Agency expects that you will only use the information in this document to benefit people with disability.

# **Executive summary**

### Background

Fundamentally, the National Disability Insurance Scheme (NDIS) was set up to allow people with disability to live "an ordinary life": to fully realise their potential, to participate in and contribute to society, and to have a say in their own present and future – just as other members of Australian society do.

These aims are embedded in the legislation which established the Scheme, the National Disability Insurance Scheme Act 2013<sup>1</sup> (the NDIS Act), and included in the National Disability Insurance Agency (NDIA) Corporate Plan 2020-2024<sup>2</sup>.

The NDIS Act underscores the Scheme objectives:

- To support the independence and social and economic participation of people with disability;
- To enable people with disability to exercise choice and control in the pursuit of their goals and the planning and delivery of their supports;
- To maximise independent lifestyles and full inclusion in the community; and
- To facilitate greater community inclusion of people with disability.

### **The NDIS Outcomes Framework questionnaires**

The NDIS Act further indicates that the Scheme adopts an insurance-based approach. An insurance-based approach considers the lifetime cost of participants (including early investment), and the outcomes achieved across participants' lifetimes. Measurement of outcomes and costs (both to the NDIS and other mainstream service systems) is critical in understanding the success of the NDIS and is a legislative requirement.<sup>3</sup>

Measurement of outcomes encompasses a wide range of areas, ranging from participants' progress towards achievement of their own individual goals, to the broad economic and societal benefits that are expected to emerge from the Scheme in the longer term.

The NDIS Outcomes Framework questionnaires have been developed to measure progress towards a common set of accepted goals for each participant, so that the results can be aggregated to provide a picture of how and where the Scheme is making a difference. In addition, a common set of goals allows benchmarking to Australians without disability and to other OECD countries.

### This report

This report summarises longitudinal outcomes for participants who have been in the Scheme for one year or more at 30 June 2020. A separate report covers baseline results for NDIS

<sup>&</sup>lt;sup>1</sup> <u>http://www.comlaw.gov.au/Details/C2019C00332/Download</u>

<sup>&</sup>lt;sup>2</sup> https://www.ndis.gov.au/about-us/publications/corporate-plan

<sup>&</sup>lt;sup>3</sup> Further, the National Disability Insurance Scheme forms part of the broader National Disability Strategy 2010-2020. The strategy is a commitment from all governments to a shared vision of an inclusive Australian society that enables people with disability to fulfil their potential as equal citizens. In particular, the strategy emphasises the need for improved performance of mainstream services in delivering outcomes for people with disability.

participants entering the Scheme during the four year period from 1 July 2016 to 30 June 2020. Two previous reports have covered both baseline and longitudinal experience, as at 30 June 2018 and 30 June 2019.<sup>4</sup>

This year's report adds a third year of longitudinal experience to the analysis, compared to last year's report. Three years is still not a lot of time to measure success – however, importantly this report builds on last year's analysis and continues the conversation on what factors are driving good outcomes, and indicates that the NDIS is continuing to improve many participants' lives.

The global COVID-19 pandemic that took hold from early 2020 is likely to have had an impact on at least some participant outcomes, such as community participation, and for older age groups, employment. This report investigates effects of the pandemic on outcomes via multiple regression models that allow for discontinuities in indicator levels, as well as different time trends, pre- and post-onset of the pandemic.

### **Baseline versus progress**

It is important to recognise that, with respect to how they are going in different areas of their lives, participants do not enter the Scheme on an equal footing. A whole range of individual and external factors will impact on the experiences of participants at baseline, including the nature and severity of their disability, where they live, and the extent of support they receive from family and friends.

An example of this baseline variability is provided by young adult participants with a psychosocial disability. These participants were found to have consistently poorer baseline outcomes, across all life domains. On the other hand, participants with a hearing impairment generally experience better baseline outcomes.

Consequently, the success of the Scheme should be judged not on baseline outcomes, but on how far participants have come since they entered the Scheme, acknowledging their different starting points.

It is also important to note that whilst some of the benefits of the Scheme should be quick to emerge (for example, assistance with daily living), others are much more long-term in nature (for example, employment), and measurable progress may take some years to emerge.

Finally, it should be recognised that some of the domains included in the outcomes framework (for example, home, education, and health) are not the primary responsibility of the NDIS, but are nevertheless included in order to provide a fuller picture of participants' circumstances.

### A lifespan approach

Leveraging research conducted by the NDIS Independent Advisory Council (IAC), the outcomes framework takes a lifespan approach to the measurement of outcomes, recognising that different milestones are important for different age groups.

Reflecting this lifespan approach, the report is organised with separate chapters for each participant age cohort<sup>5</sup>.

<sup>&</sup>lt;sup>4</sup> <u>https://data.ndis.gov.au/reports-and-analyses/outcomes-and-goals/participant-outcomes-report</u>

<sup>&</sup>lt;sup>5</sup> Participants from birth to before starting school, participants from starting school to age 14, participants aged 15 to 24, and participants aged 25 and over.

### Participants from birth to before starting school

Outcome indicators for children in the birth to before starting school age group measure the extent to which participants are gaining functional, developmental and coping skills appropriate to their ability and circumstances; showing evidence of autonomy in their everyday lives; accessing early intervention specialist services; and participating meaningfully in family and community life.

#### **Overall results**

- In the longitudinal analysis, significant **improvements** were observed across a number of indicators, for participants who have been in the Scheme for one, two and three years. Areas of particular note were:
  - Social, community and civic participation:
    - For participants who have been in the Scheme for three years, the percentage of parents/carers who say their child feels welcomed or actively included when they participate in age appropriate community, cultural or religious activities increased by 11.1% between baseline and third review, from 63.7% to 74.8%. The improvement was slightly stronger on an age-adjusted basis (11.7%). However, this indicator did not change significantly over the latest year. Additionally, the percentage of children who have friends they enjoy playing with has increased by 21.9% over three years, including a 2.2% increase in the latest year.
    - For participants who have been in the Scheme for two years, there was a two year improvement of 5.1% in the percentage of parents/carers who say their child feels welcomed or actively included when they participate in age appropriate community, cultural or religious activities, from 64.7% to 69.9%, with no significant change over the most recent year. Additionally, the percentage of children who have friends they enjoy playing with has increased by 12.5% over two years in the Scheme, from 42.4% to 54.9%, including a significant increase of 4.2% over the most recent year.
    - For participants who have been in the Scheme for one year, there was a one year improvement of 3.6%, from 63.4% to 67.1%, for the percentage of parents/carers who say their child feels welcomed or actively included when they participate in age appropriate community, cultural or religious activities. The percentage of children who have friends they enjoy playing with has increased by 8.4% over the one year in the Scheme, from 41.7% to 50.1%.
  - Specialist services:
    - For participants who have been in the Scheme for three years, the use of specialist services increased by 24.2% between baseline and third review, from 71.9% to 96.2%. The percentage of parents/carers who say specialist services support them in assisting their child increased by 12.9%, from 86.0% to 98.9%. Furthermore, the percentage of parents/carers who say specialist services help their child gain the skills they need to participate in everyday life increased by 12.9% (8.4% age adjusted) between baseline and third review, from 85.7% to 98.5%.
    - For participants who have been in the Scheme for two years, the use of specialist services increased by 21.8% two years after Scheme entry. The percentage of parents/carers who say specialist services support them in assisting their child increased by 5.1%, from 92.9% to 98.0%, and the percentage who say specialist

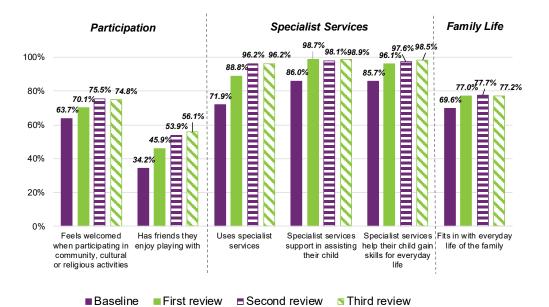
services help their child gain the skills they need to participate in everyday life increased by 5.7%, from 92.5% to 98.2%. Further, the percentage who say the services they use assist staff at their child's day care, pre-school, or community activities to support their child has increased by 34.1% over two years in the Scheme, from 45.5% to 79.5%.

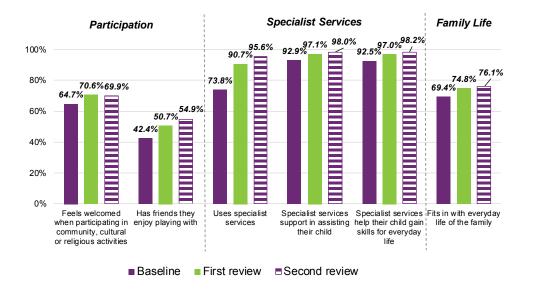
For participants who have been in the Scheme for one year, the use of specialist services increased by 17.7% after one year in the Scheme. In the same time frame, the percentage of parents/carers who say specialist services support them in assisting their child increased by 4.4%, from 91.6% to 96.0%, and the percentage who say specialist services help their child gain the skills they need to participate in everyday life increased by 5.5%, from 90.2% to 95.7%.

#### • Participating in family life:

- For participants who have been in the Scheme for three years, the percentage of parents/carers who say their child fits in with the everyday life of the family increased by 7.7% between baseline and third review, from 69.6% to 77.2%. On an age-adjusted basis the improvement was stronger (11.9%).
- For participants who have been in the Scheme for two years, the percentage of parents/carers who say their child fits in with the everyday life of the family increased by 6.7% between baseline and second review, from 69.4% to 76.1%. On an age-adjusted basis the improvement was stronger (10.7%). In addition, the percentage who say that their child gets along with his or her brothers or sisters has increased by 2.2% (3.3% on an age-adjusted basis), from 84.3% to 86.5%.
- For participants who have been in the Scheme for one year, the percentage of parents/carers who say their child fits in with the everyday life of the family increased by 5.4% between baseline and first review, from 67.8% to 73.2%. On an age-adjusted basis the improvement was stronger (7.4%). In addition, the percentage who say that their child gets along with his or her brothers or sisters has increased by 2.8% (3.7% on an age-adjusted basis), from 80.6% to 83.4%.

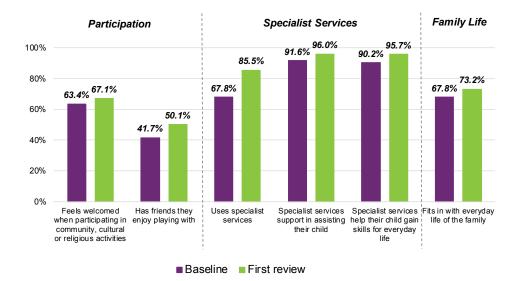
# Figure 1 Changes in indicators over three years for birth to starting school participants who have been in the Scheme for three years





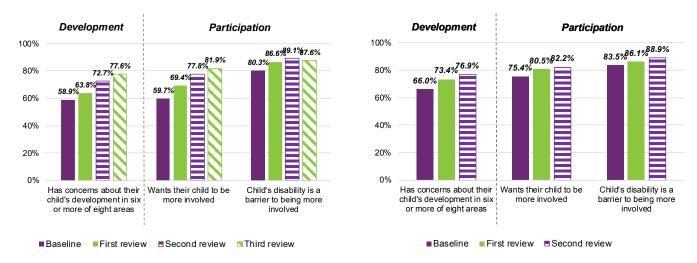
# Figure 2 Changes in indicators over two years for birth to starting school participants who have been in the Scheme for two years

# Figure 3 Changes in indicators over one year for birth to starting school participants who have been in the Scheme for one year



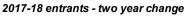
- Improved access to specialist services improves families' knowledge about their child's disability or developmental delay, which can lead to increased concerns and expectations for their child, particularly for families who have had little or no access to services prior to the Scheme.
  - Understandably, their *child's progress in major developmental areas* is a key concern of parents and carers. From the longitudinal analysis, the proportion of parents/carers expressing concern about their child's development in six or more of eight areas surveyed has increased:

- For participants who have been in the Scheme for three years, by 18.6% between baseline and third review, from 58.9% to 77.6%. However, on an age-adjusted basis, the increase was lower (8.2%).
- For participants who have been in the Scheme for two years, by 10.9% between baseline and second review, from 66.0% to 76.9%. However, on an age-adjusted basis, the increase was slightly lower (7.5%).
- For participants who have been in the Scheme for one year, by 5.7% between baseline and first review, from 67.6% to 73.2%. However, on an age-adjusted basis, the increase was slightly lower (4.0%).
- Social inclusion and interaction for children with a disability is another key concern, and the proportion of parents/carers who wanted their child to be more involved in community activities has increased:
  - For participants who have been in the Scheme for three years, by 22.2% between baseline and third review, from 59.7% to 81.9%. There was also a 7.3% increase in the percentage of parents/carers who say their child's disability is one of the barriers to being involved in community activities, from 80.3% at baseline to 87.6% at third review.
  - For participants who have been in the Scheme for two years, by 6.8% between baseline and second review, from 75.4% to 82.2%. There was also a 5.4% increase in the percentage of parents/carers who say their child's disability is one of the barriers to being involved in community activities, from 83.5% at baseline to 88.9% at second review.
  - For participants who have been in the Scheme for one year, by 4.6% between baseline and first review, from 74.0% to 78.7%. There was also a 3.0% increase in the percentage of parents/carers who say their child's disability is one of the barriers to being involved in community activities, from 84.2% at baseline to 87.3% at first review.

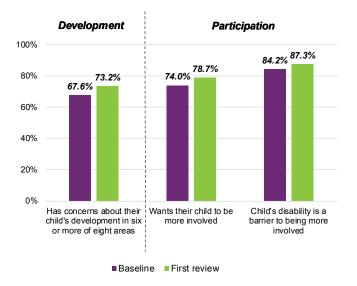


#### Figure 4 Changes in indicators for birth to starting school participants

#### 2016-17 entrants - three year change



2018-19 entrants - one year change



- Participants' longitudinal outcomes vary significantly with their level of function, primary disability, geographic remoteness and cultural background:
  - Longitudinal outcomes vary with participant level of function. Participants with a higher level of function tend to exhibit higher rates of improvement than those with a lower level of function.
  - Participants with a hearing impairment generally experience better longitudinal outcomes than those with other disabilities.
  - Participants from regional and remote locations, compared to those from major cities, show more positive longitudinal results on some indicators. For example, parents/carers of children in regional or remote areas more likely to improve with regard to having concerns in six or more developmental areas from baseline to first review, than children living in major cities.
  - Indigenous status was not strongly associated with longitudinal change: only one multiple regression model found a significant difference between Indigenous and non-

Indigenous participants. This model found that Indigenous children were more likely to deteriorate on the indicator "my child participates in age-appropriate community, cultural or religious activities" from baseline to second review.

- CALD participants were less likely to improve in making friends with people outside the family from baseline to first review and from baseline to second review. Parents/carers of CALD participants were also less likely to change their response from "Yes" to "No" for the indicator "I would like my child to be more involved in community activities".
- o Moving to a new LGA tends to have a negative impact for some transitions.
- Opinions on whether the NDIS has helped are generally positive for this cohort:
  - There is widespread agreement that the NDIS has helped in areas related to the child's development (91.2% after one year in the Scheme, 95.4% after two years in the Scheme, and 94.9% three years in the Scheme) and access to specialist services (90.5% after one year in the Scheme, increasing to 93.2% after two years and 93.8% after three years in the Scheme). Higher plan utilisation is strongly associated with a positive response after one year in the Scheme, across all five areas surveyed.
  - Parents/carers of participants whose plans are fully self-managed were significantly more likely to think that the NDIS has helped after one year in the Scheme than those of participants with agency-managed plans, across all domains except access to specialist services (where there was no significant difference).
  - Across all domains, the percentage who think the NDIS has helped is slightly higher for participants who have been in the Scheme for two years compared to those who have been in the Scheme for one year. However, opinions on whether the NDIS has helped remained relatively unchanged between the second and third review.
  - Overall, comparing three year responses with one year responses, the percentage responding positively increased slightly for all domains (by 1-4%, depending on the domain). The likelihood of improvement/ deterioration varied by some participant characteristics:
    - Participants who entered the Scheme due to disability (s24) are more likely to deteriorate between first and second review than those entering for early intervention (s25)
    - Participants who have used a higher percentage of their total supports, and in particular of their capacity building supports, are generally more likely to improve and less likely to deteriorate between first review and later reviews
    - Participants with higher annualised plan budget are less likely to improve
    - Parents/carers of Indigenous participants are more likely to deteriorate in thinking the NDIS has improved their child's access to specialist services.

### Participants from starting school to age 14

This age group includes children who are commencing school, up to the early teenage years. Typically these years of a child's life are characterised by increasing independence and development of relationships inside and outside the family.

#### **Overall results**

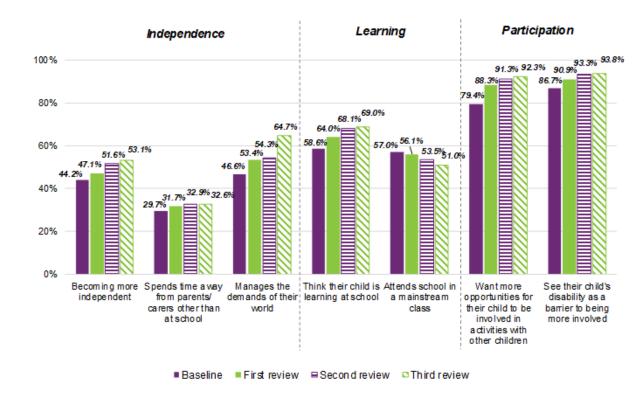
- In the longitudinal analysis, significant *improvements* were observed in areas related to growth in independence and lifelong learning:
  - Growth in independence:
    - For participants who have been in the Scheme for three years, the percentage of parents/carers who say their child is becoming more independent increased by 9.0% between baseline and third review, from 44.2% to 53.1%. On an age-adjusted basis the improvement was stronger (16.6%). The percentage of children who spend time away from parents/carers other than at school increased by 2.9% (2.3% age-adjusted) over three years in the Scheme, from 29.7% to 32.6%, although there has been no significant change in the most recent year. In addition, the percentage of children who manage the demands of their world has increased by 18.1% over three years (10.3% in the latest year).
    - For participants who have been in the Scheme for two years, the percentage of parents/carers who say their child is becoming more independent increased by 8.2% (13.6% after adjusting for age) between baseline and second review, from 41.7% to 49.9%. This includes a 3.4% increase in the latest year. The percentage of children who spend time away from parents/carers other than at school increased by 1.8%, from 30.4% to 32.2%, with a slight increase of 0.4% in the latest year.
    - For participants who have been in the Scheme for one year, the percentage of parents/carers who say their child is becoming more independent increased by 6.4% (7.8% age-adjusted) between baseline and first review, from 39.0% to 45.4%, while the percentage of children who spend time away from parents/carers other than at school increased by 1.5%, from 27.0% to 28.5%. In addition, the percentage of children who manage the demands of their world has increased by 7.1% over one year.

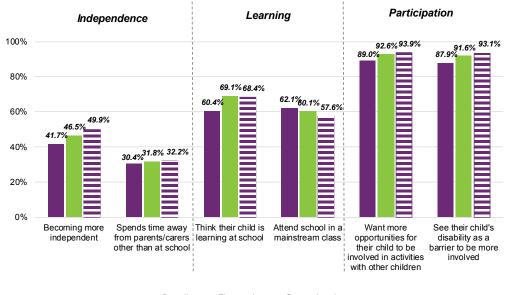
#### • Lifelong learning:

- For participants who have been in the Scheme for three years, the percentage who think their child is learning at school has increased, by 10.4% over three years, from 58.6% to 69.0%. However, the percentage of children who attend school in a mainstream class decreased by 6.0% between baseline and third review, from 57.0% to 51.0%.
- For participants who have been in the Scheme for two years, the percentage of parents/carers who think their child is learning at school increased by 8.0% over two years, from 60.4% to 68.4%. The percentage of children who attend school in a mainstream class decreased by 4.5% between baseline and second review, from 62.1% to 57.6%.
- For participants who have been in the Scheme for one year, the percentage of children who attend school in a mainstream class decreased by 2.1% between baseline and first review, from 65.9% to 63.8%.

- Children in this age group typically are developing a wider range of social skills and have moved from the home environment into school. For indicators of *social interaction and inclusion*, observed changes include:
  - Social, community and civic participation:
    - For participants who have been in the Scheme for three years, the percentage of parents/carers who say they would like their child to have more opportunities to be involved in activities with other children has increased by 12.9%, from 79.4% to 92.3%, between baseline and third review. Of those who would like their child to be more involved in activities with other children, the percentage who see their child's disability as a barrier increased by 7.1%, from 86.7% at baseline to 93.8% at third review.
    - For participants who have been in the Scheme for two years, the percentage of parents/carers who say they would like their child to have more opportunities to be involved in activities with other children increased by 4.9% between baseline and second review, from 89.0% to 93.9%. Of those who would like their child to be more involved in activities with other children, the percentage who see their child's disability as a barrier increased by 5.2% between baseline and the second review, from 87.9% to 93.1%.
    - For participants who have been in the Scheme for one year, the percentage of parents/carers who say they would like their child to have more opportunities to be involved in activities with other children increased by 6.3% between baseline and first review, from 79.4% to 85.7%. Of those who would like their child to be more involved in activities with other children, the percentage who see their child's disability as a barrier increased by 3.4% between baseline and the first review, from 88.2% to 91.6%.

# Figure 5 Changes in indicators for starting school to age 14 participants who have been in the Scheme for three years

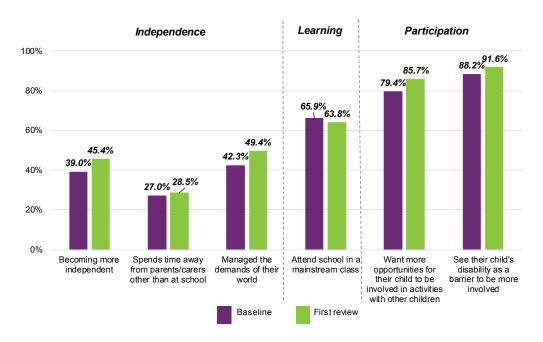




# Figure 6 Changes in indicators for starting school to age 14 participants who have been in the Scheme for two years

Baseline First review Second review

# Figure 7 Changes in indicators for starting school to age 14 participants who have been in the Scheme for one year



- Participants' longitudinal outcomes vary significantly with their level of function, primary disability, geographic remoteness and cultural background:
  - Longitudinal outcomes vary with participant level of function. Participants with higher level of function tend to exhibit higher rates of improvement than those with lower level of function.
  - Participants with a sensory disability generally experience better outcomes than those with other disabilities.
  - Participants from regional and remote locations, show more positive results on some indicators compared to those from major cities. For example, they are more likely to be gaining in independence, and are less likely to move out of a mainstream class at school.
  - CALD participants tend to be less likely to improve on a number of the independence indicators, such as having a genuine say in decisions about themselves, and are less likely to move into a mainstream class at school. However, they are more likely to improve and less likely to deteriorate in getting along with their siblings.
  - Indigenous participants who attend school in a mainstream class are more likely than non-Indigenous participants to move out of a mainstream class between first and second review.
  - Relocating to a new LGA was generally associated with less favourable transitions, with participants being less likely to improve and/or more likely to deteriorate.
- Opinions on whether the NDIS has helped vary by domain for the starting school to 14 cohort:
  - The percentage responding positively is lowest for access to education (39.9% after one year in the Scheme and essentially unchanged after two years and three years in the Scheme) and highest for independence (60.5% after one year in the Scheme, increasing to 65.4% after two years in the Scheme and 68.5% after three years in the Scheme). For education, however, the mainstream education system has a much bigger role in ensuring successful outcomes than the NDIS.
  - Higher plan utilisation is a strong predictor of a positive response across all four areas surveyed, after one, two and three years in the Scheme. In particular, those with very low utilisation (below 20%) are much less likely to say that the NDIS has helped. The fact that utilisation tends to be lowest for the starting school to 14 cohort may contribute to the observed lower levels of satisfaction across all domains, compared to participants in other age groups.
  - Participants who self-manage fully, those who did not receive services from State/Territory or Commonwealth programs before entering the NDIS, and those with a higher annualised plan budget were more likely to respond positively after one year in the Scheme. By contrast, Indigenous participants, those with lower level of function, and those living in regional or remote areas were less likely to respond positively.
  - The percentage who think that the NDIS has helped increased by 4-9% between first and third review across all domains except for access to education, where there was little change (1%). The likelihood of improvement/deterioration varied by some participant characteristics:

- Participants with higher utilisation of capacity building supports were more likely to improve and less likely to deteriorate across all domains
- Participants who self-manage (either fully or partly) were more likely to improve across all domains except in relation to access to education
- Participants who relocated to a different LGA tended to be more likely to deteriorate
- CALD participants were more likely to improve and less likely to deteriorate in relation to access to education
- Female participants were more likely to improve and less likely to deteriorate between baseline and third review in the Relationship domain
- Participants who did not receive Commonwealth or State/Territory support services prior to joining the NDIS were less likely to deteriorate than those who previously received State/Territory support services.

### Participants aged 15 to 24

Participants aged 15 to 24, the young adult cohort, are characterised by increasing levels of independence and participation in community. They are also likely to be impacted by major life events such as moving out of the family home, and transitioning from school to employment or further study.

#### **Overall results**

- Overall, significant *improvements* were observed across a number of indicators, particularly in the areas of Choice and Control, Work, and Social, Community and Civic Participation.
  - Choice and control:
    - For participants who have been in the Scheme for three years, the percentage of participants who make more decisions in their life than they did two years ago increased by 7.5%, from 58.9% at baseline to 66.4% at third review. The percentage who choose who supports them increased by 3.6%, from 31.1% to 34.7%, and the percentage who make most decisions in their life increased by 5.1%, from 24.9% to 30.0%.
    - For participants who have been in the Scheme for two years, the percentage of participants who make more decisions in their life than they did two years ago increased by 6.9%, from 56.7% at baseline to 63.6% at second review. The percentage who choose who supports them increased by 2.2%, from 32.9% to 35.1%, and the percentage who make most decisions in their life increased by 3.8%, from 25.4% to 29.2%.
    - For participants who have been in the Scheme for one year, the percentage of participants who make more decisions in their life than they did two years ago increased by 4.9%, from 54.8% at baseline to 59.6% at first review.

#### • **Work**:

- For participants who have been in the Scheme for three years, the percentage of participants in a paid job increased by 11.8%, from 12.7% at baseline to 24.5% at third review. The percentage of participants working 15 hours or more per week increased by 19.2% from 33.1% at baseline to 52.3% at third review.
- For participants who have been in the Scheme for two years, the percentage of participants in a paid job increased by 6.4%, from 15.3% at baseline to 21.7% at second review. The percentage of participants working 15 hours or more per week increased by 12.7% from 40.5% at baseline to 53.2% at second review.
- For participants who have been in the Scheme for one year, the percentage of participants in a paid job increased by 2.4%, from 17.7% at baseline to 20.1% at first review. The percentage of participants working 15 hours or more per week increased by 4.6% from 40.9% at baseline to 45.5% at first review.

#### • Lifelong learning:

 For participants who have been in the Scheme for three years, the percentage who get opportunities to learn new things increased by 2.7%, from 62.4% at baseline to 65.1% at third review. The percentage who have post-school qualifications increased by 5.2% from 19.1% at baseline to 24.3% at third review.

- For participants who have been in the Scheme for two years, the percentage who get opportunities to learn new things increased by 3.5%, from 60.7% at baseline to 64.2% at second review. The percentage who have post-school qualifications increased by 3.3% from 19.8% at baseline to 23.1% at second review.
- For participants who have been in the Scheme for one year, the percentage who get opportunities to learn new things increased by 2.6%, from 57.6% at baseline to 60.2% at first review. The percentage who have post-school qualifications increased by 1.2% from 21.1% at baseline to 22.3% at first review.

#### • Social, community and civic participation:

- For participants who have been in the Scheme for three years, the percentage actively involved in a community, cultural or religious group in the previous 12 months increased by 14.0%, from 31.1% at baseline to 45.1% at third review. The percentage who spend their free time doing activities that interest them increased 6.6%, from 76.1% to 82.7% at third review. The percentage who know people in their community increased 7.0% from 51.6% to 58.6%.
- For participants who have been in the Scheme for two years, the percentage actively involved in a community, cultural or religious group in the previous 12 months increased by 10.7%, from 32.4% at baseline to 43.1% at second review. The percentage who spend their free time doing activities that interest them increased 4.8%, from 75.5% to 80.2% at second review. The percentage who know people in their community increased 5.4% from 55.2% to 60.5%.
- For participants who have been in the Scheme for one year, the percentage actively involved in a community, cultural or religious group in the last 12 months increased by 5.4%, from 34.9% at baseline to 40.4% at first review. The percentage who spend their free time doing activities that interest them increased 4.2%, from 73.1% to 77.3% at first review. The percentage who know people in their community increased 3.2% from 50.6% to 53.8%.

# Figure 8 Changes in indicators over three years for participants aged 15-24 who have been in the Scheme for three years – choice and control and employment

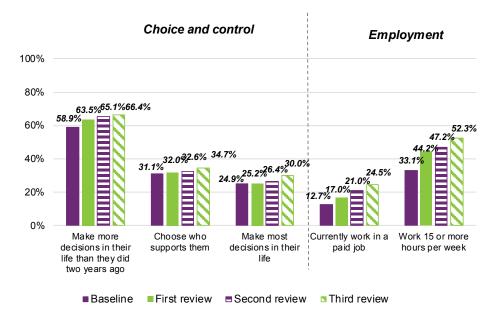
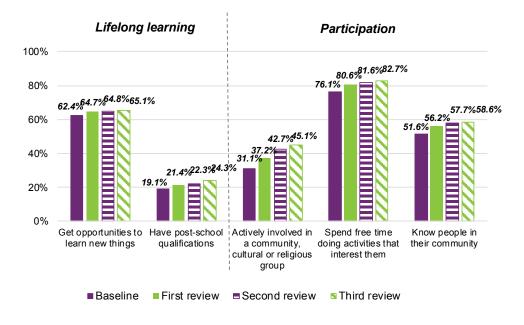


Figure 9 Changes in indicators over three years for participants aged 15-24 who have been in the Scheme for three years – lifelong learning and participation



# Figure 10 Changes in indicators over two years for participants aged 15-24 who have been in the Scheme for two years – choice and control and employment

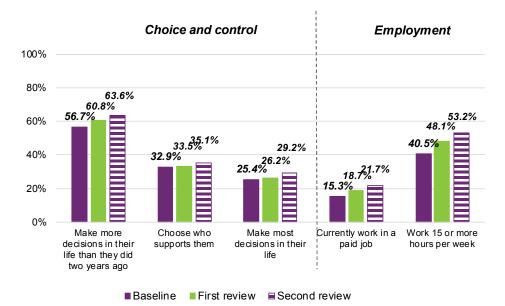


Figure 11 Changes in indicators over two years for participants aged 15-24 who have been in the Scheme for two years – lifelong learning and participation

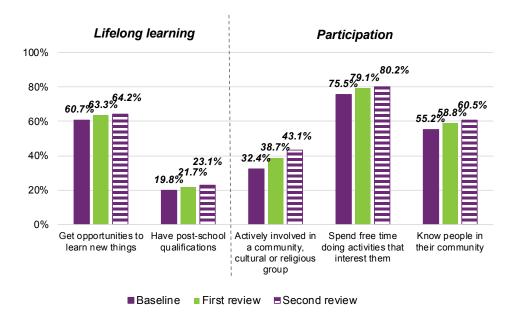
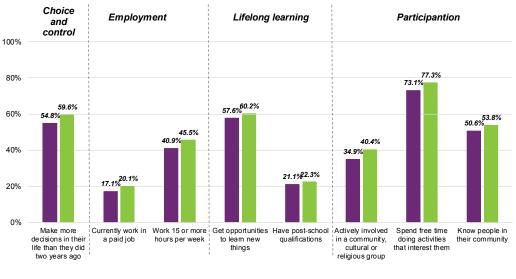


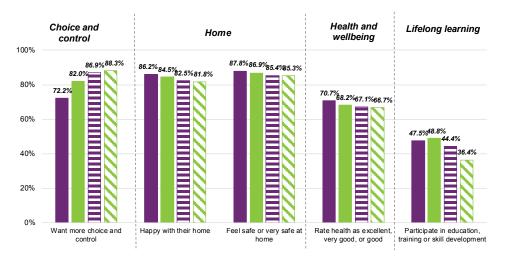
Figure 12 Changes in indicators over one year for participants aged 15-24 who have been in the Scheme for one year – choice and control, employment, lifelong learning and participation



- Baseline First review
- **Other significant changes** have been observed for some indicators in the Choice and Control, Home, Health and Wellbeing and Lifelong Learning domains.
  - Choice and control: While improvements were observed for some choice and control indicators, more participants also expressed a desire for greater choice and control, with the percentage seeking more choice and control increasing:

- By 16.1% over three years for participants who have been in the Scheme for three years, from 72.2% at baseline to 88.3% at third review.
- By 8.6% over two years for participants who have been in the Scheme for two years, from 82.1% at baseline to 90.7% at second review.
- By 4.6% over one year for participants who have been in the Scheme for one year, from 82.6% at baseline to 87.5% at first review.
- *Home*: There have been small but significant reductions in the percentages of participants who are happy with their home and who felt safe or very safe in their home:
  - For participants who have been in the Scheme for three years, the percentage happy with their home decreased by 4.4%, from 86.2% to 81.8% over three years. The percentage feeling safe or very safe in their home decreased by 2.5%, by 87.8% to 85.3%.
  - For participants who have been in the Scheme for two years, reductions over two year were smaller: a 2.1% decrease for the percentage happy with their home, and a 1.6% decrease for the percentage feeling safe or very safe in their home.
  - For participants who have been in the Scheme for one year, the percentage of participants feeling safe or very safe in their home decreased by 1.5% from 84.3% to 82.8%. However, the percentage happy with their home did not change significantly.
- *Health and wellbeing*: The percentage of participants who rated their health as excellent, very good or good has declined:
  - For participants who have been in the Scheme for three years, by 4.0%, from 70.7% at baseline to 66.7% at third review.
  - For participants who have been in the Scheme for two years, by 1.4%, from 68.0% at baseline to 66.5% at second review.
  - For participants who have been in the Scheme for one year, by 2.0%, from 68.9% at baseline to 66.8% at first review.
- Lifelong learning: There has been a reduction in the percentage of participants who participate in education, training or skill development, possibly reflecting the transition from study to work:
  - For participants who have been in the Scheme for three years, a decrease of 11.1% was observed, from 47.5% at baseline to 36.4% at third review.
  - For participants who have been in the Scheme for two years, a decrease of 7.8% was observed, from 48.1% at baseline to 40.4% at second review.
  - For participants who have been in the Scheme for one year, a decrease of 1.6% was observed, from 42.0% at baseline to 40.4% at first review.

Figure 13 Changes in indicators over three years for participants aged 15-24 who have been in the Scheme for three years – choice and control, home, health and wellbeing and lifelong learning



■Baseline ■First review ■Second review ■Third review

Figure 14 Changes in indicators over one year for participants aged 15-24 who have been in the Scheme for two years – choice and control, home, health and wellbeing and lifelong learning

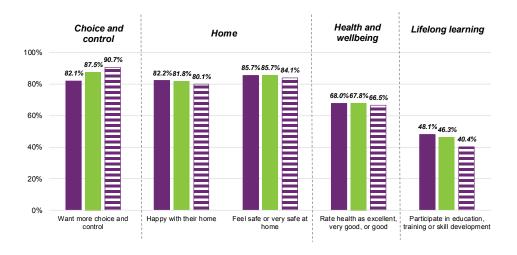
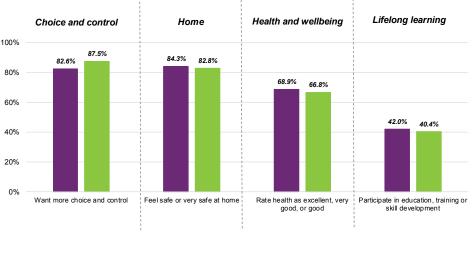




Figure 15 Changes in indicators over one year for participants aged 15-24 who have been in the Scheme for one year – choice and control, home, health and wellbeing and lifelong learning





- Longitudinal outcomes for the 15 to 24 age group vary significantly with participants' level of function, primary disability, geographic remoteness, and cultural background:
  - Longitudinal outcomes vary with participant level of function. Participants with a higher level of function tend to exhibit higher rates of improvement than those with a lower level of function.
  - Participants with a hearing impairment generally experience better outcomes. Additionally, participants with cerebral palsy are less likely to deteriorate with regard to knowing people in their community.
  - Participants from regional areas are more likely to improve over time in knowing people in their community. They were also more likely to want to see their friends more often compared to baseline levels.
  - Participants from a CALD background are more likely to deteriorate over time with respect to making most decisions in life, and knowing people in the community.
  - Indigenous participants were more likely to start wanting more choice and control, and more likely to improve with respect to knowing people in their community.
  - Relocating to a new LGA was significant in a large number of models, with the direction of the effect being mostly negative but sometimes mixed or positive. For example, participants who relocated were more likely to improve on the indicator "I make most decisions in my life". However, they were more likely to deteriorate with respect to having a regular doctor and knowing people in their community.
- Opinions on whether the NDIS has helped vary considerably by domain for the young adult cohort:
  - The percentage who think that the NDIS has helped is lowest for work (18.5% after one year in the Scheme, decreasing to 16.3% after two years in the Scheme and 15.0% after three years in the Scheme), and highest for daily living (60.7% after one year in the Scheme, increasing to 65.4% after two years in the Scheme and 69.5% after three years in the Scheme).

- Higher plan utilisation, and in particular higher utilisation of capacity building supports, is strongly associated with a positive response across most domains, after one, two and three years in the Scheme. Perceptions also tended to improve with increasing participant age. Participants from Western Australia tended to be more positive, and those from Tasmania less positive.
- The percentage who think that the NDIS has helped increased between first and third review across all domains except home and work, where small decreases were observed, and lifelong learning, where there was little change. The likelihood of improvement/deterioration varied by participant characteristics:
  - Higher plan utilisation, and in particular utilisation of capacity building supports, is associated with a higher likelihood of improvement and a lower likelihood of deterioration.
  - Where the plan is self-managed either fully or partly, participants were more likely to improve in the choice and control, daily living, and health and wellbeing domains.
  - For a number of domains, in particular daily living and home, higher annualised plan budget was associated with a higher likelihood of improvement.
  - Female participants were more likely to improve in the lifelong learning domain but less likely to improve in the work domain.

### Participants aged 25 and over

#### **Overall results**

- In the longitudinal analysis, significant *improvements* have been observed for indicators across the relationships, health and wellbeing, lifelong learning, and social, community and civic participation domains.
  - Social, community and civic participation:
    - For participants who have been in the Scheme for three years, the percentage actively involved in a community, cultural or religious group in the last 12 months increased by 12.4% between baseline and third review, from 36.6% to 49.0%. The percentage of participants who spend their free time doing activities that interest them increased by 8.0%, from 69.1% at baseline to 77.1% in third review, and the percentage who know people in their community increased by 8.0%, from 59.2% to 67.2%.
    - For participants who have been in the Scheme for two years, the percentage actively involved in a community, cultural or religious group in the last 12 months increased by 9.1% between baseline and second review, from 36.2% to 45.3%. The percentage of participants who spend their free time doing activities that interest them increased by 6.5%, from 66.0% to 72.5%, and the percentage who know people in their community increased by 4.3%, from 63.1% to 67.3%.
    - For participants who have been in the Scheme for one year, the percentage actively involved in a community, cultural or religious group in the last 12 months increased by 3.4% between baseline and the first review, from 38.1% to 41.5%. Further, the percentage of participants who spend their free time doing activities that interest them increased by 4.3% from 61.6% to 65.9%, and the percentage who know people in their community increased by 2.8%, from 57.5% to 60.3%.
  - *Health and wellbeing*: health indicators suggest an improvement in accessing care, lower rates of hospitalisation, and a more positive outlook on life:
    - For participants who have been in the Scheme for three years, the percentage of participants who had been to the hospital in the last 12 months decreased by 6.1% between baseline and the third review, from 40.2% to 34.1%, the percentage who had no difficulties accessing health services increased by 3.9%, from 70.1% to 73.9%, and the percentage who have a doctor they see on a regular basis increased by 8.9%, from 83.2% to 92.1%.
    - For participants who have been in the Scheme for two years, improvements over two years were also observed for these indicators: hospitalisations declined by 6.2% from 41.4% to 35.2%, the percentage who had no difficulties accessing health services increased by 3.3% from 64.9% to 68.2%, and the percentage who have a doctor they see on a regular basis increased by 4.1%, from 90.7% to 94.8%. In addition, the percentage of participants who felt delighted, pleased, or mostly satisfied about their life increased by 7.2%, from 44.2% to 51.4%.
    - For participants who have been in the Scheme for one year, one year improvements were also observed on these indicators. The percentage of participants who had been to the hospital in the last 12 months decreased by 4.1%, from 41.9% to 37.8%, the percentage of participants who did not have any difficulties accessing health services increased by 1.5%, from 65.0% to 66.5%,

and the percentage who have a doctor they see on a regular basis increased by 2.6%, from 90.1% to 92.7%.

- *Relationships*: improvements in the relationships domain tended to be less consistent across cohorts than those for other domains. However, some statistically significant improvements of note include the following:
  - For participants who have been in the Scheme for two years, the percentage of participants who say they provide care for others but don't get enough assistance decreased by 2.7%, from 80.5% at baseline to 77.8% at second review. There were also small decreases for those who have been in the Scheme for three years and one year, but the changes were not significant.
  - For participants who have been in the Scheme for one year, the percentage of participants who had someone outside their home to call on for practical help increased by 8.0%, from 75.2% at baseline to 83.2% at first review. Further, the percentage of participants who had someone outside their home to call on for emotional support increased by 4.9%, from 76.2% to 81.1%, and the percentage of participants who often felt lonely decreased by 4.5%, from 19.9% to 15.5%.
- Lifelong Learning: More participants are getting opportunities to learn new things, with increases of:
  - 5.0% between baseline (47.1%) and third review (52.2%) for the cohort who have been in the Scheme for three years;
  - 4.2% between baseline (41.9%) and second review (46.1%) for those who have been in the Scheme for two years; and
  - 2.7% between baseline (38.2%) and first review (40.9%) for those who have been in the Scheme for one year.

Figure 16 Changes in indicators over three years for participants aged 25 and over who have been in the Scheme for three years – participation, health and wellbeing, and lifelong learning

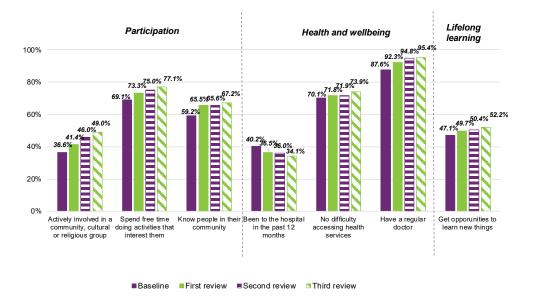
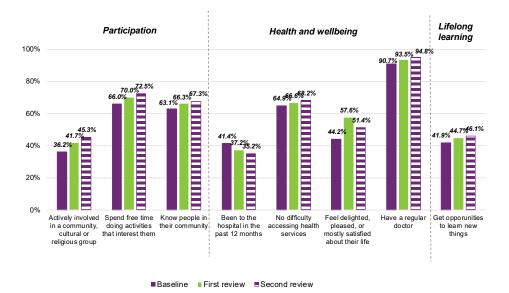
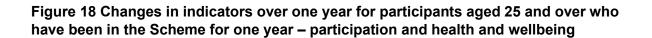
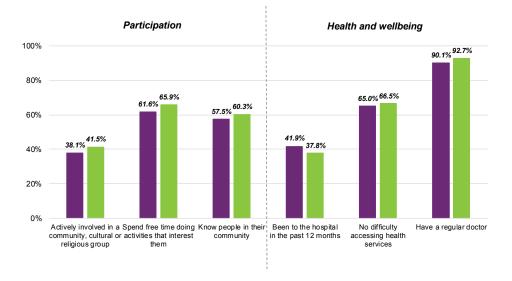


Figure 17 Changes in indicators over two years for participants aged 25 and over who have been in the Scheme for two years – participation, health and wellbeing, and lifelong learning

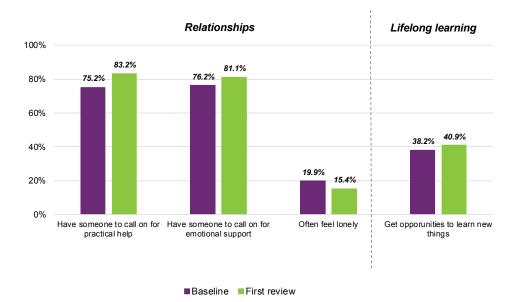






Baseline First review

# Figure 19 Changes in indicators over one year for participants aged 25 and over who have been in the Scheme for one year – relationships and lifelong learning



- **Other significant changes** have been observed in some indicators across choice and control, relationships, home, health and wellbeing, and social, community and civic participation domains.
  - Choice and control:
    - For participants who have been in the Scheme for three years, the percentage wanting more choice and control in their life has increased by 16.0% between baseline and third review, from 65.4% to 81.4%.
    - For participants who have been in the Scheme for two years, the percentage wanting more choice and control in their life has increased by 7.8% between baseline and second review, from 77.8% to 85.6%.
    - For participants who have been in the Scheme for one year, the percentage wanting more choice and control in their life has increased by 3.9% between baseline and first review, from 79.8% to 83.7%.
  - Home:
    - For participants who have been in the Scheme for three years, the percentage who feel safe or very safe at home has decreased by 2.6% from 79.1% at baseline to 76.5% at third review.
    - For participants who have been in the Scheme for two years, the percentage who feel safe or very safe at home has decreased by 1.7% from 75.4% at baseline to 73.7% at second review.
    - For participants who have been in the Scheme for one year, the percentage who feel safe or very safe at home has decreased by 1.4% from 73.1% at baseline to 71.8% at first review.
  - Health and wellbeing: Fewer participants rated their health as excellent, very good or good:

- For participants who have been in the Scheme for three years, the percentage decreased by 5.1%, from 51.2% at baseline to 46.2% at third review.
- For participants who have been in the Scheme for two years, the percentage decreased by 3.2%, from 47.6% at baseline to 44.4% at second review.
- For participants who have been in the Scheme for one year, the percentage decreased by 1.6%, from 45.9% at baseline to 44.3% at first review.

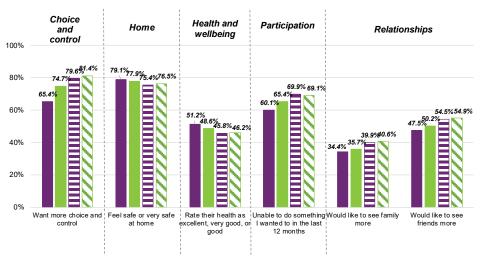
#### • Social, community and civic participation:

- For participants who have been in the Scheme for three years, there was a threeyear increase of 9.0% from 60.1% to 69.1% in the percentage of participants who wanted to do certain things in the last 12 months but could not.
- For participants who have been in the Scheme for two years, there was a two-year increase of 5.1% from 68.0% to 73.0% in the percentage of participants who wanted to do certain things in the last 12 months but could not.
- For participants who have been in the Scheme for one year, there was a one-year increase of 2.9% from 68.5% to 71.4% in the percentage of participants who said there was something they wanted to do in the last 12 months but could not.

#### • Relationships:

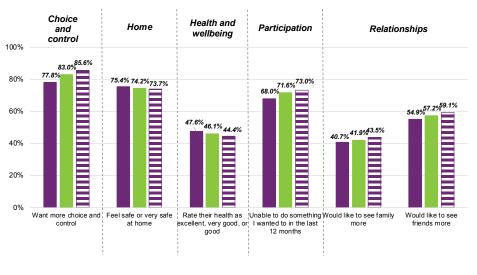
- For participants who have been in the Scheme for three years, there was a 6.1% increase in the percentage of participants who would like to see their family more, from 34.4% at baseline to 40.6% at third review, and an increase of 7.5% in the percentage of participants who would like to see their friends more, from 47.5% at baseline to 54.9% at third review.
- For participants who have been in the Scheme for two years, there were slight increases in the percentage who would like to see their family (2.8%, from 40.7% to 43.5%) and friends (4.2%, from 54.9% to 59.1%).
- For participants who have been in the Scheme for one year, there were also slight increases in the percentage who would like to see their family (1.6%, from 42.3% to 43.9%) and friends (1.6%, from 60.2% to 61.8%).

# Figure 20 Changes in indicators over three years for participants aged 25 and over who have been in the Scheme for three years



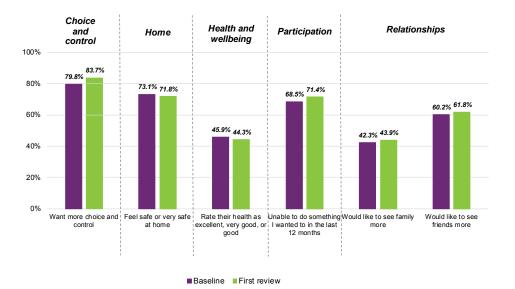
■Baseline ■First review ■Second review ■Third review

# Figure 21 Changes in indicators over two years for participants aged 25 and over who have been in the Scheme for two years



■Baseline ■First review ■Second review

# Figure 22 Changes in indicators over three years for participants aged 25 and over who have been in the Scheme for one year



- Longitudinal changes in outcomes vary significantly with participants' level of function, primary disability, geographic remoteness and cultural background:
  - The impact of disability type on outcomes varies by indicator. In longitudinal analyses, participants with a spinal cord injury or other physical injury were more likely to improve and less likely to deteriorate with regard to being able to advocate for themselves, however they were less likely to improve and more likely to deteriorate with regard to being in the hospital in the last 12 months.
  - Longitudinal outcomes also vary with participant level of function. Participants with a higher level of function tend to exhibit higher rates of improvement than those with a lower level of function.
  - Participants not living in major cities were more likely to improve with regard to being able to advocate for themselves.
  - CALD participants were less likely to improve and more likely to deteriorate with respect to being able to advocate for themselves. They were also less likely to improve getting opportunities to learn new things.
  - Older participants were more likely to change their response from "no" to "yes" with respect to wanting more choice and control in their lives.
  - Participants in supported independent living (SIL) were generally more likely to improve and less likely to deteriorate compared with participants not in SIL. In particular, outcomes were more positive in all models for having been to the hospital in the last 12 months, and SIL participants were more likely to maintain having a regular doctor in all transitions from baseline. However, they were less likely to improve with respect to knowing people in their community between baseline and either first or second review.
  - Relocating to a new LGA was significant in a large number of models, with the direction of the effect being mostly negative but sometimes mixed. In particular, the effect was negative for having been to hospital in the last 12 months, getting the

opportunity to learn new things, saying there were certain things they wanted to do in the last 12 months but could not, and knowing people in their community.

- Opinions on whether the NDIS has helped tend to be slightly more optimistic than the young adult cohort (apart from lifelong learning and work), but generally reflect a similar pattern by domain:
  - The percentage who think the NDIS has helped is highest for daily activities (72.8% after one year in the Scheme, increasing to 79.0% after two years in the Scheme and 82.7% after three years in the Scheme), followed by choice and control (69.2% after one year in the Scheme, increasing to 74.1% after two years in the Scheme and 77.5% after three years in the Scheme). Percentages are lowest for home (30.7% after one year, 29.5% after two years and 31.7% after three years) and work (19.5% after one year, 18.1% after two years and 18.5% after three years).
  - Higher plan utilisation is strongly associated with a positive response across all eight domains, after both one, two and three years in the Scheme. Perceptions also tended to improve with increasing plan budget. Participants from Western Australia and Queensland tended to be more positive, and those from Victoria and South Australia less positive.
  - The percentage who think that the NDIS has helped increased by 1% to 10% between first and third review across all domains except work, where there was a 1% decrease. The likelihood of improvement/deterioration varied by some participant characteristics:
    - Female participants were more likely to improve in the daily living domain but more likely to deteriorate in choice and control.
    - Participants who self-manage were more likely to improve and/or less likely to deteriorate in the choice and control, daily living, and health and wellbeing domains.
    - Older participants were less likely to deteriorate in choice and control, daily living, home and health and wellbeing, however they were less likely to improve and/or more likely to deteriorate in lifelong learning and work.
    - Participants living in a regional area were more likely to improve and/or less likely to deteriorate in daily living, relationships, home, health and wellbeing, lifelong learning and social and community participation.
    - Participants in supported independent living (SIL) were more likely to improve and/or less likely to deteriorate for at least some transitions across all domains.

### COVID-19

The global pandemic that took hold from early 2020 is likely to have had an impact on at least some participant outcomes, such as community participation, and for older age groups, employment.

To investigate which outcomes may have been affected by the pandemic via quantitative modelling, additional time-related terms were included in the regression models.<sup>6</sup> These terms allow for a step change in the probability of a participant changing their response, and/or a different trend over time, when the later review occurs during the COVID-19 pandemic.

#### Participants from birth to before starting school

Results from the modelling were generally negative, with participants being less likely to improve or more likely to deteriorate in their response compared to the pre-COVID period:

- The COVID-19 step-change variable was significant in at least one model for all but one of the nine indicators modelled ("My child fits in with the everyday life of the family"), and had a negative impact for all but one of these models, with responses being less likely to improve or more likely to deteriorate between the two time points when the later time point occurred during the COVID-19 period. For example, participants were less likely to improve between baseline and first or second review with regard to:
  - Participating in age-appropriate community, cultural or religious activities.
  - Being able to make friends with people outside the family.
- The one indicator where there was a positive step change was "My child joins me when I complete tasks at home", where participants were less likely to deteriorate between baseline and first review, when the review occurred during the COVID period.
- There were two indicators where a favourable change in the time trend was observed after the COVID-19 date: "My child fits in with the everyday life of the family" and "My child's disability is a barrier to being more involved" (although the latter indicator was preceded by a negative step change).

#### Participants from starting school to age 14

There were some significant changes to participants' longitudinal outcomes during the pandemic, and results were mixed, being favourable in some models but unfavourable in others. For example:

- For the indicator "My child gets along with his/her siblings", parents/carers were less likely to change their response (either improve or deteriorate) in all one-year transitions, when the later review occurred during the COVID period. In addition, responses were less likely to improve over three years when the third review occurred during the COVID period.
- For the indicator "There is enough time each week for all members of the family to get their needs met", parents/carers were less likely to change their response (either improve or deteriorate) between baseline and first review, and they were less likely to deteriorate between second and third review.

<sup>&</sup>lt;sup>6</sup> The methodology and limitations of the approach are discussed in Section 2.5. In particular, the modelling is based on only about three months of experience during the pandemic, and some of the effects detected are only slight.

- With respect to their child becoming more independent, parents/carers were less likely to change their response (either improve or deteriorate) between baseline and first review, but were less likely to improve between second and third review. There was also a negative change in time trend post-COVID, with improvement becoming less likely over time for some transitions.
- However, parents/carers were less likely to deteriorate with respect to perceiving their child's disability as a barrier to being more involved between baseline and first review, where the review occurred during the COVID period.

#### Participants aged 15 to 24

There were some significant changes to participants' longitudinal outcomes during the pandemic, and results were mixed, being favourable in some models but unfavourable in others. For example:

- Participants were generally less likely to report an improvement between reviews with respect to making more decisions than they did two years ago, when the later review occurred during the pre-COVID period.
- Participants who gave their second response during the COVID period were less likely to change their response from "Yes" (wanting to see their friends more often) to "No" (not wanting to see them) in all transitions from baseline.
- However, participants were less likely to deteriorate between baseline and second review in relation to wanting to do certain things in the last 12 months but being unable to, when the later response occurred during the COVID period.

#### Participants aged 25 and over

There were some significant changes to participants' longitudinal outcomes during the pandemic, and results were mixed, being favourable in some models but unfavourable in others. For example:

- With respect to having a regular doctor, participants were less likely to deteriorate between baseline and second or third review, when the review occurred during the COVID period. There was also a favourable change in time trend post-COVID, with deterioration becoming less likely over time, for the transition from baseline to third review.
- However, participants were less likely to improve with respect to knowing people in their community between baseline and second review, and between second and third review, when the later review took place during the COVID period.
- Participants who gave their second response during the COVID period were less likely to change their response from "Yes" (wanting to see their family more often) to "No" (not wanting to see them) between baseline and first or second review, as well as between first and second review.

# 1. Introduction

### 1.1 Background

This report summarises longitudinal outcomes for participants who have been in the Scheme for one year or more at 30 June 2020. A separate report covers baseline results for NDIS participants entering the Scheme during the four year period from 1 July 2016 to 30 June 2020. Two previous reports have covered both baseline and longitudinal experience, as at 30 June 2018 and 30 June 2019.<sup>7</sup>

The purpose of the report is to provide a picture of how participants are progressing under the NDIS, based on information provided by them in interviews conducted using the NDIS outcomes framework questionnaires. The results are intended to provide insight into how the Scheme is making a difference, and point to any areas where improvements may be required.

The present report focusses on results. Readers requiring further background should refer to the previous reports, which contains additional information regarding the broader scope of outcomes measurement within the NDIA, and the development and implementation of the outcomes framework questionnaires.

### 1.2 Overview

In this year's report, we have mainly concentrated on results from the latest year's experience, during 2019-20. However, for the longitudinal analysis we have also considered overall change from baseline. Results from previous years can be found in earlier reports, and are also summarised in the appendices, which include high level summaries of results for all questions.

The global coronavirus pandemic occurring during 2020 could be expected to impact some of the outcome indicators for NDIS participants, for example those related to employment and community participation, with the impact potentially felt for approximately the last four months of the 2019-20 year. We have attempted to analyse differences occurring during this period using regression models.

The remainder of the report is organised as follows:

- Sections 2 and 3 contain results for participants from birth to before starting school.
- Sections 4 and 5 contain results for participants from starting school to age 14.
- Sections 6 and 7 contain results for young adult participants aged 15 to 24.
- Sections 8 and 9 contain results for adult participants aged 25 and over.

More detailed results contained in the Appendices include:

- Appendix A: Numbers of questionnaires completed by participants
- Appendix B: Long form participation and representativeness analysis
- Appendix C: Variables used in the regression modelling
- Appendix D: Age adjustment methodology
- Appendix E: Participants from birth to before starting school
- Appendix F: Participants from starting school to age 14

<sup>&</sup>lt;sup>7</sup> https://data.ndis.gov.au/reports-and-analyses/outcomes-and-goals/participant-outcomes-report

- Appendix G: Participants aged 15 to 24
- Appendix H: Participants aged 25 and over.

### **1.3 Questionnaires and domains**

Table 1.1 sets out the questionnaire versions, and domains, including letter codes used in the report.

Table 1.1 Participant outcomes framework questionnaire versions and do	omains
--	--------

Domain	Children: 0 to before starting school	Children: starting school to age 14	Young adults: 15 to 24	Adults: 25 and over
Daily living (DL)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Choice and control (CC)	V	<ul> <li></li> </ul>	$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>
Relationships (REL)	$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>	$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>
Social, community and civic participation (S/CP)	V	<b>V</b>	<ul> <li>Image: A start of the start of</li></ul>	<ul> <li>Image: A start of the start of</li></ul>
Lifelong learning (LL)		<ul> <li>Image: A start of the start of</li></ul>	$\checkmark$	$\checkmark$
Health and wellbeing (HW)			$\checkmark$	$\checkmark$
Home (HM)			$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>
Work (WK)			$\checkmark$	<ul> <li>Image: A start of the start of</li></ul>
Specialist services assist children to be included in families and community (SPL)	<ul> <li>Image: A start of the start of</li></ul>			

### **1.4** Cohorts used in the longitudinal analysis

Results for longitudinal change overall are shown separately for three cohorts of participants:

Cohort C3: Participants entering the Scheme between 1 July 2016 and 30 June 2017, for whom a record of outcomes is available at Scheme entry (baseline), and approximately three years after Scheme entry (third review). The large majority of these participants also responded at one year and/or two years after Scheme entry (first and/or second review). For this cohort the 2019-20 experience represents changes over participants' third year in the Scheme.

- Cohort C2: Participants entering the Scheme between 1 July 2016 and 30 June 2018, for whom a record of outcomes is available at Scheme entry (baseline), and approximately two years after Scheme entry (second review).<sup>8</sup> The large majority of these participants also responded at one year after Scheme entry (first review). For this cohort, the 2019-20 experience represents changes over their second year in the Scheme.
- Cohort C1: Participants entering the Scheme between 1 July 2016 and 30 June 2019, for whom a record of outcomes is available at Scheme entry (baseline), and approximately one year after Scheme entry (first review).<sup>9</sup> For this cohort, the 2019-20 experience represents changes over their first year in the Scheme.

These three cohorts are distinct (that is, each participant belongs to one cohort only).

For the regression models where we consider factors affecting transitions between states (such as transitioning from not having a paid job to having a paid job), the analysis includes all available transitions from the three cohorts, so as to maximise the amount of data on which the models are based.

### **1.5 Modelling the impact of COVID-19**

The global pandemic that took hold from early 2020 is likely to have had an impact on at least some participant outcomes, such as community participation, and for older age groups, employment.

To investigate which outcomes may have been affected by the pandemic via quantitative modelling, the following terms were added to the regression models for transitions over time:

- 1. An indicator taking the value 0 for dates up to 23 March 2020 (the announcement of stronger restrictions by the Prime Minister, such as closure of restaurants and gyms), and 1 for later dates.
- 2. A general time trend.
- 3. The interaction between 1. and 2.

The first term allows for a step change in the indicator from 23 March 2020. The second term allows for temporal changes in the indicator not related to COVID-19, whereas the third term allows for different time trends before and after 23 March 2020.

The regression models in this report look at changes between two timepoints, either from baseline to first, second or third review, or from an earlier review to a later review. In all cases only the later review can have occurred after the assumed COVID-19 date of 23 March 2020, and the time variables are measured with reference to that later review (for example, the COVID-19 indicator is 1 where the later review occurs during the COVID period).

Results of this analysis should be interpreted with care due to the following limitations:

1. The modelling is based on only about three months of experience during the pandemic, and some of the effects detected are only slight.

<sup>&</sup>lt;sup>8</sup> Most of these participants entered the Scheme between 1 July 2017 and 30 June 2018, however a small number of participants entering between 1 July 2016 and 30 June 2017 who had a response at year 2 but not at year 3 are included in the C2 cohort.

<sup>&</sup>lt;sup>9</sup> Most of these participants entered the Scheme between 1 July 2018 and 30 June 2019, however a small number of participants entering between 1 July 2016 and 30 June 2018 who had a response at year 1 but not at year 2 or 3 are included in the C1 cohort.

- 2. Some of the indicators where the pandemic might be thought to have an effect have a time frame specified. For example, for social and community participation, adult participants are asked "Have you been actively involved in a community, cultural or religious group *in the last 12 months*?". At least nine months of this period will be prior to the start of the pandemic.
- 3. Significance of the COVID indicator and/or the interaction term does not imply causality: it is not possible to say that changes in the indicator were caused by the COVID-19 pandemic.
- 4. The full impact of the pandemic cannot be evaluated using quantitative methods alone: qualitative research (such as focus groups and interviews with participants) would also be needed. Some qualitative research into economic and social participation outcomes, including the effect of the pandemic, is being undertaken.

# 2. Participants from birth to before starting school: outcome indicators

#### 2.1 Key findings

Overall, the three cohorts (C3, C2 and C1) have progressed in similar ways longitudinally.

### Box 2.1: Overall findings for C3 cohort (participants who have been in the Scheme for three years)

- For participants with three years of Scheme experience, the longitudinal analysis revealed significant improvements across a number of indicators, with improvements in the first year generally continuing into the second and third years of Scheme experience. Improvements were seen particularly in the areas of:
- Social, community and civic participation: the percentage of parents/carers who say their child feels welcomed or actively included when they participate in age appropriate community, cultural or religious activities increased by 11.1% between baseline and third review, from 63.7% to 74.8%. The improvement was slightly stronger on an age-adjusted basis (11.7%). However, this indicator did not change significantly over the latest year. The percentage of children who have friends they enjoy playing with has increased by 21.9% over three years, including a 2.2% increase in the latest year.
- Specialist services: use of specialist services increased in the three years following Scheme entry, by 24.2%. The percentage of parents/carers who say specialist services support them in assisting their child increased by 12.9% between baseline and third review, from 86.0% to 98.9%. Further, the percentage of parents/carers who say specialist services help their child gain the skills they need to participate in everyday life increased by 12.9% between baseline and third review, from 85.7% to 98.5%. For these three indicators, there was no significant change over the latest year.
- Participating in family life: the percentage of parents/carers who say their child fits in with the everyday life of the family increased by 7.7% between baseline and third review, from 69.6% to 77.2%. On an age-adjusted basis the improvement was slightly stronger (11.9%). There was no significant change over the most recent year. The percentage who say that their child gets along with his or her brothers or sisters has decreased by 1.8% between baseline and third review. However, this change was not significant, and on an age-adjusted basis there was an increase of 6.0% over three years.
- Understandably, their child's progress in major developmental areas is a key concern of parents and carers. From the longitudinal analysis, the proportion of parents/carers expressing concern about their child's development in six or more of eight areas surveyed increased by 18.6% between baseline and third review, from 58.9% to 77.6%. However, on an age-adjusted basis, the increase was lower (8.2%).
- Social inclusion and interaction for children with a disability is another key concern, and the proportion of parents/carers who wanted their child to be more involved in community activities increased by 22.2% between baseline and third review, from 59.7% to 81.9%, including a significant increase of 4.1% over the latest year. There was also a 7.3% increase in the percentage of parents/carers who say their child's disability is one of the barriers to being more involved in community activities, from 80.3% at baseline to 87.6% at third review (but no significant change between second and third review).

### Box 2.2 Overall findings for C2 cohort (participants who have been in the Scheme for two years)

- For participants with two years of Scheme experience, many indicators also showed significant longitudinal improvement over two years, for example:
- Social, community and civic participation: the percentage of parents/carers who say their child feels welcomed or actively included when they participate in age appropriate community, cultural or religious activities increased by 5.1% between baseline and second review, from 64.7% to 69.9%, with no significant change over the most recent year. The percentage of children who have friends they enjoy playing with has increased by 12.5% over two years in the Scheme, from 42.4% to 54.9%, including a significant increase of 4.2% over the most recent year.
- Specialist services: use of specialist services increased in the two years following Scheme entry, by 21.8% for the cohort entering in 2017-18, with an increase of 5.0% in the latest year. The percentage of parents/carers who say specialist services support them in assisting their child increased by 5.1% between baseline and second review, from 92.9% to 98.0%. The percentage who say specialist services help their child gain the skills they need to participate in everyday life increased by 5.7% between baseline and second review, from 92.5% to 98.2%. Further, the percentage who say the services they use assist staff at their child's day care, pre-school, or community activities to support their child has increased by 8.1% in the latest year and 34.1% overall.
- Participating in family life: the percentage of parents/carers who say their child fits in with the everyday life of the family increased by 6.7% between baseline and second review, from 69.4% to 76.1%. On an age-adjusted basis the improvement was slightly stronger (10.7%). In addition, the percentage who say that their child gets along with his or her brothers or sisters has increased by 2.2% (6.9% on an age-adjusted basis) between baseline and second review, from 84.3% to 86.5%.
- As for other cohorts, progress of their children in major developmental areas is a key concern of parents/carers. The proportion of parents/carers expressing concern about their child's development in six or more of eight areas surveyed increased by 10.9% between baseline and second review, from 66.0% to 76.9%. However, on an age-adjusted basis, the increase was slightly lower (7.5%).
- Social inclusion and interaction for children with a disability is another key concern, and the proportion of parents/carers who wanted their child to be more involved in community activities increased by 6.8% between baseline and second review, from 75.4% to 82.2%. There was also a 5.4% increase in the percentage of parents/carers who say their child's disability is one of the barriers to being involved in community activities (including a 2.7% increase over the most recent year), from 83.5% at baseline to 88.9% at second review.

### Box 2.3 Overall findings for C1 cohort (participants who have been in the Scheme for one year)

- For participants with one year of Scheme experience, many indicators also showed significant longitudinal improvement over one year, for example:
- Social, community and civic participation: the percentage of parents/carers who say their child feels welcomed or actively included when they participate in age appropriate community, cultural or religious activities increased by 3.6% between baseline and first review, from 63.4% to 67.1%. The percentage of children who have friends they enjoy playing with has increased by 8.4% over one year in the Scheme, from 41.7% to 50.1%.
- Specialist services: use of specialist services increased in the year following Scheme entry, by 17.7% for the cohort entering in 2018-19. The percentage of parents/carers who say specialist services support them in assisting their child increased by 4.4% between baseline and first review, from 91.6% to 96.0%. The percentage who say specialist services help their child gain the skills they need to participate in everyday life increased by 5.5% between baseline and first review, from 90.2% to 95.7%. Further, the percentage who say the services they use assist staff at their child's day care, preschool, or community activities to support their child has increased by 11.2% over one year in the Scheme, from 60.0% to 71.2%.
- Participating in family life: the percentage of parents/carers who say their child fits in with the everyday life of the family increased by 5.4% between baseline and first review, from 67.8% to 73.2%. On an age-adjusted basis the improvement was slightly stronger (7.4%). In addition, the percentage who say that their child gets along with his or her brothers or sisters has increased by 2.8% (3.7% on an age-adjusted basis) between baseline and first review, from 80.6% to 83.4%.
- As for parents/carers of participants in other cohorts, progress of their children in major developmental areas is a key concern. The proportion of parents/carers expressing concern about their child's development in six or more of eight areas surveyed increased by 5.7% between baseline and first review, from 67.6% to 73.2%. However, on an age-adjusted basis, the increase was slightly lower (4.0%).
- Social inclusion and interaction for children with a disability is another key concern, and the proportion of parents/carers who wanted their child to be more involved in community activities increased by 4.6% between baseline and first review, from 74.0% to 78.7%. There was also a 3.0% increase in the percentage of parents/carers who say their child's disability is one of the barriers to being involved in community activities, from 84.2% at baseline to 87.3% at first review.

### Box 2.4: Outcomes by key characteristics for participants from birth to before starting school

- Longitudinal outcomes vary with participant level of function. Participants with a higher level of function tend to exhibit higher rates of improvement than those with a lower level of function.
- Participants with a hearing impairment generally experience better longitudinal outcomes than those with other disabilities.
- Participants from regional and remote locations, compared to those from major cities, show more positive longitudinal results on some indicators. For example, parents/carers of children in regional or remote areas more likely to improve with regard to having concerns in six or more developmental areas from baseline to first review, than children living in major cities.
- Indigenous status was not strongly associated with longitudinal change: only one multiple regression model found a significant difference between Indigenous and non-Indigenous participants. This model found that Indigenous children were more likely to deteriorate on the indicator "my child participates in age-appropriate community, cultural or religious activities" from baseline to second review.
- CALD participants were less likely to improve in making friends with people outside the family from baseline to first review and from baseline to second review. Parents/carers of CALD participants were also less likely to change their response from "Yes" to "No" for the indicator "I would like my child to be more involved in community activities".
- Moving to a new LGA tends to have a negative impact for some transitions.
- The COVID-19 step-change variable was significant in at least one model for all but one indicator ("My child fits in with the everyday life of the family"), and had a negative impact for all but one of these models, with participants being less likely to improve or more likely to deteriorate in their response between the two time points when the later time point occurred during the COVID-19 period. The one indicator where there was a positive step change was "My child joins me when I complete tasks at home", where participants were less likely to deteriorate between baseline and first review. There were two indicators where a favourable change in slope was observed after the COVID-19 date: "My child fits in with the everyday life of the family" and "My child's disability is a barrier to being more involved".

### Box 2.5: Has the NDIS helped? – participants from birth to before starting school

- Opinions on whether the NDIS has helped tend to be positive for this cohort. In particular, there is widespread agreement that the NDIS has helped in areas related to the child's development (91.2% after one year in the Scheme, 95.4% after two years in the Scheme, and 94.9% three years in the Scheme) and access to specialist services (90.5% after one year in the Scheme, increasing to 93.2% after two years and 93.8% after three years in the Scheme).
- Higher plan utilisation is strongly associated with a positive response after one year in the Scheme, across all five areas surveyed. Higher utilisation of total plan budget, and higher utilisation of capacity building supports, were also associated with a higher likelihood of improvement, and a lower likelihood of deterioration, between first review and later reviews.
- Parents/carers of participants living in regional or remote areas are less likely to think that the NDIS has helped after one year in the Scheme than those living in major cities.
- Parents/carers of participants whose plans are fully self-managed were significantly
  more likely to think that the NDIS has helped after one year in the Scheme than those of
  participants with Agency-managed plans, across all domains except access to specialist
  services (where there was no significant difference).
- Across all domains, the percentage who think the NDIS has helped is slightly higher for participants who have been in the Scheme for two years compared to those who have been in the Scheme for one year. However, opinions on whether the NDIS has helped remained relatively unchanged between the second and third review.
- The percentage who think that the NDIS has helped increased slightly (by 1-4%) between first and third review across all domains. The likelihood of improvement/ deterioration varied by some participant characteristics:
- Participants who entered the Scheme due to disability are more likely to deteriorate between first and second review than those entering for early intervention.<sup>10</sup>
- Participants who have used a higher percentage of their total supports, and in particular of their capacity building supports, are generally more likely to improve and less likely to deteriorate between first review and later reviews.
- Participants with higher annualised plan budget are less likely to improve in thinking the NDIS has helped with their child's development, and with increasing their child's ability to communicate what they want.
- Parents/carers of Indigenous participants are more likely to deteriorate in thinking the NDIS has improved their child's access to specialist services.

<sup>&</sup>lt;sup>10</sup> Participants accessing the Scheme under Section 24 of the NDIS Act 2013 enter the Scheme due to disability, whereas participants accessing the Scheme under Section 25 of the Act enter the Scheme for early intervention.

#### 2.2 Outcomes framework questionnaire domains

For children in the birth to before starting school cohort, the outcomes framework seeks to measure the extent to which participants are:

- Gaining functional, developmental and coping skills appropriate to their ability and circumstances (domain DL, daily living)
- Showing evidence of autonomy in their everyday lives (domain CC, choice and control)
- Using specialist services that assist them to be included in families and communities (domain SPL, use of specialist services)
- Participating meaningfully in family life (domain REL, relationships)
- Participating meaningfully in community life (domain S/CP, social, community and civic participation).

The LF includes 11 extra questions related to childcare, four related to specialist services, three about developmental/coping skills, two about effects on family, and one about developing autonomy.

Participants answer the outcomes questionnaire applicable to their age/schooling status at the time of interview. Hence the birth to before starting school cohort comprises children who are yet to start school when they enter the Scheme, and includes responses at all review time points for which they have still not started school.

#### 2.3 Longitudinal indicators – overall

Longitudinal analysis describes how outcomes have changed for participants during the time they have been in the Scheme. Included here are participants who entered the Scheme between 1 July 2016 and 30 June 2019, for whom a record of outcomes is available at Scheme entry (baseline) and at one or more of the three time points: approximately one year following scheme entry (first review), approximately two years following scheme entry (second review), and approximately three years following scheme entry (third review).

For this year's report, results are shown separately by entry year cohort, including the value of the indictator at baseline and each yearly review, as well as the change in the latest year, and the change between baseline and latest review. For example, for 2016-17 entrants, results at baseline, first review, second review, and third review are shown, as well as the change between second review and third review, and the change from baseline to third review.

There have been a number of improvements across all domains for the time periods being considered. Often, improvements tend to be greater in the earlier years in the Scheme, with smaller improvements observed in later years. Hence the change from baseline to latest review tends to be greater than the change over the latest year, for participants who have been in the Scheme for more than a year.

Changes over time for children will include an element of normal age-related development. Age-adjusted changes have been used to guide selection of indicators presented in this section.

Table 2.1 summarises changes for selected indicators by cohort across the three time periods. Indicators were selected for the tables if the change, either overall or for the latest

year, was statistically significant<sup>11</sup>, had an absolute magnitude greater than 0.02 for at least one entry year cohort, and was confirmed by the age-adjusted analysis.

				Indicat				ange		ficant <sup>12</sup>
Domain	Indicator	Cohort	Baseline	Review 1	Review 2	Review	Latest	Overall	Latest	Overall
(Form)	Indicator	Conort		rovemen		3	year	Overall	year	Overall
	% of parents/carers who	C3	85.7%	96.1%	97.6%	98.5%	0.9%	12.9%		**
SPL	say specialist services help	C3 C2		96.1% 97.0%	97.0% 98.2%	90.0%		12.9% 5.7%	**	**
(SF)	their child gain skills to participate in everyday life	C2 C1	92.5% 90.2%	97.0% 95.7%	90.2%		1.3% 5.5%	5.7% 5.5%	**	**
	% of parents/carers who	C3	86.0%	98.7%	98.1%	98.9%	0.8%	12.9%		**
SPL	SPL say specialist services	C2	92.9%	97.1%	98.0%	30.370	0.9%	5.1%	**	**
(SF)	support them in assisting their child	C1	91.6%	96.0%	30.070		4.4%	4.4%	**	**
	% who say services assist	C3			e too smal	1	4.470	4.470		
SPL	staff at day care/	C2	45.5%	71.4%	79.5%		8.1%	34.1%	*	*
(LF)	preschool/ community activities to support child	C1	60.0%	71.2%	10.070		11.2%	11.2%	*	*
		C3	87.4%	89.5%	89.0%	85.6%	-3.4%	-1.8%		
REL	% of children who get along with their	C2	84.3%	85.6%	86.5%	001070	0.9%	2.2%	*	*
(SF)	brother(s)/sister(s)	C1	80.6%	83.4%	001070		2.8%	2.8%	**	**
	% of parents/carers who	C3	69.6%	77.0%	77.7%	77.2%	-0.5%	7.7%		*
REL (SF)	say their child fits in with the everyday life of the	C2	69.4%	74.8%	76.1%		1.3%	6.7%	**	**
(01)	family	C1	67.8%	73.2%			5.4%	5.4%	**	**
	% of children who have	C3	34.2%	45.9%	53.9%	56.1%	2.2%	21.9%	**	**
S/CP (SF)	friends they enjoy playing	C2	42.4%	50.7%	54.9%		4.2%	12.5%	**	**
(01)	with	C1	41.7%	50.1%			8.4%	8.4%	**	**
	% of children who	C3	59.8%	60.8%	59.1%	56.9%	-2.3%	-3.0%		
S/CP (SF)	participate in age appropriate community/	C2	52.8%	55.0%	53.8%		-1.2%	1.0%		
	cultural/ religious activities	C1	49.4%	52.1%			2.7%	2.7%	**	**
0/05	% who feel welcomed/	C3	63.7%	70.1%	75.5%	74.8%	-0.7%	11.1%		*
S/CP (SF)	actively included when they participate in community	C2	64.7%	70.6%	69.9%		-0.8%	5.1%		**
(01)	activities	C1	63.4%	67.1%			3.6%	3.6%	**	**
	% whose childcare is	C3	N	lumbers ar	e too smal	1				
S/CP (LF)	assisted by their early intervention service to	C2	N	lumbers ar	e too smal	1				
. ,	know how to support child	C1	53.2%	70.9%			17.7%	17.7%	*	*
			Contex	t depend	lent					
201	% who say their child uses	C3	71.9%	88.8%	96.2%	96.2%	-0.1%	24.2%		**
SPL (SF)	specialist services that assist with their learning	C2	73.8%	90.7%	95.6%		5.0%	21.8%	**	**
· ,	and development	C1	67.8%	85.5%			17.7%	17.7%	**	**
S/CP	% of parents/carers who	C3	59.7%	69.4%	77.8%	81.9%	4.1%	22.2%	*	**
(SF)	would like their child to be more involved in	C2	75.4%	80.5%	82.2%		1.7%	6.8%	*	**
	community activities	C1	74.0%	78.7%			4.6%	4.6%	**	**

<sup>&</sup>lt;sup>11</sup> McNemar's test at the 0.05 level. <sup>12</sup> \*\* statistically significant, p-value<0.001; \* statistically significant, p-value between 0.001 and 0.05.

Domain			Indicator at: Review Review Review			Change Latest		Significant <sup>12</sup> Latest		
(Form)	Indicator	Cohort	Baseline	1	2	3	year	Overall	year	Overall
			Dete	erioratior	1					
Б	% of parents/carers with	C3	58.9%	63.8%	72.7%	77.6%	4.9%	18.6%		**
DL (SF)	concerns in 6 or more	C2	66.0%	73.4%	76.9%		3.5%	10.9%	**	**
( )	areas	C1	67.6%	73.2%			5.7%	5.7%	**	**
0/05	% of parents/carers who	C3	80.3%	86.6%	89.1%	87.6%	-1.5%	7.3%		*
S/CP (SF)	see their child's disability as a barrier to being more	C2	83.5%	86.1%	88.9%		2.7%	5.4%	**	**
(31)	involved	C1	84.2%	87.3%			3.0%	3.0%	**	**

Key findings from Table 2.1 include:

- Use of specialist services has increased, along with the percentage of parents/carers who say that these services help their child gain the skills they need to participate in everyday life, and the percentage who say the services support them in assisting their child.
- There have been improvements across the social, community and civic participation domain, with a higher percentage of parents/carers saying their child is welcomed or actively included when they participate in community, cultural or religious activities.
- Participation in family life has also improved, with more parents/carers saying that their child fits in with the everyday life of the family, and that they get along with their siblings. The percentage of parents/carers who would like their child to be more involved in community activities increased across all time points.
- Further deterioration was observed for two of the indicators highlighted in last year's report: more parents/carers have concerns about their child's development in six or more of the eight areas surveyed, and more see their child's disability as a barrier to greater involvement in community activities.

#### 2.4 Longitudinal indicators – participant characteristics

Analysis by participant characteristics has been examined in two ways:

- 1. A simple comparison of the change from baseline to first, second or third review in the percentage meeting the indicator, across different subgroups.
- 2. Multiple regression analyses with separate models for improvement and deterioration in the indicator. That is, for the subset without/with the indicator at baseline, the probability of meeting/not meeting the indicator at a subsequent review time point is modelled as a function of participant characteristics.<sup>13,14</sup>

<sup>&</sup>lt;sup>13</sup> The amount of data for modelling transitions reduces for later reviews, hence the number of significant predictors identified also tends to reduce.

<sup>&</sup>lt;sup>14</sup> Note that these models are used to investigate factors associated with a higher or lower likelihood of change, rather than whether there has been a change overall, which was the purpose of the analysis summarised in the previous subsection. Considering the role of age, the models can identify whether younger or older participants are more likely to improve. Including age in the model also means that age is controlled for when interpreting the effect of other factors in the model. This is different to the concept of age adjustment that was used in the overall analysis. In the overall analysis, age-adjustment was used to remove the portion of change attributable to normal age-related development. The overall analysis does not say anything about differential rates of improvement by age (or any other factor).

It should be noted that these two analyses can produce different results, particularly where there is a large difference in the indicator at baseline between subgroups.

In order to maximise the amount of data for the regression models, to prevent the same person contributing multiple transitions to the same model, and to keep the number of models to a manageable size, transitions from different cohorts have been grouped, and only selected groups of transitions have been modelled. Table 2.2 shows the four groups of transitions that have been modelled for participants from birth to before starting school, and the transitions contributed by each of the C1, C2 and C3 cohorts. Improvements and deteriorations have been considered separately, resulting in eight different models for each indicator.

	1 year tra	ansitions	2 year transitions <sup>15</sup>	3 year transitions		
Cohort	Baseline to First Review	Latest Year	Baseline to Second Review	Baseline to Third Review		
C3	$B \rightarrow R1$	$R2 \rightarrow R3$	$B \rightarrow R2$	$B \rightarrow R3$		
C2	$B \rightarrow R1$	$R1 \rightarrow R2$	$B \rightarrow R2$			
C1	$B \rightarrow R1$					

Table 2.2 Transitions contributing to the models for cohorts C1, C2 and C3<sup>\*</sup>

<sup>\*</sup>B=baseline, R1=first review, R2=second review. The arrow represents transition between the two time points.

Some key features of the analyses for selected indicators are summarised below. For each indicator, a table summarising the direction of the effect for each significant predictor in the regression models is included.<sup>16</sup> Table 2.3 provides a key to aid interpretation of the arrow symbols used in these tables, including some examples.

Symbol	Meaning	Impact of characteristic	Example				
1	More likely to improve	Positive	Participants who have friends are more likely to improve in relation to being able to communicate what they want				
ŧ	Less likely to improve	Negative	Children with autism are less likely to start feeling welcomed or actively included in community, cultural or religious activities				
1	More likely to deteriorate	Negative	Children with autism are more likely to stop feeling welcomed or actively included in community, cultural or religious activities				

<sup>&</sup>lt;sup>15</sup> There is another two-year transition, from first review to third review, however the amount of data for this transition is smaller and to keep the presentation manageable it has not been included. Results from selected models for this transition were generally consistent with baseline to second review (but tended to identify a smaller number of predictors, due to the smaller amount of data).
<sup>16</sup> For models where no variables are identified as significant predictors, the corresponding column in the table is shaded grey.

Symbol	Meaning	Impact of characteristic	Example
ŧ	Less likely to deteriorate	Positive	Participants who have friends are less likely to deteriorate in relation to being able to communicate what they want
1	More likely to change from "No" to "Yes"	Depends on context	Parents/carers of participants with lower level of function were more likely to change from not wanting their child to be more involved in community activities, to wanting them to be more involved
û	Less likely to change from "No" to "Yes"	Depends on context	Parents/carers of participants who have friends were less likely to change from not wanting their child to be more involved in community activities, to wanting them to be more involved
仓	More likely to change from "Yes" to "No"	Depends on context	Parents/carers of participants in more remote areas were more likely to change from wanting their child to be more involved in community activities, to not wanting them to be more involved
ŧ	Less likely to change from "Yes" to "No"	Depends on context	Parents/carers of participants with a lower level of function were less likely to change from wanting their child to be more involved in community activities, to not wanting them to be more involved

### My child participates in age-appropriate community, cultural or religious activities

The percentage of parents/carers reporting that their child participates in age-appropriate community, cultural or religious activities increased significantly between baseline and the first review (2.6%), but did not change significantly between baseline and second review, or between baseline and third review. This was a result of improvements offset by deteriorations as set out in Table 2.4 below.

Lougitudin el	Number of Baseline Responses in cohort <sup>*</sup>		Improve No to	ements: o Yes	Deterio Yes t	Not	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	8,316	8,342	1,547	18.6%	1,110	13.3%	+2.6%
Baseline to Review 2	1,501	1,710	451	30.1%	418	24.4%	+1.0%
Baseline to Review 3	149	222	55	36.9%	66	29.7%	-3.0%

#### Table 2.4 Breakdown of net movement in longitudinal responses

\*The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 2.5 below.

Table 2.5 Key drivers of likelihood of transitions in *"my child participates in age-appropriate community, cultural or religious activities"* response

		1 step transitions				2 step transitions		3 step transitions	
Reference	Variable	Baseline to Latest Year First Review			Baseline to Second Review		Baseline to Third Review		
Category		Ň	tionship with hood of		Relationship with likelihood of		Relationship with likelihood of		onship ⁄ith nood of
		Imp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
	Participant lives in VIC	➡	₽						
	Participant lives in QLD		Ļ						
NSW	Participant lives in SA				1				
	Participant lives in ACT, NT, TAS, or WA		ŧ		₽				
	Disability is autism								1
Qishal	Disability is cerebral palsy or other neurological disability								1
Global developmental delay / developmental delay	Disability is Down syndrome or an intellectual disability						ŧ		1
	Disability is a sensory disability	1	ŧ				ŧ		1
	Disability is "Other"								1
N/A	Participant is older		↓						
Male	Participant is female		Ļ						
Non- Indigenous	Participant is Indigenous						1		
N/A	Lower level of function	₽			1	₽	1		

			1 step ti	ransitior	าร	2 step transitions		3 step transitions	
Reference	Variable	Baseline to First Review		Latest Year		Baseline to Second Review		Baseline to Third Review	
Category		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		Imp.	Det.	lmp.	Det.	Imp.	Det.	Imp.	Det.
N/A	Higher annualised total funding	₽	1						
N/A	Higher baseline utilisation					1	Ļ		
N/A	Higher utilisation of capacity building supports	1							
	Plan is managed by a plan manager	1							
Agency- managed	Plan is fully self-managed	1	↓		ŧ	1			
	Plan is partly self-managed	1							
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1						
Pre-COVID	Review during COVID period	➡				₽			
N/A	General time trend	₽							
Entered the Scheme for early intervention (s25)	Entered the Scheme due to disability (s24)				1				
Lower level of NDIA support	Higher level of NDIA support								
N/A	Participant lives in an area with a higher average unemployment rate	₽							

Key findings from Table 2.5 include:

- Having a plan that is fully self-managed was associated with a higher likelihood of improvement (starting to participate in community activities) between baseline and first review, and between baseline and second review. Participants with fully selfmanaged plans were also less likely to deteriorate from baseline to first review, and less likely to deteriorate over their latest year in the Scheme.
- Participants with a sensory disability were more likely to improve from baseline to first review, and less likely to deteriorate from baseline to first review and from baseline to second review. However, participants with developmental delay / global developmental delay (the reference category in the models) were less likely to deteriorate between baseline and third review than all other disability groups.
- Participants with higher level of function were more likely to improve and less likely to deteriorate over one and two years in the Scheme.
- There were some differences by State/Territory. For example, participants living in Victoria were less likely to improve, but also less likely to deteriorate, from baseline to first review.
- Having a review during the COVID-19 period was associated with participants being less likely to start participating in community activities between baseline and first review, and between baseline and second review.

### My child feels welcomed or actively included when they participate in community activities

The percentage of participants who can make friends with people outside the family has increased significantly from baseline to all reviews, with net-increases of 3.9%, 5.7% and 11.1% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 2.6 below.

l on situdinal	Number of Baseline Responses in cohort*			ements: o Yes	Deterio Yes t	Net		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement	
Baseline to Review 1	2477	4349	533	21.5%	265	6.1%	+3.9%	
Baseline to Review 2	425	778	156	36.7%	88	11.3%	+5.7%	
Baseline to Review 3	49	86	19	38.8%	4	4.7%	+11.1%	

#### Table 2.6 Breakdown of net movement in longitudinal responses

\*The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 2.7 below.

Table 2.7 Key drivers of likelihood of transitions in *"Of those who participate, % who feel welcomed or actively included"* response

			1 step tr	ansitions			tep itions	3 step transitions	
			ine to Review	Latest	Year	Sec	Baseline to Second Review		ine to Review
		wi	onship ith ood of	Relatic with like o	elihood	Relationship with likelihood of		Relationship with likelihood of	
Reference Category	Variable	Imp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.
	Participant lives in VIC	₽	↓			₽			
NSW	Participant lives in ACT, NT, TAS, WA	₽				₽			
Global developmental	Disability is autism						1		
	Disability is cerebral palsy or another neurological disability	1					ŧ		
delay / developmental delay	Disability is Down Syndrome or an intellectual disability		ŧ						
	Disability is a sensory disability								
Male	Participant is female							1	
Non-CALD	Participant is CALD	•							
N/A	Lower level of function				1				
N/A	Higher annualised total funding	₽	1	₽			1		
N/A	Higher baseline utilisation					₽			
N/A	Higher utilisation of capacity building supports		1						

			1 step tr	ansitions	5		tep itions	3 s trans	tep itions
		Baseli First R Relatio wit likeliho	eview onship th	Relatio with lik	t Year onship elihood of	Baseline to Second Review Relationship with likelihood of		Third F Relation with lik	ine to Review onship elihood of
Reference Category	Variable	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
Agency- managed	Plan is fully self-managed			1					
Pre-COVID	Review during COVID period	₽							
Entered the Scheme for early intervention (s25)	Entered the Scheme due to disability (s24)				ŧ				
N/A	Participant lives in an area with a higher average unemployment rate	ŧ				ŧ			

Key findings from Table 2.7 include:

- Participants with cerebral palsy or another neurological disorder were more likely to improve (start feeling welcomed or actively included when participating in community activities) over one year in the Scheme, and less likely to deteriorate over two years in the Scheme. Conversely, participants with autism were more likely to deteriorate, from baseline to first review and from baseline to second review.
- Participants living in Victoria, or in the State/Territory group ACT, NT, Tasmania or WA, were less likely to improve over one and two years in the Scheme, compared to participants living in NSW. Participants living in SA or Queensland were not significantly different to those living in NSW.
- Higher annualised plan budget was generally associated with a lower likelihood of improvement and a higher likelihood of deterioration.
- Having a review during the COVID-19 period was strongly associated with participants being less likely improve from baseline to first review.
- Participants living in areas with a higher average unemployment rate were less likely to improve from baseline to first review and from baseline to second review.

#### Parent/carer would like their child to be more involved in community activities

The percentage of parents/carers who would like their child to be more involved in community activities has increased significantly from baseline to all reviews, with net increases of 4.9%, 7.8% and 22.2% from baseline to the first, second and third review, respectively. This was a result of changes from "No" to "Yes", and from "Yes" to "No", as set out in Table 2.8 below.

1		f Baseline s in cohort*		ependent: o Yes		ependent: to No	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	4,476	12,661	1,472	5.0%	630	32.9%	+4.9%
Baseline to Review 2	855	2,439	459	8.3%	202	53.7%	+7.8%
Baseline to Review 3	158	234	105	7.7%	18	66.5%	+22.2%

#### Table 2.8 Breakdown of net movement in longitudinal responses

\*The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 2.9 below.

### Table 2.9 Key drivers of likelihood of transitions in *"% of parents/carers who would like their child to be more involved in community activities"* response

			1 step tr	ansitions			tep itions	3 s trans	
			line to Review	Latest Year		Baseline to Second Review			ine to Review
		with lik	Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		onship elihood ıf
Reference Category	Variable	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
	Participant lives in VIC	む	↓						
NSW	Participant lives in QLD	む							
	Participant lives in ACT, NT, TAS, WA	Ŷ	Ļ						
	Disability is autism	1	↓			1			
Global developmental delay / developmental	Disability is cerebral palsy or another neurological disability	Û				Û			
delay	Disability is Down Syndrome or an intellectual disability		仓						

			1 step tr	ansitions	;		tep itions		tep itions
			line to Review	Lates	t Year	Sec	line to cond view		line to Review
		with lik	onship elihood of	with lik	onship elihood of	with lik	onship elihood of	Relationship with likelihood of	
Reference Category	Variable	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
	Disability is a sensory disability		仓						
	Disability is "Other"					Û			
N/A	Participant is older	Ŷ							
Male	Participant is female				仓		仓		
Non-CALD	Participant is CALD		↓				₽		
	Participant entered the Scheme in 2017/18	Û				Û			
2016/17	Participant entered the Scheme in 2018/19	Û							
N/A	General time trend		₽						
N/A	Lower level of function			1	₽		₽		
N/A	Higher annualised total funding	1	ŧ						
N/A	Higher baseline utilisation		Ļ		₽		₽		
N/A	Higher utilisation of capacity building supports	1							
Agency- managed	Plan is managed by a plan manager	1							

			1 step tr	ansitions	;		tep itions		tep itions
			line to Review	Lates	t Year	Baseline to Second Review		Baseline to Third Review	
		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihooc of	
Reference Category	Variable	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
	Plan is fully self-managed	1							
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1			ŧ				
Major cities	Participant does not live in a major city		仓	Ŷ		Û			仓
Pre-COVID	Review during COVID period	む						Ŷ	
Entered the Scheme for early intervention	Entered the Scheme due to disability		ŧ				ŧ		
Low level of NDIA support	Medium level of NDIA support						仓		
N/A	Participant lives in an area with a higher average unemployment rate		ŧ						

Key findings from Table 2.9 include:

- Compared to NSW, parents/carers from all States and Territories apart from SA were significantly less likely to transition from not wanting their child to be more involved in community activities at baseline, to wanting them to be more involved at first review. In addition, parents/carers living in Victoria and the State/Territory group ACT, NT, Tasmania and WA were less likely to change their response from "Yes" to "No" between baseline and first review.
- Parents/carers of participants living outside a major city were generally more likely to stop wanting their child to be more involved, and less likely to start wanting them to be more involved.
- There were also some differences by disability. For example, parents/carers of children with cerebral palsy or other neurological disorders who responded "No" at

baseline were less likely to respond "Yes" at first and second review. Conversely, parents/carers of children with autism were more likely to change their response from "No" to "Yes", and less likely to change from "Yes" to "No".

- Parents/carers of CALD participants were less likely to change their response from "Yes" to "No" between baseline and either first or second review.
- Parents/carers of female participants were more likely to change their response from "Yes" to "No" between baseline and second review, and over the child's latest year in the Scheme.
- Those who responded "No" at baseline were less likely to answer "Yes" at first or third review when the review took place during the COVID-19 period.

### Parents/carers who say their child's disability is one of the barriers to being more involved in community activities

The percentage of parents/carers who say their child's disability is one of the barriers to being more involved in community activities has increased significantly from baseline to all reviews, with net increases of 3.1%, 5.5% and 7.3% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 2.10 below.

Longitudinal	Number of Baseline Responses in cohor Longitudinal		-	ements: to No		rations: o Yes	Net
Period	No	Yes	Number	%	Number	%	Movement
Baseline to Review 1	1,821	9,547	251	2.6%	605	33.2%	+3.1%
Baseline to Review 2	348	1,750	72	4.1%	187	53.7%	+5.5%
Baseline to Review 3	38	155	11	7.1%	25	65.8%	+7.3%

#### Table 2.10 Breakdown of net movement in longitudinal responses

\*The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 2.11 below.

## Table 2.11 Key drivers of likelihood of transitions in *"% of parents/carers who say their child's disability is one of the barriers to being more involved in community activities"* response

			1 step ti	ransitions		2 step	transitions	3 step transitions		
			Baseline to First Review		Year		e to Second eview	Baseline to Third Review		
			Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
Reference Category	Variable	Imp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.	
NSW	Participant lives in VIC	+	ŧ	↓						

			1 step tr	ansitions		2 step	transitions	3 step tra	nsitions
			e to First view	Latest	Year		e to Second eview	Baseline t Revi	
5 (			ship with lood of	Relations likeliho			nship with ihood of	Relationsl likeliho	
Reference Category	Variable	lmp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.
NSW	Participant lives in SA	₽							
NSW	Participant lives in ACT, NT, TAS, WA	•							
Global developmental delay/ developmental delay	Disability is a sensory disability					1			
Global developmental delay/ developmental delay	Disability is "Other"					1			
N/A	Participant is older		₽						
Male	Participant is female					1			
2016/17	Participant entered the Scheme in 2017/18	₽							
2016/17	Participant entered the Scheme in 2018/19	₽							
N/A	Lower level of function	₽	1	₽		ŧ			
N/A	Higher annualised total funding	•			1	ŧ			
N/A	Higher baseline utilisation	₽							
N/A	Higher utilisation of capacity building supports		1		1				
Pre-COVID	Review during COVID period	₽			1				

			1 step ti	ransitions		2 step t	ransitions	3 step trar	sitions
		Baseline to First Review		Latest	Year		to Second view	Baseline to Third Review	
Reference		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
Category	Variable	lmp.	Det.	Imp.	Det.	Imp.	Det.	lmp.	Det.
N/A	Change in time trend post- COVID				ŧ				

Key findings from Table 2.11 include:

- Parents/carers of participants with higher level of function were more likely to stop perceiving their child's disability as a barrier over one and two years in the Scheme, and over the latest year in the Scheme.
- Compared to NSW, parents/carers from all States and Territories apart from SA were significantly less likely to stop thinking their child's disability is one of the barriers to being involved in community activities between baseline and first review.
   Parents/carers of participants living in Victoria were also less likely to improve over the latest year in the Scheme, but less likely to deteriorate from baseline to first review.
- Female participants were more likely to improve, both from baseline to first review and baseline to second review.
- Higher utilisation of capacity building supports was associated with a higher likelihood of deterioration both from baseline to first review and over the latest review period.
- The COVID-19 terms in the model for deterioration over the latest year in the Scheme suggest a significant step increase in the likelihood of perceiving the child's disability as a barrier to greater involvement at review, followed by a decreasing trend with time since the introduction of tighter restrictions.

#### Parents/carers with concerns in six or more areas

The percentage of parents/carers reporting concerns in six or more areas has increased significantly from baseline to all reviews, with net increases of 6.1%, 11.4% and 18.6% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 2.12 below.

1		f Baseline s in cohort*	_	ements: to No		rations: o Yes	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	5,730	11,649	806	32.4%	1,858	6.9%	+6.1%
Baseline to Review 2	1,166	2,179	216	51.2%	597	9.9%	+11.4%
Baseline to Review 3	161	231	18	56.5%	91	7.8%	+18.6%

#### Table 2.12 Breakdown of net movement in longitudinal responses

\*The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 2.13 below.

### Table 2.13 Key drivers of likelihood of transitions in *"% of parents/carers with concerns in 6 or more areas"* response

			1 step tra	ansitions			tep itions	3 s trans	-
		Baseline to Latest Year First Review		Baseline to Second Review			ine to Review		
- /		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of			onship elihood if
Reference Category	Variable	lmp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.
	Participant lives in VIC	₽				₽			
NSW	Participant lives in ACT, NT, TAS, WA		ŧ						
	Disability is cerebral palsy or another neurological disability	1	ŧ		ŧ		ŧ		
Global developmental delay / developmental	Disability is Down Syndrome or an intellectual disability	ŧ	1			₽			
delay	Disability is a sensory disability	1	ŧ	1	ŧ	1	ŧ		
	Disability is "Other"	1	₽						

			1 step tr	ansitions			tep itions		tep itions
			line to Review	Lates	t Year		line to Review		ine to Review
		with lik	onship celihood of	with lik	onship elihood of	with lik	onship elihood of	Relationship with likelihoo of	
Reference Category	Variable	lmp.	Det.	Imp.	Det.	Imp.	Det.	lmp.	Det.
N/A	Participant is older	1	₽						
Male	Participant is female		ŧ		ŧ		₽		
2016/17	Participant entered the Scheme in 2017/18	₽							
N/A	Lower level of function	₽	1	₽	1	₽			
N/A	Higher annualised total funding	ł	1	ł		ł	1		
N/A	Higher baseline utilisation	↓			1				
N/A	Higher utilisation of capacity building supports		1	ŧ		ŧ	1		
N/A	Higher utilisation of capital funding		1						
Agency- managed	Plan is managed by a plan manager				1		1		
Major cities	Participant lives outside a major city	1							
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1						
Pre-COVID	Review during COVID period	↓							
Lower level of NDIA support	Medium level of NDIA support		1						

#### Key findings from Table 2.13

Table 2.13 include:

- The participant's primary disability was an important predictor for the likelihood of improvement/deterioration in the percentage of parents/carers with concerns in six or more areas. Responses from parents/carers of participants with a hearing impairment, visual impairment or other speech/sensory impairment were more likely to improve and less likely to deteriorate across all models with sufficient data. Responses from parents/carers of participants with cerebral palsy or another neurological disability were less likely to deteriorate across all models, and more likely to improve from baseline to first review. Conversely, responses from parents/carers of participants with an intellectual disability or Down syndrome were less likely to improve and more likely to deteriorate between baseline and first review.
- Higher utilisation of capacity building supports was associated with a higher likelihood of deterioration from both baseline to first review and baseline to second review, and a lower likelihood of improvement from baseline to second review and over the latest year in the Scheme.
- Having a review during the COVID-19 period was associated with a lower likelihood of improvement between baseline and first review.
- Responses from parents/carers of female participants were less likely to deteriorate in all one-step transitions and between baseline and second review.
- Reponses from participants with higher level of function were more likely to improve and less likely to deteriorate across all models with sufficient data.

#### Parents/carers who say their child is able to tell them what he/she wants

The percentage of parents/carers reporting that their child is able to tell them what he/she wants has increased significantly from baseline to all reviews, with net increases of 13.9%, 25.3% and 31.6% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 2.14 below.

		Number of Baseline Improvements: Responses in cohort <sup>*</sup> No to Yes				rations: to No	N-4
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	6,690	10,482	2,688	40.2%	306	2.9%	+13.9%
Baseline to Review 2	1,548	1,746	911	58.9%	79	4.5%	+25.3%
Baseline to Review 3	212	177	135	63.7%	12	6.8%	+31.6%

#### Table 2.14 Breakdown of net movement in longitudinal responses

\*The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 2.15 below.

Table 2.15 Key drivers of likelihood of transitions in *"% of parents/carers who say their child is able to tell them what he/she wants"* response

			1 step tra	ansitions			tep itions		tep itions
			e to First /iew	Lates	t Year		line to Review		line to Review
		with lik	onship elihood of	with lik	onship elihood of	Relationship with likelihood of		with lik	onship elihood of
Reference Category	Variable	Imp.	Det.	lmp.	Det.	Imp.	Det.	Imp.	Det.
	Participant lives in VIC	↓	₽						
NSW	Participant lives in QLD	1	•						
	Participant lives in SA	1							
Global development delay /	Disability is cerebral palsy or another neurological disability	ŧ		ŧ		ŧ			
developmental delay	Disability is Down Syndrome or an intellectual disability	ŧ	•			ŧ			
N/A	Participant is older	1	₽	1		1	↓		
Non-CALD	Participant is CALD					↓			
2016/17	Participant entered the Scheme in 2017/18						ŧ		
N/A	Lower level of function	↓	1	₽		↓			
N/A	Higher annualised total funding	ł	1			ŧ	1	ŧ	
N/A	Higher baseline utilisation		1						
N/A	Higher utilisation of core supports		1						

			1 step tra	ansitions			tep itions		tep itions
		Baseline to First Review Relationship with likelihood of		Lates	t Year	Baseline to Second Review		Baseline to Third Review	
Reference				Relationship with likelihood of		Relationship with likelihood of		with lik	onship elihood of
Category	Variable	Imp. Det.		lmp. Det.		lmp.	Det.	lmp.	Det.
Agency- managed	Plan is fully self-managed	1	Ļ						
Major cities	Participant does not live in a major city							1	
Pre-COVID	Review during COVID period	↓							
N/A	Participant lives in an area with a higher average unemployment rate	ŧ							

Key findings from Table 2.15 include:

- Improvement was more likely, and deterioration less likely, over the first year in the Scheme for participants with fully self-managed plans than for participants whose plan is Agency-managed.
- State/Territory has a significant impact on the percentage of parents/carers who say their child is able to tell them what he/she wants. For example, participants living in Queensland were more likely to improve and less likely to deteriorate from baseline to first review than participants living in NSW.
- There were also some differences by disability. For example, participants with cerebral palsy or other neurological conditions were less likely to improve in all onestep transitions and from baseline to second review. Participants with an intellectual disability or Down syndrome were less likely to improve and more likely to deteriorate between baseline and first review.
- In most models, improvement was more likely, and deterioration less likely, for participants with higher level of function.
- Having a review during the COVID-19 period resulted in participants being less likely to improve from baseline to first review.
- Older participants were more likely to improve and less likely to deteriorate in all transitions with sufficient data except from baseline to third review.

#### My child can make friends with people outside the family

The percentage of participants who can make friends with people outside the family has increased significantly from baseline to all reviews, with net increases of 6.3%, 7.8% and 11.4% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 2.16 below.

I STATE POST	Number of Baseline Responses in cohort <sup>*</sup>		_	ements: o Yes	Deterio Yes t		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	7,435	9,745	1,813	24.4%	723	7.4%	+6.3%
Baseline to Review 2	1,375	1,922	505	36.7%	247	12.9%	+7.8%
Baseline to Review 3	174	213	78	44.8%	34	16.0%	+11.4%

#### Table 2.16 Breakdown of net movement in longitudinal responses

\*The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 2.17 below.

Table 2.17 Key drivers of likelihood of transitions in "% of children who can make
friends with people outside the family" response

			1 step tr	ansitions			tep itions		tep itions
			line to Review	Lates	t Year	Baseline to Second Review		Baseline to Third Review	
Reference		with lik	Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		onship elihood of
Category	Variable	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
	Participant lives in VIC	₽	Ļ	₽		₽			
NSW	Participant lives in QLD		↓						
NSW	Participant lives in SA	1							
	Participant lives in ACT, NT, TAS, WA		ŧ						
	Disability is autism		1						
Global developmental delay / developmental	Disability is cerebral palsy or another neurological disability		ŧ				ŧ	1	
delay	Disability is Down syndrome or an intellectual disability							1	

			1 step tr	ansitions			tep itions		tep itions
			line to Review	Lates	t Year		line to Review		ine to Review
		with lik	onship elihood of	with lik	onship elihood of	Relationship with likelihood of		Relationship with likelihoo of	
Reference Category	Variable	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
	Disability is a sensory disability	1	ŧ				ŧ		
	Disability is "Other"	1	↓						
N/A	Participant is older		↓				↓		
Non-CALD	Participant is CALD	₽				₽			
N/A	General time trend		₽		₽				
N/A	Lower level of function	₽				ŧ	1	₽	
N/A	Higher annualised total funding	₽	1	ŧ		ł		ŧ	
N/A	Higher baseline utilisation	₽	1			₽			
N/A	Higher utilisation of capital funding						1		
Agency-	Plan is fully self- managed					1			
managed	Plan is partly self-managed					1			
Major cities	Participant lives outside a major city	1					ŧ		
Did not relocate	Participant relocated to a new Local Government Area (LGA)				1		1		
Pre-COVID	Review during COVID period	₽		↓					
Lower level of NDIA support	Medium level of NDIA support				₽				

			1 step tra	ansitions			tep itions		tep itions
				Baseline to Second Review			line to Review		
Reference		with lik	Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		onship elihood of
Category	Variable	Imp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
N/A	Participant lives in an area with a higher average unemployment rate	ŧ		ŧ		ŧ		1	

Key findings from Table 2.17 include:

- Participants with cerebral palsy or another neurological disability, and those with Down syndrome or an intellectual disability, were more likely to improve over three years in the Scheme. Participants with a sensory disability, or a disability in the "Other" category, were more likely to improve and less likely to deteriorate over one year in the Scheme.
- Participants living in Victoria were less likely to improve for all one-step transitions and from baseline to second review than those living in NSW. However, participants from Victoria were less likely to deteriorate from baseline to first review.
- Having a review during the COVID-19 period was associated with participants being less likely to improve in all one-step transitions.
- Participants with higher annualised plan budgets, and those with lower level of function, were generally less likely to improve and more likely to deteriorate.
- Participants that relocated during the transition were more likely to deteriorate in their latest year in the scheme, and from baseline to second review.

#### My child joins me when I complete tasks at home

The percentage of parents/carers reporting that their child joins them when they complete tasks at home has increased significantly from baseline to all reviews, with net increases of 3.6%, 8.3% and 14.0% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 2.18 below.

	Number of Baseline Responses in cohort <sup>*</sup>			ements: o Yes		rations: to No	N-4
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	5,030	12,087	1,322	26.2%	703	5.8%	+3.6%
Baseline to Review 2	1,024	2,262	459	44.8%	186	8.2%	+8.3%
Baseline to Review 3	136	250	80	58.8%	26	10.4%	+14.0%

#### Table 2.18 Breakdown of net movement in longitudinal responses

\*The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 2.19 below.

			1 step tra	ansitions		2 s transi			tep itions
			line to Review	Latest	t Year	Basel Second	ine to Review		ine to Review
Deference		with lik	Relationship with likelihood of		Relationship with likelihood of		onship elihood if	Relationshi with likelihoo of	
Reference Category	Variable	Imp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.
	Participant lives in VIC	₽	↓			↓			
NSW	Participant lives in QLD		₽						
	Participant lives in ACT, NT, TAS, WA		ŧ						
	Disability is autism		1						1
Global developmental delay /	Disability is cerebral palsy or another neurological disability		ŧ						
developmental delay	Disability is a sensory disability		ŧ						
	Disability is "Other"								1
N/A	Participant is older		↓				↓		
Male	Participant is female		↓				↓		
Non- Indigenous	Participant did not state their Indigenous status						1		
Non-CALD	Participant is CALD	₽							
N/A	Lower level of function	₽	1			₽			

Table 2.19 Key drivers of likelihood of transitions in *"% parents/carers who say their child joins them when they complete tasks at home* 

			1 step tra	ansitions		2 s transi			tep itions
			line to Review	Lates	t Year	Basel Second	ine to Review		ine to Review
		with lik	onship celihood of	with lik	onship elihood of	with like	onship elihood of	with lik	onship elihood of
Reference Category	Variable	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
2016/17	Participant entered the Scheme in 2017- 18	ŧ							
2010/17	Participant entered the Scheme in 2018- 19	₽	₽						
N/A	Higher annualised total funding	ŧ	1		1	ŧ	1		1
N/A	Higher baseline utilisation	₽			1	↓			
N/A	Higher utilisation of core supports						₽		
N/A	Higher utilisation of capacity building supports		1						
Agency-	Plan is fully self- managed	1							
managed	Plan is partly self-managed						₽		
Major cities	Participant lives outside a major city		ŧ						
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1						
Pre-COVID	Review during COVID period	₽	↓		1				
Lower level of	Medium level of NDIA support					1			
NDIA support	Higher level of NDIA support					1			

			1 step tra	ansitions			tep itions	3 step transitions	
		Baseline to First Review Relationship with likelihood of		Lates	t Year		ine to Review	Basel Third F	ine to Review
Reference				Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
Category	Variable	lmp. Det.		Imp.	Det.	lmp.	Det.	lmp.	Det.
Entered the Scheme for early intervention	Entered the Scheme due to disability		ŧ						1
N/A	Participant lives in an area with a higher unemployment rate	ŧ				ŧ	1		

Key findings from Table 2.19 include:

- Female participants, and older participants, were less likely to deteriorate (stop joining their parents/carers when they complete tasks at home), between baseline and first review, and between baseline and second review.
- Participants living in Victoria were less likely to improve from baseline to first review and baseline to second review than those living in NSW. However, participants from Victoria were less likely to deteriorate from baseline to first review.
- There were also some differences by disability. For example, participants with autism were more likely to deteriorate from baseline to first review and from baseline to third review than those with global developmental delay / developmental delay.
- Participants with higher annualised plan budgets, and those with lower level of function, were generally less likely to improve and more likely to deteriorate.
- Participants living in an area with a higher average unemployment rate were less likely to improve from baseline to first review and baseline to second review. These participants were also more likely to deteriorate from baseline to second review.

#### My child fits in with the everyday life of the family

The percentage of parents/carers reporting that their child fits in with the everyday life of the family has increased significantly from baseline to all reviews, with net increases of 5.2%, 6.6% and 7.7% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 2.20 below.

1	Number of Baseline Responses in cohort <sup>*</sup>		Improve No to	ements: o Yes	Deterio Yes t		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	5,404	11,655	1,580	29.2%	689	5.9%	+5.2%
Baseline to Review 2	988	2,265	435	44.0%	220	9.7%	+6.6%
Baseline to Review 3	119	272	70	58.8%	40	14.7%	+7.7%

#### Table 2.20 Breakdown of net movement in longitudinal responses

\*The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 2.21 below.

### Table 2.21 Key drivers of likelihood of transitions in *"% parents/carers who say their child fits in with the everyday life of the family*

		1 step transitions				2 step transitions		3 step transitions	
		Baseline to First Review Relationship with likelihood of		Latest Year Relationship with likelihood of		Baseline to Second Review Relationship with likelihood of		Baseline to Third Review Relationship with likelihood of	
Reference									
Category	Variable	lmp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.
NSW	Participant lives in VIC	₽	Ļ			↓			
	Participant lives in QLD		↓						
	Participant lives in SA			1		1			
	Participant lives in ACT, NT, TAS, WA	₽	ŧ						
	Disability is autism		1		1		1		
Global developmental delay / developmental delay	Disability is cerebral palsy or another neurological disability		ŧ						
	Disability is Down Syndrome or an intellectual disability		ŧ						

			1 step tra	ansitions		2 step transitions		3 step transitions	
		Baseline to First Review Relationship with likelihood of		Latest Year Relationship with likelihood of		Baseline to Second Review Relationship with likelihood of		Baseline to Third Review Relationship with likelihood of	
Reference Category	Variable	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
	Disability is a sensory disability	1	ŧ						
	Disability is "Other"		↓				↓		
N/A	Participant is older		↓						
Male	Participant is female				↓		↓		
Non-CALD	Participant is CALD						1		
N/A	Lower level of function	₽	1				1	↓	
N/A	Higher annualised total funding	₽	1		1	ŧ	1		1
N/A	Higher baseline utilisation	₽							
N/A	Higher utilisation of core supports			₽					
N/A	Higher utilisation of capacity building supports		1						
N/A	Higher utilisation of capital supports		1						
Agency- managed	Plan is managed by a plan manager	₽	1			₽		ŧ	
	Plan is partly self-managed							↓	
Major cities	Participant lives outside a major city		ŧ						
Did not relocate	Participant relocated to a new Local				1				

		1 step transitions				2 step transitions		3 step transitions	
		Baseline to First Review Relationship with likelihood of		Latest Year Relationship with likelihood of		Baseline to Second Review Relationship with likelihood of		Baseline to Third Review Relationship with likelihood of	
<b>-</b> (									
Reference Category	Variable	Imp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.
	Government Area (LGA)								
N/A	Change in time trend post- COVID		ŧ						
Lower level of NDIA support	Higher level of NDIA support								1
N/A	Participant lives in an area with a higher average unemployment rate	ŧ		ŧ					

Key findings from Table 2.21 include:

- Responses from parents/carers of participants with autism were more likely to deteriorate in all one-step transitions and from baseline to second review.
- Responses from parents/carers of female participants were more likely to improve from baseline to first review, and less likely to deteriorate between baseline and second review and over the latest year in the Scheme.
- Improvement in responses was less likely for participants whose plans are plan managed than whose plans are Agency-managed, from baseline to first, second or third review. Responses for these participants were also less likely to deteriorate from baseline to first review.
- Responses for participants living in an area with a higher average unemployment rate were less likely to improve in all one-step transitions.
- Responses for participants who changed address were more likely to deteriorate in all one-step transitions.

A summary of key findings from this section is contained in Box 2.6.

# Box 2.6: Summary of findings: longitudinal indicators by participant characteristics

- Longitudinal outcomes vary with participant level of function. Participants with a higher level of function tend to exhibit higher rates of improvement than those with a lower level of function.
- Participants with a hearing impairment generally experience better longitudinal outcomes than those with other disabilities.
- Participants from regional and remote locations, compared to those from major cities, show more positive longitudinal results on some indicators. For example, parents/carers of children in regional or remote areas more likely to improve with regard to having concerns in six or more developmental areas from baseline to first review, than children living in major cities.
- Indigenous status was not strongly associated with longitudinal change: only one multiple regression model found a significant difference between Indigenous and non-Indigenous participants. This model found that Indigenous children were more likely to deteriorate on the indicator "my child participates in age-appropriate community, cultural or religious activities" from baseline to second review.
- CALD participants were less likely to improve in making friends with people outside the family from baseline to first review and from baseline to second review. Parents/carers of CALD participants were also less likely to change their response from "Yes" to "No" for the indicator "I would like my child to be more involved in community activities".
- Moving to a new LGA tends to have a negative impact for some transitions.
- The COVID-19 step-change variable was significant in at least one model for all but one indicator ("My child fits in with the everyday life of the family"), and had a negative impact for all but one of these models, with participants being less likely to improve or more likely to deteriorate in their response between the two time points when the later time point occurred during the COVID-19 period. The one indicator where there was a positive step change was "My child joins me when I complete tasks at home", where participants were less likely to deteriorate between baseline and first review. There were two indicators where a favourable change in slope was observed after the COVID-19 date: "My child fits in with the everyday life of the family" and "My child's disability is a barrier to being more involved".

# 3. Participants from birth to before starting school: Has the NDIS helped?

### 3.1 Results across all participants

For participants who have been in the Scheme for approximately one, two or three years as at 30 June 2020, Figure 3.1 shows the percentage of parents/carers who reported that the NDIS has helped with outcomes related to each of the five domains, one, two and three years in the Scheme (first review, second review and third review, respectively).

Figure 3.1 Percentage who think that the NDIS has helped with outcomes related to each domain<sup>17</sup>

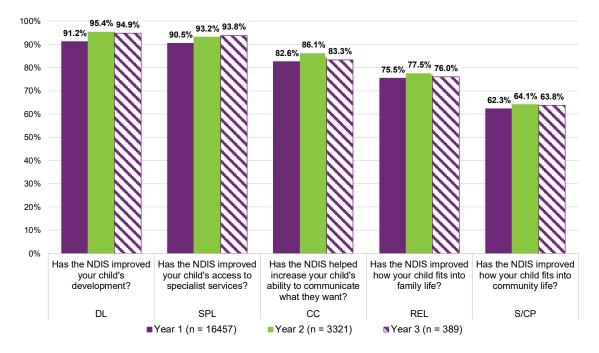


Figure 3.1 shows that opinions on whether the NDIS has helped vary considerably by domain for the youngest cohort of participants. After approximately one year in the Scheme, there is widespread agreement that the NDIS has helped in areas related to the child's development (91.2%) and access to specialist services (90.5%). A slightly smaller percentage (82.6%) feel that the NDIS has helped improve their child's ability to communicate what they want. Percentages are lower for integration into family and community, with 75.5% thinking that the NDIS has helped with how their child fits into family life, and 62.3% thinking that the NDIS has helped with fitting into community life.

Across all domains, the percentage who think the NDIS has helped is slightly higher for participants who have been in the Scheme for two years compared to those who have been in the Scheme for one year. However, opinions on whether the NDIS has helped remained relatively unchanged between the second and third review. There was a slight increase over the third year for the percentage who think the NDIS has improved their child's access to specialist services (from 93.2% to 93.8%), and slight decreases for the percentages who felt

<sup>&</sup>lt;sup>17</sup> The graph legend shows the number of responses averaged across the five questions (since slightly different numbers respond to each question).

that the NDIS helped increase their child's ability to communicate what they want (from 86.1% to 83.3%) and the percentage who think the NDIS has helped with how their child fits into family life (from 77.5% to 76.0%). However, for all domains, the percentage who think that the NDIS has helped is slightly higher at third review than at first review.

### **3.2 Results by participant characteristics**

#### 3.2.1 Year 1 'Has the NDIS Helped?' indicators – participant characteristics

Year 1 (first review) indicators have been analysed by participant characteristics using oneway analyses and multiple regression modelling.

Table 3.1 summarises the results of the regression modelling, showing the relationship of different participant characteristics with the likelihood of the child's parent/carer saying that the NDIS has helped after one year in the Scheme. The arrow symbols have the same interpretation as for Section 2, defined in Table 2.6.

### Table 3.1 Relationship of participant characteristics with the likelihood of a positive response<sup>18</sup>

			R	elationship wit	h:	
Deferrere			Has NDIS h	elped improve	participant s	
Reference Category	Characteristic	Develop ment	Access to specialist services	Ability to communic ate what they want	Fit into family life	Fit into community life
Doesn't use child care	Uses child care	1	1	1	1	1
Doesn't use specialist services	Uses specialist services		1	1	1	1
Doesn't have friends	Participant has friends	1	1	1	1	1
Doesn't participate in the community	Participant participates in the community	1	1	1	1	1
Participant entered the Scheme for early intervention	Participant entered the Scheme due to disability	₽			ŧ	ł
N/A	Higher annualised plan budget	ŧ				
Non-CALD	Participant is CALD					1

<sup>18</sup> The reference category for categorical variables in the models is shown in the leftmost column of the table, and the arrows are interpreted relative to participants belonging to the reference category. For example, a green "up" arrow means more likely to respond positively than participants in the reference category. For continuous variables, the arrows are interpreted relative to either increasing or decreasing values of the variable, as described in the second column of the table (for example, "Higher annualised plan budget" or "Lower level of function"), and the reference category is shown as N/A.

			R	elationship wit	h:	
Reference			Has NDIS h	elped improve	participant s	
Category	Characteristic	Develop ment	Access to specialist services	Ability to communic ate what they want	Fit into family life	Fit into community life
N/A	General time trend	1		1	1	1
	Disability is cerebral palsy		t	₽	₽	
	Disability is Down syndrome			Ļ		
	Disability is global developmental delay	Ļ	t	ŧ		
	Disability is hearing impairment	↓	t		₽	
Developmental delay	Disability is intellectual disability		Ļ	₽		
	Disability is another neurological disability		ŧ	₽	₽	
	Disability is another sensory or speech disability					1
	Disability is spinal cord injury or another physical disability	Ļ		ŧ	₽	
	Disability is visual impairment	₽		₽	₽	ŧ
	Disability is "Other"	ŧ	ŧ	₽		
N/A	Participant is older			1		1
2016/17	Participant entered the scheme in 2017/18		1			
	Participant entered the scheme in 2018/19		1			
Major cities	Participant lives in regional area	₽	<b>↓</b>	₽	₽	ŧ
	Participant lives in remote/very remote area	ŧ	t			
95-100% capacity building supports	0-95% of supports are capacity building supports	ŧ		₽	₽	ŧ

			R	elationship wit	h:	
Deference			Has NDIS h	elped improve	participant s	
Reference Category	Characteristic	Develop ment	Access to specialist services	Ability to communic ate what they want	Fit into family life	Fit into community life
	5-100% of supports are capital supports			ŧ	ŧ	↓
Agency-managed	Plan is managed by a plan manager				↓	ŧ
	Plan is fully self- managed	1		1	1	1
Did not receive services from Commonwealth or State/Territory	Participant received services from Commonwealth programs before joining NDIS		ł			
programs before joining NDIS	Participant received services from State/Territory programs before joining NDIS	ŧ	ł			
N/A	Lower level of function	Ļ		ł	↓	Ļ
	Participant lives in NT		1		ł	
	Participant lives in QLD	1	1	1		1
NSW	Participant lives in SA		1	1	1	
	Participant lives in VIC		1	1		1
	Participant lives in WA				ł	
Lower level of NDIA support	Higher level of NDIA support		t			
N/A	Participant lives in an area with a higher average unemployment rate			ł		
N/A	Higher baseline plan utilisation	1	1	1	1	1

Key findings from Table 3.1 are discussed below.

#### **Baseline plan utilisation**

Parents and carers of participants who used a higher percentage of the supports in their baseline plan are more likely to say that the NDIS has improved their child's outcomes across all five domains of interest.

#### **Remoteness**

The percentage of positive responses tended to be lower for participants living in regional and remote areas, relative to major cities, and to decrease with increasing remoteness. This trend was most pronounced for access to specialist services. On a one-way basis, 92.2% of those living in major cities thought that the NDIS had improved their child's access to specialist services, decreasing to 74.5% for those living in remote/very remote areas.

#### **Disability type**

Compared to participants with developmental delay:

- Responses in respect of participants with autism were not significantly different for any of the five domains. Generally speaking, responses for participants with developmental delay or autism tended to be better or not significantly worse than those for participants with other disabilities. The one exception was for fitting into community life, where participants with other sensory or speech disabilities were significantly more likely to respond positively.
- Parents and carers of participants with global developmental delay, hearing impairment, spinal cord injury / other physical disabilities, visual impairment, and disabilities in the "Other" category were less likely to say the NDIS improved their child's development.
- Parents and carers of participants with cerebral palsy, global developmental delay, hearing impairment, intellectual disability, other neurological and "other" disabilities were less likely to say that the NDIS improved their child's access to specialist services.
- Parents and carers of participants with all other disabilities apart from hearing impairment or another sensory/speech disability were significantly less likely to think that the NDIS had improved their child's ability to communicate what they want.
- Parents and carers of participants with cerebral palsy, hearing impairment, other neurological disabilities, spinal cord injury, other physical disabilities and visual impairment were less likely to think that the NDIS helped their child fit into family life.
- Parents and carers of participants with other sensory/speech disabilities were more likely to say the NDIS helped their child fit into community life, whereas parents/carers of participants with a visual impairment were less likely to say this.

#### Plan management type

Parents and carers of participants with fully self-managed plans were significantly more likely to think that the NDIS has helped than those of participants with Agency-managed plans, across all domains where plan management type was a significant predictor. The one area for which plan management type was not a significant predictor was access to specialist services.

Parents and carers of participants who use a plan manager are significantly less likely to say that the NDIS helped with how their child fits into either family or community life, compared to those with Agency-managed plans.

#### Support categories within plans

Parents and carers of participants whose plans include 0-95% capacity building support are less likely to say the NDIS helped than those whose plans have 95-100% of capacity

building supports, for all domains except access to specialist services (where support category was not a significant predictor).

Those with 5-100% of capital supports are also less likely than parents and carers of participants with 95-100% capacity building supports to say that the NDIS improved their child's ability to communicate want, as well as how they fit into family and community life.

#### State/Territory

In comparison to parents/carers of participants living in NSW, parents/carers of participants living in:

- The Northern Territory are more likely to say the NDIS improved their child's access to specialist services but are less likely to say the NDIS helped their child fit into family life.
- Queensland are more likely to say that the NDIS helped across all domains with the exception of fitting into family life (where there was no significant difference).
- South Australia are more likely to say that the NDIS has improved their child's access to specialist services, their ability to communicate what they want, and how they fit into family life.
- Victoria are more likely to say that the NDIS improved their child's access to specialist services, increased their ability to communicate what they want, and fit into community life.
- Western Australia are less likely to say that the NDIS helped their child fit into family life.

#### Level of function

Parents and carers of participants with lower levels of function are less likely to say that the NDIS has helped across all domains except access to specialist services, where level of function was not a significant predictor of a positive response at first review.

#### Annualised plan budget

Parents/carers of participants with higher annualised plan budget are less likely to say that the NDIS has improved their child's development.

#### Level of NDIA Support<sup>19</sup>

Parents and carers of participants receiving a higher level of support with planning from the NDIA are less likely than those with a lower level of NDIA support to say that the NDIS improved their children's access to specialist services.

#### Participant age

Parents/carers of older participants are more likely to say that the NDIS has helped improve their ability to communicate what they want, and how they fit into community life.

#### **CALD** status

Parents and carers of participants from a CALD background are more likely to say that the NDIS improved how their child fits into community life.

<sup>&</sup>lt;sup>19</sup> The level of NDIA support a participant requires as they move along the participant pathway, having regard to the complexity of their situation.

#### Time trends

Compared to those entering in 2016-17, parents/carers of participants entering the Scheme in later years are more likely to say that the NDIS improved their child's access to specialist services.

There is also a general time trend for the other four domains, with the percentage of parents/carers responding positively tending to increase over time. (Note that this is a calendar year time trend, not time in Scheme. All participants have been in the Scheme for approximately one year when they respond at first review).

#### Access type

Compared to parents/carers of participants entering the Scheme for early intervention, parents/carers of those entering due to disability are less likely to say that the NDIS has helped with their child's development, and how they fit into family and community life.

#### Scheme entry type

Parents and carers of participants who previously received services from Commonwealth or State/Territory systems are less likely than those who received neither to say that the NDIS improved their access to specialist services. Parents/carers of those previously receiving State/Territory services are also less likely to say that the NDIS improved their child's development.

#### **Other characteristics**

Parents and carers of participants who use specialist services/childcare, who participate in community activities and those who have friends are more likely to say the NDIS has helped their children improve outcomes across all five domains of interest.

### 3.2.2 Longitudinal 'Has the NDIS Helped?' indicators – participant characteristics

Analysis of longitudinal indicators by participant characteristics has been examined in two ways:

- 1. A simple comparison of the percentage reporting that the NDIS had helped after two and three years in the Scheme with the percentage reporting that the NDIS had helped after one year in the Scheme. The difference (percentage after two and three years minus percentage after one year) is compared for different subgroups.
- 2. Multiple regression analyses modelling the probability of improvement / deterioration over the participant's time in the Scheme.<sup>20</sup>

Some key features of the analyses for helped question indicators are summarised below.

#### The NDIS has improved my child's development

The percentage of participants reporting that the NDIS improved their child's development increased by 4.6% from 91.2% to 95.8% between first review and second review, and by 5.2% from 90.2% to 95.4% between first review and third review. Of those who responded

<sup>&</sup>lt;sup>20</sup> Regression models for improvement include all participants who answered "No" at the initial time point and model the probability of answering "Yes" at the later time point. Models for deterioration include all participants who answered "Yes" at the initial time point and model the probability of answering "No" at the later time point. For some transitions, especially first review to third review, the numbers are small and the models may identify few or no predictors.

negatively at first review, 66.4% improved at second review and 78.1% at third review. Table 5.1 sets out the breakdown of the movements of responses.<sup>21</sup>

l constituello el		f Baseline s in cohort¹	Improvements: No to Yes		Deterio Yes t		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Review 1 to Review 2	250	2,585	166	66.4%	35	1.4%	+4.6%
Review 1 to Review 3	32	294	25	78.1%	8	2.7%	+5.2%

Table 5.1 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

From Review 1 to Review 2:

- Participants with higher annualised plan budget are less likely to improve.
- Participants with higher plan utilisation between first and second reviews are more likely to improve.
- Participants who entered the Scheme due to disability are more likely to deteriorate than those joining the scheme for early intervention.
- Participants who use a higher percentage of their capacity building supports are less likely to deteriorate.

From Review 1 to Review 3:

• Participants who have used a higher percentage of their capacity building supports are more likely to improve.

#### The NDIS has improved my child's access to specialist services

The percentage of parents/carers reporting that the NDIS improved their child's access to specialist services increased by 4.4% (from 89.2% to 93.5%) between first review and second review, and by 6.0% (from 88.4% to 94.4%) between first review and third review. Of those who responded negatively at first review, 61.6% improved at second review and 75.7% at third review. Table 5.2 sets out the breakdown of the movements of responses.

<sup>&</sup>lt;sup>21</sup> The net movements shown in the tables differ from the changes shown in Section 3.1 since they are longitudinal results, restricted to the same group of participants, whereas the previous results included all participants who answered at first, second and third reviews.

Longitudinal		f Baseline s in cohort <sup>1</sup>	Improvements: No to Yes		Deterio Yes t	Net	
Period	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	305	2,510	188	61.6%	65	2.6%	+4.4%
Review 1 to Review 3	37	282	28	75.7%	9	3.2%	+6.0%

#### Table 5.2 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

From Review 1 to Review 2:

- Participants with higher utilisation of capacity building supports are more likely to improve and less likely to deteriorate.
- Participants entering the Scheme in 2017-18 are more likely to improve than those entering in 2016-17.
- Participants who entered the Scheme due to disability are more likely to deteriorate than those entering for early intervention.
- Participants with higher annualised plan budget are more likely to deteriorate.
- Parents/carers of Indigenous participants who thought the NDIS improved their access to specialist services at first review are less likely than non-Indigenous participants to maintain this opinion at second review.
- There was a significant positive time trend prior to the assumed COVID date (the likelihood of maintaining a positive response increased over time), however this switched to a negative trend post-COVID (with the likelihood of maintaining a positive response decreasing over time after the assumed COVID date).

From Review 1 to Review 3:

- Participants with higher utilisation of capacity building supports are more likely to improve.
- Participants with higher utilisation of capital supports are more likely to deteriorate.

#### The NDIS has increased my child's ability to communicate what they want

The percentage of parents/carers who say that the NDIS increased their child's ability to communicate what they want increased by 6.4% from 80.7% to 87.1% between first review and second review, and by 10.4% from 75.7% to 86.1% between first review and third review. Of those who responded negatively at first review, 49.7% improved at second review and 58.4% at third review. Table 5.3 sets out the breakdown of the movements of responses.

Longitudinal		f Baseline s in cohort <sup>1</sup>	Improvements: No to Yes		Deterio Yes t	Net	
Period	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	543	2,263	270	49.7%	90	4.0%	+6.4%
Review 1 to Review 3	77	240	45	58.4%	12	5.0%	+10.4%

#### Table 5.3 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

From Review 1 to Review 2:

- Participants with higher annualised plan budget are less likely to improve.
- Participants who have used a higher percentage of their capacity building supports are more likely to improve.
- There is a positive general time trend, with participants responding to the survey later in time being more likely to improve.
- Participants who entered the Scheme due to disability compared to those who entered for early intervention are more likely to deteriorate.
- Participants whose plans include more than 5% of capital supports are more likely to deteriorate than those with 0-75% in capacity building supports.
- Participants with higher plan utilisation are less likely to deteriorate.
- Participants who are older are less likely to deteriorate.

From Review 1 to Review 3:

- Participants who have used a higher percentage of their capacity building supports are more likely to improve.
- Participants living outside a major city are less likely to improve.
- Participants with a lower level of function are less likely to improve.
- Indigenous participants are more likely to deteriorate.

#### The NDIS has improved how my child fits into family life

The percentage of parents/carers who say that the NDIS improved how their child fits into family life increased by 5.9% from 72.0% to 77.9% between first review and second review, and by 12.1% from 65.1% to 77.1% between first review and third review. Of those who responded negatively at first review, 38.6% improved at second review and 50.0% at third review. Table 5.4 sets out the breakdown of the movements of responses.

Longitudinal		f Baseline s in cohort¹	Improvements: No to Yes		Deterio Yes t	Net	
Period	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	783	2,013	302	38.6%	137	6.8%	+5.9%
Review 1 to Review 3	110	205	55	50.0%	17	8.3%	+12.1%

#### Table 5.4 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

From Review 1 to Review 2:

- Participants who entered the Scheme in 2017-18 are more likely to improve than 2016-17 entrants.
- Participants with higher plan utilisation are more likely to improve.
- Participants who entered the Scheme due to disability are more likely to deteriorate than those entering for early intervention.
- Participants with higher utilisation of their capacity building supports are less likely to deteriorate.
- Participants living in Victoria are less likely to deteriorate than those living in NSW.

From Review 1 to Review 3:

• Participants who are older are more likely to deteriorate.

#### The NDIS has improved how my child fits into community life

The percentage of parents/carers who say that the NDIS improved how their child fits into community life increased by 7.1% from 57.8% to 64.9% between first review and second review, and by 14.7% from 50.2% to 64.9% between first review and third review. Of those who responded negatively at first review, 29.6% improved at second review and 46.2% at third review. Table 5.5 sets out the breakdown of the movements of responses.

#### Table 5.5 – Breakdown of net movement in longitudinal responses

Longitudinal		f Baseline s in cohort <sup>1</sup>	Improvements: No to Yes		Deterio Yes t	Not	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Review 1 to Review 2	1,167	1,596	346	29.6%	149	9.3%	+7.1%
Review 1 to Review 3	156	157	72	46.2%	26	16.6%	+14.7%

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

From Review 1 to Review 2:

- Participants whose plans are fully self-managed are more likely to improve than those whose plans are Agency-managed.
- Participants with lower levels of function are less likely to improve.
- Participants with higher plan utilisation are more likely to improve.
- Participants from Local Government Areas (LGAs) with higher unemployment rates are less likely to improve.
- Female participants are less likely to deteriorate.
- Participants who live in Queensland and Victoria are less likely to deteriorate than those in NSW.
- Participants with a higher level of NDIA support are more likely to deteriorate than those with a lower level of NDIA support.

From Review 1 to Review 3:

• Participants with higher plan utilisation are less likely to deteriorate.

Box 3.1 summarises the results of this section.

#### Box 3.1: Has the NDIS helped? – by participant characteristics

After one year in the Scheme:

- Higher plan utilisation is strongly associated with a positive response after one year in the Scheme, across all five areas surveyed. Higher utilisation of total plan budget, and higher utilisation of capacity building supports, were also associated with a higher likelihood of improvement, and a lower likelihood of deterioration, between first review and later reviews.
- Parents/carers of participants living in regional or remote areas are less likely to think that the NDIS has helped after one year in the Scheme than those living in major cities.
- Parents/carers of participants whose plans are fully self-managed were significantly
  more likely to think that the NDIS has helped after one year in the Scheme than those of
  participants with Agency-managed plans, across all domains except access to specialist
  services (where there was no significant difference).

Changes between one and three years in the Scheme:

- Participants who entered the Scheme due to disability (s24) are more likely to deteriorate between first and second review than those entering for early intervention (s25).
- Participants who have used a higher percentage of their total supports, and in particular of their capacity building supports, are generally more likely to improve and less likely to deteriorate between first review and later reviews.
- Participants with higher annualised plan budget are less likely to improve in thinking the NDIS has helped with their child's development, and with increasing their child's ability to communicate what they want.
- Parents/carers of Indigenous participants are more likely to deteriorate in thinking the NDIS has improved their child's access to specialist services.

# 4. Participants from starting school to age 14: outcome indicators

### 4.1 Key findings

# Box 4.1: Overall findings for C3 cohort (participants who have been in the Scheme for three years)

- For participants with three years of Scheme experience, longitudinal analysis revealed improvements and deteriorations in outcomes across a number of indicators. In particular, significant changes were observed in the following areas:
- Growth in independence: The percentage of parents/carers who say their child is becoming more independent increased by 9.0% between baseline and third review, from 44.2% to 53.1%. On an age-adjusted basis the improvement was stronger (16.6%). The percentage of children who spend time away from parents/carers other than at school increased by 2.9% (2.3% age-adjusted) over three years in the Scheme, from 29.7% to 32.6%, although there has been no significant change in the most recent year. In addition, the percentage of children who manage the demands of their world has increased by 18.1% over three years (10.4% in the latest year).
- Lifelong learning: Parents/carers were more likely to say they know their child's goals at school (an increase of 16.4% over three years, including a 4.7% increase in the latest year). The percentage who think their child is learning at school has also increased, by 10.4% over three years. However, the percentage of children who attend school in a mainstream class decreased by 5.9% between baseline and third review, including a 2.5% decrease in the most recent year. The percentage of children who have been suspended from school has increased by 10.3% between baseline and third review.
- Social, community and civic participation: The percentage of parents/carers who say they would like their child to have more opportunities to be involved in activities with other children has increased by 12.9%, from 79.4% to 92.3%, between baseline and third review. This includes a small but significant increase of 1.0% over the latest year. Of those who would like their child to be more involved in activities with other children, the percentage who see their child's disability as a barrier increased from 86.7% at baseline to 93.8% at third review.

## Box 4.2: Overall findings for C2 cohort (participants who have been in the Scheme for two years)

- For participants with two years of Scheme experience, longitudinal analysis revealed improvements and deteriorations in outcomes that were largely in line with the cohort of participants with three years of Scheme experience. Specifically, the following changes were observed:
- Growth in independence: The percentage of parents/carers who say their child is becoming more independent increased by 8.2% (13.6% after adjusting for age) between baseline and second review, from 41.7% to 49.9%. This includes a 3.4% increase in the latest year. The percentage of children who spend time away from parents/carers other than at school increased by 1.8%, from 30.4% to 32.2%, with a slight increase of 0.4% in the latest year.
- Lifelong learning: The percentage of parents/carers who think their child is learning at school increased by 8.0% over two years, although not significantly in the latest year. The percentage of children who attend school in a mainstream class decreased by 4.5% between baseline and second review, including a 2.5% decrease in the latest year.
- Social, community and civic participation: The percentage of parents/carers who say they would like their child to have more opportunities to be involved in activities with other children increased by 4.9% between baseline and second review, from 89.0% to 93.9%. Of those who would like their child to be more involved in activities with other children, the percentage who see their child's disability as a barrier increased by 5.2% between baseline and the second review, from 87.9% to 93.1%, with a 1.5% increase over the latest year.

# Box 4.3: Overall findings for C1 cohort (participants who have been in the Scheme for one year)

- For participants with one year of Scheme experience, longitudinal analysis revealed improvements and deteriorations in outcomes that were largely in line with the other cohorts of participants. Specifically, the following changes were observed:
- Growth in independence: The percentage of parents/carers who say their child is becoming more independent increased by 6.4% (7.8% age-adjusted) between baseline and first review, from 39.0% to 45.4%, while the percentage of children who spend time away from parents/carers other than at school increased by 1.5%, from 27.0% to 28.5%. In addition, the percentage of children who manage the demands of their world has increased by 7.1% over one year.
- Lifelong learning: The percentage of children who attend school in a mainstream class decreased by 2.1% between baseline and first review, from 65.9% to 63.8%.
- Social, community and civic participation: The percentage of parents/carers who say they would like their child to have more opportunities to be involved in activities with other children increased by 6.3% between baseline and first review, from 79.4% to 85.7%. Of those who would like their child to be more involved in activities with other children, the percentage who see their child's disability as a barrier increased by 3.4% between baseline and the first review, from 88.2% to 91.6%.

# Box 4.4: Outcomes by key characteristics for participants from starting school to age 14

- Longitudinal outcomes vary with participant level of function. Participants with higher level of function tend to exhibit higher rates of improvement than those with lower level of function.
- Participants with a sensory disability generally experience better outcomes than those with other disabilities.
- Participants from regional and remote locations, show more positive results on some indicators compared to those from major cities. For example, they are more likely to be gaining in independence, and are less likely to move out of a mainstream class at school.
- CALD participants tend to be less likely to improve on a number of the independence indicators, such as having a genuine say in decisions about themselves, and are less likely to move into a mainstream class at school. However, they are more likely to improve and less likely to deteriorate in getting along with their siblings.
- Indigenous participants who attend school in a mainstream class are more likely than non-Indigenous participants to move out of mainstream class between first and second review.
- Relocating to a new LGA was generally associated with less favourable transitions, with participants being less likely to improve and/or more likely to deteriorate.
- COVID-19 variables were significant in at least one model for all indicators, however the direction of the effect was mixed, being favourable in some models but unfavourable in others. For example:
- For the indicator "My child gets along with his/her siblings", parents/carers were less likely to change their response (either improve or deteriorate) in all one-year transitions, when the later review occurred during the COVID period. In addition, responses were less likely to improve over three years when the third review occurred during the COVID period.
- For the indicator "There is enough time each week for all members of the family to get their needs met", parents/carers were less likely to change their response (either improve or deteriorate) between baseline and first review, and they were less likely to deteriorate between second and third review.
- With respect to their child becoming more independent, parents/carers were less likely to change their response (either improve or deteriorate) between baseline and first review, but were less likely to improve between second and third review. There was also a negative change in time trend post-COVID, with improvement becoming less likely over time for some transitions.
- However, parents/carers were less likely to deteriorate with respect to perceiving their child's disability as a barrier to being more involved between baseline and first review, where the review occurred during the COVID period.

#### Box 4.5: Has the NDIS helped? – participants from starting school to age 14

- Opinions on whether the NDIS has helped vary by domain for the starting school to age 14 cohort, with the percentage responding positively being lowest for access to education (39.9% after one year in the Scheme and essentially unchanged after two years and three years in the Scheme) and highest for independence (60.5% after one year in the Scheme, increasing to 65.4% after two years in the Scheme and 68.5% after three years in the Scheme). For education, however, the mainstream education system has a much bigger role in ensuring successful outcomes than the NDIS.
- Higher plan utilisation is a strong predictor of a positive response across all four areas surveyed, after one, two and three years in the Scheme. In particular, those with very low utilisation (below 20%) are much less likely to say that the NDIS has helped. The fact that utilisation tends to be lowest for the starting school to age 14 cohort may contribute to the observed lower levels of satisfaction across all domains, compared to participants in other age groups.
- Participants who self-manage fully, those who did not receive services from State/Territory or Commonwealth programs before entering the NDIS, and those with a higher annualised plan budget were more likely to respond positively after one year in the Scheme. By contrast, Indigenous participants, those with lower level of function, and those living in regional or remote areas were less likely to respond positively.
- The percentage who think that the NDIS has helped increased slightly (by 4-9%) between first and third review across all domains except for access to education, where there was little change (1%). The likelihood of improvement/deterioration varied by some participant characteristics:
- Participants with higher utilisation of capacity building supports are more likely to improve and less likely to deteriorate across all domains.
- Improvement was more likely for participants who self-manage (either fully or partly), except in relation to access to education. Participants who relocated to a different LGA tended to be more likely to deteriorate.
- For access to education, CALD participants were more likely to improve and less likely to deteriorate. However, older participants were less likely to improve.
- For the relationships domain, female participants were more likely to improve and less likely to deteriorate between baseline and third review. Participants who did not receive Commonwealth or State/Territory support services prior to joining the NDIS were less likely to deteriorate than those who previously received State/Territory support services.

### 4.2 Outcomes framework questionnaire domains

Starting with the milestone of school commencement, this life stage follows children through to the early teenage years. Typically these years are characterised by increasing independence and development of relationships inside and outside the family. Hence the outcomes framework seeks to measure the extent to which participants:

- Grow in independence (domain DL, daily living)
- Are welcomed and educated in their local school (domain LL, lifelong learning)
- Form friendships with peers and have positive relationships with family (domain REL, relationships)
- Participate in local social and recreational activities (domain S/CP, social, community and civic participation).

The LF questions for participants in the starting school to age 14 cohort allow a deeper investigation into the experiences of participants in educational and school settings, with eight extra questions devoted to these areas. There are also three extra questions about developing independence (on managing the demands of the world and becoming more independent), one on relationships (about the effect on siblings), and four on social participation (about vacation care and after school activities).

Participants answer the outcomes questionnaire applicable to their age/schooling status at the time of interview. Hence the starting school to age 14 cohort comprises children who have started school and are aged 14 or younger when they enter the Scheme, and includes responses at all review time points until they turn 15.

### 4.3 Longitudinal indicators – overall

Longitudinal analysis describes how outcomes have changed for participants during the time they have been in the Scheme. Included here are participants who entered the Scheme between 1 July 2016 and 30 June 2019, for whom a record of outcomes is available at scheme entry (baseline) and at one or more of the three time points: approximately one year following scheme entry (first review), approximately two years following scheme entry (second review), and approximately three years following scheme entry (third review).

For this year's report, results are shown separately by entry year cohort, including the value of the indictator at baseline and each yearly review, as well as the change in the latest year, and the change between baseline and latest review. For example, for 2016-17 entrants, results at baseline, first review, second review, and third review are shown, as well as the change between second review and third review, and the change from baseline to third review.

There have been a number of improvements across all domains for the time periods being considered. Often, improvements tend to be greater in the earlier years in the Scheme, with smaller improvements observed in later years. Hence the change from baseline to latest review tends to be greater than the change over the latest year, for participants who have been in the Scheme for more than a year.

Changes over time for children will include an element of normal age-related development. Age-adjusted changes have been used to guide selection of indicators presented in this section.

Table 4.1 summarises changes for selected indicators across the two time periods. Indicators were selected for the tables if the change, either overall or for the latest year, was statistically significant<sup>22</sup>, had an absolute magnitude greater than 0.02 for at least one entry year cohort, and was confirmed by the age-adjusted analysis.

Table 4.1 Selected longitudinal indicators for participants from starting school to age 14
--

				Indicat				ange		ficant <sup>23</sup>
Domain (Form)	Indicator	Cohort	Baseline	Review 1	Review 2	Review 3	Latest year	Overall	Latest year	Overall
, í			Imp	rovement	t					-
	% of parents/carers who	C3	44.2%	47.1%	51.6%	53.1%	1.5%	9.0%	**	**
DL (SF)	say their child is becoming	C2	41.7%	46.5%	49.9%		3.4%	8.2%	**	**
(01)	more independent	C1	39.0%	45.4%			6.4%	6.4%	**	**
	% of children who spend	C3	29.7%	31.7%	32.9%	32.6%	-0.2%	2.9%		**
DL (SF)	time away from parents/carers other than	C2	30.4%	31.8%	32.2%		0.4%	1.8%	*	**
()	at school	C1	27.0%	28.5%			1.5%	1.5%	**	**
		C3	46.6%	53.4%	54.3%	64.7%	10.3%	18.1%	*	*
DL (LF)	% of children who manage the demands of their world	C2	42.3%	51.9%	46.5%		-5.4%	4.2%		
( )		C1	42.3%	49.4%			7.1%	7.1%	**	**
LL % of parents/carers who (LF) know their child's goals at	C3	73.3%	83.3%	85.0%	89.7%	4.7%	16.4%	*	*	
	C2	79.6%	85.0%	80.8%		-4.2%	1.2%			
( )	school	C1	76.1%	79.7%			3.6%	3.6%		
% of parents/carers who	C3	58.6%	64.0%	68.1%	69.0%	0.8%	10.3%		*	
LL (LF)	(LE) think their child is learning	C2	60.4%	69.1%	68.4%		-0.7%	8.0%		*
. ,	at school	C1	64.4%	66.4%			2.0%	2.0%		_
			Contex	t depend	ent		I			-
S/CP	% of parents/carers who would like their child to be	C3	79.4%	88.3%	91.3%	92.3%	1.0%	12.9%	**	**
(SF)	more involved in activities	C2	89.0%	92.6%	93.9%		1.3%	4.9%	**	**
. ,	with other children	C1	79.4%	85.7%			6.3%	6.3%	**	**
			Det	erioration			1			
LL	% of children who attend	C3	57.0%	56.1%	53.5%	51.0%	-2.5%	-5.9%	**	**
(SF)	school in a mainstream	C2	62.1%	60.1%	57.6%		-2.5%	-4.5%	**	**
	class	C1	65.9%	63.8%			-2.1%	-2.1%	**	**
LL	% of children who have	C3	14.7%	15.8%	16.8%	25.0%	8.2%	10.3%	*	*
(SF)	been suspended from school	C2	17.6%	19.3%	21.6%		2.3%	4.0%		
		C1	13.1%	15.1%			2.0%	2.0%	**	**
S/CP	% of parents/carers who see their child's disability	C3	86.7%	90.9%	93.3%	93.8%	0.6%	7.1%	**	**
(SF)	as a barrier to being more	C2	87.9%	91.6%	93.1%		1.5%	5.2%	**	**
-	involved	C1	88.2%	91.6%			3.4%	3.4%	**	**

Key findings from Table 4.1 include:

• For the daily living domain, more children are becoming independent, spending time away from parents/carers other than at school, and managing the demands of their world.

<sup>&</sup>lt;sup>22</sup> McNemar's test at the 0.05 level.

<sup>&</sup>lt;sup>23</sup> \*\* statistically significant, p-value<0.001; \* statistically significant, p-value between 0.001 and 0.05.

- More parents/carers think their child is learning at school, and more say that they know their child's goals at school.
- The percentage of parents/carers who would like their child to have opportunities for greater involvement with other children has continued to increase.
- More parents/carers see their child's disability as a barrier to greater involvement, continuing the increase observed for previous reports.
- Longitudinally, there has been a shift away from attending school in a mainstream class. This is in contrast to the cross-sectional baseline results, which show an increasing percentage attending school in a mainstream class over calendar time. Taken together, these results suggest that whilst more children are starting out in a mainstream class, they tend to move to other educational settings (support class or special school) after a period.

### 4.4 Longitudinal indicators – participant characteristics

Section 2.4 describes the general methodology used to analyse longitudinal outcomes by participant characteristics.

Table 4.2 shows the five groups of transitions that have been modelled for participants from starting school to age 14, and the transitions contributed by each of the C1, C2 and C3 cohorts. Improvements and deteriorations have been considered separately, resulting in 10 different models for each indicator.

Cohort		1 year transitions	2 year transitions <sup>24</sup>	3 year transitions	
	Baseline to first review	First review to second review	Second review to third review	Baseline to Second Review	Baseline to Third Review
C3	$B \rightarrow R1$	$R1 \rightarrow R2$	$R2 \rightarrow R3$	$B \rightarrow R2$	$B \rightarrow R3$
C2	$B \rightarrow R1$	$R1 \rightarrow R2$		B → R2	
C1	$B \rightarrow R1$				

Table 4.2 Transitions	contributing	to the	models fo	r cohorts	C1. C2 and C3 <sup>*</sup>
	continuating		models io		

\*B=baseline, R1=first review, R2=second review. The arrow represents transition between the two time points.

Some key features of the analyses for selected indicators, for participants in the starting school to age 14 cohort, are summarised below. Table 2.3 in Section 2.4 includes a table explaining the meaning of the arrow symbols used in the tables.

<sup>&</sup>lt;sup>24</sup> There is another two-year transition, from first review to third review, however the amount of data for this transition is smaller and to keep the presentation manageable it has not been included. Results from selected models for this transition were generally consistent with baseline to second review (but tended to identify a smaller number of predictors, due to the smaller amount of data).

#### My child is becoming more independent

The percentage of parents/carers reporting that their child is becoming more independent has increased significantly from baseline to all reviews. This was a result of improvements offset by deteriorations as set out in Table 4.3 below.

l on situdinal		f Baseline s in cohort <sup>1</sup>		ements: o Yes		rations: to No	Nat
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	30,359	20,512	5,975	19.7%	3,169	15.5%	+5.5%
Baseline to Review 2	11,240	8,278	3,465	30.8%	1,921	23.2%	+7.9%
Baseline to Review 3	3,015	2,384	1,128	37.4%	643	27.0%	+9.0%

 Table 4.3 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 4.4 below.

### Table 4.4 Key drivers of likelihood of transitions in *"% parents/carers who say their child is becoming more independent"*

			1	step tra	ansition	s			tep itions	3 s transi	-
			Baseline to First Review		teview cond view	Revie	Second Review to Third Review		ine to ond view	Basel Third F	
Reference		wi	with		Relationship with likelihood of		Relationship with likelihood of		onship ith ood of	Relatio wi likeliho	th
Category	Variable	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.
NSW	Participant lives in VIC		↓		Ļ				↓	1	
NSW	Participant lives in QLD	1		1	Ļ			1	₽	1	₽
NSW	Participant lives in SA	1									
NSW	Participant lives in ACT, NT, TAS, WA		₽		₽				₽		•
Autism	Disability is Down Syndrome or an intellectual disability			₽							

			1	step tr	ansition	s			tep itions	3 s trans	tep itions
			line to Review	to Se	Review econd /iew	Revi	cond ew to Review	Sec	line to ond /iew	Basel Third F	ine to Review
		wi	onship ith ood of	w	onship ith ood of	w	onship ith lood of	w	onship ith ood of		onship th ood of
Reference Category	Variable	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.
Autism	Disability is a sensory disability	1	ŧ	1				1	ŧ		
Autism	Disability is global developmental delay or developmental delay	1	ŧ								
Autism	Disability is "Other"		₽								
N/A	Participant is older			1	↓	1		1	↓		₽
Male	Participant is female							1			
Non-CALD	Participant is CALD			₽				₽			
Non- Indigenous	Indigenous status is not stated					₽					
N/A	Lower level of function	₽		₽		₽		₽		₽	
N/A	Higher annualised total funding	₽	1	₽	1			₽	1	₽	1
2016/17	Participant entered the Scheme in 2017/18	₽									
2016/17	Participant entered the Scheme in 2018/19	ŧ									
N/A	Higher baseline utilisation	₽		₽	1	↓		₽	1	₽	
N/A	Higher utilisation of capacity	1		1				1		1	

			1	l step tra	ansition	s			tep itions	3 s trans	tep itions
			ine to Review	to Se	Review econd /iew	Revi	ond ew to Review	Sec	line to cond /iew	Basel Third F	ine to Review
			onship ith ood of	w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	Relatio wi likelih	
Reference Category	Variable	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.
	building supports										
0-75% capacity building supports	75%-100% of supports are capacity building supports	1	ŧ	1	ŧ			1	ŧ	1	
0-75% capacity building supports	More than 5% of supports are capital supports		ŧ		ŧ			1	ŧ	1	
Pre-COVID	Review during COVID period	₽	₽			₽					
N/A	General time trend		↓	₽	↓		₽	↓	₽		Ļ
N/A	Change in time trend post- COVID			₽						₽	
Agency- managed	Plan is managed by a plan manager							₽			
Agency- managed	Plan is fully self-managed	1				1				1	₽
Agency- managed	Plan is partly self-managed	1									
Major cities	Participant lives outside a major city				1	1			1		
N/A	Participant lives in an area with a higher unemployment rate	ŧ	1			₽		₽	1		
Did not relocate	Participant relocated to a new Local Government Area (LGA)			₽	1		1		1		1

			1	step tra	ansition	s			tep itions	3 s transi	-
		Basel First R	ine to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	line to cond view	Basel Third F	
Reference		Relatio wi likeliho		wi	onship ith ood of	w	onship ith ood of	w	onship ith ood of	Relatio wi likeliho	th
Category	Variable	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS	1	ŧ			1		1	ŧ		
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs			1							
Medium level of NDIA support	Higher level of NDIA support	₽			₽			₽			

Key findings from Table 4.4 include:

- State/Territory has a significant impact on the percentage of parents/carers reporting that their child is becoming more independent. Participants living in a State or Territory other than NSW were more likely to improve and less likely to deteriorate than those living in NSW, across most models.
- There were also some differences by disability. For example, participants with a sensory disability (hearing impairment, visual impairment, or another sensory/speech impairment) were more likely to improve and less likely to deteriorate from baseline to first review and from baseline to second review.
- Participants with more than 75% capacity building in their plans were more likely to improve and less likely to deteriorate across most models, compared to those with less than 75% capacity building.
- Participants with fully self-managed plans were more likely to improve across most models than participants with Agency-managed plans.
- Participants using a higher percentage of their plan budget were less likely to improve and more likely to deteriorate, across all models. However, participants using a higher percentage of their capacity building supports were generally more likely to improve.
- Participants who live in an area with a higher unemployment rate were less likely to improve and more likely to deteriorate from baseline to first review and from baseline to second review.

• Participants who relocated during the transition were more likely to deteriorate across most models.

#### My child spends time away from parents/carers other than at school

The percentage of children who spend time away from parents/carers other than at school has increased significantly from baseline to all reviews. This was a result of improvements offset by deteriorations as set out in Table 4.5 below.

I S S M P S I		f Baseline s in cohort¹		ependent: o Yes	Context D Yes t		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	36,525	14,315	3,594	9.8%	2,795	19.5%	+1.6%
Baseline to Review 2	13,643	5,870	2,242	16.4%	1,797	30.6%	+2.3%
Baseline to Review 3	3,794	1,603	759	20.0%	600	37.4%	+2.9%

#### Table 4.5 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 4.6 below.

### Table 4.6 Key drivers of likelihood of transitions in *"% of children who spend time away from parents/carers other than at school"*

			1	step tra	ansition	S	2 step transitions	3 step transitions
			Raseline to		Review cond view	Second Review to Third Review	Baseline to Second Review	Baseline to Third Review
Reference		wi	with kelihood of li		onship ith ood of	Relationship with likelihood of	Relationship with likelihood of	Relationship with likelihood of
Category	Variable	lmp.	Det.	Imp.	Det.	Imp. Det.	Imp. Det.	Imp. Det.
NSW	Participant lives in VIC		Ļ					1
NSW	Participant lives in QLD	1	Ļ	1		1	1	1
NSW	Participant lives in SA	1		1	1	1	1	1
NSW	Participant lives in ACT, NT, TAS, WA	1	↓			1	1	1
Autism	Disability is cerebral palsy or other		↓					

			1	step tra	ansition	s			tep itions	3 s trans	tep itions
		Basel First F	ine to Review	First R to Se Rev			ond ew to Review	Sec	ine to ond view	Basel Third F	ine to Review
		Relatio wi likelih		Relatio wi likelih		wi	onship ith ood of	wi	onship ith ood of		onship th ood of
Reference Category	Variable	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
	neurological disability										
Autism	Disability is a sensory disability		ŧ		ŧ				₽		
Autism	Disability is global developmental delay or developmental delay	1	ŧ								
Autism	Disability is "Other"		₽								
N/A	Participant is older	1	↓	1	Ļ	1		1	₽	1	
Non-CALD	Participant is CALD	₽		₽				₽			
N/A	Lower level of function	₽	1	₽				₽	1		
N/A	Higher annualised total funding	₽	1	₽				₽	1		
N/A	Higher baseline utilisation	1									
N/A	Higher utilisation of core supports		1		1	₽			1		1
N/A	Higher utilisation of capacity building supports		1						1		
0-75% capacity building supports	75%-95% of supports are capacity building supports	₽									

			1	l step tra	ansition	s			tep itions		tep itions
		Basel First F	ine to Review	First R to Se Rev		Revi	ond ew to Review	Sec	line to ond view		ine to Review
		Relatio wi likelih		Relatio wi likelih		wi	onship ith ood of	w	onship ith ood of	w	onship ith ood of
Reference Category	Variable	Imp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.
Pre-COVID	Review during COVID period				₽						
N/A	General time trend	↓	↓	₽				↓	Ļ		
N/A	Change in time trend post- COVID	₽									
Agency- managed	Plan is managed by a plan manager	1	1								
Agency- managed	Plan is fully self-managed	1	Ļ		Ļ				₽		
Agency- managed	Plan is fully self-managed	1									
Major cities	Participant lives outside a major city	1		1				1		1	
N/A	Participant lives in an area with a higher unemployment rate			ŧ		ŧ		ŧ		ŧ	
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		1		1	₽	1		1
Medium level of NDIA support	Lower level of NDIA support		₽								
Medium level of NDIA support	Higher level of NDIA support	↓									

Key findings from Table 4.6 include:

• Older participants were more likely to improve (start spending time away from their parents/carers other than at school) and less likely to deteriorate across most transition periods.

- CALD participants were less likely to improve between baseline and either first or second review, and between first and second reviews.
- Participants who live outside a major city were more likely to improve between baseline and first, second or third reviews, and between first and second reviews.
- Participants living in Queensland and South Australia were more likely to improve across all transitions.
- There were also some differences by disability. For example, participants with autism were more likely to deteriorate between baseline and first review than participants with other disabilities, and participants with global developmental delay/ developmental delay were more likely to improve and less likely to deteriorate from baseline to first review.
- Participants who relocated during the transition were more likely to deteriorate in all transitions.

#### My child has a genuine say in decisions about themselves

The percentage of parents/carers reporting that their child has a genuine say in decisions about themselves increased significantly from baseline to all reviews. This was a result of improvements offset by deteriorations as set out in Table 4.7 below.

L opgiáu dinol		f Baseline s in cohort <sup>1</sup>	Improve No to	ements: o Yes		rations: to No	Not
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	18,157	32,340	2,361	13.0%	1,594	4.9%	+1.5%
Baseline to Review 2	7,356	12,031	1,671	22.7%	1,013	8.4%	+3.4%
Baseline to Review 3	2,038	3,287	646	31.7%	320	9.7%	+6.1%

#### Table 4.7 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 4.8 below.

### Table 4.8 Key drivers of likelihood of transitions in *"% of children who have a genuine say in decisions about themselves"*

			1	step tra	ansition	S		2 s transi		3 s trans	-
		Baseli First R		to Se	Review cond view	Revi	ond ew to Review	Basel Sec Rev	ond	Basel Third F	ine to Review
Reference Category	Variable	Relatio wit likeliho Imp.	h.		onship ith ood of Det.	w	onship ith ood of Det.	Relatic wi likelihe Imp.	th .	Relatio wi likelih Imp.	
NSW	Participant lives in VIC		ŧ						t		

			1	l step tr	ansition	S		step sitions		tep itions
			line to Review	to Se	Review econd view	Second Review to Third Reviev	Se	eline to cond view		ine to Review
Reference		wi	onship ith ood of	w	onship ith ood of	Relationship with likelihood of	v	ionship /ith 100d of	wi	onship ith ood of
Category	Variable	Imp.	Det.	Imp.	Det.	Imp. Det	Imp.	Det.	Imp.	Det.
NSW	Participant lives in QLD	1					1		1	
NSW	Participant lives in SA	1	₽	1			1		1	
NSW	Participant lives in ACT, NT, TAS, WA			₽			ŧ			
Autism	Disability is cerebral palsy or other neurological disability		ŧ					ŧ		
Autism	Disability is Down Syndrome or an intellectual disability	ŧ	1	ŧ			ŧ	1		
Autism	Disability is a sensory disability		₽					₽		
Autism	Disability is global developmental delay or developmental delay						ŧ			
Autism	Disability is "Other"		₽					₽		
N/A	Participant is older	1	₽	1	₽	1	1	₽	1	₽
Male	Participant is female	1					1			
Non-CALD	Participant is CALD	₽		₽	1		₽		₽	1
N/A	Lower level of function	₽		₽		↓	₽	1	₽	1

			1	l step tr	ansition	s			tep itions		tep itions
			Baseline to First Review		Review cond view	Revie	ond ew to Review	Sec	line to cond /iew		line to Review
5.4		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationshi with likelihood o	
Reference Category	Variable	lmp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
N/A	Higher annualised total funding	₽	1	₽	1			₽	1	ŧ	
N/A	Higher baseline utilisation	↓	1	↓		₽		↓	1		
N/A	Higher utilisation of capacity building supports	1			ŧ			1	ŧ		
0-75% capacity building supports	75%-95% of supports are capacity building supports	1		1		1		1	ŧ	1	
0-75% capacity building supports	95%-100% of supports are capacity building supports	1		1				1	Ļ	1	
0-75% capacity building supports	More than 5% of supports are capital supports			1				1	₽	1	ŧ
Pre-COVID	Review during COVID period		₽					Ļ		↓	
N/A	General time trend	₽	₽	₽	₽		₽		₽	1	
Agency- managed	Plan is fully self-managed		₽						₽		↓
N/A	Lower level of function	₽	1	↓	1	₽		₽	1	↓	
Major cities	Participant lives outside a major city	1	ŧ	1	₽		ŧ	1	₽		₽
N/A	Participant lives in an area with a higher unemployment rate				1						

			1	l step tr	ansition	s		2 step transitions		3 step transitions	
			Baseline to First Review Relationship with		First Review to Second Review		Second Review to Third Review		line to ond view	Baseline to Third Review	
		wi			with		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of
Reference Category	Variable	lmp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.	lmp.	Det.
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		1		1		1		
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs		ŧ	1	ŧ		ŧ	1	ŧ	1	ŧ
Medium level of NDIA support	Lower level of NDIA support	1									
Medium level of NDIA support	Higher level of NDIA support	₽							↓		

Key findings from Table 4.8 include:

- Participants living outside a major city were more likely to improve with regard to having a genuine say in decisions about themselves, and less likely to deteriorate, for most of the modelled transitions.
- Participants who had not previously received services from Commonwealth or State/Territory systems prior to entering the NDIS were more likely to improve and less likely to deteriorate across most models.
- CALD participants were less likely to improve and more likely to deteriorate across most models.
- There were some differences by State/Territory. For example, participants living in Queensland and SA were more likely to improve from baseline to first, second and third reviews than participants living in NSW.
- Participants who relocated during the transition were more likely to deteriorate in all one and two year transitions.

#### Attending school in a mainstream class

The percentage of children who attend school in a mainstream class has decreased significantly from baseline to all reviews. This was a result of improvements offset by deteriorations as set out in Table 4.9 below.

	Number o Responses	f Baseline s in cohort¹		ements: o Yes	Deterio Yes t	N-4	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	16,922	30,270	1,157	6.8%	2,136	7.1%	-2.1%
Baseline to Review 2	7,021	10,968	693	9.9%	1,466	13.4%	-4.3%
Baseline to Review 3	2,060	2,727	229	11.1%	513	18.8%	-5.9%

#### Table 4.9 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 4.10 below.

### Table 4.10 Key drivers of likelihood of transitions in *"% of children attending school in a mainstream class"*

			1	step tr	ansition	IS		2 s trans	tep itions		tep itions
		Baseline to First Review		First Review to Second Review		Second Review to Third Review		Baseline to Second Review		Th	ine to ird ⁄iew
Reference		w	onship ith ood of	w	onship ith ood of	Relation witi likeliho	h	wi	onship ith ood of	wi	onship ith ood of
category	Variable	Imp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.
NSW	Participant lives in VIC		ŧ		Ļ		₽		Ļ		Ļ
NSW	Participant lives in QLD	1	1	1	1			1	1		
NSW	Participant lives in SA	1	Ļ	1	Ļ		↓	1	↓		Ļ
NSW	Participant lives in ACT, NT, TAS, WA	1	₽	1	₽			1	₽		Ļ
Autism	Disability is cerebral palsy or other neurological disability		ŧ						ŧ		
Autism	Disability is Down Syndrome or an intellectual disability	ŧ	1	₽	1		1	₽	1	₽	1

			1	step tr	ansition	IS		2 step transitions Baseline to Second Review			tep itions
			line to Review	to Se	Review econd view	Revi Th	cond ew to hird view			Th	line to ird ⁄iew
Reference		w	onship ith ood of	w	onship ith ood of	w	onship ith lood of	w	onship ith ood of	w	onship ith ood of
category	Variable	Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Autism	Disability is a sensory disability	1	₽		₽		₽	1	₽	1	₽
Autism	Disability is global developmental delay or developmental delay	ŧ									1
Autism	Disability is "Other"		↓	1				1	↓		
N/A	Participant is older	↓	1		1		1		1	ł	
Male	Participant is female		↓								
Non-CALD	Participant is CALD	↓	1			↓		↓		↓	
Non-Indigenous	Participant is Indigenous				1						
N/A	Lower level of function	↓	1	↓	1	↓	1	₽	1	₽	1
N/A	Higher annualised total funding	₽	1					₽			
N/A	Higher baseline utilisation	₽	1	₽	1	↓	1		1	₽	
N/A	Higher utilisation of core supports							↓	1		
N/A	Higher utilisation of capacity building supports	1	₽	1	₽	1	₽	1	₽	1	ŧ
0-75% capacity building supports	75%-95% of supports are capacity building supports	1	ŧ					1		1	Ļ

			1	step tr	ansition	s			tep itions	3 s trans	tep itions
			line to Review	to Se	Review cond riew	Second Review to Third Review		Sec	ine to ond view	Basel Th Rev	
		w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	wi	onship ith ood of	Relatio wi likelih	
Reference category	Variable	Imp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
0-75% capacity building supports	95%-100% of supports are capacity building supports	1	ŧ	1				1	ŧ	1	ŧ
0-75% capacity building supports	More than 5% of supports are capital supports		₽		₽				₽		₽
Pre-COVID	Review during COVID period		↓								
N/A	General time trend	ł									
Agency-managed	Plan is managed by a plan manager	1	₽						₽		₽
Agency-managed	Plan is fully self- managed	1	↓		Ļ		Ļ	1	Ļ	1	Ļ
Agency-managed	Plan is partly self- managed		Ļ					1		1	
Major cities	Participant lives outside a major city	1	₽	1				1		1	
N/A	Participant lives in an area with a higher unemployment rate				1						
Participant did not relocate	Participant relocated to a new Local Government Area (LGA)	1	1	1	1		1	1			
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS	1		1		1		1			

			1	step tra	ansition	IS		2 step transitions		3 s transi	
		Baseline to First Review		First R to Se Rev	cond	Sec Revie Th Rev	ew to ird	Baseline to Second Review		Basel Th Rev	
Reference category	Variable	wi	onship th ood of Det.	Relatio wi likeliho Imp.	th .	Relatio wi likeliho Imp.	th .	wi	onship ith ood of Det.	wi	onship th ood of Det.
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs	1	1	1		1		1			
Entry due to disability	Participant entered the Scheme through early intervention		ŧ							1	
Medium level of NDIA support	Higher level of NDIA support				1						

Key findings from Table 4.10 include:

- Older participants were more likely to move out of a mainstream class, for all modelled transitions.
- Participants with higher utilisation of capacity building supports were more likely to move into, and less likely to move out of, a mainstream class.
- Participants with Down syndrome or an intellectual disability were generally less likely to move into, and more likely to move out of a mainstream class. Conversely, participants with a sensory disability were more likely to move into, and less likely to move out of, a mainstream class.
- CALD participants were less likely to move into a mainstream class than non-CALD participants.
- Participants living in Victoria were less likely to deteriorate across all transitions. Participants living in SA, and those living in ACT/NT/TAS/WA were more likely to improve and less likely to deteriorate, for most models.
- Participants with a fully self-managed plan were less likely to deteriorate across all transitions, and more likely to improve from baseline to first, second and third reviews.
- Participants with a higher level of NDIA support were more likely to deteriorate from baseline to first, second and third review and from first review to second review.

#### My child gets along with their siblings

The percentage of children who get along with their siblings has decreased significantly from baseline to all reviews. This was a result of improvements offset by deteriorations as set out in Table 4.11 below.

Lougitudin el		f Baseline s in cohort¹	_	ements: o Yes	Deterio Yes t	Net			
Longitudinal Period	No Yes		No Yes		No Yes Number		Number	%	Net Movement
Baseline to Review 1	12,039	32,801	1,693	14.1%	2,629	8.0%	-2.1%		
Baseline to Review 2	4,350	12,890	965	22.2%	1,709	13.3%	-4.3%		
Baseline to Review 3	1,081	3,646	305	28.2%	643	17.6%	-7.2%		

#### Table 4.11 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 4.12 below.

## Table 4.12 Key drivers of likelihood of transitions in *"% of children who get along with their siblings"*

			1	l step tr	ansition	S			tep itions	3 sto transit	-
			line to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	line to ond view	Baseli Third R	
- (		w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	Relatio wit likeliho	h
Reference Category	Variable	Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.	lmp.	Det.
NSW	Participant lives in VIC	-		₽					1		
NSW	Participant lives in QLD		1						1		
NSW	Participant lives in SA	1		1				1			
Autism	Disability is cerebral palsy or other neurological disability	1	ŧ		ŧ		ŧ	1	ŧ		ŧ
Autism	Disability is Down Syndrome or an intellectual disability	1	ŧ		ŧ			1	ŧ		Ļ
Autism	Disability is a sensory disability		₽		₽		₽	1	₽		ŧ

			1	1 step tr	ansition	s		2 s trans	tep itions		tep itions
			line to Review	to Se	Review econd view	Sec Revie Third F	ew to	Sec	ine to ond view	Basel Third F	ine to Review
Reference		w	onship ith ood of	w	onship ith ood of	Relatio wi likeliho	th	wi	onship ith ood of		onship ith ood of
Category	Variable	Imp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
Autism	Disability is global developmental delay or developmental delay	1	ŧ								t
Autism	Disability is "Other"	1	↓		↓				↓		↓
N/A	Participant is older				₽				₽		
Non-CALD	Participant is CALD		₽					1	₽		
N/A	Lower level of function	1									
N/A	Higher annualised total funding							₽			
2016/17	Participant entered the Scheme in 2017/18								ŧ		
N/A	Higher utilisation of core supports						1				
N/A	Higher utilisation of capacity building supports		1	ŧ	1			ŧ	1		1
0-75% capacity building supports	75%-95% of supports are capacity building supports	1	ŧ						ŧ		ŧ
0-75% capacity building supports	95%-100% of supports are capacity building supports	1	ŧ					1	ŧ	1	ŧ

			1	l step tra	ansition	S			tep itions		tep itions
			line to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	line to ond view		ine to Review
Defenses		w	onship ith ood of	wi	onship ith ood of	w	onship ith ood of	w	onship ith ood of	wi	onship ith ood of
Reference Category	Variable	Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.
0-75% capacity building supports	More than 5% of supports are capital supports	1	ŧ	1	ŧ			1	ŧ		ŧ
Pre-COVID	Review during COVID period	₽	↓	₽	₽	↓	↓			₽	
N/A	General time trend				↓						↓
Agency- managed	Plan is managed by a plan manager	₽			1			₽	1		1
Agency- managed	Plan is fully self-managed		₽		₽				₽		
Agency- managed	Plan is partly self-managed			₽							
N/A	Lower level of function	1									
N/A	Participant lives in an area with a higher unemployment rate	ŧ							1		
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1	1		1		1		1		
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs		1								
Medium level of NDIA support	Lower level of NDIA support		↓								
Medium level of NDIA support	Higher level of NDIA support	₽		₽						₽	

Key findings from Table 4.12 include:

- Compared to participants with other disabilities, participants with autism were less likely to improve with regard to getting along with their siblings, and more likely to deteriorate, between baseline and first review. Participants with cerebral palsy or another neurological disorder, intellectual disability/Down syndrome, or a sensory disability were generally more likely to improve and less likely to deteriorate.
- Participants from a CALD background were less likely to deteriorate from baseline to first or second review, and more likely to improve between baseline and second review.
- Participants living in South Australia were more likely to improve from baseline to first and second reviews and from first review to second review than participants living in NSW.
- Participants with fully self-managed plans were less likely to deteriorate between baseline and first or second review, and between first and second review than participants whose plans are Agency-managed.
- Participants with 0-75% capacity building in their plan were less likely to improve and more likely to deteriorate between baseline and first review, compared to participants with a higher percentage of capacity building, or participants with capital supports in their plan.
- Having a review during the COVID-19 period resulted in participants being less likely to either improve or deteriorate across most transitions.

### % who report having enough time each week for all members of family to get their needs met

The percentage who report having enough time each week for all members of family to get their needs met has decreased significantly from baseline to all reviews. This was a result of improvements offset by deteriorations as set out in Table 4.13 below.

Longitudinal		f Baseline s in cohort <sup>1</sup>	_	ements: o Yes		rations: to No	Net
Longitudinal Period	No	Yes	Number	%	Number	%	Movement
Baseline to Review 1	36,837	13,475	1,570	4.3%	2,739	20.3%	-2.3%
Baseline to Review 2	13,899	5,371	979	7.0%	1,880	35.0%	-4.7%
Baseline to Review 3	3,903	1,490	392	10.0%	633	42.5%	-4.5%

Table 4.13 Breakdov	wn of net movement	in longitudinal responses
		in longitualitat looponooo

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 4.14 below.

Table 4.14 Key drivers of likelihood of transitions in *"% who report having enough time each week for all members of family to get their needs met"* 

		1 step transitions							tep itions		tep itions
			line to Review	to Se	Review econd view	Revi	ond ew to Review	Sec	line to cond view		line to Review
Reference category	Variable	w	onship ith ood of Det.	w	onship ith lood of Det.	w	onship ith ood of Det.	w	onship ith lood of Det.	w	onship ith ood of Det.
NSW	Participant lives in VIC	ŧ	Ļ				1	ł		ł	
NSW	Participant lives in QLD		Ļ	1			1	1	Ļ		
NSW	Participant lives in SA	1		1				1		1	
NSW	Participant lives in ACT, NT, TAS, WA		↓								
Autism	Disability is cerebral palsy or other neurological disability		ŧ		ŧ				ŧ		Ļ
Autism	Disability is Down Syndrome or an intellectual disability	1						1	Ļ	1	
Autism	Disability is a sensory disability	1	↓		₽			1	₽	1	₽
Autism	Disability is global developmental delay or developmental delay	1	ŧ								
N/A	Participant is older					1					
Male	Participant is female	₽									1
N/A	Lower level of function	₽		↓		↓	1	↓		₽	
N/A	Higher annualised total funding	₽	1	₽	1			₽	1		1

			1	l step tra	ansition	s			tep itions		step sitions
			line to Review	First R to Se Rev	cond	Revi	ond ew to Review	Sec	line to cond view		line to Review
Reference category	Variable	w	onship ith ood of Det.	Relatio wi likeliho Imp.	th	w	onship ith ood of Det.	w	onship ith lood of Det.	w	onship ith lood of Det.
N/A	Higher baseline utilisation		Det.	imp.	Det.		Det.	imp.	Det.	imp.	Det.
N/A	Higher utilisation of core supports						1				
N/A	Higher utilisation of capacity building supports		1	ŧ				₽	1	ŧ	
0-75% capacity building supports	75%-95% of supports are capacity building supports	1	ŧ	1		1		1	ŧ	1	ŧ
0-75% capacity building supports	95%-100% of supports are capacity building supports	1	ŧ	1				1	ŧ	1	Ļ
0-75% capacity building supports	More than 5% of supports are capital supports	1	₽	1		1		1	₽	1	₽
2016/17	Entry year 2017- 18	ł									
Pre-COVID	Review during COVID period	₽	₽				₽				
N/A	General time trend	₽	₽	₽	ŧ			₽	↓		
Agency- managed	Plan is managed by a plan manager	₽	1					₽	1	₽	1
Agency- managed	Plan is fully self- managed	↓		₽				₽			
Agency- managed	Plan is partly self-managed	↓		₽				₽		₽	1

			1	l step tr	ansition	S		2 step transitions		3 s transi	-
		Basel First F	ine to Review	to Se	Review cond view	Revi	Second Review to Third Review		ine to ond view	Basel Third F	ine to Review
Deferrer ee		wi	onship th ood of	w	onship ith ood of	w	onship ith ood of	Relatio wi likelih		Relatio wi likeliho	th
Reference category	Variable	Imp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.
Major cities	Participant lives outside a major city		1	1							
N/A	Participant lives in an area with a higher unemployment rate		ŧ	ŧ	ŧ				ŧ		
Participant did not relocate	Participant relocated to a new Local Government Area (LGA)	1	1	1			1		1		
Medium level of NDIA support	Lower level of NDIA support	1							Ļ		
Medium level of NDIA support	Higher level of NDIA support		₽						Ļ		

Key findings from Table 4.14 include:

- Parents/carers of participants whose plan is Agency-managed were more likely to improve their response (start thinking there is enough time to meet the needs of all family members) between baseline and first or second review, compared to other all other plan management types.
- Participants with a sensory disability were more likely to improve and less likely to deteriorate for most transitions. Participants with cerebral palsy or another neurological disorder were less likely to deteriorate across most transitions.
- Participants with 0-75% capacity building in their plan were less likely to improve and more likely to deteriorate between baseline and first review, compared to participants with a higher percentage of capacity building, or participants with capital supports in their plan.
- Participants living in South Australia were more likely to improve from baseline to first, second and third review, and from first to second review.

#### My child has friends that he/she enjoys spending time with

The percentage of parents/carers reporting that their child has friends that he/she enjoys spending time with has increased significantly from baseline to the third review, but has not changed materially between baseline and first or second review. This was a result of improvements offset by deteriorations as set out in Table 4.15 below.

I S S M P S I	Number of Baseline Responses in cohort <sup>1</sup>		_	ements: o Yes		rations: to No	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	26,572	23,810	2,709	10.2%	2,289	9.6%	+0.8%
Baseline to Review 2	9,496	9,841	1,604	16.9%	1,617	16.4%	-0.0%
Baseline to Review 3	2,872	2,528	689	24.0%	563	22.3%	+2.3%

#### Table 4.15 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 4.16 below.

### Table 4.16 Key drivers of likelihood of transitions in *"% of children who have friends that he/she enjoys spending time with"*

			1	step tra	ansition	IS		2 step transitions			tep itions
			line to Review	to Se	Review cond riew	Seco Revie Thi Rev	w to rd	Sec	ine to ond view	Th	line to ird ⁄iew
		wi	onship ith ood of	wi	onship th ood of	Relatio wit likeliho	th	wi	onship ith ood of	w	onship ith ood of
Reference Category	Variable	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
NSW	Participant lives in VIC							1			
NSW	Participant lives in QLD	1						1			
NSW	Participant lives in SA	1		1				1		1	
NSW	Participant lives in ACT, NT, TAS, WA	1						1			
Autism	Disability is cerebral palsy or other neurological disability	1	ŧ	1	ŧ		ŧ	1	ŧ	1	ŧ
Autism	Disability is Down Syndrome or an intellectual disability		ŧ		ŧ				ŧ	1	ŧ

			1	step tr	ansition	S			tep itions		tep itions
			ine to Review	to Se	Review cond view	Revi Th	ond ew to ird view	Sec	line to ond view	Th	line to ird /iew
		wi	onship ith ood of	w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	w	onship ith ood of
Reference Category	Variable	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.
Autism	Disability is a sensory disability	1	₽	1	ŧ		₽	1	₽	1	₽
Autism	Disability is global developmental delay or developmental delay	1	ŧ								
Autism	Disability is "Other"		₽		₽		Ļ		ŧ		Ļ
N/A	Participant is older				₽	1			ŧ		
Male	Participant is female	1		1				1		1	
Non-CALD	Participant is CALD	₽						↓		₽	
N/A	Lower level of function	₽	1	ŧ		₽	1	↓	1	ŧ	
N/A	Higher annualised total funding	ŧ		₽	1			₽	1	₽	
2016/17	Participant entered the Scheme in 2017/18	ŧ						ŧ			
2016/17	Participant entered the Scheme in 2018/19	ŧ									
N/A	Higher baseline utilisation	↓	1	↓	1			↓	1		1
N/A	Higher utilisation of core supports					₽				↓	
N/A	Higher utilisation of capacity building supports	1	1				1				

			1	step tr	ansition	IS			tep itions		tep itions
			Baseline to First Review		Review cond view	Th	ew to	Sec	line to ond view	Th	ine to ird view
		Relatio wi likelihe		w	onship ith ood of	Relatio wi likelih		w	onship ith ood of	w	onship ith ood of
Reference Category	Variable	lmp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
0-75% capacity building supports	75%-95% of supports are capacity building supports	1	ŧ	1				1	ŧ		
0-75% capacity building supports	95%-100% of supports are capacity building supports	1	ŧ	1	ŧ			1	ŧ	1	ŧ
0-75% capacity building supports	More than 5% of supports are capital supports	1	₽					1	₽	1	
Pre-COVID	Review during COVID period		₽			₽					
N/A	General time trend		↓	↓	↓			↓	↓		
Agency-managed	Plan is fully self- managed								ŧ		
Major cities	Participant lives outside a major city	1		1				1			
N/A	Participant lives in an area with a higher unemployment rate	ŧ	1					ŧ		ŧ	
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		1		1		1		1
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS							1			
Received State/Territory supports	Participant did not previously receive services from	1		1				1			

			1	step tra	ansition	S		2 st transi		3 st transi	-
		Baseline to First Review		First F to Se Rev		Sec Revie Th Rev	ew to ird	Basel Sec Rev	ond	Baseli Thi Rev	rd
		wi	Relationship with likelihood of		onship th ood of	wit		Relatio wi likeliho	th	Relatio wi likeliho	th
Reference Category	Variable	lmp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
	Commonwealth or State/Territory programs										
Entry due to disability	Participant entered the scheme through Early Intervention	1									
Medium level of NDIA support	Higher level of NDIA support	↓						Ļ			

Key findings from Table 4.16 include:

- Female participants were more likely to improve than male participants with regard to having friends they enjoy spending time with.
- Participants with autism were more likely to deteriorate between baseline and first review than participants with all other disabilities. Participants with cerebral palsy or another neurological disorder, and those with a sensory disability, were generally more likely to improve and less likely to deteriorate.
- Participants living in NSW were less likely to improve between baseline and second review than participants living in other States and Territories.
- Participants living outside a major city were more likely to improve between baseline and first or second review, and between first and second review.
- Participants who did not receive any services from State/Territory systems were also more likely to improve between baseline and first or second review, and between first and second review.
- CALD participants were less likely to improve between baseline and first, second or third reviews.
- Participants who relocated during the transition were more likely to deteriorate in all transitions.

### I would like my child to have more opportunity to be more involved in activities with other children

The percentage of parents/carers who say they would like their child to have more opportunity for greater involvement in activities with other children has increased significantly from baseline to first, second and third reviews. This was a result of changes from "No" to "Yes", and from "Yes" to "No", as set out in Table 4.17 below.

	Number of Baseline Responses in cohort <sup>1</sup>			ependent: o Yes		ependent: to No	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	8,925	41,013	3,278	36.7%	420	1.0%	+5.7%
Baseline to Review 2	2,552	16,593	1,520	59.6%	264	1.6%	+6.6%
Baseline to Review 3	1,113	4,284	782	70.3%	86	2.0%	+12.9%

#### Table 4.17 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 4.18 below.

### Table 4.18 Key drivers of likelihood of transitions in *"% who say they would like their child to have more opportunity to be involved in activities with other children"*

			1	step tra	ansition	s		2 st transi		3 st transi	-
			ine to Review	First R to See Rev	cond	Seco Revie Thi Rev	w to ird	Baseli Seco Revi	ond	Baseli Thi Rev	rd
		wi	with		Relationship with likelihood of		onship th pod of	Relatio wit likeliho	th	Relatio wit likeliho	th
Reference Category	Variable	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
NSW	Participant lives in QLD	1						1			
NSW	Participant lives in SA		仓								
NSW	Participant lives in ACT, NT, TAS, WA	1						Û			
Autism	Disability is cerebral palsy or other neurological disability	Û							仓		
Autism	Disability is Down Syndrome or an intellectual disability	Û									

			1	l step tra	ansition	s		2 s trans	tep itions	3 st transi	
			line to Review	First R to Se Rev	cond	Sec Revie Thi Rev	ew to ird	Sec	ine to ond ⁄iew	Basel Thi Rev	ird
			onship ith ood of	Relatic wi likelihe	th	Relatio wi likeliho	th	wi	onship th ood of	Relatic wi likelihe	
Reference Category	Variable	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
Autism	Disability is a sensory disability	Ŷ	仓	Ŷ				Ŷ	仓	Ŷ	
Autism	Disability is global developmental delay or developmental delay		Û								
Autism	Disability is "Other"	¢								Ŷ	
Male	Participant is female		℃						仓		
Non-CALD	Participant is CALD								₽		
N/A	Lower level of function		₽		Ļ			1		1	
N/A	Higher annualised total funding	1							₽		
2016/17	Participant entered the Scheme in 2017/18		ŧ		ŧ				ŧ		
2016/17	Participant entered the Scheme in 2018/19		ŧ								
N/A	Higher baseline utilisation		↓		↓				↓		
N/A	Higher utilisation of capacity building supports	1						1		1	

			1	step tra	ansition	S		2 st transi		3 st transi	
			ine to Review	First R to Se Rev	cond	Seco Revie Thi Rev	ew to ird	Baseli Seco Rev	ond	Baseli Thi Rev	ird
		Relatio wi likelih		Relatio wi likeliho	th	Relationship with likelihood of		Relationship with likelihood of		Relatio wit likeliho	th
Reference Category	Variable	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
0-75% capacity building supports	75%-95% of supports are capacity building supports		仓								
0-75% capacity building supports	95%-100% of supports are capacity building supports		仓					Û			
0-75% capacity building supports	More than 5% of supports are capital supports		仓					Û			
Pre-COVID	Review during COVID period	Ŷ									
N/A	General time trend	Û		Ŷ				Û			
Agency- managed	Plan is managed by a plan manager	1			↓				↓		
Major cities	Participant lives outside a major city					Ŷ					
N/A	Participant lives in an area with a higher unemployment rate	Û	Ļ								
Did not relocate	Participant relocated to a new Local Government Area (LGA)									1	
Received State/Territory supports	Participant received services from Commonwealth	Û									

		1 step transitions						2 st transit		3 st transi	-
		Baseline to First Review		First R to See Rev	cond	Seco Revie Thi Rev	w to rd	Baseli Secc Revi	ond	Baseli Thi Rev	rd
		Relationship with likelihood of		Relatio wit likeliho	th	Relationship with likelihood of		with		Relationship with likelihood of	
Reference Category	Variable	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
	programs before joining NDIS										
Medium level of NDIA support	Lower level of NDIA support	ΰ									
Medium level of NDIA support	Higher level of NDIA support	Û									

Key findings from Table 4.18 include:

- Parents/carers of participants with a sensory disability were less likely to change from not wanting their child to be more involved, to wanting them to be more involved. They were also more likely to change from wanting them to be more involved, to not wanting them to be more involved, between baseline and first or second review.
- Parents/carers of participants living in Queensland were more likely to change their response from "No" to "Yes" between baseline and first or second review.
- During the COVID-19 period, parents/carers were less likely to start wanting their child to be more involved between baseline and first review.
- Participants with higher utilisation of capacity building supports were more likely to start wanting their child to be more involved between baseline and first, second or third reviews.

#### My child's disability is a barrier to being more involved

The percentage of parents/carers reporting that their child's disability is a barrier to being more involved increased significantly from baseline to all reviews. This was a result of improvements offset by deteriorations as set out in Table 4.19 below.

	Number of Baseline Responses in cohort <sup>1</sup>			ements: to No		rations: o Yes	Net Movement
Longitudinal Period	No	Yes	Number	%	Number	%	(No to Yes)
Baseline to Review 1	4,671	34,256	234	0.7%	1,616	34.6%	+3.6%
Baseline to Review 2	1,955	13,815	170	1.2%	1,045	53.5%	+5.5%
Baseline to Review 3	533	3,482	62	1.8%	348	65.3%	+7.1%

#### Table 4.19 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 4.20 below.

## Table 4.20 Key drivers of likelihood of transitions in "Of those who would like their child to be more involved in activities with other children, % who see their child's disability as a barrier"

			1	step tra	ansition	s		2 s transi		3 st transi	-
			Baseline to First ReviewFirst Review to Second ReviewSecond Review to Third Review		Basel Sec Rev	ond	Basel Third F				
- (		Relatio wit likeliho	th	Relatio wi likelih		Relatio wi likeliho		Relatio wi likeliho		Relatio wi likeliho	th
Reference category	Variable	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.
NSW	Participant lives in VIC	₽							Ļ		
NSW	Participant lives in ACT, NT, TAS, WA	ŧ			ŧ						
Autism	Disability is cerebral palsy or other neurological disability		Ļ			1			ŧ		
Autism	Disability is Down Syndrome or an intellectual disability		Ļ								
Autism	Disability is a sensory disability		Ļ								

			1	step tra	ansition	s		2 s trans	tep itions		tep itions
			line to Review	to Se	Review cond view	Revie	ond ew to Review	Sec	ine to ond ⁄iew		line to Review
		wi	onship ith ood of	wi	onship ith ood of	wi	onship th ood of	wi	onship th ood of	wi	onship ith ood of
Reference category	Variable	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.
Autism	Disability is global developmental delay or developmental delay	1	ŧ								
Autism	Disability is "Other"	1	₽			1				1	
N/A	Participant is older							1	Ļ		
Non- Indigenous	Participant is Indigenous	₽									
Non- Indigenous	Indigenous status is not stated	ŧ	1								1
N/A	Lower level of function	₽	1	₽				₽	1	₽	1
N/A	Higher annualised total funding			1							
N/A	Higher baseline utilisation	₽		₽	1			₽	1	₽	
N/A	Higher utilisation of capacity building supports		1								
0-75% capacity building supports	95%-100% of supports are capacity building supports	1			1					1	
0-75% capacity building supports	More than 5% of supports are capital supports	1						1		1	
Pre-COVID	Review during COVID period		₽								

			1	step tra	ansition	s			tep itions		tep itions
			line to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	line to ond /iew		line to Review
		w	onship ith ood of	wi	onship ith ood of	wi	onship th ood of	w	onship ith ood of	w	onship ith ood of
Reference category	Variable	Imp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.
N/A	General time trend	↓			Ļ				Ļ		
Agency- managed	Plan is managed by a plan manager			ŧ				₽		₽	
Agency- managed	Plan is partly self-managed							₽		↓	
N/A	Lower level of function	₽		₽				₽		₽	
Major cities	Participant lives outside a major city	1									
N/A	Participant lives in an area with a higher unemployment rate		ŧ								
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		1			1	1		
Entry due to disability	Participant entered the Scheme through early intervention				ŧ				ŧ		
Medium level of NDIA support	Higher level of NDIA support		↓						↓		

Key findings from Table 4.20 include:

- Parents/carers of participants with higher level of function were more likely to stop thinking their child's disability was a barrier to greater involvement and less likely to start thinking it was a barrier, between baseline and first, second or third review.
- Responses given by parents/carers of participants with autism were more likely to deteriorate between baseline and first review.
- Responses for older participants were more likely to improve and less likely to deteriorate from baseline to second review.

- Responses for Indigenous participants were less likely to improve from baseline to first review.
- Responses given by parents/carers of participants with a higher level of NDIA support were less likely to deteriorate between baseline and first or second review.

A summary of key findings from this section is contained in Box 4.6.

### Box 4.6: Summary of findings: longitudinal indicators by participant characteristics

- Longitudinal outcomes vary with participant level of function. Participants with higher level of function tend to exhibit higher rates of improvement than those with lower level of function.
- Participants with a sensory disability generally experience better outcomes than those with other disabilities.
- Participants from regional and remote locations, show more positive results on some indicators compared to those from major cities. For example, they are more likely to be gaining in independence, and are less likely to move out of a mainstream class at school.
- CALD participants tend to be less likely to improve on a number of the independence indicators, such as having a genuine say in decisions about themselves, and are less likely to move into a mainstream class at school. However, they are more likely to improve and less likely to deteriorate in getting along with their siblings.
- Indigenous participants who attend school in a mainstream class are more likely than non-Indigenous participants to move out of mainstream class between first and second review.
- Relocating to a new LGA was generally associated with less favourable transitions, with participants being less likely to improve and/or more likely to deteriorate.
- COVID-19 variables were significant in at least one model for all indicators, however the direction of the effect was mixed, being favourable in some models but unfavourable in others. For example:
- For the indicator "My child gets along with his/her siblings", parents/carers were less likely to change their response (either improve or deteriorate) in all one-year transitions, when the later review occurred during the COVID period. In addition, responses were less likely to improve over three years when the third review occurred during the COVID period.
- For the indicator "There is enough time each week for all members of the family to get their needs met", parents/carers were less likely to change their response (either improve or deteriorate) between baseline and first review, and they were less likely to deteriorate between second and third review.
- With respect to their child becoming more independent, parents/carers were less likely to change their response (either improve or deteriorate) between baseline and first review, but were less likely to improve between second and third review. There was also a negative change in time trend post-COVID, with improvement becoming less likely over time for some transitions.
- However, parents/carers were less likely to deteriorate with respect to perceiving their child's disability as a barrier to being more involved between baseline and first review, where the review occurred during the COVID period.

# 5. Participants from starting school to age 14: Has the NDIS helped?

#### 5.1 Results across all participants

For participants who have been in the Scheme for approximately one, two or three years as at 30 June 2020, Figure 5.1 shows the percentage of parents/carers who reported that the NDIS has helped with outcomes related to each of the four domains, after one, two and three years in the scheme (first review, second review and third review respectively).

### Figure 5.1 Percentage who think that the NDIS has helped with outcomes related to each domain

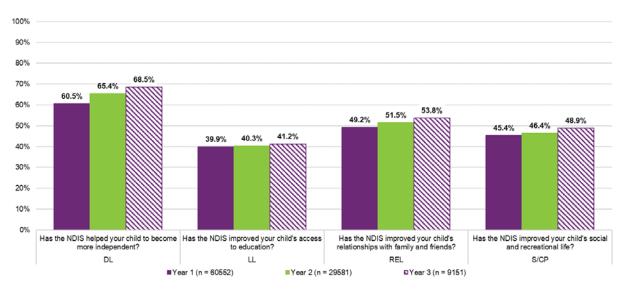


Figure 5.1 shows that after one year in the Scheme, opinions on whether the NDIS has helped range from 39.9% to 60.5% for the starting school to age 14 cohort. The highest percentage of positive responses was for the first domain, where 60.5% think that the NDIS has helped their child to become more independent. The largest improvement in the percentage of positive responses between year 1 and year 3 was also seen for daily living (DL) (from 60.5% to 68.5%).

For lifelong learning (LL), only around 40% thought that the NDIS had helped with their child's access to education after one year in the Scheme, and this has not changed significantly after an additional one or two years in the Scheme. However, to a large extent this is the responsibility of the mainstream education system, which has a bigger role in ensuring successful education outcomes than the NDIS.

Whilst perceptions for relationships (REL) and social and community participation (S/CP) are not as high as for daily living, steady improvements have been observed over time in the Scheme. 49.2% said that the NDIS has improved their child's relationships with family and friends at the end of year 1, and 45.4% said that the NDIS has improved their child's social and recreational life. By the end of year 3, the percentage reporting that the NDIS has helped increased to 53.8% and 48.9%, respectively.

#### 5.2 Results by participant characteristics

#### 5.2.1 Year 1 'Has the NDIS Helped?' indicators – participant characteristics

Year 1 (first review) indicators have been analysed by participant characteristics using oneway analyses and multiple regression modelling.

Table 5.1 summarises the results of the regression modelling, showing the relationship of different participant characteristics with the likelihood of the child's parent/carer saying that the NDIS has helped after one year in the Scheme. The arrow symbols have the same interpretation as for Section 2, defined in Table 2.3.

### Table 5.1 Relationship of participant characteristics with the likelihood of a positive response

		Relationsh	ip with: Has NDI	S helped improve p	articipant s
Reference	Characteristic	н	as NDIS helped	improve participan	ts
Category	Characteristic	Independence	Access to education	Relationship with family and friends	Social and recreational life
N/A	Higher annualised plan budget	1	1	1	1
N/A	Lower level of function	ŧ	<b>↓</b>	ŧ	ŧ
Non-Indigenous	Participant is Indigenous	ŧ	₽	ŧ	₽
Non-CALD	Participant is CALD		1		
N/A	General time trend	1	1		
Autism	Disability is cerebral palsy		ŧ		
Autism	Disability is developmental delay	1	1	1	1
Autism	Disability is global developmental delay	1	1	1	1
Autism	Disability is hearing impairment	1	1	1	1
Autism	Disability is intellectual disability	ŧ		ŧ	ŧ
Autism	Disability is another neurological disability			ŧ	ŧ
Autism	Disability is another sensory or speech disability	1	1	1	1
Autism	Disability is a visual impairment		1		

		Relationsh	ip with: Has NDI	S helped improve p	articipant s
Reference		н	as NDIS helped	improve participant	s
Category	Characteristic	Independence	Access to education	Relationship with family and friends	Social and recreational life
Autism	Disability is "Other"	1	1		
N/A	Participant is older	Ļ	₽	Ļ	1
2016/17	Participant entered the Scheme in 2017/18	ŧ	₽		
2016/17	Participant entered the Scheme in 2018/19			1	1
Major cities	Participant lives in regional area	ŧ	Ļ	ł	•
Major cities	Participant lives in remote/very remote areas	ŧ	ŧ	t	ŧ
0-75% capacity building supports	75-95% of supports are capacity building supports	1	1	1	ŧ
0-75% capacity building supports	95-100% of supports are capacity building supports	1	1	1	
0-75% capacity building supports	5-100% of supports are capital supports				₽
Agency-managed	Plan is managed by a plan manager	ŧ	ŧ	ł	
Agency-managed	Plan is fully self- managed	1	1	1	1
Agency-managed	Plan is partly self- managed	1		1	1
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS	1		1	1
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs	1	1	1	1
NSW	Participant lives in ACT	1	1	1	1

		Relationsh	ip with: Has NDI	S helped improve p	articipant s
Reference	Characteristic	н	as NDIS helped	improve participant	ts
Category	Characteristic	Independence	Access to education	Relationship with family and friends	Social and recreational life
NSW	Participant lives in QLD	1	1	1	1
NSW	Participant lives in SA	1	1	1	1
NSW	Participant lives in TAS	1	Ļ		
NSW	Participant lives in VIC	1		1	1
NSW	Participant lives in WA	1	1	1	1
Medium level of NDIA support	Lower level of NDIA support	1			
Medium level of NDIA support	Higher level of NDIA support	ŧ		ŧ	
N/A	Participant lives in an area with a higher average unemployment rate	ŧ		ł	ŧ
N/A	Higher baseline utilisation	1	1	1	1

#### Baseline plan utilisation

Parents and carers of participants who used a higher percentage of the supports in their baseline plan are more likely to say that the NDIS has improved their child's outcomes across all four domains.

#### Annualised plan budget

Parents and carers of participants who have higher annualised plan budget are more likely to say the NDIS helped across all four domains.

#### Level of function

By contrast with the results for annualised plan budget, parents and carers of participants with lower level of function are less likely to say that the NDIS helped improve their child's outcomes across all four domains.

#### Indigenous status

Parents and carers of Indigenous participants are less likely to think that the NDIS has helped across all four domains. On a one-way basis, differences ranged from 6.0% (the NDIS has helped their child become more independent) to 11.4% (the NDIS has improved their child's access to education).

#### **CALD** status

Parents and carers of CALD participants are more likely to say that the NDIS improved their child's access to education.

#### **Time trends**

Parents and carers of participants entering the Scheme in 2017-18 are more likely than those who entered in 2016-17 to say the NDIS improved their child's independence and access to education. Parents and carers of those joining in 2018-19 are less likely to say the NDIS improved their child's relationship with family/friends or social/recreational life.

There is also a general time trend for the domains independence and access to education, with the percentage of parents/carers responding positively tending to increase over time. (Note that this is a calendar year time trend, not time in Scheme. All participants have been in the Scheme for approximately one year when they respond at first review).

#### **Disability type**

Compared to participants with autism:

- Parents and carers of participants with developmental delay, global developmental delay, hearing impairment or another sensory/speech disability were more likely to respond positively across all domains.
- Parents and carers of participants with an intellectual disability were less likely to respond positively across all domains except access to education.
- Parents and carers of participants with another neurological disability were less likely to think that the NDIS has helped their child's relationships with family and friends, and their social and recreational life.
- Responses for participants with Down syndrome, a spinal cord injury/other physical disability, or the small group with a psychosocial disability were not significantly different to those for participants with autism.

#### Participant age

Parents/carers of older participants are more likely to say that the NDIS helped with their child's independence, access to education and relationship with family and friends. However, they are less likely to think the NDIS improved their child's social and recreational life.

#### Remoteness

Parents and carers of participants residing in regional, remote or very remote areas are less likely than their counterparts in major cities to say the NDIS improved their child's outcomes across all four domains.

#### Support categories within plans

Compared to participants whose plans have 0-75% capacity building supports:

- Parents and carers of participants whose plans have 75-95% capacity building support are more likely to say that the NDIS improved their child's outcomes across all four domains.
- Parents and carers of participants whose plans have 95-100% capacity building supports are more likely to say that the NDIS improved their child's independence, access to education and relationship with family/friends.
- Parents and carers of participants whose plans have 5-100% capital supports are more likely to say the NDIS improved their child's independence, relationship with family/friends and social/recreational life.

#### Plan management type

Compared to plans that are Agency-managed:

- Parents and carers of participants with fully self-managed plans are more likely to say the NDIS improved their child's outcomes across all four domains.
- Parents and carers of participants with partly self-managed plans are also more likely to say the NDIS helped, except for improving access to education where the difference is not statistically significant.
- Parents and carers whose plans are managed by a plan manager are less likely to say the NDIS helped improve their child's outcomes across all domains except for social and recreational life, where the differences are not statistically significant.

#### Scheme entry type

Relative to participants who received supports from State/Territory systems before joining the NDIS:

- Parents/carers of participants who did not previously receive supports from either State/Territory or Commonwealth systems are more likely to say the NDIS has helped across all four domains.
- Parents/carers of former recipients of Commonwealth system supports are more likely to say that the NDIS helped improve their child's independence, relationships with family/friends, and social/recreational life.

#### State/Territory

Compared to participants living in New South Wales:

- Parents/carers of participants in the Australian Capital Territory, Queensland, South Australia, and Western Australia are more likely to say that the NDIS has helped across all four domains.
- Parents/carers of Victorian participants are more likely to say that the NDIS helped improve their children's independence, relationships with families/friends and social/recreational life.
- Parents and carers of Tasmanian participants are more likely to say that the NDIS helped improve their children's level of independence, but are less likely to say that the NDIS improved their child's access to education.

#### Level of NDIA support

Parents and carers of participants with higher levels of NDIA support with the planning process are less likely to say that the NDIS helped improved their child's outcomes in the level of independence and relationship with family and friends.

#### Unemployment rate for LGA of residence

Parents and carers of participants who live in Local Government Areas with higher unemployment rates are less likely to say that the NDIS improved their child's level of independence, relationship with family/friends, and social/recreational life.

### 5.2.2 Longitudinal 'Has the NDIS Helped?' indicators – participant characteristics

Analysis of longitudinal indicators by participant characteristics has been examined in two ways:

- A simple comparison of the percentage reporting that the NDIS had helped after one, two and three years in the Scheme with the percentage reporting that the NDIS had helped after one year in the Scheme. The difference (percentage after two years minus percentage after one year, as well as after three years minus one year) are compared for different subgroups.
- 2. Multiple regression modelling of the probability of improvement / deterioration over the participant's second and third years in the Scheme.

Some key features of the analyses for helped question indicators are summarised below.

#### The NDIS has helped my child become more independent

The percentage of parents/carers reporting that the NDIS helped their child become more independent increased 6.4% from 57.3% to 63.7% between the first and the second review, and from 57.3% to 67.2% (9.9% increase) between the first and the third review. Of those who responded negatively at the first review, 26.4% responded positively at the second review (improvement) and 39.3% at the third. Table 5.2 sets out the breakdown of the movements.

Longitudinal Period		umber of Baseline esponses in cohort		No to Yes Yes to No		Net Movement	
T CHOU	No	Yes	Number	%	Number	%	movement
Review 1 to Review 2	10,146	13,601	2,674	26.4%	1,158	8.5%	+6.4%
Review 1 to Review 3	2,806	3,768	1,103	39.3%	450	11.9%	+9.9%

#### Table 5.2 – Breakdown of net movement in longitudinal responses

Table 5.3 shows the main drivers of the likelihood of improvement or deterioration.

### Table 5.3 – Key drivers of likelihood of transitions of *"The NDIS has helped my child become more independent"* response

Reference Category	Variable	Rev	ew to 2 <sup>nd</sup> view ship with ood of	1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of	
		lmp.	Det.	lmp.	Det.
N/A	Higher annualised plan budget		1		
N/A	Lower level of function	₽	1	₽	1
N/A	Higher baseline plan utilisation				1

Reference Category	Variable		ew to 2 <sup>nd</sup> view ship with ood of	Rev Relation	ew to 3 <sup>rd</sup> view ship with lood of
		lmp.	Det.	lmp.	Det.
N/A	Higher utilisation of capacity building supports	1	₽	1	₽
N/A	Higher utilisation of core supports				1
Pre-COVID	Review during COVID period	₽	₽		
N/A	General time trend	₽	₽		
N/A	Change in time trend post-COVID			₽	
Major cities	Participant lives in regional area	1		1	
Agency-managed	Plan is fully self-managed	1	₽	1	₽
Agency-managed	Plan is partly self-managed		ŧ		
0-75% capacity building supports	75%-100% of supports are capacity building supports			1	
NSW	Participant lives in QLD	1	₽	1	
NSW	Participant lives in SA	1		1	
NSW	Participant lives in ACT, NT, TAS or WA		₽		
N/A	Participant is older	₽			
Entered the Scheme due to disability	Participant entered the Scheme for early intervention		1		1
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS		₽	1	₽
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs		ŧ	ŧ	ŧ
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		

Reference Category	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of Imp. Det.	1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of Imp. Det.
N/A	Participant lives in an area with a higher average unemployment rate	1	
Medium Level of NDIA Support	Higher level of NDIA support	ŧ	

Key findings from Table 5.3 are as follows:

- Participants who used a higher percentage of their capacity building supports are more likely to improve and less likely to deteriorate.
- Participants whose plans are fully self-managed are more likely to improve and less likely to deteriorate relative to those whose plans are Agency-managed.
- Participants living in Queensland and SA are more likely than those in NSW to improve.
- Participants who entered the scheme for early intervention are more likely to deteriorate than those entering due to disability.
- Participants who have lower levels of function are less likely to improve and more likely to deteriorate.
- Participants who received Commonwealth support services or received neither Commonwealth nor State/Territory support services prior to joining NDIS are less likely to deteriorate than former recipients of State/Territory support services.

#### The NDIS has improved my child's access to education

The percentage of parents/carers reporting that the NDIS improved their child's access to education increased from 36.4% at the first review to 37.4% at the second review (a 1.0% improvement), and from 36.6% at the first review to 37.9% at the third review (an improvement of 1.2%). Table 5.4 sets out the breakdown of the movements in responses between first and second review, and between first and third review.

Longitudinal Period	Number of E Responses i		Improvements: No to Yes		Deteriorations: Yes to No		Net Movement
i onou	No	Yes	Number	%	Number	%	
Review 1 to Review 2	14,932	8,552	1,661	11.1%	1,424	16.7%	+1.0%
Review 1 to Review 3	4,124	2,382	694	16.8%	613	25.7%	+1.2%

#### Table 5.4 – Breakdown of net movement in longitudinal responses

The main drivers of the likelihood of improvement or deterioration are shown in Table 5.5.

### Table 5.5 – Key drivers of likelihood of transitions of *"The NDIS has helped my child's access to education"* response

		1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of	1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of
Reference Category	Variable	Imp. Det.	Imp. Det.
N/A	Higher annualised plan budget		
N/A	Higher utilisation of capacity building supports	1	1 ↓
N/A	Higher utilisation of core supports		ŧ
NSW	Participant lives in ACT, NT, TAS or WA	+	Ļ
NSW	Participant lives in QLD	1	
NSW	Participant lives in SA	1	ŧ
N/A	Participant is older	+	ŧ
Non-CALD	Participant is CALD	<b>↑</b> ↓	1 1
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1	
N/A	Participant lives in an area with a higher average unemployment rate	+	
Medium Level of NDIA Support	Lower level of NDIA support	+	
Medium Level of NDIA Support	Higher level of NDIA support	<b>↓</b>	
Pre-COVID	Review during COVID period	₽	
N/A	General time trend	Ļ	ŧ

Key findings from Table 5.5 are as follows:

- Participants who used a higher percentage of their capacity building supports are more likely to improve and less likely to deteriorate.
- Participants living in the ACT, NT, Tasmania and WA are less likely to deteriorate than those living in NSW.
- Older participants are less likely to improve.

- Participants from a CALD background are more likely to improve and less likely to deteriorate, compared to non-CALD participants.
- The likelihood of deterioration decreases with calendar time.

#### The NDIS has improved my child's relationships with family and friends

The percentage of parents/carers reporting that the NDIS improved their child's relationships with family and friends increased 3.9% from 45.6% to 49.5% between the first review and the second review, and from 46.0% to 52.2% between first review and third review. Table 5.6 sets out the breakdown of the movements in responses between first and second review, and between first and third review.

Longitudinal Period		Number of Baseline Responses in cohort		Improvements:Deteriorations:No to YesYes to No				Net Movement
	No	Yes	Number	%	Number	%		
Review 1 to Review 2	12,830	10774	2,229	17.4%	1,314	12.2%	+3.9%	
Review 1 to Review 3	3,521	3003	963	27.4%	559	18.6%	+6.2%	

#### Table 5.6 – Breakdown of net movement in longitudinal responses

The main drivers of the likelihood of improvement or deterioration are shown in Table 5.7.

Table 5.7 – Key drivers of likelihood of transitions of "The NDIS has improved my
child's relationships with family and friends" response

Reference Category	Variable			1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of	
			Det.	lmp.	Det.
Male	Participant is female			1	₽
N/A	Higher baseline utilisation				1
N/A	Higher annualised plan budget	1			
N/A	Higher utilisation of capacity building supports	1	Ļ	1	₽
N/A	General time trend	ŧ	Ļ		
Agency-managed	Plan is managed by a plan manager	1			
Agency-managed	Plan is fully self-managed	1	₽		
Agency-managed	Plan is partly self-managed	1			

Reference Category	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of		1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of	
		lmp.	Det.	Imp.	Det.
0-75% capacity building supports	75%-100% of supports are capacity building supports				
NSW	Participant lives in QLD			1	
NSW	Participant lives in SA			1	
NSW	Participant lives in VIC	1			
NSW	Participant lives in ACT, NT, TAS or WA		↓		
N/A	Participant is older	₽			
Did not relocate	Participant relocated to a new Local Government Area (LGA)				1
N/A	Participant lives in an area with a higher average unemployment rate		1		
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS			1	Ļ
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs		ŧ		ŧ

Key findings from Table 5.7 are as follows:

- Participants who use a higher percentage of their capacity building supports are more likely to improve and less likely to deteriorate.
- Participants residing in Queensland and SA are more likely to improve compared to those in NSW.
- Participants who have relocated to a different Local Government Area are more likely to deteriorate than those who did not relocate.
- Participants who did not receive Commonwealth or State/Territory support services prior to joining the NDIS are less likely to deteriorate than former recipients of State/Territory support services.

#### The NDIS has improved my child's social and recreational life

The percentage of parents/carers reporting that the NDIS improved their child's social and recreational life increased by 4.0% from 41.4% to 45.4% between first and second review, and by 6.0% from 42.4% to 48.4% between first and third review. Table 5.8 sets out the breakdown of the movements in responses between different reviews.

Longitudinal Period	Number of B Responses in		Improvements:Deteriorations:No to YesYes to No				Net Movement
	No	Yes	Number	%	Number	%	
Review 1 to Review 2	13,723	9,695	2,128	15.5%	1,187	12.2%	+4.0%
Review 1 to Review 3	3,730	2,749	912	24.5%	524	19.1%	+6.0%

#### Table 5.8 – Breakdown of net movement in longitudinal responses

The main drivers of the likelihood of improvement or deterioration are shown in Table 5.9.

Table 5.9 – Key drivers of likelihood of transitions of "The NDIS has improved my
child's social and recreational life" response

Reference Category	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of		1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of	
		lmp.	Det.	lmp.	Det.
Male	Participant is female			1	
N/A	Higher annualised plan budget				+
N/A	Higher utilisation of capacity building supports	1	₽	1	₽
N/A	Higher utilisation of core supports	1			
Pre-COVID	Review during COVID period		₽		
N/A	General time trend	➡	₽		
Agency-managed	Plan is managed by a plan manager	1			
Agency-managed	Plan is fully self-managed	1	₽	1	₽
Agency-managed	Plan is partly self-managed			1	
N/A	Lower level of function	₽			

Reference Category	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of		1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of	
		lmp.	Det.	lmp.	Det.
NSW	Participant lives in QLD			1	
NSW	Participant lives in VIC	1		1	
NSW	Participant lives in SA		ŧ	1	Ļ
NSW	Participant lives in ACT, NT, TAS or WA		ŧ	1	↓
N/A	Participant is older			1	
N/A	Participant lives in an area with a higher average unemployment rate	₽			
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1	↓	
0-75% capacity building supports	75%-100% of supports are capacity building supports		1		
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS			1	ŧ
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs				ŧ
Medium Level of NDIA Support	Higher level of NDIA Support			1	
Entry due to disability	Participants entered the scheme through Early Intervention				

Key findings from Table 5.9 are as follows:

- Participants who have utilised a higher percentage of their capacity building supports are more likely to improve and less likely to deteriorate.
- Compared to participants whose plans are Agency-managed, those self-managing their plans, whether partly or fully, are more likely to improve. Participants with fully self-managed plans are also less likely to deteriorate than those with Agency-managed plans.
- Participants living in NSW are less likely to improve between first and third review than participants living in other States/Territories.
- Participants who relocated to a different Local Government Area (LGA) are more likely to deteriorate than those who did not.

Box 5.1 summarises the results of this section.

#### Box 5.1: Has the NDIS helped? – by participant characteristics

After one year in the Scheme:

- Higher plan utilisation is a strong predictor of a positive response across all four areas surveyed, after one year in the Scheme. In particular, those with very low utilisation (below 20%) are much less likely to say that the NDIS has helped. The fact that utilisation tends to be lowest for the starting school to age 14 cohort may contribute to the observed lower levels of satisfaction across all domains, compared to participants in other age groups.
- Participants who self-manage fully, those who did not receive services from State/Territory or Commonwealth programs before entering the NDIS, and those with a higher annualised plan budget were more likely to respond positively after one year in the Scheme. By contrast, Indigenous participants, those with lower level of function, and those living in regional or remote areas were less likely to respond positively.

Changes between one and three years in the Scheme:

- Participants with higher utilisation of capacity building supports are more likely to improve and less likely to deteriorate across all domains.
- Improvement was more likely for participants who self-manage (either fully or partly), except in relation to access to education.
- Participants who relocated to a different LGA tended to be more likely to deteriorate.
- For access to education, CALD participants were more likely to improve and less likely to deteriorate. However, older participants were less likely to improve.
- For the relationships domain, female participants were more likely to improve and less likely to deteriorate between baseline and third review.
- Participants who did not receive Commonwealth or State/Territory support services prior to joining the NDIS were less likely to deteriorate than those who previously received State/Territory support services.

## 6. Participants aged 15 to 24: outcome indicators

#### 6.1 Key findings

### Box 6.1: Overall findings for C3 cohort (participants who have been in the Scheme for three years)

- For participants with three years of Scheme experience, the longitudinal analysis revealed significant improvements across a number of indicators, with the trend between baseline and first review generally continuing to the second and third reviews. Improvements were observed particularly in the areas of:
- Choice and control: the percentage of participants who make more decisions in their life than they did two years ago increased by 7.5% over three years, from 58.9% at baseline to 66.4% at third review. The percentage who choose who supports them increased by 3.6%, from 31.1% to 34.7%, and the percentage who make most decisions in their life also increased by 5.1%, from 24.9% to 30.0%, including a 3.6% increase in the latest year. However, the percentage of participants who expressed a desire for greater choice and control increased by 16.1% over three years, from 72.2% to 88.3%.
- Health and wellbeing: the percentage who did not have any difficulty accessing health services increased by 4.1%, from 71.1% to 75.2%, and the percentage who had been to hospital in the last 12 months decreased by 5.1%, from 26.5% to 21.4% between baseline and third review.
- Lifelong learning: the percentage who have a post-school qualification increased by 5.2% over three years, and the percentage who get opportunities to learn new things increased by 2.7%. However, the percentage who participate in education, training or skill development decreased by 11.1% over three years (possibly partly due to transitioning from school to work).
- Work: the percentage of participants in a paid job increased by 11.8%, from 12.7% at baseline to 24.5% at third review. Of those who have a paid job, the percentage working 15 hours or more per week increased by 19.2%.
- Community participation: the percentage participating in a community group in the last 12 months increased by 14.0%, from 31.1% at baseline to 45.1% at third review. There were also significant increases in the percentage who spend their free time doing activities that interest them (from 76.1% to 82.7%), and the percentage who know people in their community (51.6% to 58.6%). However, the percentage who wanted to do certain things in the last 12 months but could not increased by 12.1%, from 55.4% to 67.5% from baseline to third review.

### Box 6.2: Overall findings for C2 cohort (participants who have been in the Scheme for two years)

- For participants with two years of Scheme experience, results of the longitudinal analysis were generally consistent with the findings for those with two years of experience. Improvements over the two years in the Scheme were observed in the areas of:
- Choice and control: the percentage of participants who make more decisions in their life than they did two years ago increased by 6.9%, from 56.7% at baseline to 63.6% at second review. The percentage who choose what they do each day increased by 2.4%, from 41.3% to 43.7%, and the percentage who make most decisions in their life increased by 3.8%, from 25.4% to 29.2%, including a 3.0% increase in the latest year. However, the percentage of participants who expressed a desire for greater choice and control increased by 8.6%, from 82.1% to 90.7%.
- Health and wellbeing: the percentage who had been to hospital in the last 12 months decreased by 6.9%, from 28.7% to 21.7%, and the percentage who did not have any difficulties accessing health services increased by 3.3%, from 66.1% to 69.4%, between baseline and second review.
- Work: the percentage of participants in a paid job increased by 6.4%, from 15.3% at baseline to 21.7% at second review, and the percentage of these participants who work 15 hours or more per week increased by 12.7%, from 40.5% to 53.2%, including a 5.1% increase in the latest year.
- Lifelong learning: the percentage who get the opportunity to learn new things increased by 3.5% over two years, from 60.7% to 64.2%.
- Community participation: the percentage participating in a community group in the last 12 months increased by 10.7%, from 32.4% at baseline to 43.1% at second review. There were also significant increases in the percentage who spend their free time doing activities that interest them (from 75.5% to 80.2%), and the percentage who know people in their community (55.2% to 60.5%). However, the percentage who wanted to do certain things in the last 12 months but could not increased by 6.6%, from 63.5% to 70.1%, between baseline and second review.

# Box 6.3: Overall findings for C1 cohort (participants who have been in the Scheme for one year)

- For participants with one year of Scheme experience, results of the longitudinal analysis were generally consistent with the findings for participants who have been in the Scheme for a longer period. Improvements over the year in the Scheme were observed in the areas of:
- Choice and control: the percentage of participants who make more decisions in their life than they did two years ago increased by 4.9%, from 54.8% at baseline to 59.6% at first review. The percentage who choose how they spend their free time increased by 14.5%, from 51.8% to 66.3%. However, the percentage of participants who expressed a desire for greater choice and control increased by 4.9%, from 82.6% to 87.5%.
- Health and wellbeing: the percentage who had been to hospital in the last 12 months decreased by 4.4%, from 27.9% to 23.4%. The percentage who did not have any difficulties accessing health services increased by 1.3%, from 69.9% to 71.2%, between baseline and first review.
- Work: the percentage of participants in a paid job increased by 2.4%, from 17.7% at baseline to 20.1% at first review, and the percentage working 15 hours or more increased by 4.6%.
- Lifelong learning: the percentage who get the opportunity to learn new things increased by 2.6% over one year, from 57.6% to 60.2%.
- Community participation: the percentage participating in a community group in the last 12 months increased by 5.4%, from 34.9% at baseline to 40.4% at first review. There were also significant increases in the percentage who spend their free time doing activities that interest them (from 73.1% to 77.3%), and the percentage who know people in their community (50.6% to 53.8%). However, the percentage who wanted to do certain things in the last 12 months, but could not increased by 3.9%, from 63.8% to 67.7%, between baseline and first review.

## Box 6.4: Outcomes by key characteristics for participants aged 15 to 24

- Longitudinal outcomes vary with participant level of function. Participants with a higher level of function tend to exhibit higher rates of improvement than those with a lower level of function.
- Participants with a hearing impairment generally experience better outcomes. Additionally, participants with cerebral palsy are less likely to deteriorate with regard to knowing people in their community.
- Participants from regional areas are more likely to improve over time in knowing people in their community. They were also more likely to want to see their friends more often compared to baseline levels.
- Participants from a CALD background are more likely to deteriorate over time with respect to making most decisions in life, and knowing people in the community.
- Indigenous participants were more likely to start wanting more choice and control, and more likely to improve with respect to knowing people in their community.
- Relocating to a new LGA was significant in a large number of models, with the direction
  of the effect being mostly negative but sometimes mixed or positive. For example,
  participants who relocated were more likely to improve on the indicator "I make most
  decisions in my life". However, they were more likely to deteriorate with respect to
  having a regular doctor and knowing people in their community.
- COVID-19 variables were significant in at least one model for all indicators, however the direction of the effect was mixed, being favourable in some models but unfavourable in others. For example:
- Participants were generally less likely to report an improvement between reviews with respect to making more decisions than they did two years ago, when the later review occurred during the pre-COVID period.
- Participants who gave their second response during the COVID period were less likely to change their response from "Yes" (wanting to see their friends more often) to "No" (not wanting to see them) in all transitions from baseline.
- However, participants were less likely to deteriorate between baseline and second review in relation to wanting to do certain things in the last 12 months but being unable to, when the later response occurred during the COVID period.

### Box 6.5: Has the NDIS helped? – participants aged 15 to 24

- Opinions on whether the NDIS has helped vary considerably by domain for the young adult cohort at first review, being lowest for work (18.5% after one year in the Scheme, decreasing to 16.3% after two years in the Scheme and 15.0% after three years in the Scheme), and highest for daily living (60.7% after one year in the Scheme, increasing to 65.4% after two years in the Scheme and 69.5% after three years in the Scheme).
- Higher plan utilisation, and in particular higher utilisation of capacity building supports, is strongly associated with a positive response across most domains, after one, two and three years in the Scheme. Perceptions also tended to improve with increasing participant age. Participants from Western Australia tended to be more positive, and those from Tasmania less positive.
- The percentage who think that the NDIS has helped increased between first and third review across all domains except home and work, where small decreases were observed, and lifelong learning, where there was little change. The likelihood of improvement/deterioration varied by participant characteristics:
- Higher plan utilisation, and in particular utilisation of capacity building supports, is associated with a higher likelihood of improvement and a lower likelihood of deterioration.
- Where the plan is self-managed either fully or partly, participants were more likely to improve in the choice and control, daily living, and health and wellbeing domains.
- For a number of domains, in particular daily living and home, higher annualised plan budget was associated with a higher likelihood of improvement.
- Female participants were more likely to improve in the lifelong learning domain but less likely to improve in the work domain.

# 6.2 Outcomes framework questionnaire domains

Typically the young adult (15 to 24 year old) cohort is characterised by increasing levels of independence and participation in community, with some moving out of the family home, and transitioning from school to employment or further study.

For participants aged 15 to 24, the eight outcome domains are:

- Choice and control (CC)
- Daily living (DL)
- Relationships (REL)
- Home (HM)
- Health and wellbeing (HW)
- Lifelong learning (LL)
- Work (WK)
- Social, community and civic participation (S/CP)

The LF contains a number of extra questions for participants aged 15 and over, across all domains, but particularly in the health and wellbeing domain.

Participants answer the outcomes questionnaire applicable to their age/schooling status at the time of interview. Hence the 15 to 24 cohort comprises participants who are aged between 15 and 24 when they enter the Scheme, and includes responses at all review time points until they turn 25.

# 6.3 Longitudinal indicators – overall

### Summary of significant changes

Longitudinal analysis describes how outcomes have changed for participants during the time they have been in the Scheme. Included here are participants who entered the Scheme between 1 July 2016 and 30 June 2019, for whom a record of outcomes is available at scheme entry (baseline) and at one or more of the three time points: approximately one year following scheme entry (first review), approximately two years following scheme entry (second review), and approximately three years following scheme entry (third review).

For this year's report, results are shown separately by entry year cohort, including the value of the indictator at baseline and each yearly review, as well as the change in the latest year, and the change between baseline and latest review. For example, for 2016-17 entrants, results at baseline, first review, second review, and third review are shown, as well as the change between second review and third review, and the change from baseline to third review.

There have been a number of improvements across all domains for the time periods being considered. Often, improvements tend to be greater in the earlier years in the Scheme, with smaller improvements observed in later years. Hence the change from baseline to latest review tends to be greater than the change over the latest year, for participants who have been in the Scheme for more than a year.

Table 6.1 summarises changes for selected indicators across the two time periods. Indicators were selected for the tables if the change, either overall or for the latest year, was statistically significant<sup>25</sup> and had an absolute magnitude greater than 0.02 for at least one entry year cohort.

			Ind	icator at:			Cha	ange	Signi	ficant
Domain		Cohort	Baseline	Review	Review	Review	Latest	Overall	Latest	Overall
(Form)	Indicator			1 Provemen	2	3	year		year	
		C3	8.3%	7.0%	6.4%	6.1%	-0.2%	-2.1%	*	**
CC (SF)	% who do not have more control than 2 years ago,	C2	9.2%	7.7%	0.4 <i>%</i> 7.0%	0.170	-0.2 <i>%</i>	-2.1%	**	**
UU (SF)	factors unrelated to disability	C2	9.2 % 9.8%	8.5%	7.070		-0.7 %	-2.3 <i>%</i> -1.4%	**	**
	·	C3	58.9%	63.5%	65.1%	66.4%	1.3%	7.5%	**	**
CC (SF)	% who make more decisions in their life than they did 2	C2	56.7%	60.8%	63.6%	00.4 /0	2.9%	6.9%	**	**
UU (SF)	years ago	C2	50.7 % 54.8%	59.6%	05.070		2.9 <i>%</i> 4.9%	0.9 <i>%</i> 4.9%	**	**
		C3	31.1%	32.0%	32.6%	34.7%	4.9 <i>%</i>	3.6%	*	**
CC (SF)	% who choose who supports	C3	31.1%	32.0 <i>%</i> 33.5%	32.0% 35.1%	34.770	2.1% 1.7%	3.0 <i>%</i> 2.2%	**	**
UU (SF)	them	C2			35.1%			2.2% 0.2%		
		C3	34.3% 40.6%	34.5% 42.2%	42.3%	45.0%	0.2% 2.7%	4.4%	**	**
	% who choose what they do	C3 C2	40.8% 41.3%	42.2% 41.7%	42.3% 43.7%	45.0%	2.7%		**	**
CC (SF)	each day	C2			43.7%			2.4% 0.7%	*	*
		C3	42.9% 24.9%	43.6%	26.4%	30.0%	0.7% 3.6%	5.1%	**	**
	% who make most decisions	C3 C2	24.9% 25.4%	25.2% 26.2%		30.0%	3.0% 3.0%	5.1% 3.8%	**	**
CC (SF)	in their life	C2	25.4% 27.1%	20.2% 28.1%	29.2%		3.0% 1.0%	3.8% 1.0%	**	**
			30.6%		33.0%	31.2%		0.6%		
	% who say lack of support is	C3	30.8% 36.7%	32.4% 36.6%	33.0% 34.6%	31.2%	-1.8%		*	*
HM (SF)	a barrier to living in a home they would choose	C2 C1	30.7% 39.6%		34.0%		-2.0% 0.0%	-2.1% 0.0%		
	,			39.5%	74.3%	75.2%			*	**
	% who did not have any	C3	71.1%	72.3%		75.2%	0.9%	4.1%	**	**
HW (SF)	difficulties accessing health services	C2	66.1%	68.0%	69.4%		1.4%	3.3%	**	**
		C1	69.9%	71.2%	22.69/	04 40/	1.3%	1.3%	*	**
	% who have been to the	C3	26.5%	22.8%	22.6%	21.4%	-1.2%	-5.1%	**	**
HW (SF)	hospital in the last 12 months	C2	28.7%	23.8%	21.7%		-2.1%	-6.9%	**	**
		C1	27.9%	23.4%	88.5%	00.00/	-4.4%	-4.4%	**	**
	% who have a doctor they	C3	77.8%	84.6%		89.6%	1.0%	11.8%	**	**
HW (SF)	see on a regular basis	C2	82.3%	86.5%	88.6%		2.1%	6.3%	**	**
		C1	82.7%	86.2%	70.00/	77 70/	3.5%	3.5%	**	**
	% who completed Year 12 or	C3	51.6%	64.5%	72.6%	77.7%	5.1%	26.1%	**	**
LL (SF)	above	C2	49.4%	59.5%	68.8%		9.3%	19.4%	**	**
		C1	52.9%	60.8%		04.00/	8.0%	8.0%		**
	% who have post-school	C3	19.1%	21.4%	22.3%	24.3%	1.9%	5.2%	**	**
LL (SF)	qualification	C2	19.8%	21.7%	23.1%		1.4%	3.3%	**	
		C1	21.1%	22.3%	<b>0</b> 4 <b>0</b> 5	0= :::	1.2%	1.2%	**	**
	% who get opportunities to	C3	62.4%	64.7%	64.8%	65.1%	0.3%	2.7%		*
LL (SF)	learn new things	C2	60.7%	63.3%	64.2%		0.9%	3.5%	**	**
		C1	57.6%	60.2%			2.6%	2.6%	**	**

## Table 6.1 Selected longitudinal indicators for participants aged 15 to 24

<sup>&</sup>lt;sup>25</sup> McNemar's test at the 0.05 level.

			Ind	icator at:			Cha	ange	Sign	ificant
Domain	la di satan	Cohort	Baseline	Review	Review	Review	Latest	Overall	Latest	Overall
(Form)	Indicator	C3	12.7%	1 17.0%	2 21.0%	3 24.5%	year 3.5%	11.8%	year **	**
WK (SF)	% who are currently working	C2	15.3%	18.7%	21.0%	24.370	3.0%	6.4%	**	**
	in a paid job	C1	17.7%	20.1%	21.770		2.4%	0.4 <i>%</i> 2.4%	**	**
		C3	33.1%	44.2%	47.2%	52.3%	5.1%	19.2%	**	**
WK (SF)	% who are working 15 hours	C2	40.5%	48.1%	53.2%	02.070	5.1%	12.7%	**	**
	or more per week	C1	40.9%	45.5%	00.270		4.6%	4.6%	**	**
		C3	76.1%	80.6%	81.6%	82.7%	1.1%	6.6%	*	**
S/CP	% who spend their free time doing activities	C2	75.5%	79.1%	80.2%		1.1%	4.8%	**	**
(SF)	that interest them	C1	73.1%	77.3%			4.2%	4.2%	**	**
		C3	11.8%	13.8%	14.1%	14.5%	0.3%	2.6%		**
S/CP	% who are currently a	C2	12.4%	13.6%	14.3%		0.7%	2.0%	*	**
(SF)	volunteer	C1	12.8%	13.3%			0.5%	0.5%	*	*
	% who have been actively	C3	31.1%	37.2%	42.7%	45.1%	2.4%	14.0%	**	**
S/CP	involved in a community,	C2	32.4%	38.7%	43.1%		4.4%	10.7%	**	**
(SF)	cultural or religious group in the last 12 months	C1	34.9%	40.4%			5.4%	5.4%	**	**
		C3	51.6%	56.2%	57.7%	58.6%	0.9%	7.0%	*	**
S/CP	% who know people in their	C2	55.2%	58.8%	60.5%		1.7%	5.4%	**	**
(SF)	community	C1	50.6%	53.8%			3.2%	3.2%	**	**
	% who feel they are able to	C3	32.2%	34.1%	33.3%	34.6%	1.3%	2.4%	*	*
S/CP	have a say with their support	C2	30.9%	31.8%	32.8%		1.0%	1.9%	*	**
(SF)	services most of the time or all of the time	C1	31.9%	32.5%			0.6%	0.6%	*	*
		C3	60.4%	50.9%	73.6%	58.5%	-15.1%	-1.9%		*
CC (LF)	% who choose how they	C2	37.1%	62.9%	62.9%		0.0%	25.8%		*
	spend their free time	C1	51.8%	66.3%			14.5%	14.5%	*	*
		C3	32.1%	45.3%	41.5%	54.7%	13.2%	22.6%		*
CC (LF)	% who choose where they live	C2	40.2%	48.5%	46.2%		-2.3%	6.1%		
	live	C1	43.8%	45.6%			1.8%	1.8%		
	% who have someone	C3	71.4%	85.7%	76.2%	71.4%	-4.8%	0.0%		
REL (LF)	outside their home to call on	C2	67.8%	80.0%	79.1%		-0.9%	11.3%		
	for emotional support	C1	62.3%	76.4%			14.2%	14.2%	*	*
		C3	71.4%	85.7%	71.4%	71.4%	0.0%	0.0%		
REL (LF)	% who have someone to call on in a crisis	C2	69.6%	78.3%	79.1%		0.9%	9.6%		
		C1	61.6%	75.2%			13.5%	13.5%	*	*
		C3	58.7%	87.0%	89.1%	84.8%	-4.3%	26.1%		*
REL (LF)	% who feel happy with their relationship with staff	C2	75.7%	90.4%	93.0%		2.6%	17.4%		*
		C1	70.5%	85.4%			14.9%	14.9%	**	**
	% who make decisions in	C3	13.2%	13.2%	20.8%	15.1%	-5.7%	1.9%		
HM (LF)	planning for a home of their own with or without the help	C2	12.1%	16.7%	27.3%		10.6%	15.2%	*	*
	of others	C1	12.4%	20.7%			8.3%	8.3%	*	*
	% who feel safe or very safe	C3	7.7%	19.2%	17.3%	19.2%	1.9%	11.5%		*
S/CP (LF)	when walking alone in their	C2	9.1%	18.2%	11.4%		-6.8%	2.3%		
<u>(</u> )	local area after dark	C1	12.4%	14.5%			2.1%	2.1%		
0/05	Of those who were eligible to	C3	Λ	lumbers ar	e too small	_		_	_	_
S/CP (LF)	vote at the last federal	C2	71.1%	87.5%	84.4%		-3.1%	13.3%		*
( )	election, % who voted	C1	89.8%	89.8%			0.0%	0.0%		

			Ind	icator at:			Cha	ange	Sign	ificant
Domain (Form)	Indicator	Cohort	Baseline	Review 1	Review 2	Review 3	Latest year	Overall	Latest vear	Overall
(1 0111)		C3	13.2%	13.2%	28.3%	30.2%	1.9%	17.0%		*
WK (LF)	% have had job(s) in the past 12 months	C2	30.3%	31.8%	32.6%		0.8%	2.3%		
	12 monuns	C1	22.2%	27.2%			5.0%	5.0%	*	*
		C3	13.2%	15.1%	28.3%	20.8%	-7.5%	7.5%		
WK (LF)	% who have worked in a casual job in the past year	C2	12.1%	20.5%	22.7%		2.3%	10.6%		*
	Casual job in the past year	C1	15.4%	16.3%			0.9%	0.9%		
	% who have had a flu	C3	41.5%	22.6%	28.3%	41.5%	13.2%	0.0%		
HW (LF)	vaccination in the last 12	C2	34.1%	38.6%	53.0%		14.4%	18.9%	*	**
	months	C1	26.9%	35.8%			8.9%	8.9%	*	*
			Contex	kt depend	lent					
		C3	77.3%	78.2%	78.0%	75.7%	-2.3%	-1.6%	*	*
HM (SF)	% who live with parents	C2	77.1%	76.9%	75.1%		-1.7%	-1.9%	**	**
		C1	78.8%	77.5%			-1.3%	-1.3%	**	**
	% who live in a private home	C3	82.1%	81.6%	80.8%	78.9%	-1.8%	-3.2%	**	**
HM (SF)	owned or rented	C2	81.1%	80.9%	79.6%		-1.3%	-1.5%	**	**
	from private landlord	C1	81.6%	80.8%			-0.7%	-0.7%	**	**
		C3	57.9%	51.5%	46.5%	44.4%	-2.1%	-13.4%	**	**
WK (SF)	% who are not working and not looking for work	C2	57.9%	53.4%	49.7%		-3.7%	-8.2%	**	**
	Hot looking for work	C1	55.8%	52.3%			-3.5%	-3.5%	**	**
		C3	84.7%	75.0%	68.9%	56.3%	-12.6%	-28.4%	**	**
WK (SF)	Of those who are studying,	C2	81.2%	74.8%	65.9%		-8.9%	-15.3%	**	**
	% who study full-time	C1	80.1%	75.6%			-4.5%	-4.5%	**	**
		C3	72.2%	82.0%	86.9%	88.3%	1.3%	16.1%	**	**
CC (SF)	% who want more choice and control in their life	C2	82.1%	87.5%	90.7%		3.2%	8.6%	**	**
		C1	82.6%	87.5%			4.9%	4.9%	**	**
		C3	56.4%	60.4%	63.3%	64.4%	1.1%	8.0%	**	**
REL (SF)	% who would like to see their friends more often	C2	61.4%	63.6%	65.8%		2.3%	4.4%	**	**
	menus more onen	C1	64.1%	66.5%			2.5%	2.5%	**	**
	Of those who are happy with	C3	69.4%	66.6%	65.3%	64.3%	-0.9%	-5.0%	**	**
HM (SF)	their current home, % who would like to	C2	66.9%	65.2%	64.1%		-1.1%	-2.8%	**	**
	live there in 5 years time	C1	67.4%	65.9%			-1.5%	-1.5%	**	**
	Of those who participate in	C3	30.7%	30.0%	30.1%	28.4%	-1.7%	-2.4%		
LL (SF)	training, % who do so in a	C2	28.1%	27.6%	28.3%		0.7%	0.2%		
	disability education facility	C1	27.6%	26.9%			-0.7%	-0.7%	*	*
	Of those who participate in	C3	60.6%	60.8%	59.3%	57.8%	-1.5%	-2.8%		*
LL (SF)	training, % who are in a class for students with	C2	60.8%	60.3%	60.0%		-0.3%	-0.8%		
	disability	C1	57.1%	56.7%			-0.4%	-0.4%		
	% who are currently	C3	53.5%	43.3%	33.8%	23.5%	-10.3%	-30.0%	**	**
LL (SF)	participating in educational	C2	51.8%	41.4%	30.1%		-11.3%	-21.7%	**	**
	activities	C1	45.0%	36.4%			-8.6%	-8.6%	**	**
		C3	11.3%	15.1%	24.5%	73.6%	49.1%	62.3%	**	**
S/CP	% who were eligible to vote at the last federal election	C2	40.2%	39.4%	55.3%		15.9%	15.2%	**	*
(LF)		C1	34.6%	48.2%			13.6%	13.6%	**	**

			Ind	icator at:			Cha	ange	Sign	ificant
Domain (Form)	Indicator	Cohort	Baseline	Review 1	Review 2	Review 3	Latest year	Overall	Latest vear	Overall
			Det	erioration	า					
	% who feel able to advocate	C3	32.1%	29.7%	27.2%	26.6%	-0.7%	-5.6%	*	**
CC (SF)	(stand up) for	C2	30.6%	27.8%	26.3%		-1.4%	-4.2%	**	**
	themselves	C1	26.8%	25.1%			-1.7%	-1.7%	**	**
		C3	86.2%	84.5%	82.5%	81.8%	-0.7%	-4.4%		**
HM (SF)	% who are happy with the home they live in	C2	82.2%	81.8%	80.1%		-1.7%	-2.1%	*	**
	nome they live in	C1	80.5%	80.1%			-0.4%	-0.4%		
		C3	87.8%	86.9%	85.4%	85.3%	-0.2%	-2.5%		**
HM (SF)	% who feel safe or very safe in their home	C2	85.7%	85.7%	84.1%		-1.7%	-1.6%	**	**
		C1	84.3%	82.8%			-1.5%	-1.5%	**	**
		C3	70.7%	68.2%	67.1%	66.7%	-0.4%	-4.0%	*	**
HW (SF)	% who rate their health as excellent, very good or good	C2	68.0%	67.8%	66.5%		-1.3%	-1.4%	*	*
	excellent, very good of good	C1	68.9%	66.8%			-2.0%	-2.0%	**	**
	% who feel safe getting out	C3	44.8%	44.6%	42.4%	42.5%	0.1%	-2.3%	*	*
HW (SF)	and about in their	C2	41.9%	40.5%	39.6%		-0.9%	-2.3%	*	**
	community	C1	37.6%	36.9%			-0.7%	-0.7%	*	*
	% who currently attend or	C3	26.5%	25.0%	23.8%	24.2%	0.4%	-2.3%	*	**
LL (SF)	previously attended	C2	28.0%	26.5%	25.9%		-0.6%	-2.1%	**	**
	school in a mainstream class	C1	30.1%	28.9%			-1.2%	-1.2%	**	**
	% who currently participate	C3	47.5%	48.8%	44.4%	36.4%	-8.1%	-11.1%	**	**
LL (SF)	in education, training or skill	C2	48.1%	46.3%	40.4%		-5.9%	-7.8%	**	**
	development	C1	42.0%	40.4%			-1.6%	-1.6%	**	**
	% who wanted to do certain	C3	55.4%	62.6%	66.2%	67.5%	1.3%	12.1%	**	**
S/CP (SF)	things in the last	C2	63.5%	67.8%	70.1%		2.3%	6.6%	**	**
	12 months, but could not	C1	63.8%	67.7%			3.9%	3.9%	**	**
	% who have been offered	C3	52.8%	49.1%	66.0%	50.9%	-15.1%	-1.9%		
HW (LF)	% who have been offered education and support for	C2	47.0%	46.2%	41.7%		-4.5%	-5.3%		*
	sexual health	C1	46.2%	41.1%			-5.0%	-5.0%		

Key findings from Table 6.1 include:

- There have been considerable improvements in the social, community and civic participation domain:
  - Participants are more involved in their community, with an increase in the percentage of participants who have been actively involved in a community, cultural or religious group in the last 12 months:
    - For the C3 cohort, by 14.0% over three years in the Scheme, including a 2.4% increase over the latest year
    - For the C2 cohort: by 10.7% over two years in the Scheme, including a 4.4% increase over the latest year
    - For the C1 cohort: by 5.4% over one year in the Scheme.
  - The percentage of participants who know people in their community has continued to increase (by 7.0% over three years for the C3 cohort, including an increase of 0.9% over the latest year; by 5.4% over two years for the C2 cohort, including an increase of 1.7% over the latest year; and by 3.2% over one year for the C1 cohort).

- The percentage of participants who spend their free time doing activities that interest them has also continued to increase (by 6.6% over three years, 4.8% over two years, and 4.2% over one year for the C3, C2, and C1 cohorts, respectively. Increases of 1.1% in the latest year were also observed for both the C3 and C2 cohorts).
- Choice and control indicators have also continued to improve:
  - More participants are able to choose who supports them, with significant increases of around 2% over the latest year for the C3 and C2 cohorts, and to choose what they do each day (significant increases of 2.7%, 2.0%, and 0.7% in the latest year for the C3, C2, and C1 cohorts, respectively).
  - Participants are more likely to make most decisions in their life (significant increases of 3.6%, 3.0%, and 1.0% over the latest year for the C3, C2, and C1 cohorts, respectively).
  - The percentage who make more decisions than two years ago has increased by 7.5% over three years, 6.9% over two years, and 4.9% over one year for the C3, C2 and C1 cohorts respectively, including significant increases over the latest year for the C3 and C2 cohorts. (These results possibly partly reflect increasing age).
- The desire for greater choice and control has also continued to increase. For the C3 cohort, there has been a 16.1% increase over three years, including a 1.3% increase over the latest year. Increases have also been observed for the C2 (latest year and overall) and C1 cohorts. Whether this is a positive or a negative change depends on the reasons (for example, it could reflect increasing awareness that choice and control is possible).
- There has been a considerable increase in the percentage who are happy with their relationships with staff<sup>26</sup> over the first year in the Scheme. However, no significant change was observed over the latest year in the Scheme for the C3 or C2 cohorts.
- The percentage of participants who say they get opportunities to learn new things has increased by 2.7% over three years in the Scheme, 3.5% over two years in the Scheme, and 2.6% over one year in the Scheme for the C3, C2 and C1 cohorts, respectively. The percentage with a post-school qualification has also increased, by 5.2%, 3.3%, and 1.2%, respectively. However, the percentage who attend school in a mainstream class has decreased.
- The percentage of participants working in a paid job has increased (by 11.8% over three years in the Scheme, 6.4% over two years in the Scheme, and 2.4% over one year in the Scheme for the C3, C2 and C1 cohorts, respectively), along with the percentage working 15 hours or more per week (by 19.2%, 12.7%, and 4.6%, respectively). The percentage of participants who volunteer has also increased.
- Whilst self-rated health has deteriorated, health services have become more accessible, with the percentage of participants reporting no difficulty in accessing health services increasing by 4.1% over three years, 3.3% over two years, and 1.3% over one year for the C3, C2 and C1 cohorts, respectively. Additionally, the percentage of participants who say they have a regular doctor has increased for all cohorts (for example, by 11.8% for the C3 cohort, including a 1.0% increase in the latest year).

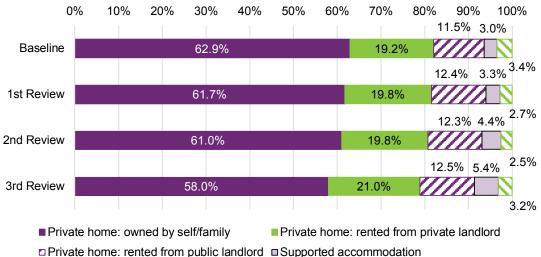
<sup>&</sup>lt;sup>26</sup> This may partly reflect participants without staff at baseline responding "no" at baseline then subsequently changing their answer to "yes" once they have staff and are happy with them, at review. An option "I don't have any staff" was added, commencing for the 2019 LF interviews.

- The percentage of participants who feel they are able to advocate for themselves has continued to decrease, by 0.7% to 1.7% in the latest year.
- The percentage who are happy with the home they live in has decreased overall and for the latest year, possibly due to a desire to move out of the family home. Feelings of safety in the home (as well as out in the community) have also declined.

#### Living and housing arrangements

Looking at longitudinal change, for participants who have been in the Scheme for three years or more at 30 June 2020, there has been a reduction in the percentage living in a privately owned home, and slight increases in the percentages living in private or public rental properties. The percentage living in supported accommodation has also increased slightly, from 3.0% to 5.4% (Figure 6.1).

# Figure 6.1 Participant housing arrangements – longitudinal changes for participants who have been in the Scheme for three years or more



Private home: rented from Other

# 6.4 Longitudinal indicators – participant characteristics

Section 2.4 describes the general methodology used to analyse longitudinal outcomes by participant characteristics.

Table 6.2 shows the five groups of transitions that have been modelled for participants aged 15 to 24, and the transitions contributed by each of the C1, C2 and C3 cohorts. Improvements and deteriorations have been considered separately, resulting in 10 different models for each indicator.

Cohort		1 year transitions		2 year transitions <sup>27</sup>	3 year transitions
	Baseline to first review	First review to second review	Second review to third review	Baseline to Second Review	Baseline to Third Review
C3	$B \rightarrow R1$	$R1 \rightarrow R2$	$R2 \rightarrow R3$	$B \rightarrow R2$	$B \rightarrow R3$
C2	$B \rightarrow R1$	$R1 \rightarrow R2$		$B \rightarrow R2$	
C1	$B \rightarrow R1$		-		

Table 6.2 Transitions contributing to the models for cohorts C1, C2 and C3<sup>\*</sup>

\*B=baseline, R1=first review, R2=second review. The arrow represents transition between the two time points.

Some key features of the analyses for selected indicators, for participants aged 15 to 24, are summarised below. Table 2.3 in Section 2.4 includes a table explaining the meaning of the arrow symbols used in the tables.

<sup>&</sup>lt;sup>27</sup> There is another two-year transition, from first review to third review, however the amount of data for this transition is smaller and to keep the presentation manageable it has not been included. Results from selected models for this transition were generally consistent with baseline to second review (but tended to identify a smaller number of predictors, due to the smaller amount of data).

## I make more decisions in my life than I did two years ago

The percentage of participants reporting that they make more decisions in their life than they did two years ago has increased significantly from baseline to all reviews, with net increases of 4.5%, 6.8% and 7.5% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 6.3 below.

l on situdinal		f Baseline s in cohort <sup>1</sup>	-	ements: o Yes		rations: to No	Nat
Longitudinal Period	No Yes		Number	%	Number	%	Net Movement
Baseline to Review 1	11,992	15,253	2,226	18.6%	1,002	6.6%	+4.5%
Baseline to Review 2	5,041	6,748	1,480	29.4%	680	10.0%	+6.8%
Baseline to Review 3	1,626	2,322	1,048	35.5%	281	12.0%	+7.5%

Table 6.3 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 6.4 below.

Table 6.4 Key drivers of likelihood of transitions in "I make more decisions in my life	
than I did two years ago" response	

			1	l step tra	ansition	S		2 step transitions			tep itions
Reference Category	Variable	First F	line to Review	to Se Rev	Review cond riew	Revie Third I	ond ew to Review	Sec Rev	line to ond view	Third F	ine to Review
		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		lmp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
NSW	Participant lives in VIC	₽									
NSW	Participant lives in QLD	1		1				1			
Autism	Disability is cerebral palsy or another neurological disorder		ŧ						ŧ		
Autism	Disability is a sensory disability	1	ŧ							1	
Autism	Disability is "Other"		↓								

			1	l step tr	ansition	s			step sitions		tep itions
Reference	Variable		line to Review	to Se	Review econd view	Revi	ond ew to Review	Sec	line to cond view		line to Review
Category		w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	w	onship ith lood of	w	onship ith lood of
		lmp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
N/A	Participant is older		Ļ								
Male	Participant is female	1								1	
N/A	Lower level of function	₽		₽	1	₽		₽	1	₽	
Non-CALD	Participant is CALD	₽		₽	1		1	₽	1	₽	
N/A	Higher School Leaver Employment Supports	1	ŧ					1			
N/A	Higher other employment supports	1									
N/A	Higher self- managed employment supports	1		1							
N/A	Higher utilisation of capacity building supports	1							ŧ	1	
N/A	Higher utilisation of core supports				1			₽	1		
30-60% capacity building supports	0-15% of supports are capacity building supports	ŧ	1	ŧ		ŧ		ŧ		ŧ	1
30-60% capacity building supports	15-30% of supports are capacity building supports		1	ŧ						ŧ	1
30-60% capacity building supports	60-100% of supports are capacity building supports								ŧ		ŧ

			1	l step tra	ansition	s			tep itions		tep itions
Reference	Variable		line to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	line to cond view		line to Review
Category		w	onship ith ood of	wi	onship ith ood of	w	onship ith ood of	w	onship ith lood of	w	onship ith ood of
		Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.
30-60% capacity building supports	5-100% of supports are capital supports	ŧ		ŧ			1		ŧ	ŧ	
Agency- managed	Plan is fully self- managed		↓	1		1		1			
Agency- managed	Plan is self- managed partly					1					
Major cities	Participant lives outside a major city	1				1		1		1	
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1			1		1	1			
Pre-COVID	Review during COVID period			₽				₽		₽	
N/A	General time trend	₽	₽		₽				₽		
Received State/ Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs	1									
Medium level of NDIA support	Higher level of NDIA support	₽	₽		₽		<b>↓</b>		₽		
N/A	Participant lives in an area with a higher average unemployment rate									ŧ	1

Key findings from Table 6.4 include:

- Participants living outside a major city were more likely to improve (transition from not making more decisions to making more decisions) between baseline and first, second or third reviews, and between second and third review.
- Participants living in Queensland were more likely to improve from baseline to first and second reviews, as well as between first and second review than participants living in NSW.
- Participants with lower level of function were less likely to improve and more likely to deteriorate in all models.
- Participants for which capacity building supports made up less than 15% of total supports were less likely to improve across all models and were more likely to deteriorate from baseline to first review and baseline to third review.
- Participants who had a review in the COVID period were less to improve from baseline to second or third review, and between first and second review.

### I make most decisions in my life

The percentage of participants who report making most decisions in their lives has increased from baseline to all reviews, with net increases of 0.8%, 3.3% and 5.1% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 6.5 below.

		f Baseline s in cohort¹	_	ements: o Yes		rations: to No	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	20,078	7,181	989	4.9%	762	10.6%	+0.8%
Baseline to Review 2	8,827	2,967	866	9.8%	475	16.0%	+3.3%
Baseline to Review 3			399	13.4%	197	20.0%	+5.1%

#### Table 6.5 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 6.6 below.

# Table 6.6 Key drivers of likelihood of transitions in *"I make most decisions in my life"* response

			,	l step tr	ansition	s			tep itions		tep itions
Reference	Variable		line to Review	to Se	Review econd view	Sec Revie Third F	ew to	Sec	line to cond view		ine to Review
Category		w	onship ith ood of	w	onship ith ood of	Relatio wi likeliho	th	w	onship ith ood of	w	onship ith ood of
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
NSW	Participant lives in VIC	₽									
NSW	Participant lives in QLD	1	1					1			
NSW	Participant lives in SA			1				1			
Autism	Disability is cerebral palsy or another neurological disorder	1	ŧ					1	ŧ		ŧ
Autism	Disability is a Down syndrome or an intellectual disability	ŧ								ŧ	Ļ
Autism	Disability is a psychosocial disability		₽	1		1			ŧ		
Autism	Disability is a sensory disability	1	₽		ŧ	1		1	ŧ	1	₽
Autism	Disability is "Other" <sup>28</sup>	1	₽	1	₽			1	₽	1	₽
N/A	Participant is older	1	↓					1	↓		↓
Male	Participant is female	1		1		1				1	
Non-CALD	Participant is CALD	₽		₽		↓		↓		₽	

<sup>&</sup>lt;sup>28</sup> Includes disabilities where numbers are too small to be modelled separately, as well as those not included in one of the 17 NDIS disability groups. Includes ABI, stroke, multiple sclerosis, spinal cord injury and other physical disabilities.

		1 step transitions			2 step transitions		3 step transitions				
Reference	Variable	Baseline to First Review		First Review to Second Review		Second Review to Third Review		Baseline to Second Review		Baseline to Third Review	
Category		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		lmp.	Det.	lmp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.
N/A	Lower level of function	➡	1	↓	1	₽		₽	1	↓	1
N/A	Higher School Leaver Employment Supports	1						1			
N/A	Higher Australian Disability Enterprise payments										1
N/A	Higher annualised total funding		1	₽			1	₽		₽	
N/A	Higher baseline utilisation	₽				↓		₽		↓	
N/A	Higher utilisation of capacity building supports			ŧ			1				
N/A	Higher utilisation of core supports			₽							
30-60% capacity building supports	15-30% of supports are capacity building supports	₽		ŧ						₽	
30-60% capacity building supports	60-100% of supports are capacity building supports			1				1		1	
30-60% capacity building supports	5-100% of supports are capital supports		ŧ						ŧ		
Agency- managed	Plan is managed by a plan manager					1					
Agency- managed	Plan is fully self- managed		₽					₽			

			1 step transition	IS	2 step transitions	3 step transitions
Reference	Variable	Baseline to First Review		Second Review to Third Review	Baseline to Second Review	Baseline to Third Review
Category		Relationship with likelihood of	with	Relationship with likelihood of	Relationship with likelihood of	Relationship with likelihood of
		Imp. Det.	Imp. Det.	Imp. Det.	lmp. Det.	Imp. Det.
Agency- managed	Plan is partly self-managed					↓
Major cities	Participant lives outside a major city	1	1	ŧ	1	•
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1	1	1	1	1
Pre-COVID	Review during COVID period	↓ ↓			ŧ	
N/A	General time trend	↓ ↓				
Entry due to disability	Participant entered the scheme through Early Intervention	1				
Medium level of NDIA support	Lower level of NDIA support					ŧ
Medium level of NDIA support	Higher level of NDIA support	1 1	1		1 1	1 1
N/A	Participant lives in an area with a higher average unemployment rate					+ +

Key findings from Table 6.6 include:

• Disability has a significant impact on the percentage of participants who make most of the decisions in their lives. Participants with sensory disabilities were more likely to improve from baseline to first review, second and third review as well as between second and third review. These participants were also less likely to deteriorate in all models from baseline as well as between first and second review. Participants with

Down syndrome were less likely to improve between baseline and first or third review, although they were also less likely to deteriorate between baseline and third review. Participants with a psychosocial disability were more likely to improve between first and second review and between second and third review, and were less likely to deteriorate between baseline and first or second review. Participants with disabilities in the "Other" category (which includes ABI, stroke, multiple sclerosis, spinal cord injury or another physical disability, as well as disabilities not included in one of the 17 NDIS disability groups) were more likely to improve and less likely to deteriorate in all transitions except second to third review.

- CALD participants were less likely to improve in all transitions and more likely to deteriorate from baseline to first review and baseline to second review.
- Participants who relocated to a new LGA were more likely to improve in all transitions.
- Participants with higher level of NDIA support were more likely to improve and less likely to deteriorate in all transitions from baseline. As well, these participants were more likely to improve between first and second review.

#### I want more choice and control in my life

The percentage of participants who say they would like more choice and control in their life has increased significantly from baseline to all reviews, with net increases of 5.7%, 10.2% and 16.1% from baseline to the first, second and third review, respectively. This was a result of changes from "No" to "Yes" offset by changes from "Yes" to "No" as set out in Table 6.7 below.

	Longitudinal Period No Yes			ependent: o Yes	Context D Yes t		
			Number %		Number %		Net Movement
Baseline to Review 1	5,132	22,006	1,850	36.0%	313	1.4%	+5.7%
Baseline to Review 2	2,412	9,362	1,409	58.4%	210	2.2%	+10.2%
Baseline to Review 3	1,112	2,883	724	65.1%	81	2.8%	+16.1%

#### Table 6.7 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of changes in the outcome are set out in Table 6.8 below.

# Table 6.8 Key drivers of likelihood of transitions in *"I want more choice and control in my life"* response

			1	l step tra	ansition	S			tep itions		tep itions
Reference		Baseline to First Review		to Se	Review cond view	Revi	ond ew to Review	Sec	ine to ond view		ine to Review
category	Variable	Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
NSW	Participant lives in QLD	1							℃		
NSW	Participant lives in SA				℃				℃		
Autism	Disability is cerebral palsy or another neurological disorder										Û
Autism	Disability is a sensory disability										仓
N/A	Participant is older	Ŷ						Ŷ			₽
Non- Indigenous	Participant is Indigenous			1				1			
2016/17	Participant entered the Scheme in 2017/18			Û							
N/A	Lower level of function							Ŷ			
N/A	Higher Australian Disability Enterprise payments				仓				仓		
N/A	Higher annualised total funding	$\hat{\mathbf{U}}$									
N/A	Higher utilisation of capacity building supports				₽				₽		

			1	l step tr	ansition	S			tep itions	3 s trans	
Reference	Variable	Baseline to First Review		First Review to Second Review		Second Review to Third Review		Sec	line to cond /iew	Baseline to Third Review	
category	Vallable	Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		No to Yes	Yes to No	No to Yes	Yes to No						
30-60% capacity building supports	0-15% of supports are capacity building supports	Û									
30-60% capacity building supports	5-100% of supports are capital supports	Û									
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1						1			
Pre-COVID	Review during COVID period	Ŷ			₽				₽		
N/A	General time trend								仓		
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs					1			仓		
Medium level of NDIA support	Higher level of NDIA support	$\hat{\mathbf{U}}$		$\hat{\mathbf{U}}$				$\hat{\mathbf{U}}$			

Key findings from Table 6.8 include:

- Participants with cerebral palsy or another neurological disorder, and those with a sensory disability, were more likely to change their response from "Yes" (wanting more choice and control) at baseline to "No" at third review.
- Indigenous participants were more likely to change their response from "No" (not wanting more choice and control) at first review to "Yes" at second review. Indigenous participants were also more likely to change their response from "No" to "Yes" between baseline and second review.

- Participants with 0-15% of capacity building supports in their plan, and those with more than 5% capital supports, were less likely to change their response from "No" to "Yes" between baseline and first review.
- Participants who responded "No" at baseline and relocated to a new LGA were more likely to change their response to "Yes" at first and second review.
- Participants with a higher level of NDIA support were less likely to change their response from "No" to "Yes" from baseline to first or second review, and from first review to second review.

### I would like to see my friends more often

The percentage of participants who say they would like to see their friends more often has increased significantly from baseline to all reviews, with net increases of 2.5%, 2.9% and 8.0% from baseline to the first, second and third review, respectively. This was a result of changes from "No" to "Yes" offset by changes from "Yes" to "No" as set out in Table 6.9 below.

Long site allocations at		f Baseline s in cohort¹		ependent: o Yes		ependent: to No	Net
Longitudinal Period	No Yes		Number	%	Number %		Net Movement
Baseline to Review 1	9,542	15,787	1,600	16.7%	957	6.0%	+2.5%
Baseline to Review 2	4,319	6,546	1,236	29.5%	702	1.5%	+2.9%
Baseline to Review 3	1,559	2,017	561	36.0%	274	13.6%	+8.0%

### Table 6.9 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of changes in the outcome are set out in Table 6.10 below.

# Table 6.10 Key drivers of likelihood of transitions in *I would like to see my friends more often*" response

			I step transition	S	2 step transitions	3 step transitions
Reference Category	Variable	Baseline to First Review Relationship with likelihood of No to Yes Yes to No	First Review to Second Review Relationship with likelihood of No to Yes Yes to No	Second Review to Third Review Relationship with likelihood of No to Yes Yes to No	Baseline to Second Review Relationship with likelihood of No to Yes Yes to No	Baseline to Third Review Relationship with likelihood of No to Yes Yes to No
NSW	Participant		л		л	л
11377	lives in VIC	•	V		V	V
NSW	Participant lives in QLD	仓				

			1	l step tra	ansition	S			tep itions		tep itions
Reference		Baseline toFirst ReviewSecondFirst Reviewto SecondReview toReviewThird Review		Sec	ine to ond ⁄iew		ine to Review				
Category	Variable	Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		w	onship ith ood of	wi	onship ith ood of
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
NSW	Participant lives in ACT, NT, TAS, or WA							Ŷ		Û	
Autism	Disability is cerebral palsy or another neurological disorder	Û		Û							
Autism	Disability is a Down syndrome or an intellectual disability			Û				Û		Û	
Autism	Disability is a sensory disability	Û	仓						仓		
Autism	Disability is "Other"	Ŷ									
N/A	Participant is older								仓	Ŷ	
Male	Participant is female										
Non- Indigenous	Participant did not state their Indigenous status <sup>29</sup>	1									
Non-CALD	Participant is CALD		↓	1				1			
N/A	Lower level of function	1	↓		↓				₽		₽
N/A	Higher School Leaver Employment Supports								仓		

<sup>&</sup>lt;sup>29</sup> There was no significant difference between Indigenous and non-Indigenous participants.

			1	l step tra	ansition	s		2 step transitions		3 step transitions	
Reference			line to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	line to cond view		line to Review
Category	Variable	Relationship with likelihood of		Relationship with likelihood of		w	onship ith ood of	w	onship ith lood of	w	onship ith lood of
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
N/A	Higher self- managed employment supports	1									
N/A	Higher other employment supports	Û									
N/A	Higher Australian Disability Enterprise payments		仓								
N/A	Higher annualised total funding							1			
N/A	Higher baseline utilisation									1	
N/A	Higher utilisation of capacity building supports	1	ŧ						ŧ		
N/A	Higher utilisation of core supports			1				1			
30-60% capacity building supports	0-15% of supports are capacity building supports		仓								
30-60% capacity building supports	15-30% of supports are capacity building supports							1	ŧ		
30-60% capacity building supports	60-100% of supports are capacity building supports		Û						仓		仓

				l step tr	ansition	S			tep itions		tep itions
Reference	Variable	Baseline to First Review		First Review to Second Review		Second Review to Third Review		Baseline to Second Review		Baseline to Third Review	
Category		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		No to Yes	Yes to No	No to Yes	Yes to No						
30-60% capacity building supports	5-100% of supports are capital supports							Û			
Major cities	Participant lives outside a major city				仓				仓		€
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1		1				1			
Pre-COVID	Review during COVID period		↓		↓				₽		₽
N/A	General time trend		₽						₽		₽
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs	Û									
Medium level of NDIA support	Higher level of NDIA support	Ŷ	₽	Û				$\hat{\mathbf{U}}$		Û	

Key findings from Table 6.10 include:

- Participants who gave their second response during the COVID period were less likely to change their response from "Yes" (wanting to see their friends more often) to "No" (not wanting to see them) in all transitions from baseline.
- Participants with Down syndrome or an intellectual disability were less likely to change their response from "No" to "Yes" between baseline and second or third review, and between first review and second review.
- Participants who relocated to a new LGA were more likely to change their response from "No" to "Yes" between baseline and first or second review, and between first and second review.

### I have a doctor I see on a regular basis

The percentage of participants who report having a doctor they see on a regular basis has increased significantly from baseline to all reviews, with net increases of 4.2%, 7.5% and 11.8% from baseline to the first, second and third review, respectively. This was a result of changes from "No" to "Yes" (improvements) offset by changes from "Yes" to "No" (deteriorations) as set out in Table 6.11 below.

Longitudinal		f Baseline s in cohort <sup>1</sup>		ement: o Yes		oration: to No	Net
Longitudinal Period	No	Yes	Number	%	Number	%	Movement
Baseline to Review 1	4,936	22,327	1,615	32.7%	480	2.1%	+4.2%
Baseline to Review 2	2,234	9,573	1,194	53.4%	311	3.2%	+7.5%
Baseline to Review 3	888	3,111	581	65.4%	110	3.5%	+11.8%

<b>Table 6.11</b>	Breakdown of ne	t movement in	longitudinal	responses
-------------------	-----------------	---------------	--------------	-----------

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of changes in the outcome are set out in Table 6.12 below.

# Table 6.12 Key drivers of likelihood of transitions in *"I have a doctor I see on a regular basis"* response

				1 step tr	ansitions				tep itions		step sitions
Reference	Variable		e to First /iew		eview to I Review		Review Review		line to I Review		e to Third view
Category			onship lihood of		onship Iihood of		onship lihood of		onship lihood of		onship lihood of
		Imp.	Det.	Imp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.
NSW	Participant lives in VIC	↓	Ļ					₽	Ļ	₽	
NSW	Participant lives in QLD	1		1				1			
NSW	Participant lives in SA								1		
Autism	Disability is cerebral palsy or another neurological disorder		ŧ							1	
Autism	Disability is a psychosocial disability		1								

				1 step tra	ansitions				tep itions		tep itions
Reference	Variable		e to First view	First Re Second	eview to Review		Review Review		line to I Review		e to Third /iew
Category		Relation with like	onship lihood of	Relatio with like	onship lihood of	Relati with like	onship lihood of	Relati with like	onship Iihood of	Relati with like	onship lihood of
		Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.
N/A	Participant is older							₽			
Male	Participant is female	1	↓			1		1	Ļ	1	
Non- CALD	Participant is CALD							1			
2016/17	Participant entered the Scheme in 2017/18		ŧ						ŧ		
2016/17	Participant entered the Scheme in 2018/19		ŧ								
N/A	Lower level of function	1	↓		Ļ			1	ŧ	1	
N/A	Higher School Leaver Employment Supports			1							
N/A	Higher self- managed employment supports					1					
N/A	Higher Australian Disability Enterprise payments				1					ŧ	
N/A	Higher baseline utilisation	1	Ļ				Ļ		ŧ		ŧ
N/A	Higher utilisation of capacity building supports				ŧ					1	
N/A	Higher utilisation of core supports							1			

				1 step tr	ransitions				step sitions		tep itions
Reference	Variable	Baseline Revi			eview to d Review		l Review d Review		line to I Review		e to Third /iew
Category		Relatio with likeli			onship elihood of	Relati with like	onship lihood of		onship lihood of		onship lihood of
		lmp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.
30-60% capacity building supports	15-30% of supports are capacity building supports			ŧ				ŧ			
Major cities	Participant lives outside a major city		1		1		1		1		1
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		1		1		1		1
N/A	General time trend	₽		₽		₽		₽			
N/A	Change in time trend post-COVID					1					
Medium level of NDIA support	Higher level of NDIA support	ŧ						ŧ		ŧ	
N/A	Participant lives in an area with a higher average unemployment rate		1					ŧ			

Key findings from Table 6.12 include:

- Female participants were more likely to transition to having a regular doctor, and less likely to transition away from having a regular doctor, between baseline and first or second review. They were also more likely to transition to having a regular doctor between baseline and third review, and between second and third review.
- Participants with cerebral palsy or another neurological disorder were less likely to stop having a regular doctor between baseline and first review, and were more likely to start having a regular doctor between baseline and third review. Participants with a psychosocial disability were more likely to stop seeing a regular doctor between baseline and first review.
- Participants who do not live in a major city were more likely to change from having a regular doctor, to not having one, in all transitions.

- Participants who relocated to a new LGA were also more likely to change from having a regular doctor, to not having one, in all transitions.
- Participants from Victoria were less likely to change their response from baseline to first review and second review. Participants living in Queensland were more likely to start seeing a regular doctor, and those in SA were more likely to stop.
- Higher utilisation of plan budget was generally associated with a lower likelihood of transitioning away from having a regular doctor.

### I have been to the hospital in the last 12 months

The percentage of participants reporting they have been to hospital in the past 12 months has decreased significantly from baseline to all reviews, with net decreases of 4.3%, 6.1% and 5.1% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 6.13 below.

Loopeite die al		f Baseline s in cohort <sup>1</sup>		ements: to No		rations: o Yes	N-4
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	19,254	7,386	2,719	36.8%	1,578	8.2%	-4.3%
Baseline to Review 2	8,279	3,226	1,666	51.6%	968	11.7%	-6.1%
Baseline to Review 3	2,830	1,021	584	57.2%	387	13.7%	-5.1%

#### Table 6.13 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 6.14 below.

# Table 6.14 Key drivers of likelihood of transitions in *"I have been to the hospital in the last 12 months"* response

			1	l step tr	ansition	S			tep itions		step sitions
eference	Variable		line to Review	to Se	Review econd view	Revi	ond ew to Review	Sec	line to cond view		line to Review
Category		w	onship ith lood of	w	onship ith ood of	w	onship ith ood of	wi	onship ith ood of	w	onship ith lood of
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
NSW	Participant lives in QLD	1									
NSW	Participant lives in SA				1						
Autism	Disability is cerebral palsy or another	₽	1	₽	1			₽	1		1

				l step tr	ansition	s			tep itions		step sitions
eference Category	Variable	First F	line to Review	to Se Rev	Review cond view	Revi Third	ond ew to Review	Sec Rev	line to cond view	Third	line to Review
		w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	w	onship ith lood of
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.
	neurological disorder										
Autism	Disability is a Down syndrome or an intellectual disability	ŧ	1								
Autism	Disability is a psychosocial disability	₽	1	₽	1			₽	1		
Autism	Disability is "Other"	₽	1	↓				₽	1		1
N/A	Participant is older	1									
Male	Participant is female	₽	1		1	₽		₽	1	₽	
Non- Indigenous	Participant is Indigenous		↓		1						
Non- Indigenous	Participant did not state their Indigenous status		ŧ								
Non-CALD	Participant is CALD	1									
2016/17	Participant entered the Scheme in 2018/19	ŧ									
N/A	Lower level of function	₽		₽		₽		➡		₽	
N/A	Higher School Leaver Employment Supports	1	ŧ								
N/A	Higher Australian Disability Enterprise payments		ŧ	1				1	ŧ	1	

			ŕ	l step tr	ansition	s			tep itions		tep itions
eference	Variable		line to Review	to Se	Review econd view	Revi	ond ew to Review	Sec	line to cond /iew		ine to Review
Category		w	onship ith lood of	w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	wi	onship ith ood of
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
N/A	Higher other employment supports								₽		
N/A	Higher annualised plan budget	₽	1					₽	1		1
30-60% capacity building supports	0-15% of supports are capacity building supports				1						
30-60% capacity building supports	5-100% of supports are capital supports				1						
Agency- managed	Plan is managed by a plan manager	₽						₽			
Agency- managed	Plan is fully self- managed		1								
Agency- managed	Plan is partly self-managed	ŧ	1								
Major cities	Participant lives outside a major city	1	1					1	1		
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1						1		1
Pre-COVID	Review during COVID period	₽									
N/A	General time trend	1						1			
Entry due to disability	Participant entered the scheme through Early Intervention				1						

			1	l step tra	ansition	S			tep itions		tep itions
eference Category	Variable		line to Review	to Se	Review cond riew	Revi	ond ew to Review	Sec	line to ond view		ine to Review
		wi	onship ith ood of	wi	onship ith ood of	w	onship ith ood of	w	onship ith ood of	wi	onship ith ood of
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
Medium level of NDIA support	Lower level of NDIA support								₽		
Medium level of NDIA support	Higher level of NDIA support	₽		₽		₽		-		•	
N/A	Participant lives in an area with a higher average unemployment rate	₽									

Key findings from Table 6.14 include:

- Participants with autism (the reference category in the models) were more likely to improve and less likely to deteriorate with regard to having been to hospital in the last 12 months, between baseline and first review. Participants with cerebral palsy or another neurological disorder, and those with a psychosocial disability, tended to have less favourable transitions than participants with other disabilities.
- Participants with lower level of function tended to be less likely to improve and more likely to deteriorate across most transitions.
- Participants with higher annualised plan budget were less likely to improve and more likely to deteriorate between baseline and first or second review.
- Female participants were less likely to improve and more likely to deteriorate between baseline and first or second review. They were also less likely to improve between baseline and third review and between second and third review, and were more likely to deteriorate between first and second review.
- Participants who relocated to a new LGA were more likely to deteriorate in all transitions from baseline.
- Participants with a higher level of NDIA support were less likely to improve across all transitions. Participants with a lower level of NDIA support were more likely to improve and less likely to deteriorate between baseline and second review.

## I have wanted to do certain things in the last 12 months, but could not

The percentage of participants who have wanted to do certain things in the last 12 months, but could not has increased significantly from baseline to all reviews, with net increases of 4.4%, 7.6% and 12.1% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 6.15 below.

I S S M P S I		f Baseline s in cohort¹		ements: to No		rations: o Yes	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	10,193	17,071	1,081	6.3%	2,284	22.4%	+4.4%
Baseline to Review 2	4,461	7,248	743	10.3%	1,646	36.1%	+7.6%
Baseline to Review 3	1,782	2,213	300	13.6%	784	44.0%	+12.1%

#### Table 6.15 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 6.16 below.

# Table 6.16 Key drivers of likelihood of transitions in *"I have wanted to do certain things in the last 12 months, but could not"* response

			1	l step tr	ansition	S	2 step transitions	3 step transitions
Reference Category	Variable	First I	line to Review onship	to Se Rev	Review econd view onship	Second Review to Third Review Relationship	Baseline to Second Review Relationship	Baseline to Third Review Relationship
		w	ith iood of	w	ith ood of	with likelihood of	with likelihood of	with likelihood of
		lmp.	Det.	lmp.	Det.	Imp. Det.	Imp. Det.	Imp. Det.
NSW	Participant lives in VIC		Ļ	₽	Ļ			
NSW	Participant lives in QLD	1		1			1	1
NSW	Participant lives in SA	1	↓	1			1	Ļ
NSW	Participant lives in ACT, NT, TAS, or WA	1	ŧ		ŧ	ŧ	ŧ	↓
Autism	Disability is a psychosocial disability						ł	
Autism	Disability is a sensory disability		₽					
Autism	Disability is "Other"							

			1	l step tra	ansition	S			tep itions		tep itions
Reference	Variable		line to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	line to cond /iew		line to Review
Category		w	onship ith ood of	w	onship ith ood of	wi	onship ith ood of	w	onship ith ood of	w	onship ith lood of
		lmp.	Det.	lmp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.
N/A	Participant is older		Ļ		Ļ		Ļ				
Male	Participant is female		1								1
Non- Indigenous	Participant is Indigenous								1		1
N/A	Lower level of function		₽							₽	
N/A	Higher Australian Disability Enterprise payments	1						1			
N/A	Higher annualised total funding	₽	1					₽	1		
N/A	Higher utilisation of capacity building supports		1					ŧ	1		
30-60% capacity building supports	0-15% of supports are capacity building supports	1						1	ŧ		
30-60% capacity building supports	15-30% of supports are capacity building supports		1								
30-60% capacity building supports	60-100% of supports are capacity building supports	1	ŧ					1	ŧ	1	
30-60% capacity building supports	5-100% of supports are capital supports								ŧ		
Agency- managed	Plan is managed by plan manager										1

			1	l step tr	ansition	s			step sitions		step sitions
Reference Category	Variable		line to Review	to Se	Review econd view	Revi	ond ew to Review	Sec	line to cond view		line to Review
Calegory		w	onship ith ood of	w	onship ith ood of	wi	onship ith ood of	w	onship ith lood of	w	onship ith lood of
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.
Major cities	Participant lives outside a major city		1						1		
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1						1		
Pre-COVID	Review during COVID period								↓		
N/A	General time trend	₽	↓	₽				↓			
Entry due to disability	Participant entered the scheme through Early Intervention										1
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs		ŧ								
Medium level of NDIA support	Lower level of NDIA support					1				1	↓
Medium level of NDIA support	Higher level of NDIA support	₽		₽			ŧ		Ļ		₽
N/A	Participant lives in an area with a higher average unemployment rate				ŧ				ŧ	ŧ	

Key findings from Table 6.16 include:

• State/Territory has a significant impact on the percentage of participants who have wanted to do certain things in the past 12 months, but could not. For example,

participants living in the ACT, NT, Tasmania or WA were less likely to deteriorate across all transitions and more likely to improve from baseline to first review.

- Older participants were less likely to deteriorate in all one-step transitions.
- Indigenous participants were more likely to deteriorate from baseline to second review and baseline to third review.
- Participants with more than 60% of capacity building supports in their plan were more likely to improve and less likely to deteriorate from baseline to first review and baseline to second review.

#### I know people in my community

The percentage of participants who know people in their community has increased significantly from baseline to all reviews, with net increases of 6.9%, 5.6% and 7.0% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 6.17 below.

l on situdinal	Number of Baseline Responses in cohort <sup>1</sup>		Improvements: No to Yes		Deteriorations: Yes to No		Nat
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	13,030	14,129	1,908	14.6%	934	6.6%	+3.6%
Baseline to Review 2	5,401	6,369	1,336	24.6%	673	10.6%	+5.6%
Baseline to Review 3	1,935	2,063	597	30.9%	317	15.4%	+7.0%

#### Table 6.17 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 6.18 below.

#### Table 6.18 Key drivers of likelihood of transitions in "I know people in my community"

Reference Category	Variable		1 step transitior	2 step transitions	3 step transitions	
		Baseline to First Revie		Second Review to Third Review	Baseline to Second Review	Baseline to Third Review
		Relationsh with likelihood o	with of likelihood of	Relationship with likelihood of Imp. Det.	Relationship with likelihood of Imp. Det.	Relationship with likelihood of Imp. Det.
		lmp. De	. Imp. Det.	lmp. Det.	Imp. Det.	Imp. Det.
NSW	Participant lives in VIC	₽	₽		+	
NSW	Participant lives in QLD	1				1
NSW	Participant lives in SA					1

			1	l step tra	ansition	S			tep itions		tep itions
Reference	Variable		line to Review	First R to Se Rev	cond	Revi	ond ew to Review	Sec	line to cond view		line to Review
Category		Relationship with likelihood of		Relationship Relationship with with likelihood of likelihood of		ith	w	onship ith ood of	w	onship ith ood of	
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
Autism	Disability is cerebral palsy or another neurological disorder	1	ŧ		ŧ			1	ŧ	1	ŧ
Autism	Disability is a Down syndrome or an intellectual disability	1	ŧ		ŧ			1	ŧ	1	ŧ
Autism	Disability is a sensory disability	1	₽		ŧ				ŧ		
Autism	Disability is "Other"		₽					1	₽	1	
N/A	Participant is older		↓						₽		
Male	Participant is female				1						
Non- Indigenous	Participant is Indigenous							1			
Non-CALD	Participant is CALD	₽								₽	
2016/17	Participant entered the Scheme in 2018/19	1									
N/A	General time trend			↓					₽	₽	
N/A	Lower level of function	₽		↓				₽		₽	
N/A	Higher School Leaver Employment Supports		ŧ								
N/A	Higher Australian Disability							1		1	

				1 step tr	ransition	s			tep itions		tep itions
Reference	Variable		eline to Review	to Se	Review econd view	Revi	ond ew to Review	Sec	line to cond /iew		line to Review
Category		v	ionship /ith 100d of	with		Relationship with likelihood of		w	onship ith ood of	w	onship ith ood of
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
	Enterprise payments										
N/A	Higher self- managed employment supports			1						1	
N/A	Higher utilisation of capacity building supports	1			ŧ				ŧ		ŧ
30-60% capacity building supports	0-15% of supports are capacity building supports									ŧ	
30-60% capacity building supports	60-100% of supports are capacity building supports									1	
Agency- managed	Plan is managed by a plan manager			1				1			
Agency- managed	Plan is fully self- managed		₽								
Agency- managed	Plan is partly self-managed							1			
Major cities	Participant lives outside a major city	1	↓	1	ŧ		ŧ	1	ŧ	1	₽
Did not relocate	Participant relocated to a new Local Government Area (LGA)	ŧ	1	ŧ	1		1	ŧ	1		1
Pre-COVID	Review during COVID period		₽					₽			
N/A	General time trend	₽	↓	↓				₽	↓	↓	

			1 step transition	S	2 step transitions	3 step transitions
Reference	Variable	Baseline to First Review	First Review to Second Review	Second Review to Third Review	Baseline to Second Review	Baseline to Third Review
Category		Relationship with likelihood of				
		Imp. Det.	Imp. Det.	lmp. Det.	lmp. Det.	Imp. Det.
Entry due to disability	Participant entered the scheme through Early Intervention	ŧ				
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs					ŧ
Medium level of NDIA support	Higher level of NDIA support		ŧ		↓ ↓	
N/A	Participant lives in an area with a higher average unemployment rate	1 1		1	1	ŧ

Key findings from Table 6.18 include:

- Participants with autism were more likely to deteriorate (change from saying they know people in their community to saying they don't) between baseline and first and second reviews. Transitions were generally more favourable for participants with cerebral palsy or another neurological disorder, and those with an intellectual disability/ Down syndrome.
- Participants living in Victoria were less likely to improve from baseline to first review, baseline to second review and first review to second review.
- Participants living outside major cities were more likely to improve and less likely to deteriorate in all transitions with sufficient data.
- Participants who relocated to a new LGA were less likely to improve and more likely to deteriorate in all transitions with sufficient data.
- Participants located in an area with a higher average unemployment rate were less likely to improve from baseline to first review and baseline to third review. These participants were also more likely to deteriorate from baseline to first review, baseline to second review and second review to third review.

A summary of key findings from this section is contained in Box 6.6.

### Box 6.6: Summary of findings: longitudinal indicators by participant characteristics

- Longitudinal outcomes vary with participant level of function. Participants with a higher level of function tend to exhibit higher rates of improvement than those with a lower level of function.
- Participants with a hearing impairment generally experience better outcomes. Additionally, participants with cerebral palsy are less likely to deteriorate with regard to knowing people in their community.
- Participants from regional areas are more likely to improve over time in knowing people in their community. They were also more likely to want to see their friends more often compared to baseline levels.
- Participants from a CALD background are more likely to deteriorate over time with respect to making most decisions in life, and knowing people in the community.
- Indigenous participants were more likely to start wanting more choice and control, and more likely to improve with respect to knowing people in their community.
- Relocating to a new LGA was significant in a large number of models, with the direction
  of the effect being mostly negative but sometimes mixed or positive. For example,
  participants who relocated were more likely to improve on the indicator "I make most
  decisions in my life". However, they were more likely to deteriorate with respect to
  having a regular doctor and knowing people in their community.
- COVID-19 variables were significant in at least one model for all indicators, however the direction of the effect was mixed, being favourable in some models but unfavourable in others. For example:
- Participants were generally less likely to report an improvement between reviews with respect to making more decisions than they did two years ago, when the later review occurred during the pre-COVID period.
- Participants who gave their second response during the COVID period were less likely to change their response from "Yes" (wanting to see their friends more often) to "No" (not wanting to see them) in all transitions from baseline.
- However, participants were less likely to deteriorate between baseline and second review in relation to wanting to do certain things in the last 12 months but being unable to, when the later response occurred during the COVID period.

# 7. Participants aged 15 to 24: Has the NDIS helped?

#### 7.1 Results across all participants

Figure 7.1 shows the percentage of participants aged 15 to 24 who think that the NDIS has helped with outcomes related to each of the eight domains. The figure displays the outcomes for participants who have had at least one plan review and have been in the Scheme from approximately one and up to three years. At each review, the proportion of positive responses is given for all available participants.

### Figure 7.1 Percentage who think that the NDIS has helped with outcomes related to each domain

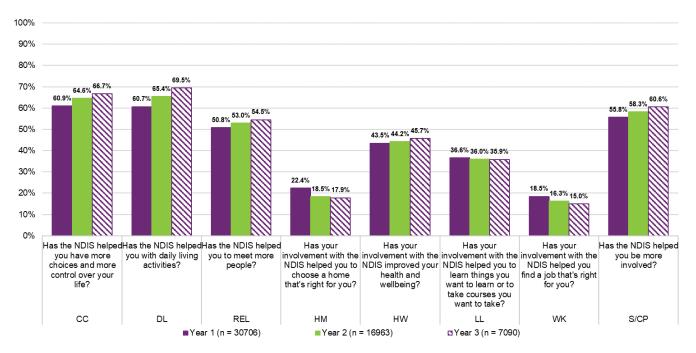


Figure 7.1 shows that opinions on whether the NDIS has helped vary considerably by domain for the young adult cohort.

The percentage of positive responses has increased over the first three years in the Scheme for the following domains: choice and control (from 60.9% to 66.7%), daily living (from 60.7% to 69.5%), and social and community participation (from 55.8% to 60.6%). For home and work domains, the overall satisfaction rates are lower compared to other domains. For home, the proportion of positive responses was 22.4% after one year, 18.5% after two years, and 17.9% after three years. For work, the percentage of positive responses was 18.5% after one year, 16.3% after two years, and 15.0% after three years. There have been slight improvements for the relationships domain, increasing from 50.8% after one year to 54.5% after one year to 45.7% after three years. The percentage of positive responses has remained relatively unchanged for lifelong learning, at around 36%.

For some of these domains, notably housing, education and health, other service systems have a more prominent role to play than the NDIS.

#### 7.2 Results by participant characteristics

#### 7.2.1 Year 1 'Has the NDIS Helped?' indicators – participant characteristics

Year 1 (first review) indicators have been analysed by participant characteristics using oneway analyses and multiple regression modelling.

Table 7.1 summarises the results of the regression modelling, showing the relationship of different participant characteristics with the likelihood of the participant saying that the NDIS has helped after one year in the Scheme. The arrow symbols have the same interpretation as for Section 2, defined in Table 2.6.

### Table 7.1 Relationship of participant characteristics with the likelihood of a positive response<sup>30</sup>

				R	elation	ship wi	th:				
Reference Category	Characteristic		Has	NDIS he	IDIS helped improve participant s						
		СС	DL	RL	НМ	нพ	LL	WK	SCP		
Entry due to disability	Participants entered the scheme through Early Intervention	1	1								
N/A	Higher annualised plan budget		1		1						
Non-Indigenous	Participant is Indigenous	↓	↓	↓		↓	↓	↓	↓		
Non-CALD	Participant is CALD	↓	↓						↓		
N/A	General time trend		1		↓		↓	↓			
Intellectual disability	Disability is acquired brain injury or stroke			₽			₽	↓			
Intellectual disability	Disability is autism			₽			₽	↓	↓		
Intellectual disability	Disability is cerebral palsy			↓	↓	1	₽	↓	↓		
Intellectual disability	Disability is Down syndrome			1			1		1		
Intellectual disability	Disability is hearing impairment			↓					↓		
Intellectual disability	Disability is another neurological disability			↓	↓		↓	↓	₽		
Intellectual disability	Disability is psychosocial disability			↓			₽	↓	↓		
Intellectual disability	Disability is spinal cord injury or another physical disability			↓	₽	1	₽	↓	↓		

<sup>&</sup>lt;sup>30</sup> The domains are: CC=Choice and Control, DL=Daily Living, RL=Relationships, HM=Home, HW=Health and Wellbeing, LL=Lifelong Learning, WK=Work, SCP=Social, Community and Civic Participation.

				R	elation	ship wit	th:		
Reference Category	Characteristic		Has I	NDIS h	elped in	nprove	partici	pant s	
		СС	DL	RL	НМ	нw	LL	wк	SCP
Intellectual disability	Disability is visual impairment			₽		↓	₽	↓	↓
N/A	Participant is older	1	1	1	1	1	1	1	1
2016-17	Participant entered the Scheme in 2018/19	1		1	1	1	1	1	1
Male	Participant is female	1	1				1	↓	
Major cities	Participant lives in regional area with population greater than 50,000	₽	ł	ŧ	₽	₽	ŧ		ŧ
Major cities	Participant lives in regional area with population between 15,000 and 50,000	1	1	1			ŧ		1
Major cities	Participant lives in regional area with population between 5,000 and 15,000	1	1	1					1
Major cities	Participant lives in regional area with population less than 5,000					₽	₽		
Major cities	Participant lives in Remote/Very Remote areas	₽	↓		₽	₽			₽
30-60% capacity building supports	0%-15% of supports are capacity building supports		1		1	1	₽	↓	
30-60% capacity building supports	15%-30% of supports are capacity building supports							ł	1
30-60% capacity building supports	60%-95% of supports are capacity building supports	↓	↓	↓		↓		1	₽
30-60% capacity building supports	95%-100% of supports are capacity building supports	↓	↓	₽	₽	₽	₽		₽
30-60% capacity building supports	5-100% of supports are capital supports			₽		1	₽	₽	
Agency-managed	Plan is managed by a plan manager	1	1			1	1		1
Agency-managed	Plan is fully self-managed	1	1	1		1	1		1
Agency-managed	Plan is partly self-managed	1	1	1		1	1		1
Received services from State/Territory programs before joining NDIS	Participant received services from Commonwealth programs before joining NDIS		ŧ				₽	1	
Received services from State/Territory programs before joining NDIS	Participant did not previously receive services from	1	1		1	1			1

				R	elation	ship wi	th:			
Reference Category	Characteristic	Has NDIS helped improve participant s								
		сс	DL	RL	НМ	HW	LL	wк	SCP	
	Commonwealth or State/Territory programs									
N/A	Lower level of function	1	1	1						
NSW	Participant lives in ACT						₽			
NSW	Participant lives in NT	1								
NSW	Participant lives in QLD	1	1	1						
NSW	Participant lives in SA			➡					₽	
NSW	Participant lives in TAS				₽		₽	₽		
NSW	Participant lives in VIC	↓		↓			1	↓	↓	
NSW	Participant lives in WA	1	1	1	1	1	1	1	1	
Medium level of NDIA support	Lower level of NDIA support									
Medium level of NDIA support	Higher level of NDIA support	↓		↓	1	1		1	↓	
N/A	Participant lives in an area with a higher average unemployment rate	↓	ł	ł	1		↓			
N/A	Higher baseline utilisation	1	1	1	1	1	1	1	1	

#### Baseline plan utilisation

Participants who used a higher percentage of the supports in their baseline plan are more likely to say that the NDIS has helped improve their outcomes after one year in the Scheme, across all eight domains.

#### Access request decision

Participants who accessed the scheme for early intervention, rather than entering due to disability, are more likely to say that the NDIS improved the level of choice and control in life, as well as helping them with daily living activities.

#### Annualised plan budget

Participants with higher annualised plan budget are more likely to say that the NDIS helped them with daily living activities, as well as choosing a home that is right for them.

#### Indigenous status

Indigenous participants are significantly less likely to say that the NDIS has helped improve outcomes across all domains except for home, where there was no significant difference

compared to non-Indigenous participants. For the seven domains where significant differences were observed, these were mostly around 8%.

#### **CALD** status

Participants from CALD backgrounds are less likely to say that the NDIS has helped improve outcomes related to choice and control, daily living activities and social and community participation.

#### **Time trends**

Participants who entered the Scheme in 2018-19, compared to those who entered in 2016-17, are more likely to say the NDIS helped improve outcomes in seven out of eight domains, with the exception being daily living.

There is also a general time trend for four of the domains. Participants who took the survey later in time are more likely to say that the NDIS helped them with daily living activities but are less likely to say so for the domains of choosing the right home, lifelong learning and work.

#### **Disability type**

For relationships and social, community and civic participation, participants with Down syndrome are the most likely to think that the NDIS has helped, followed by participants with an intellectual disability. All other disabilities are significantly less likely than those with an intellectual disability to think that the NDIS has helped in these two domains.

Participants with Down syndrome were also the most likely to say that the NDIS has helped with lifelong learning.

For health and wellbeing, participants with cerebral palsy, spinal cord injury or other physical disabilities are more likely to say that the NDIS has helped.

#### **Participant age**

Older participants are more likely to say the NDIS helped improve their outcomes across all eight domains.

#### Gender

Female participants are more likely than males to say that the NDIS gave them more choice and control in life, helped them with daily living activities and helped them learn thing they wanted to learn.

#### Remoteness

Compared to participants living in major cities:

- Those living in larger regional areas with population greater than 50,000 are less likely to say the NDIS helped improve their outcomes in all domains except work, where the difference is not statistically significant. Observed differences from major cities are between 2% and 5%.
- Participants living in medium-sized regional areas (population between 5,000 and 50,000) tend to give more positive responses in the domains of choice and control, daily living, relationships, and social and community participation. However, those living in regional areas with population between 15,000 and 50,000 are less likely to think the NDIS improved their lifelong learning opportunities.

- In smaller regional areas, where population is below 5,000, participants are significantly less likely to say the NDIS improved their health and wellbeing or lifelong learning opportunities.
- Participants living in remote or very remote areas were less likely to say the NDIS helped with choice and control, daily living activities, finding the right home, health and wellbeing, and social and community participation. Differences with major cities were around 4-7% for these domains.

#### Support categories within plans

With reference to participants whose plans contain 30-60% in capacity building supports:

- Higher percentages of capacity building supports tend to be associated with less favourable responses:
  - Participants with 95-100% of capacity building supports in their plan are less likely to say that the NDIS has helped across all domains except work.
  - Participants with 60-95% of capacity building supports in their plan are also less likely to say the NDIS helped with choice and control, daily living, relationships, health and wellbeing or social and community activities. However, they are more likely to say that the NDIS has helped with work.
- Lower percentages of capacity building supports tended to be associated with more favourable responses for some domains:
  - Participants with 0-15% of capacity building supports in their plan are more likely to say the NDIS helped them with daily living activities, choosing the right home, and health and wellbeing. However, they are less likely to say the NDIS helped with lifelong learning and work.
  - Participants with 15-30% of capacity building supports in their plans are more likely to say the NIDS helped them to be more involved in social and community activities.

The tendency for plans with a lower percentage of capacity building supports to have a higher percentage of core supports may contribute to some of these results.

• Participants with 5-100% capital support in their plan are less likely to think the NDIS helped them meet more people, to learn new things or to find the right job. On the other hand, they are more likely to say that the NDIS helped improve their health and wellbeing.

#### Plan management type

Compared to participants with Agency-managed plans:

- Participants who self-manage (either fully or partly) are more likely to think the NDIS has helped in all domains except home and work.
- Participants who have their plans managed by a plan manager are more likely to think the NDIS has helped in all domains except relationships, home and work.

#### **Reporting entry type**

Compared to participants who received services from State/Territory programs before joining the NDIS:

• Former recipients of Commonwealth program services are less likely to say that the NDIS helped improve their daily living activities and lifelong learning opportunities, but are more likely to say the NDIS helped with finding the right job.

• Participants who received services from neither State/Territory nor Commonwealth systems prior to joining the NDIS are more likely to say the NDIS helped improve their level of choice and control, daily living activities, choosing the right home, health and wellbeing, and social and community participation.

#### Level of function

Controlling for other factors, participants who have a lower level of function are more likely to say that the NDIS has helped improve their outcomes across all domains except lifelong learning and work.

#### State/Territory

Compared to participants living in New South Wales:

- Western Australian participants are more likely to think that the NDIS has helped them improve outcomes across all eight domains. It is the only State/Territory where over 20% of those surveyed responded positively in the domain of employment (26.7%).
- Participants who live in the Northern Territory or Queensland are more likely to say that the NDIS has helped across all domains except work.
- Participants who live in the Australian Capital Territory are more likely to say that the NDIS helped with daily living and health and wellbeing, but are less likely to say the NDIS helped with lifelong learning.
- Queensland participants had the highest positive response percentages of all States/Territories for seven out of eight indicators, the exception being work.
- Participants living in South Australia are less likely to say the NDIS helped them meet more people or participate in social and community activities.
- Participants living in Tasmania are less likely to think the NDIS improved their opportunities to learn new things, or finding the right home or employment.
- Participants who live in Victoria are less likely to say that the NDIS helped them improve their level of choice and control, meet more people, find the right job and participate in social and community activities, but are more likely to respond positively with respect to lifelong learning.

#### Level of NDIA support

Compared to participants who have a medium level of NDIA support with planning:

- Participants with a low level of NDIA support are more likely to report that the NDIS improved their level of choice and control in life, as well as health and wellbeing.
- Participants with a high level of NDIA support are more likely to say that the NDIS helped with finding the right home and job, as well as health and wellbeing. However, they are less likely to think the NDIS helped with choice and control, relationships, and social and community participation.

#### **Unemployment rate**

Participants who live in a Local Government Area with higher unemployment rate are less likely to say that the NDIS helped with choice and control, daily living activities, relationships, and lifelong learning. On the other hand, they are more likely to say the NDIS helped them choose the right home.

### 7.2.2 Longitudinal 'Has the NDIS Helped?' indicators – participant characteristics

Analysis of longitudinal indicators by participant characteristics has been examined in two ways:

- 1. A simple comparison of the change in the percentage reporting that the NDIS has helped over two and three years in the Scheme between different subgroups.
- 2. Multiple regression analyses with separate models for improvement and deterioration in "Has the NDIS helped?" responses. That is, for the subset responding negatively/ positively at first review, the probability of improvement/deterioration at subsequent reviews is modelled as a function of participant characteristics.

#### Has the NDIS helped you have more choices and more control over your life?

Of those who responded negatively at first review, 27.4% responded positively at second review and 39.5% responded positively at third review. Net improvements of 8.1% (from 58.0% to 66.1%) between first and second reviews and 10.9% (from 58.3% to 69.2%) between first and third reviews were a result of improvements offset by deteriorations as shown in Table 7.2.

Longitudinal		Number of Baseline Responses in cohort <sup>1</sup>		Improvements: No to Yes		Deteriorations: Yes to No	
Period	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	5,431	7,511	1,489	27.4%	440	5.9%	+8.1%
Review 1 to Review 3	1,839	2,576	727	39.5%	246	10.0%	+10.9%

#### Table 7.2 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

### Table 7.3 – Key drivers of likelihood of transitions in *"Has the NDIS helped you have more choices and more control over your life?"* response

Reference Category	Variable	1 <sup>st</sup> Revie Rev Relations likelihe	iew	Rev Relations	ew to 3 <sup>rd</sup> riew ship with ood of
		lmp.	Det.	lmp.	Det.
N/A	Participant is older	1	₽	1	
N/A	Higher annualised plan budget				•
N/A	Higher utilisation of capacity building supports	1	↓	1	₽
N/A	General time trend		ŧ		₽

Reference Category	Variable	Rev Relations	ew to 2 <sup>nd</sup> iew ship with ood of		
		Imp.	Det.	lmp.	Det.
Intellectual disability	Disability is autism	₽			
Intellectual disability	Disability is psychosocial disability	₽			
Major cities	Participant lives in regional area	1	Ļ		
Agency-managed	Plan is fully self-managed	1			
Agency-managed	Plan is partly self-managed	1			
Did not relocate	Participant relocated to a new Local Government Area (LGA)				
NSW	Participant lives in ACT, NT, TAS or WA	ŧ	↓	₽	
NSW	Participant lives in VIC			₽	
N/A	Participant lives in an area with a higher average unemployment rate	₽			
N/A	Higher baseline utilisation	1			

Key findings from Table 7.3 include:

- Older participants are more likely to improve between baseline and first and third review, and less likely to deteriorate between first and second review.
- Participants who use a higher percentage of their capacity building supports are more likely to improve and less likely to deteriorate.
- Participants who took the survey later are less likely to deteriorate.
- Participants living in regional areas rather than major cities are more likely to improve, and less likely to deteriorate between first and second review.
- Participants who self-manage their plans are more likely to improve than those whose plans are Agency-managed.
- Participants who live in the Australian Capital Territory, Northern Territory, Tasmania or Western Australia are less likely to improve than those living in New South Wales.
- Participants who used a higher percentage of their total supports are more likely to improve.

#### Has the NDIS helped you with daily living activities?

The percentage of participants reporting that the NDIS had helped them with daily living activities increased by 9.1% from 57.0% to 66.1% between first review and second review, and by 13.5% from 57.0% to 70.5% between first review and third review. Of those who responded negatively at first review, 30.1% improved at second review and 43.9% at third review. Table 7.4 sets out the breakdown of the movements of responses.

Longitudinal		Number of BaselineImprovements:Responses in cohort1No to Yes				rations: to No	Net
Period	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	5,635	7,455	1,695	30.1%	504	6.8%	+9.1%
Review 1 to Review 3	1,925	2,552	845	43.9%	240	10.0%	+13.5%

Table 7.4 – Breakdown of net movement i	n longitudinal responses
---	--------------------------

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

Table 7.5 – Key drivers of likelihood of transitions in "Has the NDIS helped you with
daily living activities?" response

Reference Category	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of		1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of	
		lmp.	Det.	lmp.	Det.
N/A	Participant is older	1			
N/A	Higher annualised plan budget	1 +		1	
N/A	Higher utilisation of capacity building supports	1 +		1	↓
N/A	Higher utilisation of core supports	ŧ			
Received services from State/Territory programs before joining NDIS	Participant received services from Commonwealth programs before joining NDIS	ŧ			
Medium level of NDIA support	Higher level of NDIA support	1			
N/A	General time trend	Ļ			↓
N/A	Lower level of function	Ļ			↓

Reference Category	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of		1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of	
			Det.	Imp.	Det.
Agency-managed	Plan is partly self-managed	1		1	
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1			
NSW	Participant lives in ACT, NT, TAS or WA		Ļ		₽
NSW	Participant lives in QLD	1	1 +		₽
NSW	Participant lives in VIC	1		₽	
N/A	Higher baseline utilisation	1		1	₽

Key findings from Table 7.5 include:

- Participants with higher annualised plan budget are more likely to improve.
- Participants who used a higher percentage of their capacity building supports are more likely to improve and less likely to deteriorate.
- Participants who used a higher percentage of their total supports are more likely to improve, and less likely to deteriorate between first and third review.
- Participant who took the survey later in time are less likely to deteriorate.
- Participants with lower level of function are less likely to deteriorate.
- Participants who partly self-manage their plans are more likely to improve than those whose plans are Agency-managed.
- Participants who live in Queensland are more likely to improve and less likely to deteriorate than those in New South Wales.

#### Has the NDIS helped you meet more people?

The percentage of participants reporting that the NDIS helped them meet more people increased by 5.9% from 48.4% to 54.3% between first review and second review, and by 7.7% from 49.2% to 57.0% between first and third review. Of those who responded negatively at first review, 19.3% responded positively at the second review and 28.4% responded positively at the third review. Table 7.6 sets out the breakdown of the movements of responses.

Longitudinal	Number o Responses	f Baseline s in cohort <sup>1</sup>	Improvements: No to Yes			rations: to No	Net
Period	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	6,700	6,275	1,291	19.3%	519	8.3%	+5.9%
Review 1 to Review 3	2,251	2,184	640	28.4%	298	10.0%	+7.7%

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

Table 7.7 – Key drivers of likelihood of transitions in "*Has the NDIS helped you to meet more people?*" response

Reference Category	Variable	1 <sup>st</sup> Revie Rev Relations likelihe	iew ship with	1 <sup>st</sup> Revie Rev Relations likeliho	iew hip with
		lmp.	Det.	lmp.	Det.
N/A	Participant is older	1	₽		↓
N/A	Higher utilisation of capacity building supports		₽		₽
N/A	Higher utilisation of core supports		₽		Ļ
Pre-COVID	Review during COVID period	ŧ			
N/A	General time trend		₽		
Male	Participant is female		↓		
N/A	Lower level of function	1	₽		Ļ
Agency-managed	Plan is partly self-managed	1			
Did not relocate	Participant relocated to a new Local Government Area (LGA)				
30-60% capacity building supports	60-95% of supports are capacity building supports	↓			
30-60% capacity building supports	5-100% of supports are capital supports	↓			
Major cities	Participant lives in regional area	1			

Reference Category	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of Imp. Det.		1 <sup>st</sup> Revie Rev Relations likelih	iew ship with
NSW	Participant lives in ACT, NT, TAS or WA	↓			
N/A	Higher baseline utilisation	1	1	1	

Key findings from Table 7.7 include:

- Older participants are less likely to deteriorate, and more likely to improve from first to second review.
- Participants who used a higher percentage of their capacity building supports are also less likely to deteriorate, and more likely to improve from first to second review.
- Participants with lower level of function are less likely to deteriorate, and more likely to improve from first to second review.
- There was a lower likelihood of improvement where the review was in the COVID period.

### Has your involvement with the NDIS helped you to choose a home that's right for you?

The percentage of participants reporting that the NDIS has helped them choose a home that's right for them decreased by 1.9% from 20.0% to 18.1% between first review and second review, and by 3.0% from 21.2% to 18.2% between first and third review. Of those who responded negatively at the first review, 3.7% responded positively at the second review and 6.5% at the third review. Table 7.8 sets out the breakdown of the movements of responses.

Longitudinal	Number o Responses	f Baseline s in cohort <sup>1</sup>	Improvements: No to Yes		Deteriorations: Yes to No		Net
Period	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	10,251	2,569	376	3.7%	621	24.2%	-1.9%
Review 1 to Review 3	3,461	933	226	6.5%	359	10.0%	-3.0%

#### Table 7.8 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

Table 7.9 – Key drivers of likelihood of transitions in "Has your involvement with the NDIS helped you to choose a home that's right for you?" response

Reference	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Variable Relationship with		1 <sup>st</sup> Revie Rev	iew
Category	<b>Vultusio</b>		ood of	Relationship with likelihood of	
		lmp.	Det.	lmp.	Det.
N/A	Participant is older				
N/A	Higher annualised plan budget		₽	1	ŧ
N/A	Higher utilisation of capacity building supports		ŧ		
N/A	Higher utilisation of core supports		₽		
2016/17	Participant entered the Scheme in 2018/19		₽		
Pre-COVID	Review during COVID period	₽			Ļ
Did not relocate	Participant relocated to a new Local Government Area (LGA)			1	
Major cities	Participant lives in regional area	1			
Medium level of NDIA support	Higher level of NDIA support	1		1	
NSW	Participant lives in QLD			1	
NSW	Participant lives in VIC			₽	1

Key findings from Table 7.9 include:

- Participants whose annualised plan budget is higher are more likely to improve and less likely to deteriorate.
- Participants with a higher level of NDIA support are more likely to improve than those with medium levels of NDIA support.
- Participants with a review during the COVID period were less likely to improve between first and second review, but were less likely to deteriorate between first and third review.
- Participants living in regional areas were more likely to improve between first and second review than those living in major cities.
- Participants living in Queensland were more likely to improve between first and third review than those living in NSW.

#### Has your involvement with the NDIS improved your health and wellbeing?

Of those who responded negatively at first review, 14.5% responded positively at second review and 21.6% responded positively at third review. Net improvements of 4.8% (from 39.8% to 44.6%) between first and second reviews and 6.1% (from 40.1% to 46.2%) between first and third reviews were a result of improvements offset by deteriorations as shown in Table 7.10.

Longitudinal		f Baseline s in cohort <sup>1</sup>	Improvements: No to Yes			rations: to No	Net
Period	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	7,709	5,104	1,114	14.5%	498	9.8%	+4.8%
Review 1 to Review 3	2,630	1,760	569	21.6%	303	10.0%	+6.1%

#### Table 7.10 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

### Table 7.11 – Key drivers of likelihood of transitions in "*Has your involvement with the NDIS improved your health and wellbeing?*" response

Reference Category	Variable	1 <sup>st</sup> Revie Rev Relations likelihe	iew ship with		
		lmp.	Det.	lmp.	Det.
N/A	Participant is older	1			
N/A	Higher annualised plan budget	ŧ			₽
N/A	Higher utilisation of capacity building supports	1 +		1	↓
N/A	Higher utilisation of core supports			1	
N/A	General time trend	₽	₽		↓
N/A	Lower level of function				1
Agency-managed	Plan is managed by a plan manager	1			
Agency-managed	Plan is fully self-managed	1		1	
Agency-managed	Plan is partly self-managed	1		1	

Reference Category	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of	Review
		Imp. Det.	. Imp. Det.
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1
Major cities	Participant lives in regional area		+
NSW	Participant lives in ACT, NT, TAS or WA	↓ ↓	
NSW	Participant lives in VIC	1	
N/A	Higher baseline utilisation	1	

Key findings from Table 7.11 include:

- Participants who have higher annualised plan budget are less likely to deteriorate.
- Participants who used a higher percentage of their capacity building supports are more likely to improve and less likely to deteriorate.
- Participants whose plans are partly or fully self-managed are more likely to improve than those with Agency-managed plans.
- Participants whose review occurred later in the year are less likely to deteriorate between first and second or third review. However, they are less likely to improve between first and second review.
- Participants living in Victoria were more likely to improve between first and second review compared to those living in NSW. Participants living in the State/Territory group ACT, NT, Tasmania or WA are less likely to improve but also less likely to deteriorate between first and second review than those living in NSW.

### Has your involvement with the NDIS helped you to learn things you want to learn or to take courses you want to take?

The percentage of participants reporting that the NDIS has helped them to learn things they want to learn or to take courses they want to take has changed slightly between first review and subsequent reviews. In particular, the proportion of positive responses has increased by 2.5% from 35.1% to 37.7% between first review and second review, and by 2.4% from 36.5% to 38.9% between first review and third review. Table 7.12 sets out the breakdown of the movements of responses.

Longitudinal	Number of Baseline Responses in cohort <sup>1</sup>		Improvements: No to Yes		Deteriorations: Yes to No		Net
Period	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	8,318	4,506	855	10.3%	532	11.8%	+2.5%
Review 1 to Review 3	2,803	1,612	444	15.8%	339	10.0%	+2.4%

#### Table 7.12 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

## Table 7.13 – Key drivers of likelihood of transitions in "Has your involvement with the NDIS helped you to learn things you want to learn or to take courses you want to take?" response

Reference Category	Variable	1 <sup>st</sup> Review Revi Relations likeliho	ew hip with	1 <sup>st</sup> Revie Rev Relations likelihe	iew ship with
		Imp.	Det.	lmp.	Det.
N/A	Participant is older				ŧ
N/A	Higher utilisation of capacity building supports	1	Ļ	1	ŧ
2016/17	Participant entered the Scheme in 2017/18	1			
Pre-COVID	Review during COVID period	ŧ		₽	
N/A	General time trend	Ļ			
Male	Participant is female	1	Ļ	1	
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		
30-60% capacity building supports	0-15% of supports are capacity building supports		1	₽	
30-60% capacity building supports	15-30% of supports are capacity building supports	₽	↓		
30-60% capacity building supports	5-100% of supports are capital supports	ŧ		₽	
Received services from State/Territory programs before joining NDIS	Participant received services from Commonwealth programs before joining NDIS	ŧ			

Reference Category	Variable	1 <sup>st</sup> Revie Rev Relations likelihe	iew ship with	1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of		
		lmp.	Det.	lmp.	Det.	
NSW	Participant lives in ACT, NT, TAS or WA	₽				
NSW	Participant lives in VIC	1				
N/A	Higher baseline utilisation	1	₽			

Key findings from Table 7.13 include:

- Participants who used a higher percentage of their capacity building supports are more likely to improve and less likely to deteriorate.
- Participants who took the survey after the introduction of the COVID-19 pandemic restrictions (23 March 2020) are less likely to improve.
- Female participants are more likely to improve, and less likely to deteriorate between first and second review.
- Participants whose plans contain 15-30% capacity building supports or 5-100% capital supports are less likely to improve than those with 30-60% capacity building supports.
- Participants who used a higher percentage of their supports are more likely to improve.

#### Has your involvement with the NDIS helped you find a job that's right for you?

The percentage of participants reporting that the NDIS has helped them find a job that's right for them remained at around 17.2% between first review and second review, and increased slightly to 17.9% at third review. Of those who responded negatively at the first review, there was a 5.2% increase in those who responded positively at the second review and 8.5% increase at the third review. Table 7.14 sets out the breakdown of the movements of responses.

Longitudinal Period		f Baseline s in cohort <sup>1</sup>	-	ements: o Yes	Deterio Yes t	Net	
	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	10,467	2,138	549	5.2%	515	24.1%	+0.3%
Review 1 to Review 3	3,610	733	307	8.5%	262	10.0%	+1.0%

#### Table 7.14 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

Table 7.15 – Key drivers of likelihood of transitions in "Has your involvement with the NDIS helped you find a job that's right for you?" response

Reference Category	Variable	1 <sup>st</sup> Revie Rev Relations likelihe	iew ship with	1 <sup>st</sup> Revie Rev Relations likelihe	iew ship with
		lmp.	Det.	lmp.	Det.
N/A	Participant is older	1	ŧ	1	•
N/A	Higher utilisation of capacity building supports	1	ŧ	1	₽
Intellectual disability	Disability is autism	₽			
Intellectual disability	Disability is psychosocial disability	➡			
Intellectual disability	Disability is visual impairment	₽			
2016/17	Participant entered the Scheme in 2017/18				
Pre-COVID	Review during COVID period		↓		
Male	Participant is female			₽	
Did not relocate	Participant relocated to a new Local Government Area (LGA)	•			
30-60% capacity building supports	0-15% of supports are capacity building supports	₽	1		1
30-60% capacity building supports	15-30% of supports are capacity building supports	➡	1	₽	1
30-60% capacity building supports	60-100% of supports are capacity building supports	1	₽	1	ŧ
30-60% capacity building supports	5-100% of supports are capital supports	₽	1	₽	1
Received services from State/Territory programs before joining NDIS	Participant received services from Commonwealth programs before joining NDIS	ŧ	ŧ		
Major cities	Participant lives in regional area			1	
NSW	Participant lives in SA		Ļ		₽
NSW	Participant lives in VIC	₽			1

Key findings from Table 7.15 include:

- Older participants are more likely to improve and less likely to deteriorate.
- Participants who used a higher percentage of their capacity building supports are more likely to improve and less likely to deteriorate.
- Compared to participants whose plans contain 30-60% of capacity building supports, participants with plans that contain:
  - 0-15% capacity building supports are more likely to deteriorate.
  - 15-30% capacity building supports are less likely to improve and more likely to deteriorate.
  - 60-100% capacity building supports are more likely to improve and less likely to deteriorate.
  - 5-100% capital supports are less likely to improve and more likely to deteriorate.
- Participants who live in South Australia are less likely to deteriorate than those living in New South Wales.

#### Has the NDIS helped you be more involved?

The percentage of participants reporting that the NDIS has helped them be more involved increased by 6.7% from 52.5% to 59.2% between first review and second review, and by 9.7% from 53.2% to 62.9% between first review and third review. Of those who responded negatively at the first review, 20.6% responded positively at second review and 30.9% reported an improvement by third review. Table 7.16 sets out the breakdown of the movements of responses.

Longitudinal		f Baseline s in cohort <sup>1</sup>	-	ements: o Yes	Deterio Yes t	Net	
Period	No	Yes	Number	%	Number	%	Movement
Review 1 to Review 2	6,045	6,667	1,244	20.6%	392	5.9%	+6.7%
Review 1 to Review 3	2,048	2,323	633	30.9%	209	10.0%	+9.7%

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

### Table 7.17 – Key drivers of likelihood of transitions in "*Has the NDIS helped you be more involved*?" response

Reference Category	Variable	1 <sup>st</sup> Revie Revi Relations likeliho	iew hip with	1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of	
		Imp.	Det.	lmp.	Det.
N/A	Participant is older	1	ŧ		

Reference Category	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of	1 <sup>st</sup> Review to 3 <sup>rd</sup> Review Relationship with likelihood of
		lmp. Det.	Imp. Det.
N/A	Higher annualised plan budget		-
N/A	Higher utilisation of capacity building supports	1	ŧ
N/A	Higher utilisation of core supports		ŧ
Intellectual disability	Disability is cerebral palsy	₽	
Intellectual disability	Disability is hearing impairment	₽	
Intellectual disability	Disability is psychosocial disability	₽	
Pre-COVID	Review during COVID period	₽	1
N/A	General time trend	₽	ŧ
Non-CALD	Participant is CALD	1	
N/A	Lower level of function	1	
Agency-managed	Plan is managed by a plan manager	1	
Agency-managed	Plan is fully self-managed	1	
Agency-managed	Plan is partly self-managed	1	
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1	1
30-60% capacity building supports	60-100% of supports are capacity building supports	₽	
Entry due to disability	Participants entered the scheme through Early Intervention		+
Major cities	Participant lives in regional area	1	
NSW	Participant lives in ACT, NT, TAS or WA	ŧ	

Reference Category	Variable	1 <sup>st</sup> Review to 2 <sup>nd</sup> Review Relationship with likelihood of Imp. Det.		Relations	view
NSW	Participant lives in QLD	1			
N/A	Higher baseline utilisation	1	ŧ	1	

Key findings from Table 7.17 include:

- Participants who took the survey later in time are less likely to deteriorate.
- Participants responding during the COVID period are less likely to improve between first and second review, and more likely to deteriorate between first and third review.
- Participants who relocated to a different LGA are more likely to deteriorate.
- Participants who used a higher percentage of their supports are more likely to improve.
- Participants with cerebral palsy, hearing impairment, or a psychosocial disability are less likely to improve between first and third review, compared to those with an intellectual disability.
- Participants who self-manage (fully or partly) or use a plan manager are more likely to improve between first and second review than those who agency manage.
- Participants living in regional areas are more likely to improve between first and second review than those living in major cities.
- Participants living in Queensland are more likely to improve between first and second review, and those living in the State/Territory group ACT, NT, Tasmania or WA are less likely to improve.

Box 7.1 summarises the results of this section.

#### Box 7.1: Has the NDIS helped? – by participant characteristics

After one year in the Scheme:

- Higher plan utilisation, and in particular higher utilisation of capacity building supports, is strongly associated with a positive response across most domains after one year in the Scheme.
- Perceptions also tended to improve with increasing participant age.
- Participants from Western Australia tended to be more positive, and those from Tasmania less positive.

Changes between one and three years in the Scheme:

- Higher plan utilisation, and in particular utilisation of capacity building supports, is associated with a higher likelihood of improvement and a lower likelihood of deterioration.
- Where the plan is self-managed either fully or partly, participants were more likely to improve in the choice and control, daily living, and health and wellbeing domains.
- For a number of domains, in particular daily living and home, higher annualised plan budget was associated with a higher likelihood of improvement.
- Female participants were more likely to improve in the lifelong learning domain but less likely to improve in the work domain.

## 8. Participants aged 25 and over: outcome indicators

#### 8.1 Key findings

### Box 8.1: Overall findings for C3 cohort (participants who have been in the Scheme for three years)

- For participants with three years of Scheme experience, significant improvements were observed across a number of indicators, with improvements in the first year generally continuing into the second and third years of Scheme experience.
- The largest improvements were observed for the social, community and civic participation domain. The percentage participating in a community group in the last 12 months increased by 12.4% between baseline and third review, from 36.6% to 49.0%, including a 3.0% increase over the latest year. The percentage who know people in their community increased by 8.0%, from 59.2% to 67.2%, with a 1.6% increase in the latest year, and the percentage who spend their free time doing activities that interest them increased by 8.0%, from 69.1% to 77.1%, with a 2.1% increase in the latest year.
- There were also some improvements in health and wellbeing outcomes for participants aged 25 and over. The percentage of participants who had been to the hospital in the last 12 months decreased by 6.1% between baseline and the third review (including a 1.8% decrease in the latest year), from 40.2% to 34.1%, the percentage who had no difficulties accessing health services increased by 3.9% (2.1% in the latest year), from 70.1% to 73.9%, and the percentage who have a doctor they see on a regular basis increased by 7.8%, from 87.6% to 95.4%. However, the percentage of participants who rated their health as excellent, very good or good declined by 5.1%, from 51.2% to 46.2% (although there was little change in the most recent year).
- Lifelong learning: the percentage of participants who say they get opportunities to learn new things increased 5.0% between baseline and third review, from 47.1% to 52.2%, including a 1.7% increase over the latest year.
- Choice and control was a key concern of participants aged 25 and over, with the percentage of participants expressing a desire for greater choice and control increasing by 16.0% between baseline and third review (1.8% in the latest year), from 65.4% to 81.4%. The percentage of participants who felt able to advocate for themselves decreased by 5.2% between baseline and third review (0.9% in the latest year), from 50.1% to 44.8%.
- A higher percentage of participants wanted to see their friends and family more often after three years in the Scheme. The percentage who would like to see their friends more often increased by 7.5% between baseline and third review, from 47.5% to 54.9%, and the percentage who would like to see their family more often increased by 6.1%, from 34.4% to 40.6%. Increases of 0.5%-0.6% were observed in the latest year.

### Box 8.2: Overall findings for C2 cohort (participants who have been in the Scheme for two years)

- For participants with two years of Scheme experience, similar improvements between baseline and second review were observed to those with three years of experience. In particular, improvements were observed in the areas of:
- Social, community and civic participation: the percentage of participants who have been actively involved in a community, cultural or religious group in the last 12 months increased by 9.1% between baseline and the second review, from 36.2% to 45.3%, including a 3.6% increase in the latest year. Further, the percentage of participants who spend their free time doing activities that interest them increased by 6.5% between baseline and the second review, from 66.0% to 72.5%, including a 2.5% increase in the latest year.
- Health and wellbeing: the percentage of participants who have been to the hospital in the last 12 months decreased by 6.2% (2.0% in the latest year), from 41.4% to 35.2%, the percentage who had no difficulties accessing health services increased by 3.3% (1.6% in the latest year), from 64.9% to 68.2%, and the percentage who have a doctor they see on a regular basis increased by 4.1% (1.4% in the latest year), from 90.7% to 94.8%. However, the percentage of participants who rated their health as excellent, very good or good declined by 3.2%, from 47.6% to 44.4%, with a decline of 1.7% in the latest year.
- Lifelong learning: the percentage of participants who say they get opportunities to learn new things increased 4.2% between baseline and the second review, from 41.9% to 46.1%, including a 1.4% increase over the latest year.
- Choice and control was also a concern for participants with two years of Scheme experience. The percentage who wanted more choice and control in their life increased by 7.8% between baseline and second review (2.7% in the latest year), from 77.8% to 85.6%. There was also a 3.0% decline (1.4% in the latest year) in the percentage of participants who felt able to advocate for themselves, from 49.7% to 46.7%.

### Box 8.3: Overall findings for C1 cohort (participants who have been in the Scheme for one year)

- For participants with one year of Scheme experience, similar improvements between baseline and first review were observed to those who have been in the Scheme for a longer period. In particular, improvements were observed in the areas of:
- Social, community and civic participation: the percentage of participants who have been actively involved in a community, cultural or religious group in the last 12 months increased by 3.4% between baseline and the first review, from 38.1% to 41.5%. Further, the percentage of participants who spend their free time doing activities that interest them increased by 4.3% between baseline and the first review, from 61.6% to 65.9%.
- Health and wellbeing: the percentage of participants who have been to the hospital in the last 12 months decreased by 4.1%, from 41.9% to 37.8%, the percentage who had no difficulties accessing health services increased by 1.5%, from 65.0% to 66.5%, and the percentage who have a doctor they see on a regular basis increased by 2.6%, from 90.1% to 92.7%. However, the percentage of participants who rated their health as excellent, very good or good declined by 1.6%, from 45.9% to 44.3%.

### Box 8.3: Overall findings for C1 cohort (participants who have been in the Scheme for one year) (continued)

- •
- Lifelong learning: the percentage of participants who got the opportunity to learn new things increased 2.7% between baseline and the first review, from 38.2% to 40.9%.
- Choice and control: the percentage who wanted more choice and control in their life increased by 3.9% between baseline and first review, from 79.8% to 83.7%.
- Relationships: there have been increases in the percentages who have someone outside their home to call on for practical support (8.0%) and emotional support (4.9%), and the percentage who often feel lonely has decreased by 4.5%.

#### Box 8.4: Outcomes by key characteristics for participants aged 25 and over

- The impact of disability type on outcomes varies by indicator. In longitudinal analyses, participants with a spinal cord injury or other physical injury were more likely to improve and less likely to deteriorate with regard to being able to advocate for themselves, however they were less likely to improve and more likely to deteriorate with regard to being in the hospital in the last 12 months.
- Longitudinal outcomes also vary with participant level of function. Participants with a higher level of function tend to exhibit higher rates of improvement than those with a lower level of function.
- Participants not living in major cities were more likely to improve with regard to being able to advocate for themselves.
- Indigenous participants were more likely to improve in knowing people in their community but less likely to improve and more likely to deteriorate in saying there was something they wanted to do but were unable to in the last 12 months.
- CALD participants were less likely to improve and more likely to deteriorate with respect to being able to advocate for themselves. They were also less likely to improve getting opportunities to learn new things.
- Older participants were more likely to change their response from "no" to "yes" with respect to wanting more choice and control in their lives.
- Participants in supported independent living (SIL) were generally more likely to improve and less likely to deteriorate compared with participants not in SIL. In particular, outcomes were more positive in all models for having been to the hospital in the last 12 months, and SIL participants were more likely to maintain having a regular doctor in all transitions from baseline. However, they were less likely to improve with respect to knowing people in their community between baseline and either first or second review.
- Relocating to a new LGA was significant in a large number of models, with the direction of the effect being mostly negative but sometimes mixed. In particular, the effect was negative for having been to hospital in the last 12 months, getting the opportunity to learn new things, saying there were certain things they wanted to do in the last 12 months but could not, and knowing people in their community.

### Box 8.4: Outcomes by key characteristics for participants aged 25 and over (continued)

- COVID-19 variables were significant in at least one model for all indicators, however the direction of the effect was mixed, being favourable in some models but unfavourable in others. For example:
- With respect to having a regular doctor, participants were less likely to deteriorate between baseline and second or third review, when the review occurred during the COVID period. There was also a favourable change in time trend post-COVID, with deterioration becoming less likely over time, for the transition from baseline to third review.
- However, participants were less likely to improve with respect to knowing people in their community between baseline and second review, and between second and third review, when the later review took place during the COVID period.
- Participants who gave their second response during the COVID period were less likely to change their response from "Yes" (wanting to see their family more often) to "No" (not wanting to see them) between baseline and first or second review, as well as between first and second review.

### Box 8.5: Health and wellbeing outcomes for participants aged 25 and over, compared to the Australian population

- NDIS participants tend to have poorer baseline health and wellbeing outcomes than Australians overall, and despite improvements on some indicators, outcomes generally remain poorer at first, second and third review.
- At baseline, 37.4% of participants aged 25 and over who entered the Scheme in 2019-20 rated their health as good, very good or excellent, compared to 86.6% of Australians aged 25 to 64 overall<sup>31</sup>. There have been slight declines for this indicator longitudinally: from 51.2% to 46.2% (a decline of 5.1%) over three years for the C3 cohort, from 47.6% to 44.4% (a decline of 3.2%) over two years for the C2 cohort, and from 45.9% to 44.3% (a decline of 1.6%) over one year for the C1 cohort. Longitudinal data from the Household Income and Labour Dynamics in Australia (HILDA) survey suggest a somewhat smaller decline for the Australian population: approximately 3% over three years and 1% over one and two years.<sup>32</sup>
- Participants also expressed lower overall life satisfaction than the general population. At baseline, 39.9% said they felt "delighted", "pleased" or "mostly satisfied" with their life, compared to 76.9% of Australians aged 25 to 64 overall<sup>33</sup>. Overall change from baseline on this indicator has been positive for all cohorts of NDIS participants, although the change was statistically significant only for the C2 cohort, (a 7.2% improvement over two years). However, for this cohort, the overall improvement was made up of a 13.3% improvement in the first year followed by a 6.2% deterioration in the second year.
- At baseline, 51.9% of participants aged 25 and over who entered the Scheme in 2019-20 said they had been to hospital in the last 12 months, compared to 11.4% of Australians aged 25 to 64<sup>34</sup>. This indicator has also improved over time, reducing to 34% over three years for the C3 cohort, to 35% over two years for the C2 cohort, and to 38% over one year for the C1 cohort, but remains substantially above the percentage for Australians overall.
- From baseline responses of 2019-20 entrants, 59.3% of those who had been to hospital had had multiple visits, compared to a population figure of 25.7% for Australians aged 25 to 64<sup>34</sup>. This percentage has not changed materially over time.
- At baseline, 42.7% of 2019-20 entrants said they had experienced some difficulty in getting health services. The baseline percentage was lower for entrants in earlier years (29.9-35.1%), and has improved over time, reducing by 1.5%-2.1% since Scheme entry depending on the cohort. The most common difficulty cited by 2019-20 entrants was lack of support (14.5% at baseline, higher than 9.2% for prior year entrants) and access issues (11.3%, higher than 9.7% for prior year entrants), however 5.5% said it was because of the attitudes and/or expertise of health professionals (similar to 5.7% for prior year entrants).

<sup>&</sup>lt;sup>31</sup> ABS National Health Survey (NHS) 2017-18.

<sup>&</sup>lt;sup>32</sup> <u>HILDA Survey (unimelb.edu.au)</u> Weighted to match the Australian population and adjusted for the NDIS age distribution.

<sup>&</sup>lt;sup>33</sup> ABS General Social Survey (GSS) 2010. For GSS 2014 the question changed from using seven descriptive categories to a rating on a 0 to 10 scale.

<sup>&</sup>lt;sup>34</sup> ABS Patient Experience Survey (PES) 2018-19.

### Box 8.5: Health and wellbeing outcomes for participants aged 25 and over, compared to the Australian population (continued)

At baseline, 23.2% of participants who entered the Scheme in 2019-20 said they currently smoked. This is slightly higher than a 2017-18 population figure of 17.2% for 25 to 64 year olds.<sup>35</sup> However, there is considerable variation in smoking rates by disability. The percentage of participants with a psychosocial disability who smoke is 44%, approximately twice the percentage for other disabilities combined.

#### Box 8.6: Has the NDIS helped? – participants aged 25 and over

- Opinions on whether the NDIS has helped tend to be slightly more optimistic than the young adult cohort (apart from lifelong learning), but generally reflect a similar pattern by domain. The percentage who think the NDIS has helped is highest for daily activities (72.8% after one year in the Scheme, increasing to 79.0% after two years in the Scheme and 82.7% after three years in the Scheme), followed by choice and control (69.2% after one year in the Scheme, increasing to 74.1% after two years in the Scheme and 77.5% after three years in the Scheme). Percentages are lowest for home (30.7% after one year, 29.5% after two years and 31.7% after three years) and work (19.5% after one year, 18.1% after two years and 18.5% after three years).
- Higher plan utilisation is strongly associated with a positive response across all eight domains, after both one, two and three years in the Scheme. Perceptions also tended to improve with plan budget. Participants from WA and QLD tended to be more positive, and those from VIC and SA less positive.
- The percentage who think that the NDIS has helped increased by 1% to 10% between first and third review across all domains except work, where there was a 1% decrease. The likelihood of improvement/deterioration varied by some participant characteristics:
- Female participants were more likely to improve in the daily living domain but more likely to deteriorate in choice and control.
- Participants who self-manage were more likely to improve and/or less likely to deteriorate in the choice and control, daily living, and health and wellbeing domains.
- Older participants were less likely to deteriorate in choice and control, daily living, home and health and wellbeing, however they were less likely to improve and/or more likely to deteriorate in lifelong learning and work.
- Participants living in a regional area were more likely to improve and/or less likely to deteriorate in daily living, relationships, home, health and wellbeing, lifelong learning and social and community participation.
- Participants in supported independent living (SIL) were more likely to improve and/or less likely to deteriorate for at least some transitions across all domains.

<sup>&</sup>lt;sup>35</sup> ABS National Health Survey (NHS) 2017-18.

#### 8.2 Outcomes framework questionnaire domains

Employment is an important area for the older adult (25 and over) cohort, with the older members of this cohort also starting to transition to retirement. For both young and older adults, choice and control is a normal part of everyday life.

For participants aged 25 and over, the eight outcome domains are:

- Choice and control (CC)
- Daily living (DL)
- Relationships (REL)
- Home (HM)
- Health and wellbeing (HW)
- Lifelong learning (LL)
- Work (WK)
- Social, community and civic participation (S/CP)

The LF contains a number of extra questions for the adult cohorts, across all domains, but particularly in the health and wellbeing domain.

Participants answer the outcomes questionnaire applicable to their age/schooling status at the time of interview. Hence the 25 and over cohort comprises participants who are aged 25 or over when they enter the Scheme, and includes responses at all subsequent review time points.

#### 8.3 Longitudinal indicators – overall

#### **Summary of Significant Changes**

Longitudinal analysis describes how outcomes have changed for participants during the time they have been in the Scheme. Included here are participants who entered the Scheme between 1 July 2016 and 30 June 2019, for whom a record of outcomes is available at Scheme entry (baseline) and at one or more of the three time points: approximately one year following Scheme entry (first review), approximately two years following Scheme entry (second review), and approximately three years following Scheme entry (third review).

For this year's report, results are shown separately by entry year cohort, including the value of the indictator at baseline and each yearly review, as well as the change in the latest year, and the change between baseline and latest review. For example, for 2016-17 entrants, results at baseline, first review, second review, and third review are shown, as well as the change between second review and third review, and the change from baseline to third review.

There have been a number of improvements across all domains for the time periods being considered. Often, improvements tend to be greater in the earlier years in the Scheme, with smaller improvements observed in later years. Hence the change from baseline to latest review tends to be greater than the change over the latest year, for participants who have been in the Scheme for more than a year.

Table 8.1 summarises changes for selected indicators across the two time periods. Indicators were selected for the tables if the change, either overall or for the latest year, was statistically significant<sup>36</sup> and had an absolute magnitude greater than 0.02 for at least one entry year cohort.

				Indicat	or at:		Ch	ange	Signi	ficant <sup>37</sup>
Domain		0 - 1	Desellers	Review	Review	Review	Latest	0	Latest	0
(Form)	Indicator	Cohort	Baseline	1 provemer	2	3	year	Overall	year	Overall
	Of those who need help	C3	79.0%	79.4%	80.5%	78.2%	-2.2%	-0.8%		
REL (SF)	to care for others,	C3				10.270				*
	% who don't get enough assistance		80.5%	78.7%	77.8%		-0.9%	-2.7%		
		<u>C1</u>	77.7%	77.6%	04.00/	05.40/	-0.1%	-0.1%	**	**
	% who have a doctor	C3	87.6%	92.3%	94.8%	95.4%	0.6%	7.8%	**	**
HW (SF) they see on a regular basis	C2	90.7%	93.5%	94.8%		1.4%	4.1%	**	**	
		C1	90.1%	92.7%	= / 00/	== = = = = = = = = = = = = = = = = = = =	2.6%	2.6%		**
	% who did not have any	C3	70.1%	71.8%	71.9%	73.9%	2.1%	3.9%	**	
HW (SF)	HW (SF) difficulties accessing health services	C2	64.9%	66.6%	68.2%		1.6%	3.3%	**	**
		C1	65.0%	66.5%			1.5%	1.5%	**	**
	% who have been to the HW (SF) hospital in the last 12 months	C3	40.2%	36.5%	36.0%	34.1%	-1.8%	-6.1%	*	**
HW (SF)		C2	41.4%	37.2%	35.2%		-2.0%	-6.2%	**	**
		C1	41.9%	37.8%			-4.1%	-4.1%	**	**
	% who get opportunities	C3	47.1%	49.7%	50.4%	52.2%	1.7%	5.0%	**	**
LL (SF)	to learn new things	C2	41.9%	44.7%	46.1%		1.4%	4.2%	**	**
		C1	38.2%	40.9%			2.7%	2.7%	**	**
	% who wanted to do a	C3	33.5%	33.5%	33.0%	29.8%	-3.2%	-3.7%	**	**
LL (SF)	course or training in the last 12 months, but could	C2	36.4%	35.7%	34.1%		-1.6%	-2.3%	**	**
	not	C1	36.4%	35.2%			-1.2%	-1.2%	**	**
	% who spend their free	C3	69.1%	73.3%	75.0%	77.1%	2.1%	8.0%	**	**
S/CP (SF)	time doing activities	C2	66.0%	70.0%	72.5%		2.5%	6.5%	**	**
	that interest them	C1	61.6%	65.9%			4.3%	4.3%	**	**
	% who have been	C3	36.6%	41.4%	46.0%	49.0%	3.0%	12.4%	**	**
S/CP (SF)	actively involved in a community, cultural or religious group in the	C2	36.2%	41.7%	45.3%		3.6%	9.1%	**	**
	last 12 months	C1	38.1%	41.5%			3.4%	3.4%	**	**
		C3	59.2%	65.5%	65.6%	67.2%	1.6%	8.0%	**	**
S/CP (SF)	% who know people in their community	C2	63.1%	66.3%	67.3%		1.1%	4.3%	**	**
		C1	57.5%	60.3%			2.8%	2.8%	**	**
		C3	80.2%	70.7%	83.2%	81.2%	-2.0%	1.0%		
CC (LF)	% say they choose how they spend their free time	C2	64.3%	67.5%	68.3%		0.8%	4.0%		*
		C1	71.2%	74.7%			3.5%	3.5%	*	*
	% who have someone	C3	81.2%	86.9%	89.1%	90.1%	1.0%	8.9%		
REL (LF)	outside their home to call	C2	80.2%	82.3%	83.1%		0.8%	3.0%		
	on for practical support	C1	75.2%	83.2%			8.0%	8.0%	*	*
	% who have someone	C3	82.2%	77.8%	81.2%	89.1%	7.9%	6.9%		
REL (LF)	outside their home to call	C2	78.2%	80.0%	81.0%		1.0%	2.8%		
	on for emotional support	C1	76.2%	81.1%			4.9%	4.9%	*	*
		01	10.270	01.170			7.570	т.970		

Table 8.1 Selected longitudinal indicators for participants aged 25 and over

<sup>36</sup> McNemar's test at the 0.05 level.
 <sup>37</sup> \*\* statistically significant, p-value<0.001; \* statistically significant, p-value between 0.001 and 0.05.</li>

				Indicat			Change			ficant <sup>37</sup>
Domain	Indicator	Cohort	Baseline	Review	Review	Review	Latest	Overall	Latest	
(Form)	Indicator			1	2	3	year	Overall	year	Overall
	% who often felt lonely	C3	21.8%	24.2%	13.9%	19.8%	5.9%	-2.0%		
REL (LF)		C2	18.7%	15.5%	16.1%		0.6%	-2.6%	*	*
		C1	19.9%	15.5%	00.00/	04.00/	-4.5%	-4.5%	^	*
	% who feel happy with	C3	69.2%	85.4%	89.0%	91.2%	2.2%	22.0%		
REL (LF)	their relationship with staff	C2	85.9%	90.1%	91.8%		1.7%	5.9%		*
		C1	77.4%	91.0%			13.5%	13.5%	**	**
	% who felt delighted, pleased or mostly	C3	40.6%	46.5%	56.4%	50.5%	-5.9%	9.9%		
HW (LF)	satisfied about their life	C2	44.2%	57.6%	51.4%		-6.2%	7.2%	*	*
	now and in the future	C1	48.5%	54.4%			5.9%	5.9%		
	% had a health check in	C3	83.2%	94.9%	89.1%	92.1%	3.0%	8.9%		*
HW (LF)	V (LF) the last 12 months	C2	91.4%	92.4%	91.4%		-1.0%	0.0%		
		C1	91.1%	91.2%			0.2%	0.2%		
	For those currently	C3	71.4%	92.0%	76.9%	92.9%	15.9%	21.4%		*
WK (LF)	WK (LF) working in a paid job, % who get the support they need to do their job.	C2	95.1%	96.6%	95.9%		-0.7%	0.8%		
		C1	90.3%	89.0%			-1.4%	-1.4%		
		C3	80.2%	83.8%	89.1%	91.1%	2.0%	10.9%		*
S/CP (LF)	S/CP (LF) % who currently have interests	C2	85.1%	89.8%	87.1%		-2.8%	2.0%		
		C1	84.9%	88.3%			3.4%	3.4%		
	% who have opportunity	C3	57.4%	68.7%	79.2%	77.2%	-2.0%	19.8%		*
S/CP (LF)	% who have opportunity CP (LF) to try new things and have new experiences	C2	68.7%	79.4%	74.7%		-4.7%	6.0%		*
, , ,		C1	69.0%	72.3%	1 1.1 /0		3.4%	3.4%		
		C3	18.8%	16.2%	20.8%	23.8%	3.0%	5.0%		
S/CP (LF)	% who are currently	C2	12.9%	14.6%	20.0 <i>%</i> 15.1%	20.070	0.6%	2.2%		
	volunteering	C1	13.9%	14.0%	13.170		2.1%	2.2%	*	*
	Of those taking part in	C3			in the amal	,	2.170	2.170		
S/CP (LF)	leisure activities in the				e too small		0.40/	0.00/		*
5/CF (LI)	past 12 months, % who	C2	94.3%	98.0%	98.1%		0.1%	3.8%		
	felt they were enjoyable	C1	96.6%	98.4%	00.40/	70.00/	1.8%	1.8%	*	**
	% who have had a flu	C3	49.5%	56.6%	62.4%	72.3%	9.9%	22.8%		
HW (LF)	vaccination in the last 12 months	C2	59.2%	64.1%	70.1%		6.0%	11.0%	*	**
		C1	60.7%	62.4%			1.7%	1.7%		
	% whose Kessler 6 score	C3	23.5%	20.5%	15.2%	14.1%	-1.1%	-9.4%		*
HW (LF)	is in the Probably Mental Illness/High Risk range	C2	18.7%	15.6%	14.9%		-0.7%	-3.8%		
		C1	17.8%	17.3%			-0.6%	-0.6%		
	% whose Brief Resilience	C3	52.9%	45.6%	40.3%	40.0%	-0.3%	-12.9%		*
HW (LF)	Scale score is in the Low	C2	39.0%	31.6%	30.0%		-1.5%	-9.0%		*
	Resilience range	C1	32.6%	31.6%			-1.0%	-1.0%		
			Conte	xt depen	dent					
		C3	26.0%	25.9%	23.8%	23.2%	-0.6%	-2.8%	**	**
HM (SF)	% who live with parents	C2	23.0%	22.9%	21.7%		-1.2%	-1.3%	**	**
		C1	21.1%	20.6%			-0.6%	-0.6%	**	**
	% who live in a private	C3	60.1%	61.3%	57.9%	57.0%	-0.9%	-3.1%	**	**
HM (SF)	home owned or rented	C2	59.9%	60.0%	58.4%	-	-1.6%	-1.5%	**	**
HM (SF)	from private landlord			/ / / / / / / / / / / / / / / / /						

				Indica	tor at:		Ch	ange	Signi	ficant <sup>37</sup>
Domain		0 - 1	Desellers	Review	Review	Review	Latest	0	Latest	<b>A</b>
(Form)	Indicator	Cohort	Baseline	1	2	3	year	Overall	year *	Overall
WK (SF)	% who are not working	C3	65.4%	64.7%	67.8%	67.6%	-0.2%	2.2%	**	**
WR (SF)	and not looking for work	C2	64.8%	65.2%	66.3%		1.2%	1.5%	**	**
		C1	66.5%	67.0%	00.4%	00.0%	0.5%	0.5%	*	~~
Participant	Of those who are	C3	23.6%	25.9%	20.4%	23.0%	2.6%	-0.7%		
Information (SF)	studying, % who study full time	C2	25.5%	23.2%	20.3%		-2.9%	-5.2%	*	**
( )		C1	25.3%	24.1%			-1.2%	-1.2%	**	**
	% who want more choice	C3	65.4%	74.7%	79.6%	81.4%	1.8%	16.0%		**
CC (SF)	and control in their life	C2	77.8%	83.0%	85.6%		2.7%	7.8%	**	
		C1	79.8%	83.7%			3.9%	3.9%	**	**
	% who would like to see	C3	34.4%	35.7%	39.9%	40.6%	0.6%	6.1%	**	**
REL (SF)	their family more often	C2	40.7%	41.9%	43.5%		1.6%	2.8%	**	**
		C1	42.3%	43.9%			1.6%	1.6%	**	**
	% who would like to see	C3	47.5%	50.2%	54.5%	54.9%	0.5%	7.5%	**	**
REL (SF)	their friends more often	C2	54.9%	57.2%	59.1%		1.8%	4.2%	**	**
		C1	60.2%	61.8%			1.6%	1.6%	**	**
	% who were eligible to	C3	84.2%	88.9%	88.1%	90.1%	2.0%	5.9%		*
S/CP (LF)	vote in the last federal election	C2	63.9%	65.1%	63.3%		-1.7%	-0.6%		
	election	C1	70.3%	72.2%			1.9%	1.9%	*	*
			Det	terioratio	n					
	% who feel able to	C3	50.1%	48.1%	45.8%	44.8%	-0.9%	-5.2%	**	**
CC (SF)	advocate (stand up) for	C2	49.7%	48.1%	46.7%		-1.4%	-3.0%	**	**
	themselves	C1	45.0%	44.1%			-0.9%	-0.9%	*	*
	0/ who fool oofo or yor (	C3	79.1%	77.9%	75.4%	76.5%	1.0%	-2.6%		**
HM (SF)	% who feel safe or very safe in their home	C2	75.4%	74.2%	73.7%		-0.5%	-1.7%		**
		C1	73.1%	71.8%			-1.4%	-1.4%	**	**
	% who rate their health	C3	51.2%	48.6%	45.8%	46.2%	0.3%	-5.1%	*	**
HW (SF)	as excellent, very good	C2	47.6%	46.1%	44.4%		-1.7%	-3.2%	**	**
	or good	C1	45.9%	44.3%			-1.6%	-1.6%	**	**
	% who feel safe getting	C3	49.5%	49.2%	46.1%	45.6%	-0.4%	-3.8%	**	**
HW (SF)	out and about in their	C2	47.4%	46.0%	44.9%		-1.1%	-2.5%	*	**
	community	C1	41.4%	41.1%			-0.3%	-0.3%	*	*
		C3	25.7%	25.7%	22.0%	23.3%	1.3%	-2.4%		**
WK (SF)	% who are currently working in a paid job	C2	25.3%	24.7%	24.1%		-0.6%	-1.2%	**	**
		C1	22.8%	22.6%			-0.2%	-0.2%	*	*
	% who wanted to do	C3	60.1%	65.4%	69.9%	69.1%	-0.8%	9.0%	**	**
S/CP (SF)	certain things in the last	C2	68.0%	71.6%	73.0%		1.4%	5.1%	**	**
. ,	12 months, but could not	C1	68.5%	71.4%			2.9%	2.9%	**	**
		C3	45.5%	37.4%	39.6%	37.6%	-2.0%	-7.9%		
WK (LF)	% have had job(s) in the	C2	34.1%	30.8%	28.6%	01.070	-2.2%	-5.6%		*
	past 12 months	C1	33.6%	30.3%	20.070		-3.3%	-3.3%	*	*

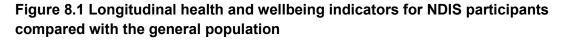
Key findings from Table 8.1 include:

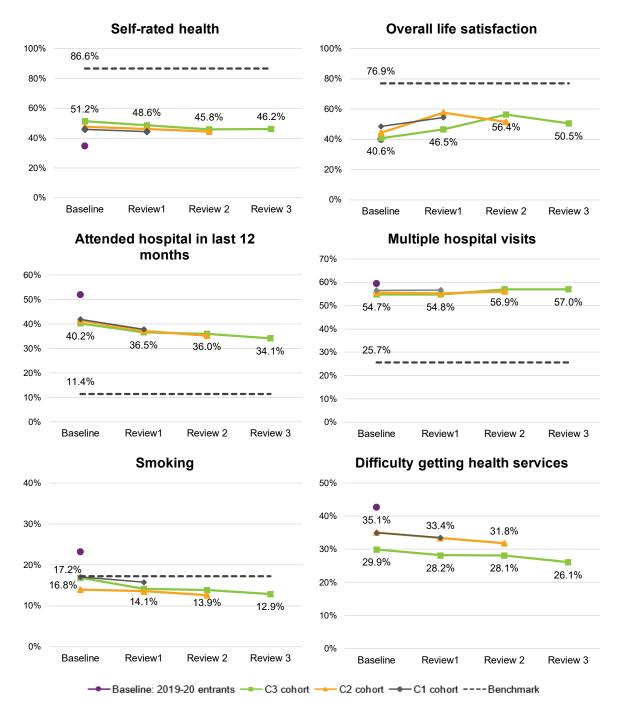
• There is considerable overlap with the 15 to 24 age group, with most indicators common to both age groups exhibiting changes in the same direction. However, for two of the employment indicators changes were in opposite directions: the

percentage who have had job(s) in the last 12 months (increasing for the 15 to 24 age group and decreasing for 25 and over), and the percentage who are not working and not looking for work (decreasing for the 15 to 24 age group and increasing for 25 and over). These differences are likely to reflect the younger adults transitioning from school to employment and the older adults transitioning from employment to retirement.

- There have been considerable improvements in the social, community and civic participation domain:
  - Participants are more involved in their community, with an increase in the percentage of participants who have been actively involved in a community, cultural or religious group in the last 12 months:
    - For the C3 cohort, by 12.4% over three years in the Scheme, including a 3.0% increase over the latest year
    - For the C2 cohort: by 9.1% over two years in the Scheme, including a 3.6% increase over the latest year
    - For the C1 cohort: by 3.4% over one year in the Scheme.
  - The percentage of participants who know people in their community has continued to increase (by 8.0% over three years for the C3 cohort, including an increase of 1.6% over the latest year; by 4.3% over two years for the C2 cohort, including an increase of 1.1% over the latest year; and by 2.8% over one year for the C1 cohort).
  - The percentage of participants who spend their free time doing activities that interest them has also continued to increase (by 8.0% over three years, 6.5% over two years, and 4.3% over one year for the C3, C2, and C1 cohorts, respectively. Increases of 2.1%-2.5% in the latest year were also observed for the C3 and C2 cohorts).
- The desire for greater choice and control has also continued to increase. For the C3 cohort, there has been a 16.0% increase over three years, including a 1.8% increase over the latest year. Increases have also been observed for the C2 (latest year and overall) and C1 cohorts.
- In the lifelong learning domain, more participants say they get opportunities to learn new things (increases of 5.0% over three years for the C3 cohort, including an increase of 1.7% over the latest year; 4.2% over two years for the C2 cohort, including an increase of 1.4% over the latest year; and 2.7% over one year for the C1 cohort). There has also been a reduction in the percentage who say they wanted to do a course or training in the last 12 months, but could not.
- There have been some continued improvements in the health and wellbeing domain. More participants have a doctor they see on a regular basis, more have had a flu vaccination in the last 12 months, and fewer have had difficulties accessing health services. The percentage who felt delighted, pleased or mostly satisfied with their life has increased from baseline, although there have been some reversals in this indicator for the C3 and C2 cohort over the most recent year. However self-rated health has continued to decline (possibly partly age-related): by 5.1% over three years for the C3 cohort, by 3.2% over two years for the C2 cohort, and by 1.6% over one year for the C1 cohort. Longitudinal data from the Household Income and Labour Dynamics in Australia (HILDA) survey suggest a somewhat smaller decline for the Australian population: approximately 3% over three years and 1% over one and two

years.<sup>38</sup> Figure 8.1 illustrates longitudinal results for the health domain, compared to the Australian population where possible.





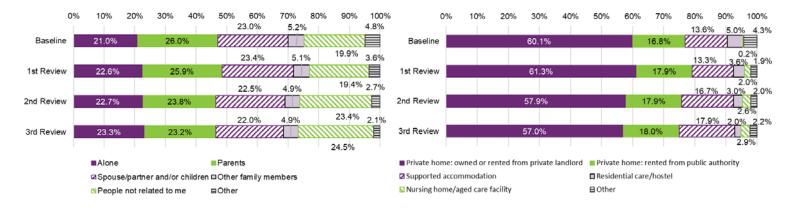
<sup>&</sup>lt;sup>38</sup> <u>HILDA Survey (unimelb.edu.au)</u> Weighted to match the Australian population and adjusted for the NDIS age distribution.

### Living and Housing Arrangements

For participants who have been in the Scheme for three years or more at 30 June 2020, the percentage living with people not related to them has increased by about 4.6% between baseline and thrid review, and the percentage living alone has increased by 2.3%. The percentage living with their parents has decreased by 2.8%, and the percentage who say they have "other" living arrangements decreased by 2.7%.

The percentage living in supported accommodation has increased by 4.3% between baseline and third review, from 13.6% to 17.9%. The percentage living in a nursing home/aged care facility has increased by 2.7%, and the percentage in public housing by 1.2%. A decrease of 3.1% were observed for the percentage living in a private home (owned or rented from a private landlord) and 3.0% for the percentage living in large or small residences.

### Figure 8.2 Participant living/housing arrangements – longitudinal changes for participants who have been in the Scheme for three years or more



### 8.4 Longitudinal indicators – participant characteristics

Section 2.4 describes the general methodology used to analyse longitudinal outcomes by participant characteristics.

Table 8.2 shows the five groups of transitions that have been modelled for participants aged 25 and over, and the transitions contributed by each of the C1, C2 and C3 cohorts. Improvements and deteriorations have been considered separately, resulting in 10 different models for each indicator.

Cohort		1-year transitions		2-year transitions <sup>39</sup>	3-year transitions
	Baseline to first review	First review to second review	Second review to third review	Baseline to Second Review	Baseline to Third Review
C3	$B \rightarrow R1$	$R1 \rightarrow R2$	$R2 \rightarrow R3$	$B \rightarrow R2$	$B \rightarrow R3$
C2	$B \rightarrow R1$	$R1 \rightarrow R2$		B → R2	
C1	$B \rightarrow R1$				

Table 8.2 Transitions contributing to the models for cohorts C1, C2 and C3<sup>\*</sup>

\*B=baseline, R1=first review, R2=second review. The arrow represents transition between the two time points.

Some key features of the analyses for selected indicators, for participants aged 25 and over, are summarised below. Table 2.3 in Section 2.4 includes a table explaining the meaning of the arrow symbols used in the tables.

<sup>&</sup>lt;sup>39</sup> There is another two-year transition, from first review to third review, however the amount of data for this transition is smaller and to keep the presentation manageable it has not been included. Results from selected models for this transition were generally consistent with baseline to second review (but tended to identify a smaller number of predictors, due to the smaller amount of data).

### I am able to advocate for myself

The percentage of participants reporting that they are able to advocate for themselves has decreased significantly from baseline to all reviews, with net decreases of 1.3%, 3.3% and 5.2% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 8.3 below.

l on situdinal		f Baseline s in cohort <sup>1</sup>		ements: o Yes	Deterio Yes t	Nat	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	47,692	42,354	2,526	5.3%	3,713	8.8%	-1.3%
Baseline to Review 2	18,586	18,470	1,771	9.5%	3,009	16.3%	-3.3%
Baseline to Review 3	6,189	6,208	702	11.3%	1,350	21.8%	-5.2%

#### Table 8.3 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 8.4 below.

## Table 8.4 Key drivers of likelihood of transitions in *"% who feel able to advocate for themselves"* response

			1	step tra	ansition	S		2 s trans	-	3 s trans	-
Reference Category	Variable		ine to Review	First R to Se Rev	cond	Sec Revie Third F	ew to	Basel Sec Rev	ond	Basel Third F	
outogory		wi	onship ith ood of	Relatio wi likeliho	th	Relatio wi likeliho	th	Relatio wi likelih	th	Relatio wi likelih	-
		Imp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.
NSW	Participant lives in VIC		₽		Ļ			1	ŧ		
NSW	Participant lives in QLD	1		1		1		1			
NSW	Participant lives in SA	1									
NSW	Participant lives in ACT, NT, TAS, WA	1							1		
Down Syndrome/ Intellectual disability	Disability is autism				1						

			1	l step tr	ansition	s		2 step transitions			tep itions
Reference	Variable		line to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	ine to ond view		line to Review
Category		w	onship ith lood of	w	onship ith ood of	wi	onship ith ood of	w	onship ith ood of	w	onship ith ood of
		Imp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.	Imp.	Det.
Down Syndrome/ Intellectual disability	Disability is cerebral palsy or another neurological disorder	1	ŧ	1	ŧ		ŧ	1	ŧ	1	ŧ
Down Syndrome/ Intellectual disability	Disability is a psychosocial disability	1	ŧ	1	ŧ			1	ŧ	1	ŧ
Down Syndrome/ Intellectual disability	Disability is a sensory disability	1	ŧ	1	ŧ		ŧ	1	ŧ	1	ŧ
Down Syndrome/ Intellectual disability	Disability is spinal cord injury or other physical	1	ŧ	1	ŧ	1	ŧ	1	ŧ	1	ŧ
Down Syndrome/ Intellectual disability	Other disability	1	Ļ	1	ŧ		ŧ	1	ŧ	1	Ļ
N/A	Participant is older	1	₽		Ļ			1	₽		↓
Participant is male	Participant is female								Ļ		
Non- Indigenous	Participant is Indigenous						1				
Non- Indigenous	Participant Indigenous status is not stated				ŧ					ŧ	ŧ
Non-CALD	Participant is CALD	₽	1	₽	1			₽	1	₽	
N/A	Lower level of function	↓		↓	1	₽		₽	1	↓	1
N/A	Higher annualised plan budget	₽	1	₽		₽		₽		₽	

			1	l step tra	ansition	s		2 s transi		3 s transi	
Reference Category	Variable	Baseli First R		to Se	Review cond view	Sec Revie Third F	ew to	Basel Sec Rev	ond	Basel Third F	
		Relatio wi likeliho	th		onship th ood of	Relatio wi likeliho	th	Relatio wi likeliho	th	Relatio wi likeliho	th
		lmp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.
Not in SIL	Participant is in supported independent living (SIL)		ŧ				ŧ				
N/A	Higher Australian Disability Enterprise payments									1	
N/A	Higher self- managed employment supports		1	1	1					1	
N/A	Higher plan utilisation				1		1		Ļ		
N/A	Higher utilisation of capacity building supports								1		
N/A	Higher utilisation of capital supports	1									
N/A	Higher utilisation of core supports								1		1
0-15% capacity building supports	15%-30% of supports are capacity building supports								ŧ		
0-15% capacity building supports	30%-60% of supports are capacity building supports		ŧ	1	ŧ	1	ŧ	1	ŧ		ŧ
0-15% capacity building supports	60-100% of supports are capacity building supports		₽		ŧ	1	₽	1	₽	1	ŧ

			1	l step tra	ansition	s		2 s trans	tep itions	3 s transi	tep itions
Reference	Variable		line to Review	to Se	Review cond view		ond ew to Review	Sec	ine to ond ⁄iew		ine to Review
Category		w	onship ith ood of	wi	onship ith ood of	Relatio wi likelih		wi	onship ith ood of	Relatio wi likeliho	
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
0-15% capacity building supports	More than 5% of supports are capital supports	1	ŧ	1	ŧ		ŧ	1	ŧ	1	ŧ
Agency- managed	Plan is fully self- managed		₽		₽		₽		₽		₽
Agency- managed	Plan is partly self-managed	1	↓		₽			1	₽		↓
Agency- managed	Plan is managed by a plan manager							1			
Major cities	Participant lives outside a major city	1		1			₽	1		1	
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1	1	1	1		1	1	1		1
Pre-COVID	Review during COVID period						Ļ			₽	Ļ
N/A	General time trend	Ļ	₽		↓			₽	₽		
N/A	Change in time trend post- COVID									1	
2016/17	Participant entered the Scheme in 2017- 18			ŧ							
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs	1					ŧ	1		1	

			1	l step tra	ansition	s		2 step transitions		3 step transitions	
Reference Category	Variable		line to Review	to Se	leview cond ⁄iew	Sec Revie Third F	ew to	Sec	ine to ond view	Basel Third F	
Galegory		w	onship ith ood of	Relatio wi likelih		Relatio wi likeliho	th	Relatio wi likelih		Relatio wi likeliho	th
		lmp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.
Received State/Territory supports	Participant received services from Commonwealth systems before entering the NDIS								1		
Medium level of NDIA support	Lower level of NDIA support	1	₽	1				1	₽		
Medium level of NDIA support	Higher level of NDIA support		₽		ŧ		ŧ	1	ŧ		-
N/A	Participant lives in an area with a higher average unemployment rate					ŧ					

Key findings from Table 8.4 include:

- Participants living outside a major city were more likely to improve (start feeling able to advocate for themselves) across all transitions excluding second review to third review.
- Participants with more than 30% of capacity building supports or more than 5% capital supports in their plan generally had more favourable transitions than those with less than 30% capacity building supports.
- Participants living in QLD were more likely to improve in all one-step and two-step transitions compared to those living in NSW.
- Participants with autism or Down Syndrome/Intellectual disability were less likely to improve and more likely to deteriorate in most transitions than participants with other disabilities. Participants with a spinal cord injury or other physical disability were more likely to improve and less likely to deteriorate than participants with Down Syndrome or an intellectual disability across all transitions.
- Participants from a CALD background were less likely to improve and more likely to deteriorate between baseline and first or second review, and between first and second review.
- SIL participants were less likely to deteriorate between baseline and third review, and between second and third review.

### I want more choice and control in my life

The percentage of participants reporting that they want more choice and control in life has increased significantly from baseline to all reviews, with net increases of 4.8%, 9.3% and 16.0% from baseline to the first, second and third review, respectively. This was a result of changes from "Yes" to "No" and from "No" to "Yes" as set out in Table 8.5 below.

l en situdia el		f Baseline s in cohort <sup>1</sup>		ependent: o Yes		ependent: to No	Net
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	20,013	69,197	5,311	26.5%	1,000	1.5%	+4.8%
Baseline to Review 2	9,271	27,470	4,101	44.2%	668	2.4%	+9.3%
Baseline to Review 3	4,294	8,099	2,281	53.1%	294	3.6%	+16.0%



<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of changes in the outcome are set out in Table 8.6 below.

Table 8.6 Key drivers of likelihood of transitions in "% who want more ca	hoice and
control in their life" response	

			1	step tra	ansition	s		2 step transitions		3 step transitions	
Reference Category	Variable	First F Relati W	line to Review onship ith ood of	to Se Rev Relatio	Review cond riew onship ith ood of	Revi Third I Relati W	ond ew to Review onship ith ood of	Sec Rev Relati	line to cond view onship ith	wi	
		No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
NSW	Participant lives in VIC	Ŷ		Ŷ				Û			
NSW	Participant lives in QLD	1	℃	1				1	仓	1	
NSW	Participant lives in SA	Ŷ	℃						℃		
NSW	Participant lives in ACT, NT, TAS, WA		仓	$\hat{\mathbf{U}}$					仓		
Down Syndrome/	Disability is cerebral palsy or another		仓								

			1	step tr	ansition	S		2 step transitions		3 step transitions	
			line to Review	to Se	Review econd view	Sec Revie Third F	ew to	Sec	line to cond view	Basel Third F	
Reference Category	Variable	w	onship ith lood of	w	onship ith lood of	wi	onship th ood of	w	onship ith lood of	Relatio wi likeliho	
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
Intellectual disability	neurological disorder										
Down Syndrome/ Intellectual disability	Disability is a sensory disability								ŧ		
N/A	Participant is older	Û	仓	Û	仓			Û	仓	Ŷ	
Participant is male	Participant is female	1		1	仓			1		1	
Non-CALD	Participant is CALD		₽		₽				₽		
N/A	Higher annualised plan budget		₽						₽	Ŷ	
Not in SIL	Participant is in supported independent living (SIL)	Û		Û				Û			
N/A	Higher Australian Disability Enterprise payments				仓						
2016/17	Participant entered the Scheme in 2017/18	Û						Û			
2016/17	Participant entered the Scheme in 2018/19	Û									
N/A	Higher plan utilisation	1								Û	
N/A	Higher utilisation of capacity	1				1		1		1	

			1	l step tr	ansition	S			tep itions		tep itions
-			line to Review	to Se	Review econd view		ond ew to Review	Sec	line to cond view		line to Review
Reference Category	Variable	w	onship ith lood of	w	onship ith ood of	wi	onship th ood of	w	onship ith lood of	w	onship ith lood of
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
	building supports										
N/A	Higher utilisation of core supports		₽							1	
N/A	15%-30% of supports are capacity building supports	1						1			
N/A	60-100% of supports are capacity building supports	Û									
N/A	More than 5% of supports are capital supports							Û			
Agency- managed	Plan is managed by a plan manager	1	₽	1					₽	1	
Agency- managed	Plan is fully self-managed	$\mathbf{\hat{U}}$								$\mathbf{\hat{U}}$	
Major cities	Participant lives outside a major city	1	仓		仓				仓	$\mathbf{\hat{U}}$	仓
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1		1				1			
Pre-COVID	Review during COVID period			1						$\mathbf{\hat{U}}$	₽
N/A	General time trend		↓	$\mathbf{\hat{U}}$	↓				↓	1	

			1	l step tr	ansition	s			tep itions		tep itions
Deferrer			line to Review	to Se	Review econd /iew	Revi	ond ew to Review	Sec	line to cond view		line to Review
Reference Category	Variable	w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	w	onship ith lood of	wi	onship ith ood of
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
N/A	Change in time trend post- COVID			Û				Ŷ			
Received State/Territory supports	Participant entered the scheme through Early Intervention									Û	
Medium level of NDIA support	Lower level of NDIA support	Û		Ŷ			仓				仓
Medium level of NDIA support	Higher level of NDIA support	Ŷ	↓	Ŷ	↓	Ŷ	↓	Ŷ	₽		₽
N/A	Participant lives in an area with a higher average unemployment rate		ŧ						ŧ		

Key findings from Table 8.6 include:

- Participants living in Victoria were less likely to transition from "No" to "Yes" (go from not wanting more choice and control, to wanting more) between baseline and first or second review, and between first and second review than participants living in NSW.
- Age also has a significant impact. Participants who are older were less likely to transition from "No" to "Yes" and more likely to transition from "Yes" to "No" between baseline and first or second review, and between first and second review.
- CALD participants were less likely to transition from "Yes" to "No" between baseline and first or second review, and between first and second review.
- SIL participants were less likely to transition from "No" to "Yes" between baseline and first or second review, and between first and second review.
- Participants with a higher level of NDIA support were less likely to change their response in almost all transitions compared to participants with medium level of support.
- There was a general time trend for some transitions, with transitions from "Yes" to "No" becoming less likely over time (baseline to first or second review, and first to second review). Transitions from "No" to "Yes" between baseline and third review

became more likely over time. However, transitions from "No" to "Yes" between first and second review became less likely over time.

 One or more COVID-related variables was significant in four of the models. For transitions from "No" to "Yes" between first and second review, there was a step up in the probability of transitioning at the assumed COVID date, however the general decline over time became steeper after this date. For transitions from "No" to "Yes" between baseline and second review, there was also a negative change in slope following the assumed COVID date. For transitions between baseline and third review (either "No" to "Yes" or "Yes" to "No"), there was a step down in the probability of transitioning at the assumed COVID date, but no change in slope.

### I would like to see my family more often

The percentage of participants reporting that they would like to see their family more often has increased significantly from baseline to all reviews, with net increases of 1.6%, 3.3% and 6.1% from baseline to the first, second and third review, respectively. This was a result of changes from "Yes" to "No" and from "No" to "Yes" as set out in Table 8.7 below.

l en situational		f Baseline s in cohort¹		ependent: o Yes	Context D Yes t	Net	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	52,064	35,851	3,940	7.6%	2,565	7.2%	+1.6%
Baseline to Review 2	21,922	14,199	3,013	13.7%	1,810	12.8%	+3.3%
Baseline to Review 3	7,783	4,089	1,424	18.3%	695	17.0%	+6.1%

 Table 8.7 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of changes in the outcome are set out in Table 8.8 below.

Table 8.8 Key drivers of likelihood of transitions in "% who would like to see their	
family more often" response	

				l step tra	ansitions	6		2 s trans	tep itions		tep itions
Deferrer		Basel First R	ine to Review	to Se	Review cond view	Seco Revie Third R	w to	Sec	ine to ond ⁄iew		line to Review
Reference Category	Variable	Relationship with likelihood of		Relationship with likelihood of		Relatio wit likeliho	th .	wi	onship ith ood of	wi	onship ith ood of
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
NSW	Participant lives in VIC		↓	¢		Û		む	↓	¢	

				1 step tr	ansitions	6			tep itions		tep itions
- <i>i</i>			line to Review	to Se	Review cond /iew	Seco Revie Third R	w to	Sec	line to cond view		line to Review
Reference Category	Variable	w	onship ith ood of	w	onship ith ood of	Relatio wit likeliho	th	w	onship ith ood of	w	onship ith ood of
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
NSW	Participant lives in QLD		℃	1	℃			1	仓		仓
NSW	Participant lives in SA				℃				℃		
NSW	Participant lives in ACT, NT, TAS, WA		仓			Ŷ		Û			
Down Syndrome/ Intellectual disability	Disability is a psychosocial disability	1						1		1	
Down Syndrome/ Intellectual disability	Disability is a sensory disability									1	
Down Syndrome/ Intellectual disability	Disability is spinal cord injury/other physical							1			
Down Syndrome/ Intellectual disability	Disability is "Other"									1	
N/A	Participant is older		↓	1	₽			1	₽		↓
Participant is male	Participant is female	1	↓					1			
Non- Indigenous	Participant is Indigenous	1						1			
Non-CALD	Participant is CALD				仓						
2016/17	Participant entered the Scheme in 2017/18	Û						Û	₽		

				1-step tr	ansitions	5			tep itions		tep itions
			line to Review	to Se	Review cond view	Seco Revie Third F	ew to	Sec	line to cond view		line to Review
Reference Category	Variable	w	onship ith ood of	w	onship ith ood of	Relatic wi likelihe	th	w	onship ith ood of	w	onship ith ood of
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
2016/17	Participant entered the Scheme in 2018/19	Û									
N/A	Higher annualised plan budget	1		1	₽			1	Ļ	1	
Not in SIL	Participant is in supported independent living (SIL)		ŧ						ŧ		ŧ
N/A	Higher Australian Disability Enterprise payments	₽	仓					Û	仓		
N/A	Higher plan utilisation							Ŷ			
N/A	Higher utilisation of core supports	1				1		1		1	
N/A	Higher utilisation of capacity building supports							1			
N/A	Higher utilisation of capital supports	1									
0-15% capacity building supports	60-100% of supports are capacity building supports				ŧ					Û	
0-15% capacity building supports	More than 5% of supports are capital supports	₽			₽			Û		₽	

				1-step tra	ansitions	5		2-step transitions			tep itions
Deferrere		Basel First F	ine to Review	to Se	Review cond riew	Seco Revie Third R	w to	Sec	ine to ond view	Basel Third F	ine to Review
Reference Category	Variable	Relationship with likelihood of		Relationship with likelihood of		Relatio wit likeliho	th	Relationship with likelihood of		Relationship with likelihood of	
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
Agency- managed	Plan is managed by a plan manager		₽					1			
Agency- managed	Plan is fully self- managed	Ŷ						Û			
Agency- managed	Plan is partly self-managed	Ŷ									℃
Major cities	Participant lives outside a major city	1						1		1	
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1	仓	1	仓	1		1		1	
Pre-COVID	Review during COVID period		↓		↓				↓		
N/A	General time trend		₽								
Medium level of NDIA support	Lower level of NDIA support							Û		₽	
Medium level of NDIA support	Higher level of NDIA support		ŧ		ŧ				ŧ		ŧ
N/A	Participant lives in an area with a higher average unemployment rate		ŧ								

Key findings from Table 8.8 include:

• Older participants were more likely to change from not wanting to see their family more often, to wanting to see them, and less likely to change in the reverse direction.

- Participants with a psychosocial disability were more likely to change their response from "No" to "Yes" between baseline and first, second or third review compared with participants with an Down syndrome or an intellectual disability.
- Participants with higher annualised plan budget were more likely to change from not wanting to see their family more often, to wanting to see them, and less likely to change in the reverse direction.
- Female participants were more likely to change their response from "No" to "Yes", and less likely to change from "No" to "Yes", between baseline and first review. They were also more likely to change their response from "No" to "Yes" between baseline and second review.
- Indigenous participants were more likely to change their response from "No" to "Yes" between baseline and first or second review.
- SIL participants were less likely to change their response from "Yes" to "No" in all transitions from baseline.
- There were some differences by State/Territory. Participants living in Queensland were more likely to change their response (either from "No" to "Yes" or from "Yes" to "No") between all time points except second to third review, whereas participants in Victoria were less likely to change their response across most transitions. Participants in SA were more likely to change from "Yes" to "No" between baseline and second review, and between first and second review. Participants from the State/Territory group ACT, NT, Tasmania and WA were more likely to change from "Yes" to "No" between baseline and first review, and less likely to change from "No" to "Yes" to "No" between baseline and first review, and between baseline and second review.
- Participants who relocated to a new LGA were more likely to change their response from "No" to "Yes" across all transitions. However, they were more likely to change from "Yes" to "No" between baseline and first review, and between first and second review.
- The COVID step-change variable was significant in three models. Participants with review during the COVID period were less likely to change their response from "Yes" to "No" between baseline and either first or second review, and between first and second review.

### I would like to see my friends more often

The percentage of participants reporting that they would like to see their friends more often has increased significantly from baseline to all reviews, with net increases of 1.9%, 4.6% and 7.5% from baseline to the first, second and third review, respectively. This was a result of changes from "Yes" to "No" and from "No" to "Yes" as set out in Table 8.9 below.

		f Baseline s in cohort¹		ependent: o Yes	Context D Yes t		
Longitudinal Period			Number	%	Number	%	Net Movement
Baseline to Review 1	35,653	47,913	3,920	11.0%	2,365	4.9%	+1.9%
Baseline to Review 2	15,878	18,129	3,139	19.8%	1,559	8.6%	+4.6%
Baseline to Review 3	5,788	5,234	1,447	25.0%	625	11.9%	+7.5%

### Table 8.9 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of changes in the outcome are set out in Table 8.10 below.

				I-step tra	ansition	S		2-step transitions		3-step transitions	
Reference			line to Review	First Review to Second Review		Revi	ond ew to Review	Sec	line to cond /iew		line to Review
Category	Variable	w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	w	onship ith ood of	w	onship ith ood of
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
NSW	Participant lives in VIC	Ŷ	₽	む				Ŷ	₽		
NSW	Participant lives in QLD	1	仓		仓			1	仓		仓
NSW	Participant lives in SA	Û	仓		仓			Ŷ	仓		
NSW	Participant lives in ACT, NT, TAS, WA		仓	Ŷ	₽						
Down Syndrome/ Intellectual disability	Disability is autism	1									ŧ
Down Syndrome/ Intellectual disability	Disability is a sensory disability	Û					ŧ				ŧ
Down Syndrome/ Intellectual disability	Disability is psychosocial						ŧ				ŧ
Down Syndrome/ Intellectual disability	Disability is spinal cord injury or other physical	Û									
Down Syndrome/ Intellectual disability	Disability is "Other"						ŧ				ŧ
Male	Participant is female	1		1				1		1	

# Table 8.10 Key drivers of likelihood of transitions in *"% who would like to see their friends more often"* response

			1	l step tr	ansition	S		2 step transitions		3 step transitions	
Reference			line to Review	to Se	First Review to Second Review		cond ew to Review	Sec	line to cond /iew		line to Review
Category	Variable	w	onship ith ood of	Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No
Non-CALD	Participant is CALD	1	↓								
N/A	Lower level of function	1	↓					1	₽	1	₽
N/A	Higher annualised plan budget			1	₽						
Not in SIL	Participant is in supported independent living (SIL)	Û		Û	Û	Û		Û		Û	
N/A	Higher Australian Disability Enterprise payments	Û	仓	Û	仓			Û	仓	Û	仓
N/A	Higher payments to self-managed employment supports		仓								
N/A	Higher plan utilisation budget							Û			
N/A	Higher utilisation of capacity building supports		ŧ		ŧ			1	ŧ	1	₽
N/A	Higher utilisation of capital supports	1									
N/A	Higher utilisation of core supports	1				1		1			
0-15% capacity building supports	15%-30% of supports are capacity	1		1				1		1	

			1	l step tr	ansition	S			tep itions		tep itions
Reference	Vodekla		line to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	line to cond view		line to Review
Category	Variable	w	onship ith ood of								
		No to Yes	Yes to No								
	building supports										
0-15% capacity building supports	Between 60% and 100% of supports are capacity building supports	₽								Û	
0-15% capacity building supports	More than 5% of supports are capital supports	₽		Û				Û		Û	
Agency- managed	Plan is fully self-managed			Ţ				Û			
Agency- managed	Plan is managed by a plan manager	1	₽	1				1	₽		
Major cities	Participant lives outside a major city	¢	仓	¢	仓				仓		
N/A	Participant lives in an area with a higher unemployment rate				ŧ				ŧ	1	
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1		1		1		1		1	
Pre-COVID	Review during COVID period		↓		↓						
N/A	General time trend		₽						₽		
2016/17	Participant entered the Scheme in 2017-18		₽	ΰ				Ŷ			

			1	l-step tra	ansition	s			tep itions		tep itions	
Reference	Variablo		line to Review	First Review to Second Review		Second Review to Third Review		Baseline to Second Review			line to Review	
Category	Variable		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	No to Yes	Yes to No	
2016/17	Participant entered the Scheme in 2018-19	Û	ŧ									
Medium level of NDIA support	Lower level of NDIA support	Ŷ				Ŷ	仓	Û		Ŷ		
Medium level of NDIA support	Higher level of NDIA support	$\hat{\mathbf{U}}$	₽	¢		$\hat{\mathbf{U}}$		Ŷ	₽	¢		
Received State/ Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs										仓	

Key findings from Table 8.10 include:

- State/Territory has a significant impact on changes in the indicator "I would like to see my friends more often". For example, participants living in Queensland were more likely to transition (either "No" to "Yes" or "Yes" to "No") from baseline to first and second reviews than participants living in New South Wales.
- Australian Disability Enterprise payments also have a significant impact. Participants with higher Australian Disability Enterprise payments were less likely to transition from "No" to "Yes" and more likely to transition from "Yes" to "No" from baseline to first, second and third reviews and from first review to second review.
- Participants who relocated to a new LGA were more likely to change their response from "No" to "Yes" across all transitions than those who remained within the same LGA.
- Participants with a higher level of NDIA support were less likely to transition from "No" to "Yes" across all transitions and were less likely to transition from "Yes" to "No" from baseline to first review and from baseline to second review.
- Female participants were more likely than male participants to transition from "No" to "Yes" from baseline to first, second and third reviews and from first review to second review.

- Participants with review during the COVID period were less likely to change their response from "Yes" to "No" between baseline and first review, and between first and second review.
- Participants entering the Scheme in 2018-19 were less likely than those entering in 2016-17 to change their response (either "No" to "Yes" or "Yes" to "No") between baseline and first review. Those entering in 2017-18 were less likely to change from "No" to "Yes" between first and second review, and between baseline and second review, and were also less likely to change their response from "Yes" to "No" between baseline and first review.
- Participants who received supports for supported independent living were less likely to change their response from "No" to "Yes" across all transitions than those who did not receive supported independent living supports.

### I have a doctor I see on a regular basis

The percentage of participants reporting that they have a doctor they see on a regular basis has increased significantly from baseline to all reviews, with net increases of 2.9%, 4.8% and 7.8% from baseline to the first, second and third review, respectively. This was a result of improvements and deteriorations as set out in Table 8.11 below.

Longitudinal		f Baseline s in cohort <sup>1</sup>	Improv No to	ement: o Yes		oration: to No	Net
Longitudinal Period	No	Yes	Number	%	Number	%	Movement
Baseline to Review 1	9,034	80,751	3,284	36.4%	640	0.8%	+2.9%
Baseline to Review 2	3,686	33,286	2,145	58.2%	380	1.1%	+4.8%
Baseline to Review 3	1,541	10,856	1,104	71.6%	138	1.3%	+7.8%

#### Table 8.11 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of changes in the outcome are set out in Table 8.12 below.

## Table 8.12 Key drivers of likelihood of transitions in *"% who have a doctor they see on a regular basis"* response

				1-step tr	ansitions				tep itions		tep itions
Reference Category	Variable	Rev Relati	e to First view onship lihood of Det.	Second Relati	eview to I Review onship Ilihood of Det.	to Thirc Relati	l Review d Review onship elihood of Det.	Second Relati	line to I Review onship lihood of Det.	Rev Relati	e to Third view onship lihood of Det.
NSW	Participant lives in VIC	↓					1	ŧ		ŧ	1

				1-step tr	ansitions				tep itions		tep itions
Reference	Variable		e to First view		eview to I Review		Review Review		ine to Review		e to Third /iew
Category			onship Iihood of		onship Iihood of		onship lihood of		onship lihood of		onship lihood of
		Imp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.
NSW	Participant lives in QLD	1	1	1				1			
NSW	Participant lives in SA	↓	1		1		1		1		
NSW	Participant lives in ACT, NT, TAS, WA	1							1	ŧ	1
Down Syndrome/ Intellectual disability	Disability is cerebral palsy or another neurological disorder	1									
Down Syndrome/ Intellectual disability	Disability is a sensory disability	₽						ŧ	ŧ		
Down Syndrome/ Intellectual disability	Disability is psychosocial							1		1	
Down Syndrome/ Intellectual disability	Disability is spinal cord injury or other physical injury								ŧ		
Down Syndrome/ Intellectual disability	Disability is "Other"	1	ŧ						ŧ		
N/A	Participant is older	1	Ļ		ŧ	1		1	Ļ	1	Ļ
Male	Participant is female	1						1		1	₽
Non-CALD	Participant is CALD					₽					₽
N/A	Lower level of function			1					Ļ	1	
N/A	Higher annualised plan budget		ŧ		ŧ			1			ŧ

			1-step transitions		2-step transitions	3-step transitions
Reference	Variable	Baseline to First Review	First Review to Second Review	Second Review to Third Review	Baseline to Second Review	Baseline to Third Review
Category		Relationship with likelihood of				
		Imp. Det.	Imp. Det.	lmp. Det.	lmp. Det.	Imp. Det.
Not in SIL	Participant is in supported independent living (SIL)	ŧ			ŧ	ŧ
N/A	Higher self- managed employment supports					Ļ
N/A	Higher other employment supports					+
N/A	Higher plan utilisation			ŧ	ŧ	↓ ↓
N/A	Higher utilisation of capacity building supports	1		1 1		<b>t</b> I
N/A	Higher utilisation of capital supports					Ļ
N/A	Higher utilisation of core supports	ŧ				1
0-15% capacity building supports	Between 60% and 100% of supports are capacity building supports	1	ŧ			
Agency- managed	Plan is managed by a plan manager		ŧ		1	
Major cities	Participant lives outside a major city	1	1		1	1 1
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1	1	1	1	+ +

				1-step tr	ansitions				tep itions		step sitions
Reference Category	Variable	Rev	e to First view	Second	eview to I Review	to Thirc	l Review d Review	Second	line to Review	Re	e to Third view
			onship lihood of		onship lihood of		onship lihood of		onship lihood of		onship lihood of
		Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Pre-COVID	Review during COVID period								₽		₽
N/A	General time trend	↓	↓	↓				↓			
N/A	Change in time trend post- COVID										ł
Entry due to disability	Participant entered the scheme through Early Intervention										1
Medium level of NDIA support	Lower level of NDIA support										ŧ
Medium level of NDIA support	Higher level of NDIA support	ŧ		₽		₽		ŧ		₽	
N/A	Participant lives in an area with a higher average unemployment rate										1

Key findings from Table 8.12 include:

A large number of variables are significant predictors of transitioning from having a regular doctor at baseline, to not having one at third review (the far right column). Overall, for participants with responses at both baseline and third review, there are 10,856 participants who had a regular doctor at baseline, and only 138 (1.3%) of these participants did not have a regular doctor at third review. Whilst the overall sample size is large, the number of events is relatively small and odds ratios estimated by maximum likelihood may be subject to some bias away from one.<sup>40</sup> Nevertheless some significant associations appear to exist. For example, looking at the impact of relocation to a new LGA: amongst those who do not relocate the

<sup>&</sup>lt;sup>40</sup> King G. and Zeng L. (2001). Logistic regression in rare events data. *Political Analysis* 9(2): 137-163.

percentage going from having a regular doctor to not having one is 1.0% (odds 0.0099), whereas amongst those who do relocate the percentage is 3.6% (odds 0.0377), yielding an unadjusted relative risk estimate of 3.69 and an unadjusted odds ratio estimate of 3.80. From the logistic regression model, the adjusted odds ratio estimate (controlling for other variables) is 4.37 with a 95% confidence interval (4.36,4.40). Further analysis of this model, including other estimation techniques which account for potential bias, will be undertaken.

- State/Territory has a significant effect on transitioning. For example, participants from SA were more likely to deteriorate in all one-step transitions and from baseline to second review. Participants living in NSW were less likely to deteriorate between second and third review.
- Participants who relocated to a different LGA between reviews were more likely to deteriorate across all transitions, and were less likely to improve between baseline and third review.
- Participants with a higher level of NDIA support were less likely to improve across all transitions.
- Older participants were more likely to improve from baseline to first, second and third reviews and from second review to third review. They were also less likely to deteriorate from baseline to first, second and third review and from first review to second review.

### I have been in the hospital in the last 12 months

The percentage of participants reporting that they have been in the hospital in the last 12 months has decreased significantly from baseline to all reviews, with net decreases of 4.0%, 5.9% and 6.1% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 8.13 below.

l on situdin al		f Baseline s in cohort <sup>1</sup>	_	ements: to No		rations: o Yes	Nat
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	51,263	36,283	9,984	27.5%	6,499	12.7%	-4.0%
Baseline to Review 2	21,085	14,822	6,131	41.4%	4,014	19.0%	-5.9%
Baseline to Review 3	7,110	4,783	2,261	47.3%	1,539	21.7%	-6.1%

### Table 8.13 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 8.14 below.

# Table 8.14 Key drivers of likelihood of transitions in *"% who have been to the hospital in the last 12 months"* response

				1-step tra	ansition	s			tep itions	3-st transi	
Reference	Variable		line to Review	to Se	Review econd view	Sec Revie Third F	ew to	Sec	ine to ond view	Basel Third F	
Category		w	onship ith ood of	w	onship ith ood of	Relatio wi likeliho	th	wi	onship ith ood of	Relatic wi likelihe	th
		lmp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
NSW	Participant lives in VIC	₽					1			₽	
NSW	Participant lives in QLD										
NSW	Participant lives in SA	1					1				
Down Syndrome/ Intellectual disability	Disability is autism		ŧ		ŧ				ŧ	1	
Down Syndrome/ Intellectual disability	Disability is sensory impairment				1						
Down Syndrome/ Intellectual disability	Disability is cerebral palsy or another neurological disorder	₽	1	ŧ	1			ŧ	1	ŧ	
Down Syndrome/ Intellectual disability	Disability is a psychosocial disability	ŧ	1	ŧ	1	ŧ		ŧ	1	ŧ	1
Down Syndrome/ Intellectual disability	Disability is spinal cord injury or other physical	₽	1	ŧ	1	ŧ		ŧ	1	ŧ	1
Down Syndrome/ Intellectual disability	Disability is "Other"	ŧ	1	ŧ	1	ŧ		ŧ	1	ŧ	1
N/A	Participant is older	₽	1	₽	1			₽	1		
Male	Participant is female		1		1			₽	1		

			1	l step tra	ansition	s			tep itions	3 s trans	tep itions
Reference	Variable		line to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	ine to ond view		ine to Review
Category		Relationship with likelihood of		Relationship with likelihood of		wi	onship ith ood of	wi	onship ith ood of	wi	onship ith ood of
		Imp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
N/A	Participant is CALD				₽						
Non- Indigenous	Participant is Indigenous	₽									1
Non- Indigenous	Participant did not state their indigenous staus						1				
N/A	Lower level of function	₽		₽			1	₽	1		1
N/A	Higher annualised plan budget	₽		₽		₽		₽		↓	
Not in SIL	Participant is in supported independent living (SIL)	1	ŧ	1	ŧ	1	ŧ	1	ŧ	1	ŧ
N/A	Higher Australian Disability Enterprise payments	1	ŧ	1	ŧ			1	ŧ	1	ŧ
N/A	Higher self- managed employment supports	1									
N/A	Higher plan utilisation					1			₽		
N/A	Higher utilisation of capacity building supports					₽		➡	1	₽	1
N/A	Higher utilisation of core supports										
0-15% capacity building supports	15%-30% of supports are capacity building supports	₽	1								
0-15% capacity building supports	More than 5% of supports are capital supports	ŧ	1		1		1	₽			1

			1	l-step tra	ansition	s		2-s trans	tep itions	3-s trans	tep itions
Reference	Variable		line to Review	First F to Se Rev		Revi	ond ew to Review	Sec	ine to ond ⁄iew	Basel Third F	ine to Review
Category		w	onship ith ood of		onship th ood of	w	onship ith ood of	wi	onship th ood of	wi	onship th ood of
		Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.	lmp.	Det.
Agency- managed	Plan is partly self- managed					₽					
Major cities	Participant lives outside a major city	1	1					1	1		
Did not relocate	Participant relocated to a new Local Government Area (LGA)	₽	1		1			ŧ			
Pre-COVID	Review during COVID period	₽	₽	₽				₽			
N/A	General time trend										1
N/A	Change in time trend post-COVID	1									
Entry due to disability	Participant entered the scheme through Early Intervention				1			ŧ			
Received State/ Territory supports	Participant received services from Commonwealth systems before entering the NDIS	1	ŧ	1				1	ŧ		
Received State/ Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs		1								
Medium level of NDIA support	Lower level of NDIA support		ŧ			1					
Medium level of NDIA support	Higher level of NDIA support	₽	₽	₽				₽		₽	

			1	I-step tra	ansition	S			tep itions	3-s transi	tep itions
Reference Variable Category	Baselin First Re		First R to Se Rev	cond	Seco Revie Third F	w to	Baseline to Second Review		Baseline to Third Review		
		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationshi with likelihood o	
		Imp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.	Imp.	Det.
N/A	Participant lives in an area with a higher average unemployment rate	ł			1			ŧ			

Key findings from Table 8.14 include:

- There is significant variation by disability type for changes in hospital visits. In general, participants with autism and those with Down syndrome or an intellectual disability (the reference category) tend to have more favourable transitions. Participants with a psychosocial disability, a spinal cord injury or other physical disability, or a disability in the "Other" category (which includes ABI, stroke and some smaller groups) are less likely to improve across all transitions and more likely to deteriorate across all transitions except for second review to third review, compared to participants with Down Syndrome or an intellectual disability.
- State/Territory has a significant impact whether participants have been in hospital in the last 12 months. For example, participants from Queensland were more likely to improve from baseline to first review, from baseline to second review and from first review to second review than participants living in New South Wales.
- Participants who received supports for supported independent living were more likely to improve and less likely to deteriorate across all transitions compared with those who did not receive these supports.
- CALD participants were less likely to deteriorate from from first review to second review than non-CALD participants.
- Participants with higher Australian Disability Enterprise payments were more likely to improve from baseline to second and third reviews and from first review to second review. They were also less likely to deteriorate from baseline to first, second and third reviews and from first review to second review.
- Participants with a review during the COVID period were less likely to improve from baseline to first and second reviews and from first review to second review than those with a review before the COVID period. They were also less likely to deteriorate from baseline to first review.
- Female participants were more likely to deteriorate between baseline and first or second review, and between first and second review.

### I get opportunities to learn new things

The percentage of participants reporting that they get opportunities to learn new things has increased significantly from baseline to all reviews, with net increases of 2.7%, 4.2% and 5.0% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 8.15 below.

1		f Baseline s in cohort¹		ements: o Yes		rations: to No	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	53,200	35,852	5,213	9.8%	2,771	7.7%	+2.7%
Baseline to Review 2	20,863	15,737	3,617	17.3%	2,088	13.3%	+4.2%
Baseline to Review 3	6,432	5,728	1,498	23.3%	884	15.4%	+5.0%

### Table 8.15 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 8.16 below.

## Table 8.16 Key drivers of likelihood of transitions in *"% who get opportunities to learn new things"* response

Reference Category	Variable		1	I-step tra	ansition	2-step transitions		3-step transitions			
		Baseline to First Review		First Review to Second Review		Second Review to Third Review		Baseline to Second Review		Baseline to Third Review	
		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		Imp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
NSW	Participant lives in VIC		₽		₽				Ļ	1	₽
NSW	Participant lives in QLD	1		1	₽		ŧ	1		1	-
NSW	Participant lives in SA	1	₽					1			
NSW	Participant lives in ACT, NT, TAS, WA	1	₽		₽		Ļ		₽		₽
Down Syndrome/ Intellectual disability	Disability is autism		1							ŧ	1
Down Syndrome/ Intellectual disability	Disability is sensory impairment	ŧ						ŧ		ŧ	1
Down Syndrome/	Disability is cerebral palsy or another	₽	1	₽	1			₽	1	₽	

Reference Category	Variable			l step tr	2 step transitions		3 step transitions				
		Baseline to First Review Relationship with likelihood of		to Se	to Second F		Second Review to Third Review		Baseline to Second Review		ine to Review
				Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		Imp.	Det.	Imp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.
Intellectual disability	neurological disorder										
Down Syndrome/ Intellectual disability	Disability is a psychosocial disability	ŧ	1					ŧ			1
Down Syndrome/ Intellectual disability	Disability is spinal cord injury or other physical	ŧ		ŧ	ŧ			ŧ		₽	
Down Syndrome/ Intellectual disability	Disability is "Other"	ŧ	1	ŧ				ŧ	1	ŧ	1
N/A	Participant is older	↓	1	₽		₽		₽		₽	
Male	Participant is female	1									
Non-CALD	Participant is CALD	₽						₽	1	₽	
Non- indigenous	Participant is Indigenous	₽						₽		₽	
N/A	Lower level of function	↓		₽				₽	1	₽	1
N/A	Higher annualised plan budget					₽				₽	
Not in SIL	Participant is in supported independent living (SIL)		ŧ		ŧ	1	ŧ		ŧ		
N/A	Higher Australian Disability Enterprise payments	1	ŧ	1	ŧ				ŧ		
N/A	Higher other employment supports			1							

Reference Category	Variable		1	I-step tra		2-step transitions		3-step transitions			
		Baseline to First Review		to Se	First Review to Second Review		Second Review to Third Review		Baseline to Second Review		Baseline to Third Review
		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of	
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
N/A	Higher plan utilisation budget	1			Ļ	1	Ļ		Ļ	1	₽
N/A	Higher utilisation of capacity building supports	1							₽	1	
N/A	Higher utilisation of core supports		₽	1							
N/A	Higher utilisation of capital supports									₽	
0-15% capacity building supports	15%-30% of supports are capacity building supports		1						1		
0-15% capacity building supports	30%-60% of supports are capacity building supports		1						1		1
0-15% capacity building supports	Between 60% and 100% of supports are capacity building supports		ŧ					1			
0-15% capacity building supports	More than 5% of supports are capital supports	₽						₽			
Agency- managed	Plan is fully self- managed	1	₽	1	ŧ		₽	1	₽	1	-
Agency- managed	Plan is partly self- managed		₽		₽				₽	1	-
Agency- managed	Plan is managed by a plan manager		↓		↓						
Major cities	Participant lives outside a major city	1		1				1			
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		1		1		1		

Reference Category	Variable		1	I-step tra	2-step transitions		3-step transitions				
		Baseline to First Review Relationship with likelihood of		First Review to Second Review Relationship with likelihood of		Second Review to Third Review Relationship with likelihood of		Baseline to Second Review Relationship with likelihood of		Baseline to Third Review Relationship with likelihood of	
	Review during	lmp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
Pre-COVID	COVID period	➡		➡	•	➡			➡	•	
N/A	General time trend	₽		₽				₽			
Entry due to disability	Participant entered the scheme through Early Intervention										1
Received State/ Territory supports	Participant received services from Commonwealth systems before entering the NDIS				1				1		
Medium level of NDIA support	Lower level of NDIA support		ŧ			1					
Medium level of NDIA support	Higher level of NDIA support	ŧ	ŧ				ŧ	ŧ			
N/A	Participant lives in an area with a higher average unemployment rate	ŧ	1	ŧ			1	ŧ		ŧ	1

Key findings from Table 8.16 include:

- State/Territory has a significant impact whether participants get to learn new things. For example, participants living in ACT, NT, TAS or WA were less likely to deteriorate across all transitions and more likely to improve from baseline to first review than those living in New South Wales.
- Disability also has a significant impact. Participants with cerebral palsy or another neurological disorder were less likely to improve across all transitions except for between second and third review, and more likely to deteriorate from baseline to first and second reviews and from first review to second review, compared to participants with Down syndrome or an intellectual disability.

- Participants with higher overall plan utilisation tended to be more likely to improve and less likely to deteriorate across most transitions. Participants with higher utilisation of capacity building supports were more likely to improve from baseline to first, second and third reviews.
- Participants with fully self-managed plans were more likely to improve and less likely to deteriorate than participants with Agency-managed plans. Participants with partly self-managed plans also tended to be more likely to improve and less likely to deteriorate across most transitions.
- Participants who received supports for supported independent living were less likely to deteriorate in all one-step transitions and from baseline to second review, compared to those without supported independent living supports. They were also more likely to improve between second and third review.
- Participants who moved to a new LGA were more likely to deteriorate.
- CALD and Indigenous participants were less likely to improve between baseline and first, second or third review. CALD participants were also more likely to deteriorate between baseline and first or second review.

#### I have wanted to do certain things in the last 12 months, but could not

The percentage of participants reporting that they have wanted to do certain things in the last 12 months, but could not has increased significantly from baseline to all reviews, with net increases of 3.4%, 6.0% and 9.0% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 8.17 below.

		of Baseline s in cohort <sup>1</sup>		ements: to No		rations: o Yes	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	29,301	60,400	2,875	4.8%	5,941	20.3%	+3.4%
Baseline to Review 2	12,446	24,491	1,967	8.0%	4,168	33.5%	+6.0%
Baseline to Review 3	4,940	7,454	818	11.0%	1,934	39.2%	+9.0%

#### Table 8.17 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 8.18 below.

### Table 8.18 Key drivers of likelihood of transitions in *"% who have wanted to do certain things in the last 12 months, but could not"* response

			1	I-step transition	s	2-step transitions	3-step transitions
Reference	Variable		line to Review	First Review to Second Review	Second Review to Third Review	Baseline to Second Review	Baseline to Third Review
Category		w	onship ith lood of	Relationship with likelihood of	Relationship with likelihood of	Relationship with likelihood of	Relationship with likelihood of
		lmp.	Det.	Imp. Det.	lmp. Det.	Imp. Det.	lmp. Det.
NSW	Participant lives in VIC	₽		ŧ	ŧ	₽	ŧ
NSW	Participant lives in QLD			1		1	1
NSW	Participant lives in SA		₽			1	
NSW	Participant lives in ACT, NT, TAS, WA		₽		ł		
Down Syndrome/ Intellectual disability	Disability is autism						ŧ
Down Syndrome/ Intellectual disability	Disability is cerebral palsy or another neurological disorder	₽	1			1	
Down Syndrome/ Intellectual disability	Disability is a psychosocial disability	₽	1	ŧ		1 1	
Down Syndrome/ Intellectual disability	Disability is a sensory disability	•		ŧ		ŧ	•
Down Syndrome/ Intellectual disability	Disability is spinal cord injury or other physical	•		ŧ		ŧ	•
Down Syndrome/ Intellectual disability	Disability is "Other"	₽	1	1		1 1	
N/A	Participant is older			ŧ		1 +	ŧ

			1	I step transition	S	2 step transitions	3 step transitions
Reference	Variable		line to Review	First Review to Second Review	Second Review to Third Review	Baseline to Second Review	Baseline to Third Review
Category		w	onship ith ood of	Relationship with likelihood of	Relationship with likelihood of	Relationship with likelihood of	Relationship with likelihood of
		lmp.	Det.	Imp. Det.	Imp. Det.	Imp. Det.	Imp. Det.
Male	Participant is female			1		1	
Non- indigenous	Participant is Indigenous	ŧ					
Non- indigenous	Participant Indigenous status is not stated		₽				
N/A	Higher annualised plan budget	₽	1			ŧ	ŧ
Not in SIL	Participant is in supported independent living (SIL)		ŧ	ŧ	ŧ	ŧ	ŧ
2016/17	Participant entered the Scheme in 2017/18		ŧ			+ +	
2016/17	Participant entered the Scheme in 2018/19		ŧ				
N/A	Higher Australian Disability Enterprise payments	1	ŧ	ŧ		1 1	ŧ
N/A	Higher other employment support payments	₽					
N/A	Higher plan utilisation budget					ŧ	1
N/A	Higher utilisation of capacity building supports	₽	1	1	₽	1 1	+ +
N/A	Higher utilisation of core supports					1	ŧ
0-15% capacity	15%-30% of supports are	₽				ŧ	1

			1	I-step tr	ansition	s			tep itions		tep itions
Reference	Variable	Basel First R		to Se	Review econd view	Revi	ond ew to Review	Sec	line to cond view		line to Review
Category		Relatio wi likeliho	th	w	onship ith lood of	wi	onship ith ood of	w	onship ith ood of	wi	onship ith ood of
		lmp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.	Imp.	Det.
building supports	capacity building supports										
0-15% capacity building supports	30%-60% of supports are capacity building supports		1								
0-15% capacity building supports	Between 60% and 100% of supports are capacity building supports		ŧ			1					ŧ
0-15% capacity building supports	More than 5% of supports are capital supports	ŧ						₽			
Agency- managed	Plan is fully self- managed	1		↓							
Agency- managed	Plan is managed by a plan manager	₽		↓				₽			
Major cities	Participant lives outside a major city	1						1	1		
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		1			₽	1	ŧ	1
N/A	Participant lives in an area with a higher average unemployment rate			ŧ							
Pre-COVID	Review during COVID period		Ļ	↓				₽	↓		
N/A	General time trend	₽			₽						
N/A	Change in time trend post-COVID										

			1	l-step tra	ansition	S			2-step transitions		tep itions
Reference	Variable	Baseline to First Review		First Review to Second Review		Second Review to Third Review		Baseline to Second Review		Basel Third F	ine to Review
Category	Category		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		Relationship with likelihood of		onship th ood of
		Imp.	Det.	Imp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
Entry due to disability	Participant entered the scheme through Early Intervention	ŧ									
Received State/ Territory supports	Participant received services from Commonwealth systems before entering the NDIS			1							
Medium level of NDIA support	Lower level of NDIA support		Ļ						ŧ		ŧ
Medium level of NDIA support	Higher level of NDIA support	ŧ	Ļ	ŧ			₽	₽	₽	ŧ	

Key findings from Table 8.18 include:

- State/Territory has a significant impact whether participants have wanted to do certain things in the last 12 months, but could not. For example, participants living in Victoria were less likely to improve across all transitions than participants living in New South Wales.
- Disability also has a significant impact. Participants with a psychosocial disability were less likely to improve and more likely to deteriorate between baseline and first or second review, and less likely to improve between first and second review than participants with Down syndrome or an intellectual disability.
- Indigenous participants were less likely to improve and more likely to deteriorate than non-Indigenous participants from baseline to first review.
- Higher utilisation of capacity building supports resulted in participants being less likely to improve and more likely to deteriorate from baseline to first, second and third reviews. They were also more likely to deteriorate from first review to second review and less likely to improve from second review to third review.
- Participants who received supported independent living supports were less likely to deteriorate across all transitions than participants who did not receive these supports.
- Female participants were more likely to deteriorate from baseline to second review and from first review to second review than male participants.
- Participants who relocated to a new LGA tended to be more likely to deteriorate, and were less likely to improve between baseline and second and third review.

#### I know people in my community

The percentage of participants reporting that they know people in their community has increased significantly from baseline to all reviews, with net increases of 3.2%, 5.1% and 8.0% from baseline to the first, second and third review, respectively. This was a result of improvements offset by deteriorations as set out in Table 8.19 below.

l constitución el		f Baseline s in cohort <sup>1</sup>	_	ements: o Yes	Deterio Yes t	N-4	
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Baseline to Review 1	36,301	53,055	5,147	14.2%	2,273	4.3%	+3.2%
Baseline to Review 2	14,044	22,764	3,519	25.1%	1,656	7.3%	+5.1%
Baseline to Review 3	5,056	7,341	1,707	33.8%	713	9.7%	+8.0%

 Table 8.19 Breakdown of net movement in longitudinal responses

<sup>1</sup>The cohort is selected as all those with non-missing responses at the relevant surveys.

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out in Table 8.20 below.

Table 8.20 Key drivers of likelihood of transitions in "% who know people in their
community" response

		1-step transitions							2-step transitions		tep tions
Reference	Variable	Baseline to First Review		First R to Se Rev			ond ew to Review	Baseline to Second Review		Basel Third F	
Category		wi	onship th ood of	Relatio wi likeliho	_	Relatio wi likelih	_	Relatio wi likeliho	th	Relatio wi likeliho	th .
		Imp.	Det.	Imp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.
NSW	Participant lives in VIC	₽		₽			₽	₽		₽	
NSW	Participant lives in QLD	1		1			Ļ	1		1	
NSW	Participant lives in SA							1			1
NSW	Participant lives in ACT, NT, TAS, WA	1		ŧ			ŧ				
Down Syndrome/ Intellectual disability	Disability is autism	ŧ	1						1		

			1	-step tra	ansition	s			tep itions	3-s trans	tep itions
Reference	Variable		ine to Review	First R to Se Rev		Sec Revie Third F	ew to	Sec	line to ond view	Basel Third F	ine to Review
Category		w	onship ith ood of		onship th ood of		onship th ood of	w	onship ith ood of	wi	onship th ood of
		Imp.	Det.	lmp.	Det.	lmp.	Det.	Imp.	Det.	lmp.	Det.
Down Syndrome/ Intellectual disability	Disability is cerebral palsy or another neurological disorder		ŧ						ŧ		ŧ
Down Syndrome/ Intellectual disability	Disability is a psychosocial disability	₽	1		1			₽	1		1
Down Syndrome/ Intellectual disability	Disability is spinal cord injury or other physical	1	₽		₽		₽	1	ŧ		ŧ
Down Syndrome/ Intellectual disability	Disability is "Other"		₽		₽		₽		ŧ		ŧ
N/A	Participant is older				₽						
Non-CALD	Participant is CALD				1	1					
Non- indigenous	Participant is Indigenous	1						1			
Non- indigenous	Participant Indigenous status is not stated	ŧ						ŧ			
2016/17	Participant entered the Scheme in 2017/18	ŧ						ŧ	ŧ		
2016/17	Participant entered the Scheme in 2018/19	ŧ									
N/A	Lower level of function	₽		₽				₽	1	₽	

			1	step tra	ansition	S			tep itions	3 s trans	tep itions
Reference	Variable		ine to Review	First R to Se Rev	cond	Revi	ond ew to Review	Sec	line to cond view	Basel Third F	ine to Review
Category		w	onship ith ood of	Relatio wi likelih	th	wi	onship ith ood of	w	onship ith ood of	wi	onship ith ood of
		lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.	lmp.	Det.
N/A	Higher annualised plan budget									₽	
Not in SIL	Participant is in supported independent living (SIL)	₽						₽			
N/A	Higher Australian Disability Enterprise payments	1	ŧ				ŧ		ŧ		ŧ
N/A	Higher other employment support payments			1				1			
N/A	Higher utilisation of capacity building supports			1				1		1	
N/A	Higher utilisation of core supports	1									
N/A	Higher utilisation of capital supports						1				
0-15% capacity building supports	30%-60% of supports are capacity building supports									ŧ	
0-15% capacity building supports	More than 5% of supports are capital supports		₽						Ļ		₽
Agency- managed	Plan is managed by a plan manager	1	₽				₽		₽		
Agency- managed	Plan is fully self- managed		Ļ		Ļ		↓		Ļ		

			1	-step tra	ansition	s		2-step transitions		3-step transitions	
Reference	Variable		line to Review	to Se	Review cond view	Revi	ond ew to Review	Sec	ine to ond ⁄iew	Basel Third F	
Category		w	onship ith ood of		onship th ood of	w	onship ith ood of		onship th ood of	Relatio wi likeliho	th
		Imp.	Det.	Imp.	Det.	Imp.	Det.	lmp.	Det.	lmp.	Det.
Agency- managed	Plan is partly self-managed	1	₽		₽	1			₽	1	
Major cities	Participant lives outside a major city	1	₽	1	₽	1		1	₽	1	₽
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		1		1	₽	1		1
N/A	Participant lives in an area with a higher average unemployment rate	ŧ	1					ŧ			1
Pre-COVID	Review during COVID period					₽		₽			
N/A	General time trend	₽	↓	↓	↓	1					
Received State/Territory supports	Participant received services from Commonwealth systems before entering the NDIS	ŧ									
Received State/ Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs		1						1		
Medium level of NDIA support	Lower level of NDIA support		₽	1				1	₽		
Medium level of NDIA support	Higher level of NDIA support	₽	↓	₽	↓	₽	↓	₽	Ļ	₽	

Key findings from Table 8.20 include:

- Participants who live outside a major city were more likely to improve across all transitions and less likely to deteriorate from baseline to first, second and third reviews and from first review to second review, compared to those living in a major city.
- Participants living in Queensland were more likely to improve from baseline to first, second and third reviews and from first review to second review than those living in New South Wales.
- Participants with a psychosocial disability were less likely to improve and more likely to deteriorate between baseline and first or second review than participants with Down syndrome or an Intellectual disability. They were also more likely to deteriorate between baseline and third review, and between first and second review.
- Participants were less likely to improve between baseline and second review, and between second and third review, when the later review took place during the COVID period.
- Participants who relocated to a new LGA were more likely to deteriorate across all transitions.
- SIL participants were less likely to improve between baseline and first or second review.

A summary of key findings from this section is contained in Box 8.6.

### Box 8.6: Summary of findings: longitudinal indicators by participant characteristics

- The impact of disability type on outcomes varies by indicator. In longitudinal analyses, participants with a spinal cord injury or other physical injury were more likely to improve and less likely to deteriorate with regard to being able to advocate for themselves, however they were less likely to improve and more likely to deteriorate with regard to being in the hospital in the last 12 months.
- Longitudinal outcomes also vary with participant level of function. Participants with a higher level of function tend to exhibit higher rates of improvement than those with a lower level of function.
- Participants not living in major cities were more likely to improve with regard to being able to advocate for themselves.
- Indigenous participants were more likely to improve in knowing people in their community but less likely to improve and more likely to deteriorate in saying there was something they wanted to do but were unable to in the last 12 months.
- CALD participants were less likely to improve and more likely to deteriorate with respect to being able to advocate for themselves. They were also less likely to improve getting opportunities to learn new things.
- Older participants were more likely to change their response from "no" to "yes" with respect to wanting more choice and control in their lives.

### Box 8.6: Summary of findings: longitudinal indicators by participant characteristics (continued)

- •
- Participants in supported independent living (SIL) were generally more likely to improve and less likely to deteriorate compared with participants not in SIL. In particular, outcomes were more positive in all models for having been to the hospital in the last 12 months, and SIL participants were more likely to maintain having a regular doctor in all transitions from baseline. However, they were less likely to improve with respect to knowing people in their community between baseline and either first or second review.
- Relocating to a new LGA was significant in a large number of models, with the direction of the effect being mostly negative but sometimes mixed. In particular, the effect was negative for having been to hospital in the last 12 months, getting the opportunity to learn new things, saying there were certain things they wanted to do in the last 12 months but could not, and knowing people in their community.
- COVID-19 variables were significant in at least one model for all indicators, however the direction of the effect was mixed, being favourable in some models but unfavourable in others. For example:
- With respect to having a regular doctor, participants were less likely to deteriorate between baseline and second or third review, when the review occurred during the COVID period. There was also a favourable change in time trend post-COVID, with deterioration becoming less likely over time, for the transition from baseline to third review.
- However, participants were less likely to improve with respect to knowing people in their community between baseline and second review, and between second and third review, when the later review took place during the COVID period.
- Participants who gave their second response during the COVID period were less likely to change their response from "Yes" (wanting to see their family more often) to "No" (not wanting to see them) between baseline and first or second review, as well as between first and second review.

# 9. Participants aged 25 and over: Has the NDIS helped?

#### 9.1 Results across all participants

For participants who have been in the Scheme for approximately one, two or three years as at 30 June 2020, Figure 9.1 shows the percentage of participants aged 25 who think that the NDIS has helped with outcomes related to each of the eight domains.

### Figure 9.1 Percentage who think that the NDIS has helped with outcomes related to each domain

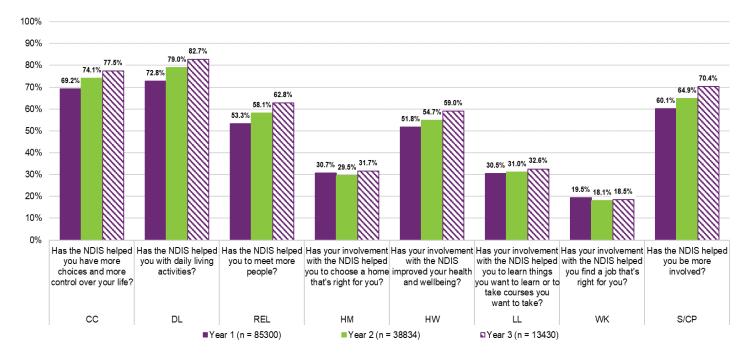


Figure 9.1 shows that opinions on whether the NDIS has helped vary considerably by domain for participants aged 25 and over. Compared to the 15 to 24 cohort, results tend to be more positive, but generally reflect a similar pattern by domain. However the young adult cohort is more likely to think that the NDIS has helped with education.

After one year in the Scheme, the percentage who think the NDIS has helped is highest for daily activities (72.8%), followed by choice and control (69.2%), participation (60.1%), and relationships (53.3%). These are all domains where the NDIS would be expected to have an impact. Percentages are still above 50% for health and wellbeing at the end of year one (51.8%), but are lower for lifelong learning (30.5%), home (30.7%) and work (19.5%). For health and wellbeing, lifelong learning and home, the mainstream service system will have a bigger role to play than the NDIS.

Continual improvements in the percentage of positive responses are observed for each additional year spent in the Scheme, for all domains except for work and home. For the two domains of work and home, slight decreases between the first and second year were followed by slight increases between the second and third years. For home, the percentage of participants who think the NDIS has helped at year three is 1.0% above the percentage at year one, whereas for work it is 1.0% below.

#### 9.2 **Results by participant characteristics**

#### 9.2.1 Year 1 'Has the NDIS Helped?' indicators – participant characteristics

Year 1 (first review) indicators have been analysed by participant characteristics using oneway analyses and multiple regression modelling.

Table 9.1 summarises the results of the regression modelling, showing the relationship of different participant characteristics with the likelihood of the participant saying that the NDIS has helped after one year in the Scheme. The arrow symbols have the same interpretation as for Section 2, defined in Table 2.6.

### Table 9.1 Relationship of participant characteristics with the likelihood of a positive response<sup>41</sup>

				R	elation	ship wi	th:		
Reference Category	Characteristic		Has	NDIS he	elped in	nprove	partici	pant's	
		сс	DL	RL	НМ	нพ	LL	WК	SCP
Entered the Scheme due to disability	Participant entered the Scheme for early intervention	1	1			1			
N/A	Higher annualised plan budget	↓	1	1	1	1	1	1	
Non-Indigenous	Participant is Indigenous	↓	₽	₽	↓	↓	↓	₽	₽
Non-CALD	Participant is CALD	↓	↓		↓			↓	
N/A	General time trend	1	1	1		1	₽	₽	
Intellectual disability	Disability is acquired brain injury			↓	↓	1	↓	₽	↓
Intellectual disability	Disability is autism			↓			↓	₽	↓
Intellectual disability	Disability is cerebral palsy			↓	↓		↓	↓	↓
Intellectual disability	Disability is Down syndrome	1		1	1		1	1	1
Intellectual disability	Disability is a hearing impairment	↓	↓	↓	↓	↓	↓	↓	↓
Intellectual disability	Disability is multiple sclerosis	1	1	↓	↓	1	↓	↓	↓
Intellectual disability	Disability is another neurological disabilities		1	₽	₽	1	₽	↓	↓
Intellectual disability	Disability is another physical disability	↓	₽	₽	₽	₽	₽	₽	₽

<sup>&</sup>lt;sup>41</sup> The domains are: CC=Choice and Control, DL=Daily Living, RL=Relationships, HM=Home, HW=Health and Wellbeing, LL=Lifelong Learning, WK=Work, SCP=Social, Community and Civic Participation.

				R	elation	ship wi	th:		
Reference Category	Characteristic		Has	NDIS h	elped ir	nprove	partici	pant's	
		сс	DL	RL	НМ	нพ	LL	wк	SCP
Intellectual disability	Disability is a psychosocial disability	1	1	↓	₽	1	₽	↓	₽
Intellectual disability	Disability is spinal cord injury			↓	₽		₽	₽	↓
Intellectual disability	Disability is stroke		1	↓	↓	1	↓	↓	↓
Intellectual disability	Disability is a visual impairment		1	₽	₽	↓	↓	↓	↓
N/A	Participant is older		1				₽	₽	
2016/17	Participant entered the Scheme in 2017/18						1		1
2016/17	Participant entered the Scheme in 2018/19	1			1	1	1	1	1
Male	Participant is female	1	1			1	1	↓	
Major cities	Participant lives in regional area with population greater than 50,000	ŧ		₽	₽	₽	ŧ	₽	ŧ
Major cities	Participant lives in regional area with population between 15,000 and 50,000	1	1	1	1	1			1
Major cities	Participant lives in regional area with population between 5,000 and 15,000		1	1	1			1	1
Major cities	Participant lives in regional area with population less than 5,000	↓				↓	₽	↓	
Major cities	Participant lives in remote/very remote areas	↓	₽	₽	₽	↓			₽
0-15% capacity building supports	15-30% of supports are capacity building supports			₽	₽			1	₽
0-15% capacity building supports	30-60% of supports are capacity building supports	₽	₽	₽	₽	↓		1	₽
0-15% capacity building supports	60-95% of supports are capacity building supports	₽	₽	₽	₽	₽	₽	1	₽
0-15% capacity building supports	95-100% of supports are capacity building supports	↓	₽	↓	↓	↓	₽		↓
0-15% capacity building supports	5-100% of supports are capital supports		₽	↓			₽	1	₽
Agency-managed	Plan is managed by a plan manager	1	1		₽	1	1		1

				R	elation	ship wit	th:			
Reference Category	Characteristic		Has NDIS helped improve participant's							
		СС	DL	RL	нм	нพ	LL	WK	SCP	
Agency-managed	Plan is fully self-managed	1	1	1		1	1		1	
Agency-managed	Plan is partly self-managed	1	1	1	↓	1	1		1	
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS	1		1	1		1	1		
Received State/Territory supports	Did not previously receive services from Commonwealth or State/Territory programs	1		₽		1		₽		
N/A	Lower level of function		1	1	↓		↓	↓	1	
NSW	Participant lives in ACT	1	1					↓		
NSW	Participant lives in NT				1					
NSW	Participant lives in QLD		1	1	1	1	1		1	
NSW	Participant lives in SA	↓		₽		↓	₽		↓	
NSW	Participant lives in TAS	1	1				₽	↓		
NSW	Participant lives in VIC	↓	₽	₽	↓	↓		↓	↓	
NSW	Participant lives in WA	1	1			1	1			
Medium level of NDIA support	Low level of NDIA support						₽			
Medium level of NDIA support	High level of NDIA support		₽		1	1	1			
N/A	Participant lives in an area with a higher unemployment rate			1	1		1			
N/A	Higher baseline utilisation									

#### Baseline plan utilisation

Participants with higher baseline plan utilisation were more likely to say that the NDIS has helped after one year in the Scheme, across all domains.

#### Access request decision

Participants entering the Scheme for early intervention were more likely to think the NDIS has helped in areas relating to choice and control, daily living, and health and wellbeing. For these three domains, the percentage of participants who entered for early intervention programs typically answered 2-6% better than those entering due to disability.

#### Annualised plan budget

Higher annualised plan budget was generally positively correlated with better outcomes across all areas with the exception of two domains: for choice and control, participants with a higher annualised plan budget were less likely to think the NDIS helped, and for social and community participation the amount of annualised plan budget had no statistically significant impact.

#### Indigenous status

Compared to non-Indigenous participants, Indigenous participants were less likely to think the NDIS has helped for all domains. On a one-way basis, non-Indigenous participants answered 2-6% better than Indigenous participants for the majority of domains. For the home domain, non-Indigenous participants were marginally more likely to think the NDIS helped (31.6% vs 31.2%)

#### **CALD** status

CALD participants are less likely to say that the NDIS has helped for the domains of choice and control, daily living, home, and work. From the one-way analyses, there is a gap of 3-4% gap between CALD and non-CALD participants for these domains.

#### **Disability type**

Participants with Down syndrome, and those with an intellectual disability, tended to have the most positive opinions of whether the NDIS has helped. Participants with Down syndrome were the most likely to say that the NDIS has helped across five domains: relationships, home, lifelong learning, work, and social and community participation.

Participants with a hearing impairment, and those with another physical disability, were significantly less likely to have a positive response across all domains.

#### Participant age

Older participants are more likely to say the NDIS has helped for areas relating to choice and control, daily living, home, and health and wellbeing. However, older participants are less likely to say the NDIS has helped with lifelong learning or work.

#### Entry year

Compared to participants entering the Scheme in 2016-17, participants who entered later tended to be more likely to say the NDIS has helped. Participants who entered in 2017-18 were more likely to answer positively for areas relating to lifelong learning, work, and social and community participation. Participants who entered in 2018-19 were more likely to answer positively for all domains except daily living and relationships.

#### Gender

Female participants were more likely to say the NDIS has helped for the domains choice and control, daily living, health and wellbeing, and lifelong learning. In these areas, the percentage of female participants who answered positively was 1-4% higher than for males. However, female participants were less likely to say the NDIS has helped them find a job that's right for them (17.9% vs 20.9% for males).

#### Remoteness

Compared to participants living in major cities, participants living in regional areas with population greater than 50,000, regional areas with population less than 5,000, and remote/very remote areas tended to be less likely to say the NDIS has helped them. In particular, participants in these areas were all less likely to answer positively for questions relating to choice and control, and health and wellbeing.

However, participants living in regional areas with population between 5,000 and 50,000 were more likely to answer positively than those living in major cities, across most domains.

#### Support categories within plans

Participants whose plans have a higher percentage of capacity building supports were less likely to say the NDIS has helped, except in relation to work. Participants with 95-100% of capacity building supports were less likely to answer positively for every domain except for work. Participants on plans with 5-100% of capital supports also tended to be less positive for areas relating to daily living, relationships, lifelong learning, and social and community participation.

#### Plan management type

Controlling for other factors in the multiple logistic regression modelling, participants with fully or partly self-managed plans, and those using a plan manager were more likely to respond positively across all domains except for home and work.

From the one-way analyses, participants with fully self-managed plans responded the most favourably, followed by those with partly self-managed plans, plan-managed plans and Agency-managed plans.

Whilst plan management type was not a significant factor for the work domain, participants with plans that were plan-managed or partly self-managed were less likely to say the NDIS has helped them choose a home that's right for them. For this domain, 32.8% of participants with Agency-managed plans answered positively, compared to 30.3% of those with a plan-managed plan and 27.5% of those with partly self-managed plans.

#### Scheme entry type

Compared to participants who received services from State/Territory programs before joining the NDIS, those who previously received services from Commonwealth programs were more likely to say the NDIS has helped them in the areas of choice and control, relationships, home, lifelong learning, and work. For the work domain, 32.5% of those previously receiving services from Commonwealth programs thought the NDIS had helped, compared to 18.7% of those previously receiving services from State/Territory programs.

Responses from participants who did not receive services from Commonwealth or State/Territory programs before were mixed. While they were more likely to say the NDIS has helped with choice and control and health and wellbeing, they were less likely to answer positively regarding relationships and work. On a one-way basis, 47.6% of participants who previously did not receive any services thought that the NDIS had helped with relationships compared to 55.8% of those previously receiving State/Territory services.

#### Level of function

The impact of level of function also varied across the eight domains. Participants with lower level of function were more likely to think that the NDIS has helped with daily living, relationships, and social and community participation. However, participants with lower level of function were less likely to say the NDIS has helped for areas relating to home, lifelong learning, and work.

#### State/Territory

Compared to participants living in NSW, those living in Western Australia and Queensland were more likely to say the NDIS has helped across most domains, whereas participants living in Victoria, the Australian Capital Territory and South Australia tended to be less likely to respond positively.

Whilst participants living in the Australian Capital Territory answered more positively for the first four domains, they were less likely to think the NDIS has helped with work. From the one-way analyses, 16.2% of Australian Capital Territory participants answered positively for this domain, compared to 20.5% of New South Wales participants.

#### Level of NDIA support

Compared to participants with medium levels of NDIA support, participants receiving lower levels of support were less likely to say the NDIS had helped with lifelong learning. Participants receiving high/very high levels responded more positively for the domains home, health and wellbeing, lifelong learning, and work. However, they were less likely to say the NDIS had helped with relationships.

#### **Unemployment rate**

Participants living in areas with higher levels of unemployment were more likely to think that the NDIS had helped with relationships, home, and lifelong learning.

### 9.2.2 Longitudinal 'Has the NDIS Helped?' indicators – participant characteristics

Analysis of longitudinal indicators by participant characteristics has been examined in two ways:

- 1. A simple comparison of the percentage reporting that the NDIS had helped after two and three years in the Scheme with the percentage reporting that the NDIS had helped after one year in the Scheme. The difference (percentage after two and three years minus percentage after one year) is compared for different subgroups.
- 2. Multiple regression analyses modelling the probability of improvement / deterioration over the participant's time in the Scheme.

Some key features of the analyses for helped question indicators are summarised below.

#### Has the NDIS helped you have more choices and more control over your life?

The percentage of participants reporting that the NDIS helped them have more choice and control increased 8.7% from 65.6% to 74.3% between the first review and the second review, and 10.4% from 67.3% to 77.7% between the first review to the third review. Of those who responded negatively at first review, 32.0% improved at second review and 41.9% at third review. Table 9.2 sets out the breakdown of the movements of responses.

	Number of Baseline Responses in cohor		Improvements: No to Yes		Deteriorations: Yes to No		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Review 1 to Review 2	10,776	20,503	3,453	32.0%	732	3.6%	+8.7%
Review 1 to Review 3	3,252	6,688	1,362	41.9%	330	4.9%	+10.4%

#### Table 9.2 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

Table 9.3 – Key drivers of likelihood of transitions in *"Has the NDIS helped you have more choices and more control over your life?"* response

Reference		Rev	w to Second view	First Revie Rev	iew	
Category	Variable	Relationship with likelihood of		Relationship with likelihood of		
		Imp.	Det.	Imp.	Det.	
Entry due to disability	Participant entered the Scheme for early intervention	ŧ	+			
Major cities	Participant lives in regional area	1				
Agency-managed	Plan is partly or fully self- managed, or managed by a plan manager.	1	ŧ	1		
NSW	Participant lives in QLD	1		1		
Medium level of NDIA support	High level of NDIA support	1		1		
Not in SIL	Participant is in supported independent living (SIL)		Ļ			
N/A	Higher baseline utilisation	1	Ļ	1	ŧ	
N/A	General time trend		Ļ	₽		
Intellectual disability	Disability is ABI, cerebral palsy, Down syndrome, or multiple sclerosis		ŧ			
Intellectual disability	Disability is not ABI, cerebral palsy, Down syndrome, or multiple sclerosis		1			
N/A	Participant is older		•		ŧ	
Male	Participant is female			1	1	
N/A	Lower level of function	1	Ļ	1		
Less than 15% of supports are capacity building supports	More than 5% of supports are capital supports				ŧ	
N/A	Participant lives in an area with a higher average unemployment rate		•		1	

Reference Category	Variable	Rev Relation	v to Second riew ship with ood of	First Review to Thir Review Relationship with likelihood of	
		Imp.	Det.	lmp.	Det.
N/A	Higher annualised plan budget		ŧ		
N/A	Higher utilisation of capacity building supports		ŧ		
Pre-COVID	Review during COVID period	₽	ŧ		
N/A	Change in time trend post- COVID		ŧ		
2016/17	Participant entered the Scheme in 2017/18		ŧ		
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		

Key findings from Table 9.3 include:

- Compared to those on Agency-managed plans, participants with partly or fully selfmanaged plans, or plan-managed plans were more likely to improve from first review to second review, and first review to third review. In addition, they were less likely to deteriorate from first review to second review.
- Participants with higher baseline plan utilisation were more likely to improve and less likely to deteriorate between first review and second review, and between first review and third review.
- Participants with lower level of function were also more likely to improve between first review and second review, and between first review and third review. They were also less likely to deteriorate from first review to second review.

#### Has the NDIS helped you with daily living activities?

The percentage of participants reporting that the NDIS had helped them with daily living activities increased by 9.5% from 69.6% to 79.1% between first review and second review, and by 11.8% from 70.7% to 82.5% between first review and third review. Of those who responded negatively at first review, 38.7% improved at second review and 50.9% at third review. Table 9.4 sets out the breakdown of the movements of responses.

	Number of Baseline Responses in cohort <sup>1</sup>		Improvements: No to Yes		Deteriorations: Yes to No		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Review 1 to Review 2	9,745	22,285	3,771	38.7%	730	3.3%	+9.5%
Review 1 to Review 3	2,972	7,186	1,513	50.9%	317	4.4%	+11.8%

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

Table 9.5 – Key drivers of likelihood of transitions in "Has the NDIS helped you with
daily living activities?" response

Reference Category	Variable	First Review to Second Review Relationship with likelihood of		First Revie Rev Relations likelihe	ship with
		lmp.	Det.	lmp.	Det.
Entry due to disability	Participant entered the Scheme for early intervention				1
Not in SIL	Participant is in supported independent living (SIL)				ŧ
Major cities	Participant lives in regional area	1	Ļ		
Agency-managed	Plan is managed by a plan manager	1			
Agency-managed	Plan is partly self-managed	1	<b>I</b>	1	₽
NSW	Participant lives in ACT, NT, TAS, WA		ŧ	1	ŧ
NSW	Participant lives in QLD	1		1	ŧ
NSW	Participant lives in SA		•		
NSW	Participant lives in VIC				ŧ
Medium level of NDIA support	High level of NDIA support			1	ŧ
Medium level of NDIA support	Very high level of NDIA support	ŧ			

Reference Category	Variable	Rev Relation likelih	w to Second view ship with lood of	First Review to Third Review Relationship with likelihood of		
		Imp.	Det.	lmp.	Det.	
N/A	Higher baseline utilisation	1	-			
N/A	General time trend		<b>I</b>			
Intellectual disability	Disability is a hearing impairment		1			
Intellectual disability	Disability is multiple sclerosis		ŧ			
Intellectual disability	Disability is "Other"		1			
N/A	Participant is older		Ļ		₽	
Male	Participant is female	1		1		
N/A	Lower level of function	1		1		
Less than 15% of supports are capacity building supports	More than 30% of supports are capacity building supports	₽	1	₽		
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs			₽		
N/A	Higher annualised plan budget	1		1		
N/A	Higher utilisation of capacity building supports	1	₽			
Pre-COVID	Review during COVID period	ŧ				
N/A	Higher utilisation of core supports	1		1	₽	
Did not relocate	Participant relocated to a new Local Government Area (LGA)				1	
N/A	Higher utilisation of capital supports			1		

Key findings from Table 9.5 include:

- Participants with partly self-managed plans were more likely to improve, and less likely to deteriorate after two and three years in the Scheme.
- Generally, States and Territories other than New South Wales were more likely to improve and less likely to deteriorate. In particular, participants living in the Australian Capital Territory, Northern Territory, Tasmania, and Western Australia group were less likely to deteriorate between first review and second or third review. They were also more likely to improve between first review and third review.
- Participants with higher baseline plan utilisation were more likely to improve and less likely to deteriorate between first and second review. They were also more likely to improve between first review and third review.
- Participants with higher utilisation of capacity building supports were more likely to improve and less likely to deteriorate between first and second review.
- Participants living in regional areas were more likely to improve and less likely to deteriorate between first and second reviews.
- Females, and participants with lower level of function, were more likely to improve, and older participants were less likely to deteriorate.

#### Has the NDIS helped you to meet more people?

The percentage of participants reporting that the NDIS helped them meet more people increased 7.0% from 50.6% to 57.6% between first review and second review, and 9.4% from 52.4% to 61.8% between first and third review. Of those who responded negatively at first review, 20.6% responded positively at the second review and 29.9% responded positively at the third review. Table 9.6 sets out the breakdown of the movements of responses.

		f Baseline s in cohort <sup>1</sup>	_	ements: o Yes	Deteriorations: Yes to No		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Review 1 to Review 2	15,667	16,076	12,439	20.6%	1,016	6.3%	+7.0%
Review 1 to Review 3	4,802	5,282	1,438	29.9%	487	9.2%	+9.4%

#### Table 9.6 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

### Table 9.7 – Key drivers of likelihood of transitions in "*Has the NDIS helped you to meet more people?*" response

Reference Category	Variable	Rev	v to Second riew ship with ood of	First Review to Third Review Relationship with likelihood of	
		Imp.	Det.	lmp.	Det.
Major cities	Participant lives in regional area		ŧ		₽

Reference Category	Variable	Rev Relation	w to Second view ship with lood of	First Revie Rev Relations likelihe	iew ship with
		Imp.	Det.	Imp.	Det.
Agency-managed	Plan is managed by a plan- manager	1			
Not in SIL	Participant is in supported independent living (SIL)		<b>I</b>		₽
NSW	Participant lives in ACT, NT, TAS, WA	ŧ			
NSW	Participant lives in SA	ŧ			
N/A	Higher baseline utilisation	1		1	
N/A	General time trend		•	₽	
Intellectual disability	Disability is acquired brain injury or other	Ļ	1		
Intellectual disability	Disability is Down syndrome	1	Ļ		
Intellectual disability	Disability is multiple sclerosis or a visual impairment	ŧ		₽	
Intellectual disability	Disability is a hearing impairment, psychosocial disability, spinal cord injry, stroke, or another neurological/physical disability	ŧ	1	ŧ	
N/A	Lower level of function	1	Ļ	1	
Less than 15% of supports are capacity building supports	15% to 60% of supports are capacity building supports	ŧ		ŧ	
Less than 15% of supports are capacity building supports	More than 60% of supports are capacity building supports	ŧ	1		
Less than 15% of supports are capacity building supports	More than 5% of supports are capital supports	ŧ	1		

Reference Category	Variable	Rev Relation	w to Second view ship with lood of	First Review to Third Review Relationship with likelihood of	
		Imp.	Det.	Imp.	Det.
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS	1			
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs	₽		₽	
N/A	Higher annualised plan budget	1		1	
N/A	Higher utilisation of capacity building supports		ŧ	1	
Pre-COVID	Review during COVID period	₽	•		
N/A	Higher utilisation of core supports	1		1	₽
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		1

Key findings from Table 9.7 include:

- Participants with Down syndrome, followed by those with an intellectual disability, tended to be more likely to improve and less likely to deteriorate then participants with other disabilities.
- Participants with lower level of function were more likely to improve between first review and second review, and between first review and third review. They were also less likely to deteriorate from first review to second review.
- Participants with higher utilisation of core supports were more likely to improve and less likely to deteriorate between first and third review. Participants with higher utilisation of capacity building supports were also more likely to improve their opinions by their third review.
- Participants who relocated to a different LGA were more likely to deteriorate.
- Participants living in regional areas were less likely to deteriorate.
- SIL participants were less likely to deteriorate.

### Has your involvement with the NDIS helped you to choose a home that's right for you?

The percentage of participants reporting that the NDIS has helped them choose a home that's right for them increased marginally by 0.3% from 27.7% to 27.9% between first review and second review, and by 0.4% from 29.0% to 29.4% between first and third review. Of those who responded negatively at the first review, 7.0% responded positively at the second

review and 10.7% at the third review. These improvements were offset by deteriorations after two and three years in the Scheme. Table 9.8 sets out the breakdown of the movements of responses.

	Number of Baseline Responses in cohort <sup>1</sup>		Improvements: No to Yes		Deteriorations: Yes to No		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Review 1 to Review 2	22,619	8,651	1,579	7.0%	1,499	17.3%	+0.3%
Review 1 to Review 3	7,073	2,889	760	10.7%	717	24.8%	+0.4%

Table 9.8 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

### Table 9.9 – Key drivers of likelihood of transitions in "Has your involvement with the NDIS helped you to choose a home that's right for you?" response

Reference Category	Variable	Re Relatior	w to Second view nship with nood of	First Review to Third Review Relationship with likelihood of	
		Imp.	Det.	lmp.	Det.
Major cities	Participant lives in regional area				+
NSW	Participant lives in ACT, NT, TAS, WA		•		ŧ
NSW	Participant lives in QLD		1		
NSW	Participant lives in VIC	₽		₽	
Not in SIL	Participant is in supported independent living (SIL)	1	₽	1	Ļ
Medium level of NDIA support	Low level of NDIA support		ŧ		
Medium level of NDIA support	High level of NDIA support	1	•	1	ŧ
Medium level of NDIA support	Very high level of NDIA support	1	•		ŧ
N/A	Higher baseline utilisation	1			
Intellectual disability	Disability is acquired brain injury			₽	

Reference	Veriekle	Rev	w to Second view	First Revie Rev	iew
Category	Variable		ship with lood of	Relationship with likelihood of	
		Imp.	Det.	lmp.	Det.
Intellectual disability	Disability is a psychosocial disability, spinal cord injury or another physical disability	ŧ			
Intellectual disability	Disability is stroke				
N/A	Participant is older	1	•		ŧ
N/A	Lower level of function	1			
Less than 15% of supports are capacity building supports	More than 60% of supports are capacity building supports	ŧ			
N/A	Participant lives in an area with a higher average unemployment rate		•		
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS	1		₽	
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs			ŧ	
N/A	Higher annualised plan budget	1		1	
N/A	Higher utilisation of capacity building supports		ŧ		
Pre-COVID	Review during COVID period		ŧ		
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1		1	

Key findings from Table 9.9 include:

- Participants living in the Australian Capital Territory, Northern Territory, Tasmania, and Western Australia were less likely to deteriorate at both reviews. Participants living in Victoria were less likely to improve.
- SIL participants more likely to improve and less likely to deteriorate between first review and second or third reviews.

- Participants with a high level of NDIA support were more likely to improve and less likely to deteriorate at second or third review.
- Older participants were more likely to improve at second or third review. They were also less likely to deteriorate between first review and second review.
- Participants who relocated to a new LGA were more likely to improve for the home domain at both reviews, as were participants with a higher annualised plan budget.

#### Has your involvement with the NDIS improved your health and wellbeing?

The percentage of participants reporting that the NDIS improved their health and wellbeing increased by 6.7% from 47.9% to 54.6% between first review and second review, and by 8.7% from 50.1% to 58.8% between first and third review. Of those who responded negatively at the first review, 19.8% responded positively at the second review and 28.1% at the third review. Table 9.10 sets out the breakdown of the movements of responses.

 Table 9.10 – Breakdown of net movement in longitudinal responses

	Number of Baseline Responses in cohort <sup>1</sup>		Improvements: No to Yes		Deteriorations: Yes to No		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Review 1 to Review 2	16,396	15,059	3,239	19.8%	1,130	7.5%	+6.7%
Review 1 to Review 3	4,011	5,021	1,410	28.1%	533	10.6%	+8.7%

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

### Table 9.11 – Key drivers of likelihood of transitions in "Has your involvement with the NDIS improved your health and wellbeing?" response

Reference Category	Variable	Re <sup>r</sup> Relation	w to Second view ship with nood of	First Review to Third Review Relationship with likelihood of	
		Imp.	Det.	lmp.	Det.
Major cities	Participant lives in regional area	1	•		•
Agency-managed	Plan is managed by a plan manager	1			
Agency-managed	Plan is fully self-managed	1	₽		
Agency-managed	Plan is partly self-managed	1	₽	1	
NSW	Participant lives in ACT, NT, TAS, WA		ŧ		ŧ
NSW	Participant lives in SA		ŧ		

Reference Category	Variable	Rev Relation	w to Second view ship with lood of	First Revie Rev Relations likelihe	iew ship with
		lmp.	Det.	lmp.	Det.
NSW	Participant lives in VIC			₽	
Not in SIL	Participant is in supported independent living (SIL)	1	Ļ		↓
Medium level of NDIA support	Low level of NDIA support		₽		
Medium level of NDIA support	High level of NDIA support		ŧ		↓
N/A	Higher baseline utilisation	1			↓
N/A	General time trend	₽		₽	₽
Intellectual disability	Disability is autism			₽	
Intellectual disability	Disability is cerebral palsy		Ļ		
Intellectual disability	Disability is a hearing impairment	Ļ		₽	
Intellectual disability	Disability is multiple sclerosis			₽	
Intellectual disability	Disability is another neurological disability	1	Ļ	1	
Intellectual disability	Disability is a psychosocial disability	1		1	
N/A	Participant is older		•		ŧ
Male	Participant is female		1		
Less than 15% of supports are capacity building supports	More than 15% of supports are capacity building supports	ŧ			
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs				ŧ
N/A	Higher utilisation of capacity building supports	1	₽	1	

Reference Category	Variable	Rev	First Review to Second Review Relationship with likelihood of Imp. Det.		w to Third iew ship with pod of Det.
Pre-COVID	Review during COVID period		ŧ		
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		1

Key findings from Table 9.11 include:

- Participants living in a regional area were more likely to improve between first and second or third review, compared to participants living in a major city. In addition, they were less likely to deteriorate between first review and second review.
- SIL participants more likely to improve and less likely to deteriorate between first review and second or third reviews.
- Participants with partly self-managed plans were more likely to improve at both the second and third reviews. They were also less likely to deteriorate between the first and second review.
- Participants with higher baseline utilisation were more likely to improve and less likely to deteriorate at third review. They were also more likely to improve between first review and second review.
- Compared to participants with an intellectual disability, participants with another neurological disability, or a psychosocial disability were more likely to improve at both the second and third review. On the other hand, participants with a hearing impairment were less likely to improve.
- Participants with a higher utilisation of capacity building supports were more likely to improve at both the second and third review. They were also less likely to deteriorate between first review and second review.
- Participants living in the Australian Capital Territory, Northern Territory, Tasmania, and Western Australia were less likely to deteriorate at both reviews. Participants in Victoria were less likely to improve.
- Participants who relocated to a new LGA were more likely to deteriorate at both reviews.

### Has your involvement with the NDIS helped you to learn things you want to learn or to take courses you want to take?

The percentage of participants reporting that the NDIS has helped them to learn things they want to learn or to take courses they want to take has only changed slightly between first review and subsequent reviews. The proportion of positive responses has increased by 0.8% between both first review and second review, and first review and third review. Table 9.12 sets out the breakdown of the movements of responses.

	Number of BaselineImprovements:Responses in cohort1No to Yes		Deteriorations: Yes to No				
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Review 1 to Review 2	22,026	9,246	1,608	7.3%	1,354	14.6%	+0.8%
Review 1 to Review 3	6,846	3,067	766	11.2%	690	22.5%	+0.8%

#### Table 9.12 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

## Table 9.13 – Key drivers of likelihood of transitions in "Has your involvement with the NDIS helped you to learn things you want to learn or to take courses you want to take?" response

Reference Category	Variable	Rev Relation	w to Second /iew ship with ood of	First Review to Third Review Relationship with likelihood of	
		lmp.	Det.	Imp.	Det.
Major cities	Participant lives in regional area				₽
Agency-managed	Plan is managed by a plan manager	1	•		
Agency-managed	Plan is fully or partly self- managed		•		
NSW	Participant lives in ACT, NT, TAS, WA	Ļ		₽	ŧ
NSW	Participant lives in QLD	1		1	
NSW	Participant lives in VIC	1		1	ŧ
Not in SIL	Participant is in supported independent living (SIL)	1	Ļ	1	
Medium level of NDIA support	High level of NDIA support				ŧ
N/A	Higher baseline utilisation	1			ŧ
N/A	General time trend	Ļ		ŧ	
Intellectual disability	Disability is ABI, cerebral palsy, multiple scleroris or, spinal cord injury	ŧ		ŧ	

Reference Category	Variable	First Review to Second Review Relationship with likelihood of		First Review to Third Review Relationship with likelihood of	
		lmp.	Det.	lmp.	Det.
Intellectual disability	Disability is Down syndrome		ŧ		
Intellectual disability	Disability is a hearing impairment	₽			
Intellectual disability	Disability is "Other"			ŧ	
Intellectual disability	Disability is another neurological or physical disability	ŧ	1	ŧ	
Intellectual disability	Disability is stroke	₽	1		
N/A	Participant is older	₽		₽	1
N/A	Higher utilisation of capacity building supports	1		1	
Pre-COVID	Review during COVID period	₽			
N/A	Higher utilisation of core supports	1		1	
N/A	Change in time trend post- COVID		ŧ		
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		

Key findings from Table 9.13 include:

- SIL participants were more likely to improve between first review and second or third review, and less likely to deteriorate between first and second review.
- Compared to New South Wales residents, participants living in Victoria and Queensland were more likely to improve, while participants in the Australian Capital Territory, Northern Territory, Tasmania, and Western Australia were less likely to improve.
- Participants with Down syndrome or an intellectual disability tended to be more likely to improve and less likely to deteriorate across most transitions.
- Older participants were less likely to improve and more likely to deteriorate between the first review and both the second and third reviews.

#### Has your involvement with the NDIS helped you find a job that's right for you?

The percentage of participants reporting that the NDIS has helped find a job that's right for them decreased by 1.1% from 18.7% to 17.6% between first review and second review, and by 2.3% from 20.3% to 18.0% at third review. Of those who responded negatively at the first review, 3.4% responded positively at the second review and 5.1% responded positively at the third review. Table 9.14 sets out the breakdown of the movements of responses.

	Number of Baseline Responses in cohort <sup>1</sup>		Improvements: No to Yes		Deteriorations: Yes to No		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Review 1 to Review 2	24,987	5,729	838	3.4%	1,164	20.3%	-1.1%
Review 1 to Review 3	7,770	1,975	399	5.1%	621	31.4%	-2.3%

#### Table 9.14 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

### Table 9.15 – Key drivers of likelihood of transitions in "*Has your involvement with the NDIS helped you find a job that's right for you?*" response

Reference Category	Variable	Re Relatior	w to Second view nship with nood of	First Review to Third Review Relationship with likelihood of	
		lmp.	Det.	Imp.	Det.
NSW	Participant lives in VIC	₽			
N/A	Higher baseline utilisation	1			
N/A	General time trend	ŧ			
Not in SIL	Participant is in supported independent living (SIL)	1	<b>↓</b>	1	ŧ
Intellectual disability	Disability is ABI, autism, multiple sclerosis, a psychosocial disability, stroke, or another neurological/physical disability.	ŧ		ŧ	
Intellectual disability	Disability is Down syndrome		Ļ		
Intellectual disability	Disability is a visual impairment	₽			

Reference Category	Variable	First Review to Second Review Relationship with likelihood of		First Review to Third Review Relationship with likelihood of	
		Imp.	Det.	Imp.	Det.
N/A	Participant is older	ŧ			
N/A	Lower level of function	₽		₽	1
Less than 15% of supports are capacity building supports	More than 15% of supports are capacity building supports	1	ŧ	1	ŧ
Less than 15% of supports are capacity building supports	More than 5% of supports are capital supports	1			
N/A	Participant lives in an area with a higher average unemployment rate		•		
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS	1		1	ŧ
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs	₽		ŧ	
N/A	Higher annualised plan budget		1		
N/A	Higher utilisation of capacity building supports	1	Ļ	1	₽
N/A	Change in time trend post- COVID		Ļ		
Did not relocate	Participant relocated to a new Local Government Area (LGA)		1		

Key findings from Table 9.15 include:

- Participants with higher utilisation of capacity building supports were more likely to improve and less likely to deteriorate across all transitions.
- SIL participants were also more likely to improve and less likely to deteriorate across all transitions.
- Participants with lower level of function were less likely to improve between first review and second review, and between first review and third review. They were also more likely to deteriorate from first review to third review.

- Participants with more than 15% of capacity building supports in their plan were more likely to improve and less likely to deteriorate across all reviews.
- Participants who previously received support from a Commonwealth program were more likely to improve at both second and third review, and were also less likely to deteriorate from first to third review. New participants, who did not previously receive any support from a Commonwealth or State/Territory program were less likely to improve at the second and third reviews.

#### Has the NDIS helped you be more involved?

The percentage of participants reporting that the NDIS has helped them be more involved increased by 7.5% from 57.2% to 64.7% between first review and second review, and by 10.2% from 59.5% to 69.7% between first review and third review. Of those who responded negatively at the first review, 23.8% responded positively at second review and 33.9% responded positively at third review. Table 9.16 sets out the breakdown of the movements of responses.

	Number of Baseline Responses in cohort <sup>1</sup>		Improvements: No to Yes		Deteriorations: Yes to No		
Longitudinal Period	No	Yes	Number	%	Number	%	Net Movement
Review 1 to Review 2	13,404	17,945	3,190	23.8%	851	4.7%	+7.5%
Review 1 to Review 3	4,033	5,924	1,367	33.9%	349	10.2%	+10.2%

#### Table 9.16 – Breakdown of net movement in longitudinal responses

Participant characteristics that had a statistically significant effect (p<0.05) on the likelihood of improvement or deterioration in the outcome are set out below.

Table 9.17 - Key drivers of likelihood of transitions in "Has the NDIS helped you be
more involved?" response

Reference Category	Variable	Re Relation	w to Second view ship with nood of	First Review to Third Review Relationship with likelihood of	
		Imp.	Det.	Imp.	Det.
Major cities	Participant lives in a regional area	1	₽	1	
Major cities	Participant lives in remote/very remote area	1		1	
Agency-managed	Plan is managed by a plan manager or partly self- managed	1			
Medium level of NDIA support	High level of NDIA support	1		1	
Not in SIL	Participant is in supported independent living (SIL)			1	ŧ

Reference Category	Variable	Rev Relation	w to Second view ship with lood of	First Review to Third Review Relationship with likelihood of	
		Imp.	Det.	Imp.	Det.
N/A	Higher baseline utilisation	1	ŧ		
N/A	General time trend		Ļ		
Intellectual disability	Disability is acquired brain injury	ł			ŧ
Intellectual disability	Disability is cerebral palsy	ŧ			
Intellectual disability	Disability is Down syndrome			1	
Intellectual disability	Disability is a hearing impairment or multiple sclerosis	ŧ		₽	
Intellectual disability	Disability is "Other"	ł			1
Intellectual disability	Disability is a visual impairment or another neurological disability	ŧ			
Intellectual disability	Disability is spinal cord injury or another physical disability	ŧ	1	₽	
Intellectual disability	Disability is a psychosocial disability	ŧ	1		
Intellectual disability	Disability is stroke	ŧ	1	₽	Ļ
N/A	Particpant is older		Ļ		
N/A	Lower level of function	1	Ļ	1	
Less than 15% of supports are capacity building supports	More than 15% of supports are capacity building supports	ŧ			
Less than 15% of supports are capacity building supports	More than 5% of supports are capital supports	ŧ			
N/A	Participant lives in an area with a higher average unemployment rate	₽			

Reference Category	Variable	First Review to Secor Review Relationship with likelihood of	nd First Review to Third Review Relationship with likelihood of
		Imp. Det.	Imp. Det.
N/A	Higher utilisation of capacity building supports	1	
Pre-COVID	Review during COVID period	+	
N/A	Higher utilisation of core supports	1	+
N/A	Change in time trend post- COVID	ŧ	
Did not relocate	Participant relocated to a new Local Government Area (LGA)	1	1

Key findings from Table 9.17 include:

- Participants living in a regional area were more likely to improve after their second or third review, compared to participants living in a major city, and were less likely to deteriorate between first review and second review. Participants in remote/very remote areas were also more likely to improve.
- Participants with higher baseline plan utilisation were more likely to improve and less likely to deteriorate at second review. They were also more likely to improve between first review and third review.
- Disability was important in determining the percentage of participants who say the NDIS has helped them be more involved. Most disabilities, compared to participants with intellectual disability tended to be more likely to deteriorate and less likely to improve. One exception are participants with Down syndrome who were more likely to improve between first review and third review.
- Participants with lower level of function were more likely to improve between first review and second review, and between first review and third review. They were also less likely to deteriorate from first review to second review.
- SIL participants were more likely to improve and less likely to deteriorate between first and third reviews.
- Participants who relocated to a new LGA were more likely to deteriorate.

Box 9.1 summarises the results of this section.

#### Box 9.1: Has the NDIS helped? – by participant characteristics

After one year in the Scheme:

- Higher plan utilisation is strongly associated with a positive response across all eight domains after one year in the Scheme.
- Perceptions also tended to improve with plan budget.
- Participants from WA and QLD tended to be more positive, and those from VIC and SA less positive.

Changes between one and three years in the Scheme:

- Female participants were more likely to improve in the daily living domain but more likely to deteriorate in choice and control.
- Participants who self-manage were more likely to improve and/or less likely to deteriorate in the choice and control, daily living, and health and wellbeing domains.
- Older participants were less likely to deteriorate in choice and control, daily living, home and health and wellbeing, however they were less likely to improve and/or more likely to deteriorate in lifelong learning and work.
- Participants living in a regional area were more likely to improve and/or less likely to deteriorate in daily living, relationships, home, health and wellbeing, lifelong learning and social and community participation.
- Participants in supported independent living (SIL) were more likely to improve and/or less likely to deteriorate for at least some transitions across all domains.