4. Participants from starting school to age 14: overview of results

4.1 Key findings

Box 4.1: Overall findings for participants from starting school to age 14 who joined the Scheme between 1 July 2016 and 30 June 2017

- For participants entering the Scheme in 2016-17, longitudinal analysis revealed improvements and deteriorations in outcomes across a number of indicators. In particular, significant changes were observed in the following domains:

- Daily living: The percentage of parents/carers who say their child is becoming more independent increased by 7.0% between baseline and second review, from 43.5% to 50.5%. On an age-adjusted basis the improvement was stronger (13.2%). The percentage of children who spend time away from parents/carers other than at school increased in the year following Scheme entry by 2.3%, with a further increase of 1.2% for the second year in the Scheme. On an age-adjusted basis, the two-year improvement was 2.7%.

- Relationships: The percentage of parents/carers who say their child has friends that they enjoy spending time with increased by 2.4% in the year following Scheme entry. However, no further change was observed between first and second 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 increased by 11.5% between baseline (79.4%) and second review (90.9%). Of those who would like their child to be more involved in activities with other children, the percentage who say their child's disability as a barrier increased from 84.0% at baseline to 91.9% at second review.

Box 4.2: Overall findings for participants from starting school to age 14 who joined the Scheme between 1 July 2017 and 30 June 2018

- For participants entering the Scheme in 2017-18, longitudinal analysis revealed improvements and deteriorations in outcomes that were largely in line with the cohort of participants entering the Scheme in 2016-17. Specifically, the following changes were observed:

- Daily living: The percentage of parents/carers who say their child is becoming more independent increased by 4.6% between baseline and first review (8.0% after adjusting for age), from 42.0% to 46.5%, while the percentage of children who spend time away from parents/carers other than at school increased by 1.7% (3.4% age-adjusted), from 31.0% to 32.6%. Additionally, the percentage of parents/carers who say their child manages the demands of their world pretty well or very well increased by 9.8% between baseline and first review, from 41.0% to 50.8%.

- 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 3.1% between baseline and first review, from 89.3% to 92.4%. Of those who would like their child to be more involved in activities with other children, the percentage who say their child's disability as a barrier increased by 4.6% between baseline and the first review, from 85.7% to 90.3%. Furthermore, the percentage of parents/carers who found it easy to find vacation care decreased 8.0% from 41.3% at baseline to 33.2% at first review.

Box 4.3: Outcomes by key characteristics for participants from starting school to age 14

- Baseline and longitudinal outcomes vary with participant level of function. Participants with higher level of function tend to have better baseline outcomes and 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, both baseline and longitudinal.

- Participants from regional and remote locations, show more positive results on some indicators – both at baseline and for longitudinal change, 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.

- Children from a CALD background have worse outcomes on most baseline indicators. Compared to non-CALD participants, CALD participants are also less likely to improve with regard to having a genuine say in decisions about themselves, making friends outside the family, and having friends they enjoy playing with.

- Differences between baseline outcomes for Indigenous and non-Indigenous participants tend to be smaller than for CALD and non-CALD participants, and results are mixed. Indigenous children are more likely to spend time with friends without an adult present, but are less likely to be becoming more independent (and are more likely to deteriorate on this indicator, longitudinally), and their school experiences tend to be worse than non-Indigenous children. As with the younger cohort, Indigenous participants from starting school to age 14 are less likely to live with their parents, and more likely to live in public housing. Longitudinal analysis also shows that Indigenous participants are also less likely to improve with regard to making friends outside the family.

Box 4.4: 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 14 cohort, with the percentage responding positively being lowest for access to education (32.8% after one year in the Scheme and 33.2% after two years in the Scheme) and highest for independence (53.3% after one year in the Scheme, increasing to 59.4% after two 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 both one and two years in the Scheme. 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.

- The percentage who think that the NDIS has helped increased slightly (by 2.7%-6.1%) between first and second review across all domains except for access to education, where there was no change. The likelihood of improvement/deterioration varied by some participant characteristics:

- Improvement was more likely for participants who self-manage (either fully or partly), younger participants, and those living in QLD.

- For access to education, improvement was more likely for CALD participants, and those with a sensory disability, developmental delay or global developmental delay. Improvement was also more likely for the relationships domain for participants with developmental delay or global developmental delay.

- Participants entering the Scheme for early intervention are more likely to think that the NDIS has helped than those entering due to disability, across all domains.

4.2 Results overview

4.2.1 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).

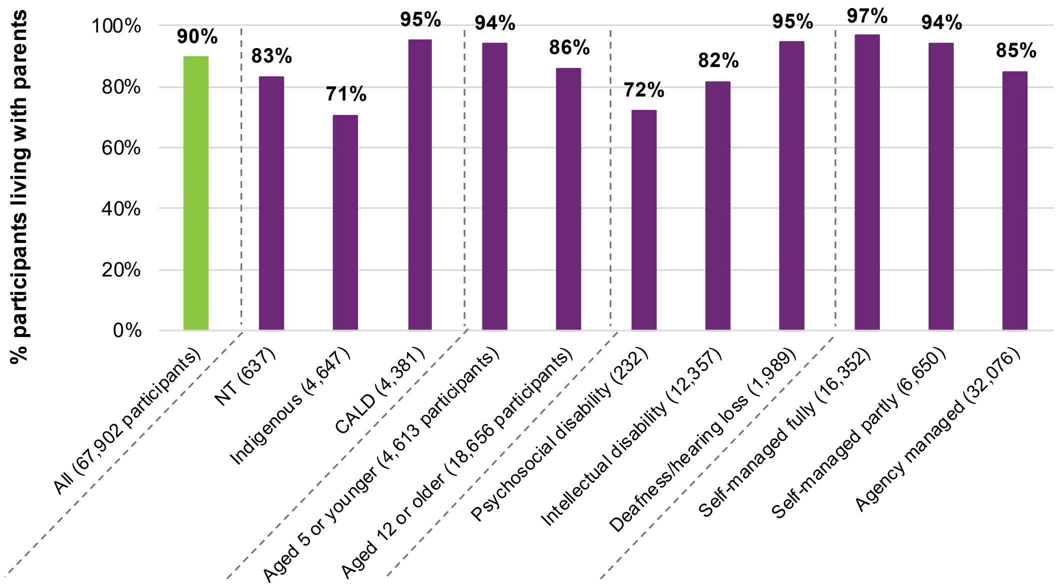
The LF questions for participants in the starting school to age 14 cohort allow a deeper investigation into the experiences of participants in educational and school settings, with eight extra questions devoted to these areas. There are also three extra questions about developing independence (on managing 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).

4.2.2 Participant living arrangements

At baseline, 89.6% of children live with their parents. The percentage is lower in NT (83.2%) and for Indigenous participants (70.7%), but higher for CALD participants (95.2%). There is a declining trend with age, from 94.0% for children aged 5 or younger to 85.9% for children aged 12 or older. Participants with psychosocial disability (72.0%) or an intellectual disability (81.7%) are less likely to live with their parents, and those with deafness/hearing loss (94.5%) are more likely to live with their parents. The percentage is higher for participants whose plan is self-managed (96.7%) compared to agency-managed (85.0%).

At baseline, 8.3% of participants live in a private home rented from a public authority. The percentage is much higher in NT (24.7%) and for Indigenous participants (26.0%).

Figure 4.1 Proportion of participants living with parents at baseline



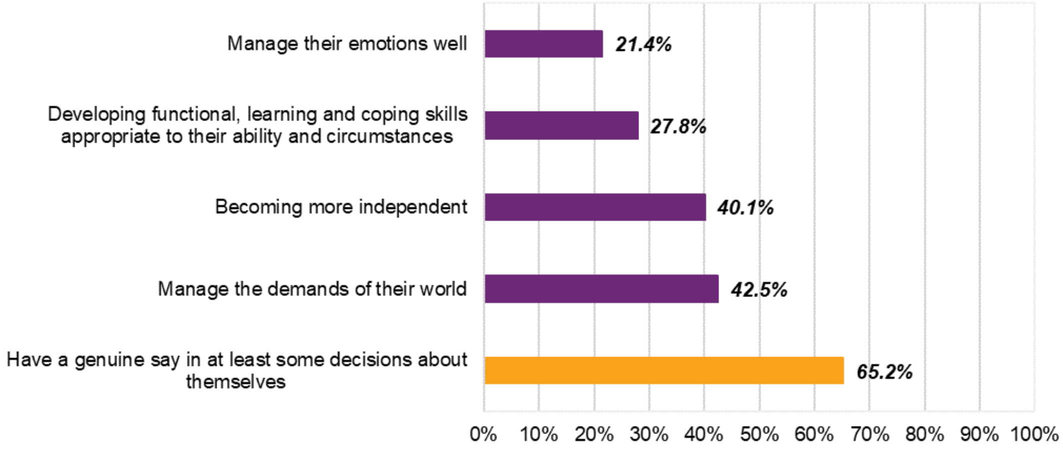
Participant living and housing arrangements have not changed materially in the longitudinal analysis.

4.2.3 Baseline indicators – across all participants

Independence

Baseline levels of independence are generally low for this cohort. For example, only 21.4% of parents/carers say their child manages their emotions well, and only 27.8% think their child is developing functional, learning and coping skills appropriate to their ability and circumstances. Based on SF answers, 40.1% think their child is becoming more independent, and in the LF, 42.5% think their child manages the demands of their world. The most positive result is that 65.2% of children have a genuine say in at least some decisions about themselves.

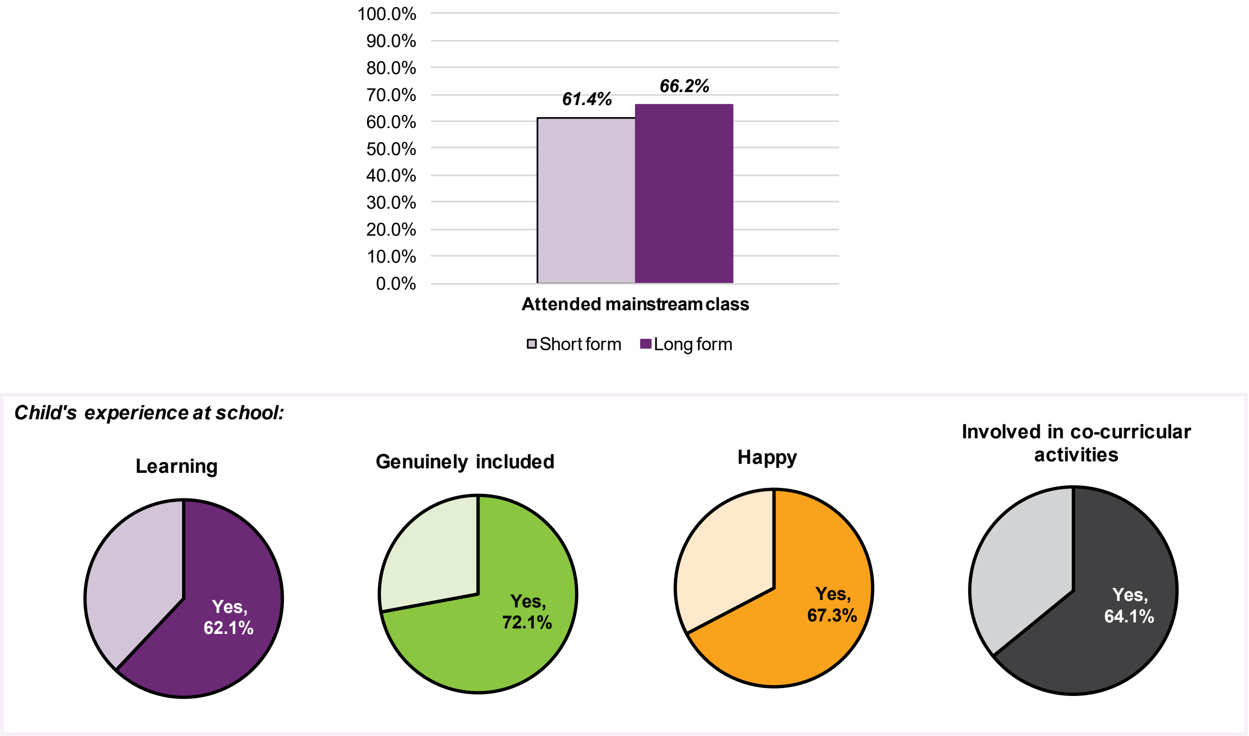
Figure 4.2 Independence indicators



School

61.4% of children responding to the SF attended school in a mainstream class (66.2% of those responding to the LF). Involvement of families and carers in their child's education was reasonably high: based on the LF, 73.2% were satisfied that their child's school listens to them in relation to their child's education, 76.3% knew their child's goals at school, and 68.0% thought their child's education was matched to those goals. Regarding the child's experience at school, 62.1% thought that their child was learning at school, 72.1% thought that their child was genuinely included and 67.3% thought that they were happy at school. 64.1% of children had been involved in co-curricular activities at school, most commonly in school plays or concerts. Only 50.2% of children who were not exempt had sat a NAPLAN test. A relatively high proportion of children (15.6%) had ever been suspended from school.

Figure 4.3 School experiences[24]



Relationships

In relation to family life, only 26.8% of parents/carers think there is enough time to meet the needs of all family members (lower than the 51.0% for the pre-school cohort). 62.3% of those with more than one child expressed some concern about the effect of having a sibling with disability on their other children. However, 73.0% say that their child with disability gets along with their siblings. At baseline, 86.9% say that their child fits into everyday family life (often or sometimes). Of those who go out without their child, 50.4% use informal care (the child stays with siblings, extended family, family friends or by themselves), although only 44.2% say they are happy with their childcare arrangements. 46.7% of the children have friends they enjoy spending time with, and 61.5% are able to make friends with people outside the family.

Participation

Overall, participation in mainstream activities tends to be low for this cohort. Only 10.3% of parents/carers use a mainstream school holiday program and only 35.6% of children spend time after school and on weekends with friends or in mainstream group activities. A high proportion (81.4%) of parents/carers expressed a wish for their child to be more involved, and 84.4% of these perceived their child's disability as a barrier to being more involved. 62.0% of parents/carers had some difficulty in finding vacation care.

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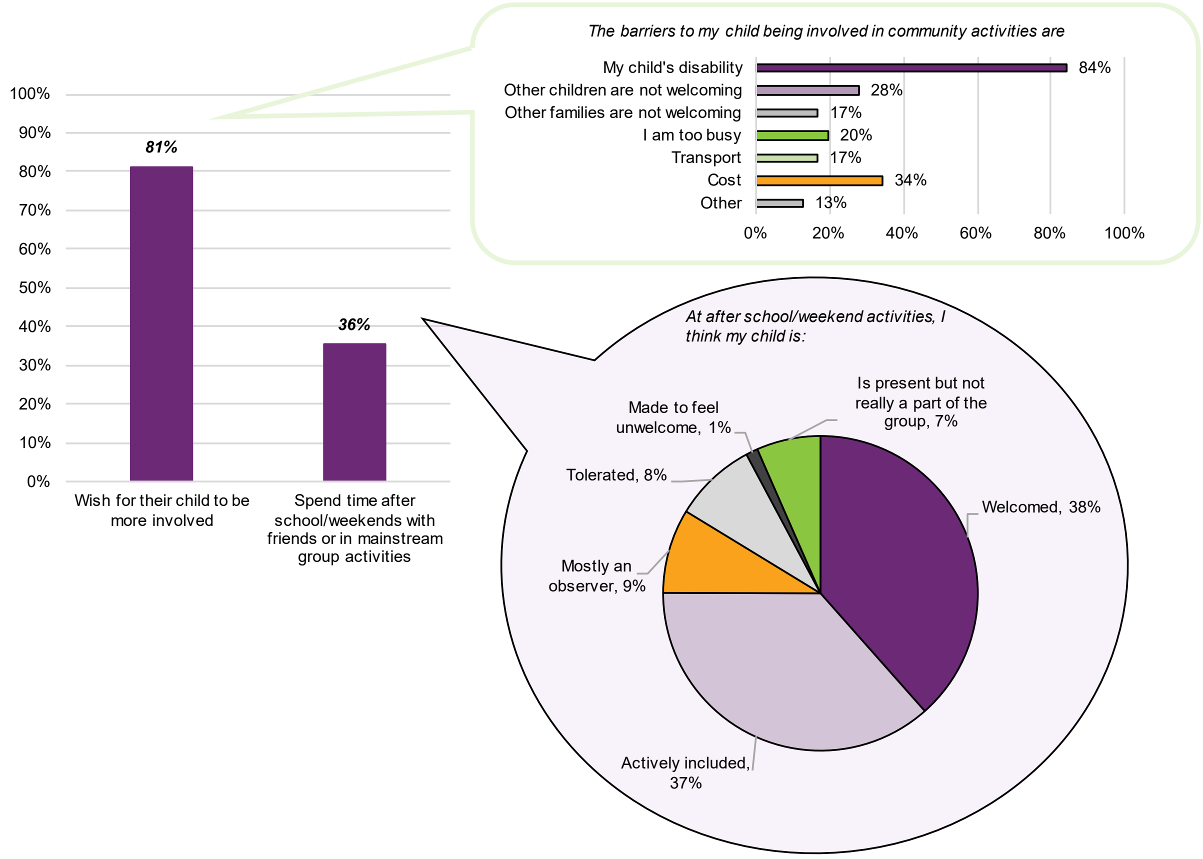
[24] In the top graph, differences between LF and SF results arise because only a subset of participants respond to the LF. The bottom graph shows results for LF participants.

Figure 4.4 Involvement in community activities



4.2.4 Baseline indicators – participant characteristics

Baseline indicators have been analysed by participant characteristics using one-way analyses and multiple logistic regression modelling. Multiple regression modelling was performed for the following indicators:

- The percentage of children developing functional, learning and coping skills appropriate to their ability and circumstances
- The percentage of children becoming more independent
- The percentage of children who spend time with friends without an adult present
- The percentage of children who have a genuine say in decisions about themselves
- The percentage of children attending school in a mainstream class
- The percentage of children who can make friends with people outside the family.

Key findings from the one-way analyses and regression modelling include:

- **Level of function**

  Baseline indicators tend to be better for participants with higher level of function, particularly those relating to the daily living and relationships domains.

  In all six regression models considered for baseline indicators, level of function was a significant predictor. Controlling for other variables:

  - Parents/carers of participants with a higher level of function are more likely to report that their child is becoming more independent (53.5%, 37.9%, and 23.7% for children with high, medium and low level of function, on a one-way basis)

- Participants with a higher level of function are more likely to be able to make friends with people outside the family (74.1%, 59.9%, and 45.1%).
- Participants with a higher level of function are also significantly more likely to attend school in a mainstream class (76.7%, 66.4%, and 29.5%).

In one-way analyses for SF indicators, other large differences occur for the percentage of parents/carers who say:

- Their child spends time after school and on weekends with friends and/or in mainstream programs (46.3%, 36.9% and 17.1% for participants with high, medium and low level of function, respectively)
- Their child has friends that he/she enjoys spending time with (58.5%, 45.7% and 30.4%).

Several LF indicators also differ significantly with level of function, particularly the percentage of parents/carers who say:

- They found it easy to find vacation care (48.7%, 34.5% and 27.4% for participants with high, medium and low level of function, respectively).
- Their child manages the demands of his/her world most of the time (53.7%, 43.1% and 22.0%).

- **Disability**

Baseline indicators differ considerably by disability type, and are often considerably better for participants with a sensory disability (hearing loss, visual impairment or another sensory/speech disability) or a physical disability compared to participants with other disabilities.

Disability was a significant predictor in all six baseline regression models. Controlling for other variables:

- Participants with a sensory disability are more likely to be developing functional, learning and coping skills appropriate to their ability and circumstances, to be gaining in independence, and to be able to make friends outside the family. These participants, and those with a physical disability, are more likely to have a genuine say in decisions about themselves, and more likely to spend time with friends without an adult present.
- Participants with developmental delay, global developmental delay or autism are least likely to spend time with friends without an adult present.
- Participants with autism are least likely to be developing functional, learning and coping skills appropriate to their ability and circumstances, to be gaining in independence, and to be able to make friends outside the family.
- Participants with visual impairment or a physical disability are the most likely to attend school in a mainstream class (in terms of estimated odds ratios, more than three times the odds for participants with autism (the reference category, comprising 60% of participants)), and those with Down syndrome, intellectual disability, or global developmental delay are the least likely (estimated odds ratios of 0.36, 0.43, and 0.54, respectively).

In one-way analyses for SF indicators, other large differences occur for the percentage of parents/carers who say their child:

- Manages their emotions well: parents/carers of children with a hearing or visual impairment respond most positively (57.8% and 56.9%, respectively), and parents/carers of children with autism respond least positively (13.5%).

- Gets along with their siblings: parents/carers of children with a hearing or visual impairment respond most positively (91.5% and 91.4%, respectively), and parents/carers of children with autism respond least positively (67.1%).

There are also differences for LF indicators. For example:

- Parents/carers of participants with a sensory disability are the least likely to be worried about the effect of their child's disability on their other children (39.8%) whereas parents/carers of participants with autism are the most likely to be worried (67.0%).
- This is also the case for the percentage who report that their child manages the demands of their world (66.1% for participants with a sensory disability compared to 38.0% for those with autism).

- **Culturally and linguistically diverse backgrounds**

Children from a non-CALD background tend to have better baseline outcomes across most indicators.

CALD status was a significant predictor in five of the six baseline regression models. Controlling for other factors:

- Parents/carers of children from a CALD background are much less likely to report that their child has a genuine say in decisions about themselves (50.5% compared with 66.0% for non-CALD participants, on a one-way basis).

- Parents/carers of children from a CALD background are less likely to report that their child is becoming more independent (31.8% compared with 40.2% for non-CALD participants, on a one-way basis) or that their child is able to make friends outside the family (50.9% compared with 61.6%).

- CALD participants are less likely to attend school in a mainstream class (48.0% compared with 62.3% for non-CALD participants).

On the other hand, one-way analysis suggests that CALD participants are more likely to manage their emotions well (26.7% compared to 20.8% for non-CALD participants).

Parents/carers of CALD participants are much less likely to use informal care for their child when they need to go out (34.1% versus 51.5% for non-CALD participants).

However, differences were less apparent for the percentage of parents/carers who reported that they would like their child to be more involved in activities (80.0% for CALD participants and 82.1% for non-CALD participants) and who see their child's disability as a barrier to involvement (86.5% for CALD participants and 84.4% for non-CALD participants).

- **Indigenous**

Differences in baseline outcomes for Indigenous participants compared to non-Indigenous participants vary with indicator, but are generally small in comparison to differences observed for other participant characteristics.

Indigenous status was a significant predictor in four out of the six baseline regression models considered, in contrast to the lack of significance found for the age 0 to starting school participant cohort. Controlling for other factors:

- Parents/carers of Indigenous children are less likely to report that their child is becoming more independent (37.8% compared with 40.3% for non-Indigenous participants, on a one-way basis), and less likely to say their child is developing functional, learning and coping skills appropriate to their ability and circumstances (25.2% versus 27.9%).
- Parents/carers of Indigenous children are more likely to report that their child spends time with friends without an adult present (13.8% compared with 11.4% for non-Indigenous participants, on a one-way basis).
- Indigenous participants are less likely to attend school in a mainstream class (56.3% compared with 62.7% for non-Indigenous participants, on a one-way basis).

From the one-way analyses, Indigenous children are less likely to spend time after school and on weekends with friends and/or in mainstream programs (31.7% compared to 36.0% for non-Indigenous participants).

For the LF indicators, Indigenous participants are much less likely to have sat a NAPLAN test (23.6% compared to 51.2% for non-Indigenous participants), and their parents/carers are less likely to say that their child's school was their first choice (49.5% compared to 63.6% for non-Indigenous participants).

- **Age**

Age appears as a significant predictor in all six baseline regression models considered, however in most cases this reflects normal childhood development, with older children exhibiting more independence and having a greater say in decisions. The percentage of participants in a mainstream class decreases significantly with age, from 77.6% for children aged under 5 to 43.4% for children aged 12 or over.

- **Type of school**

While not used as a predictor in the multiple regression models, one-way analyses show that:

- From the LF, children attending a special school are more likely to feel genuinely included at school (84.6% compared to 66.9% for participants in a mainstream class) and to feel happy at school (79.8% compared to 62.8% for participants in a mainstream class). Parents/carers of children at special schools also have better knowledge of their child's goals at school (84.2% compared to 76.1% for participants in a mainstream class) and tend to be more satisfied that the school listens to them in relation to their child's education.
- Children enrolled in a support class or special school are less likely to be developing independence (26.5% compared to 47.0% for participants in a mainstream class), to have a genuine say in decisions about themselves, to make friends outside the family (44.0% compared to 69.6% for participants in a mainstream class), and to spend time with friends without an adult present.

- **Geography**

Children from regional and remote locations tend to show more positive baseline results than those from major cities, across many indicators.

Remoteness was a significant predictor in five of the six multiple regression models considered. Controlling for other factors:

- Children living in remote and very remote regions are significantly more likely to spend time with friends without an adult present (21.5% compared to 11.0% for major cities and 12.0-13.9% for regional, on a one-way basis).
- Parents/carers of children living in major cities are less likely to say their child is becoming more independent (38.5% compared to 41.0-45.7% for regional, remote and very remote regions).
- Children living in regional areas (population between 5,000 and 50,000), are more likely to have a genuine say in decisions about themselves (70.9%), compared to 65.7% in remote or very remote areas and 62.7% in major cities.
- Children living in major cities are less likely to attend school in a mainstream class (59.2%) than those living in regional areas with population 5000 to 50,000 (61.5-65.1%), regional areas with population less than 5000 (71.1%) and remote/very remote areas (69.1%). This may be partly due to the lack of availability of special schools in more remote locations.

Based on one-way analyses, parents/carers of children living in remote and very remote regions are more likely to report wanting their child to have more opportunity to be involved in activities with other children (73.1% compared to 80.9% in major cities), but are less likely to see their child's disability as a barrier to involvement (78.9% compared to 85.1% in major cities).

- **Gender**

Female participants have more positive baseline outcomes on some indicators. Controlling for other factors in the baseline regression models, female participants are slightly more likely to have a genuine say in decisions about themselves (66.2% compared to 64.7% on a one-way basis), are more likely to make friends with people outside the family (65.3% versus 59.8% on a one-way basis), and are more likely to attend school in a mainstream class (62.5% versus 60.7% on a one-way basis).

4.2.5 Longitudinal indicators – across all participants

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 2018, for whom a record of outcomes is available at scheme entry (baseline) and at one or more of the two time points: approximately one year following scheme entry (first review), and approximately two years following scheme entry (second review). The analysis considers how outcomes have changed between baseline and first review, between baseline and second review and between first review and second review.

There have been a number of improvements across all domains for the three periods being considered. The greatest changes occurred when considering a participant's responses from baseline to their second review.

As discussed in Section 4.2, 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 different time periods. In Table 4.1, cohort "B,R1,R2" includes participants responding at baseline, first review and second review.[25] Cohort “B,R1” includes participants responding at both baseline and first review (but not at second review, so the cohorts do not overlap). Indicators were selected for the tables if the change was statistically significant[26], had an absolute magnitude greater than 0.02[27], and was confirmed by the age-adjusted analysis.

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

Domain (Form)	Indicator	Cohort	Baseline	Review 1	Review 2	Change B-R1	Change R1-R2	Change B-R2	Improvement/ Deterioration
DL (SF)	% who say their child is becoming more independent	B,R1,R2	43.5%	46.5%	50.5%	3.0%	4.0%	7.0%	**Improvement**
		B,R1	42.0%	46.5%		4.6%			
DL (SF)	% of children who spend time away from parents/carers other than at school	B,R1,R2	29.8%	32.1%	33.3%	2.3%	1.2%	3.5%	**Improvement**
		B,R1	31.0%	32.6%		1.7%			
DL (LF)	% of children who manage the demands of their world (pretty well or very well)	B,R1	41.0%	50.8%		9.8%			**Improvement**
REL (SF)	% of children who have friends that he/she enjoys spending time with	B,R1,R2	46.5%	48.9%	48.9%	2.4%	0.0%	2.4%	**Improvement**
		B,R1	52.1%	51.9%		-0.2%			
LL (LF)	% who think their child is learning at school	B,R1,R2	59.8%	65.4%	68.5%	5.6%	3.1%	8.7%	**Improvement**
		B,R1	62.2%	64.5%		2.3%			
S/CP (SF)	% who say they would like their child to have more opportunity to be involved in activities with other children	B,R1,R2	79.4%	88.0%	90.9%	8.6%	2.9%	11.5%	**Context Dependent**
		B,R1	89.3%	92.4%		3.1%			

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[25] A small number may be missing a response at the first review.

[26] McNemar’s test at the 0.05 level.

[27] Between baseline and second review for the “B,R1,R2” cohort, and between baseline and first review for the “B,R1” cohort.

Domain (Form)	Indicator	Cohort	Baseline	Review 1	Review 2	Change B-R1	Change R1-R2	Change B-R2	Improvement/ Deterioration
S/CP (SF)	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	B,R1,R2	84.0%	89.6%	91.9%	5.6%	2.3%	7.9%	**Deterioration**
		B,R1	85.7%	90.3%		4.6%			
S/CP (LF)	% of parents/carers who found it easy to find vacation care	B,R1	41.3%	33.2%		-8.0%			**Deterioration**

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. These results are consistent on an age-adjusted basis.
- More children have friends they enjoy spending time with, and this improvement is stronger on an age-adjusted basis.
- Two of the social and community participation indicators have exhibited further deterioration since last year's report, with more parents and carers seeing their child's disability as a barrier to greater involvement, and fewer finding it easy to find vacation care. The percentage of parents/carers who would like their child to have opportunities for greater involvement with other children has increased.

4.2.6 Longitudinal indicators – participant characteristics

Analysis by participant characteristics has been examined in two ways:

1. A simple comparison of the percentage meeting the indicator at first or second review with the percentage meeting the indicator at baseline. The difference (review-baseline) is compared for 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 first or second review is modelled as a function of participant characteristics.[28,29] Multiple regression analyses were performed for four indicators.

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[28] Modelling of baseline to second review transitions is based on a smaller amount of data, hence these models tend to identify a smaller number of significant predictors.

[29] 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.

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

My child is becoming more independent

The percentage of parents/carers reporting that their child is becoming more independent increased by 4.1% between baseline and first review, and by 7.0% between baseline and second review. This was a result of improvements offset by deteriorations as set out in Table 4.2 below.

Table 4.2 Breakdown of net movement in longitudinal responses

Longitudinal Period	Number of Baseline Responses in cohort[1]		Improvements: No to Yes		Deteriorations: Yes to No		Net Movement
	No	Yes	Number	%	Number	%	
Baseline to Review 1	14,368	10,605	2,888	20.1%	1,873	17.7%	+4.1%
Baseline to Review 2	3,778	2,909	1,229	32.5%	759	26.1%	+7.0%

[1]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 4.3 below.

Table 4.3 Key drivers of likelihood of transitions of *“my child is becoming more independent”* response[30]

Variable	Baseline to First Review Relationship with likelihood of		Baseline to Second Review Relationship with likelihood of	
	Improvement	Deterioration	Improvement	Deterioration
Participant lives in Victoria	↓	⬇		
Participant lives in Queensland	⬆		⬆	⬇
Participant lives in South Australia	⬆		⬆	
Participant lives in NT, TAS, WA or ACT		⬇	⬆	⬇
Disability is cerebral palsy or another neurological disability	↓			
Disability is global developmental delay/ developmental delay	⬆	⬇	⬆	

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[30] See Table 2.2 for definition of arrow symbols in this and similar tables.

Variable	Baseline to First Review		Baseline to Second Review	
	Relationship with likelihood of		Relationship with likelihood of	
	Improvement	Deterioration	Improvement	Deterioration
Disability is a sensory disability		⬇		
Participant is female	⬆			
Participant is Indigenous		⬆		⬆
Participant is older		⬇		
Participant entered the Scheme in 2016/17	⬆	⬆		
Lower level of function	⬇	⬆	⬇	⬆
Higher annualised plan budget	⬇	⬆	⬇	⬆
More than 95% of supports are capacity building supports	⬆	⬇		
Plan is self-managed	⬆			
Participant received services from Commonwealth systems before entering the NDIS	⬆		⬆	
Higher level of NDIA support	⬇	⬇		
Higher Index of Economic Resources (IER)	⬆		⬆	
Higher Index of Education and Occupation (IEO)		⬇		⬇

Key findings from Table 4.3 are as follows:

- Children with lower level of function, and those with a higher annualised plan budget, were less likely to improve, and more likely to deteriorate.
- Participants who previously received services from Commonwealth systems before entering the NDIS were more likely to improve.
- Children with developmental delay or global developmental delay were more likely to improve and less likely to deteriorate.
- Participants living in Queensland and South Australia were more likely to improve.
- Participants living in areas with a higher IER were more likely to improve and those living in areas with a higher IEO were less likely to deteriorate, at both time points.

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 slightly between both baseline and first review, and baseline and second review. This was a result of improvements offsetting deteriorations as set out in **Table 4.4** below.

Table 4.4 Breakdown of net movement in longitudinal responses

Longitudinal Period	Number of Baseline Responses in cohort[1]		Improvements: No to Yes		Deteriorations: Yes to No		Net Movement
	No	Yes	Number	%	Number	%	
Baseline to Review 1	9,183	15,617	1,222	13.3%	866	5.5%	+1.4%
Baseline to Review 2	2,438	4,150	586	24.0%	398	9.6%	+2.9%

[1] 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 4.5 below.

Table 4.5 Key drivers of likelihood of transitions of *"my child has a genuine say in decisions about themselves"* response

Variable	Baseline to First Review Relationship with likelihood of		Baseline to Second Review Relationship with likelihood of	
	Improvement	Deterioration	Improvement	Deterioration
Participant lives in Queensland or South Australia	↑		↑	
Disability is Down syndrome or an intellectual disability		↑		
Disability is a sensory disability		↓		
Participant is CALD	↓			↑
Participant is older	↑	↓	↑	↓
Participant entered the Scheme in 2016/17		↑		
Lower level of function	↓	↑	↓	↑
Participant lives in a more remote area			↑	↓
Higher annualised plan budget	↓		↓	

	Baseline to First Review		Baseline to Second Review	
	Relationship with likelihood of		Relationship with likelihood of	
Variable	**Improvement**	**Deterioration**	**Improvement**	**Deterioration**
Between 75% and 95% of supports are capacity building supports			⬆	
More than 95% of supports are capacity building supports	⬆		⬆	
More than 5% of supports are capital supports			⬆	
Plan is self-managed				⬇
Participant has not received services from Commonwealth or state systems before entering the NDIS				⬇
Higher Index of Economic Resources (IER)	⬆		⬆	
Higher Index of Economic Opportunity (IEO)			⬇	

Key findings from Table 4.5 are as follows:

- Participants with lower levels of function and CALD participants have a lower chance of improvement and a higher chance of deterioration.
- Older participants and those from remote areas are more likely to improve and less likely to deteriorate.
- Participants with higher plan budgets are less like to improve.
- Participants with more than 75% of supports being capacity building supports are more likely to improve.
- Participants living in QLD or SA are more likely to improve.

Attending school in a mainstream class

The percentage of children attending school in a mainstream class decreased by 2.0% between baseline and first review, and decreased by 4.1% between baseline and second review. This was a result of improvements offset by deteriorations as set out in Table 4.6 below.

Table 4.6 Breakdown of net movement in longitudinal responses

Longitudinal Period	Number of Baseline Responses in cohort[1]		Improvements: No to Yes		Deteriorations: Yes to No		Net Movement
	No	Yes	Number	%	Number	%	
Baseline to Review 1	9,274	14,118	599	6.5%	1,076	7.6%	-2.0%
Baseline to Review 2	2,661	3,355	249	9.4%	498	14.8%	-4.1%

[1] 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 4.7 below.

Table 4.7 Key drivers of likelihood of transitions of *"attending school in a mainstream class"* response

	Baseline to First Review		Baseline to Second Review	
	Relationship with likelihood of		Relationship with likelihood of	
Variable	**Improvement**	**Deterioration**	**Improvement**	**Deterioration**
Participant lives in New South Wales	⬇	⬆	⬇	⬆
Disability is cerebral palsy or another neurological disability		⬇		
Disability is a sensory disability	⬆	⬇	⬆	⬇
Disability is Down syndrome or an intellectual disability	⬇	⬆	⬇	⬆
Participant is female		⬇		
Participant is older	⬇	⬆		⬆
Participant is CALD				⬆
Entered the Scheme in 2016/17	⬆			
Lower level of function	⬇	⬆	⬇	⬆
Participant has SIL supports in their plan			⬆	
Participant lives in a more remote area	⬆	⬇	⬆	⬇
Higher annualised plan budget	⬇	⬆	⬇	
Between 75% and 95% of supports are capacity building supports	⬆			
More than 95% of supports are capacity building supports	⬆	⬇	⬆	⬇
More than 5% of supports are capital supports		⬇		⬇
Plan is self-managed	⬆	⬇		

Variable	Baseline to First Review		Baseline to Second Review	
	Relationship with likelihood of		Relationship with likelihood of	
	Improvement	Deterioration	Improvement	Deterioration
Plan is partly self-managed	↑		↑	
Plan is agency managed		↓		
Participant received services from Commonwealth systems before entering the NDIS			↑	
Participant has not received services from Commonwealth or state systems before entering the NDIS	↑		↑	
Higher level of NDIA support		↑		↑
Access type is early intervention				↓
Higher Index of Economic Resources (IER)		↓		
Higher Index of Economic Opportunity (IEO)				↓

Key findings from Table 4.7 are as follows:

- Children with a lower level of function, older children, those with a higher plan budget and children with Down syndrome or an intellectual disability were more likely to move out of a mainstream class, and less likely to move into one.
- Participants in more remote areas are less likely to move out of a mainstream class, and are more likely to move into a mainstream class.
- Participants living in NSW are more likely to move out of a mainstream class, and less likely to move into one.
- Children with a sensory disability are less likely to move out of a mainstream class, and are more likely to move into one.
- Participants with a self-managed plan are less likely to move out of a mainstream class, and are more likely to move into one, while those having a higher level of NDIA support through the participant pathway are less likely to move into a mainstream class.
- Participants with more than 95% capacity building supports in their plan are more likely to move into a mainstream class, and less likely to move out of one.

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 between baseline and first review, and between baseline and second review. This was a result of improvements offset by deteriorations as set out in **Table 4.8** below.

Table 4.8 Breakdown of net movement in longitudinal responses

Longitudinal Period	Number of Baseline Responses in cohort[1]		Improvements: Yes to No		Deteriorations: No to Yes		Net Movement
	No	Yes	Number	%	Number	%	
Baseline to Review 1	3,078	17,874	193	1.1%	1,195	38.8%	+4.8%
Baseline to Review 2	831	4,369	81	1.9%	491	59.1%	+7.9%

[1] 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 4.9 below.

Table 4.9 Key drivers of likelihood of transitions of *“my child’s disability is a barrier to being more involved”* response

Variable	Baseline to First Review Relationship with likelihood of Improvement	Baseline to First Review Relationship with likelihood of Deterioration	Baseline to Second Review Relationship with likelihood of Improvement	Baseline to Second Review Relationship with likelihood of Deterioration
Participant lives in Victoria		↓		↓
Disability is cerebral palsy, another neurological disability, Down syndrome, an intellectual disability or a sensory disability		↓		↓
Disability is global developmental delay/ developmental delay	↑			
Participant is older	↑	↓	↑	
Participant entered the Scheme in 2016/17	↑			
Lower level of function	↓	↑	↓	↑
Higher annualised plan budget		↑		
Between 75% and 95% of supports are capacity building supports		↑		

Variable	Baseline to First Review Relationship with likelihood of		Baseline to Second Review Relationship with likelihood of	
	Improvement	Deterioration	Improvement	Deterioration
More than 5% of supports are capital supports	↑		↑	
Higher level of NDIA support		↓		
Higher Index of Economic Resources (IER)		↑		
Higher Index of Economic Opportunity (IEO)				↑

Key findings from Table 4.9 are as follows:

- Parents/carers of children with lower level of function are more likely to start perceiving their child's disability as a barrier after spending time in the Scheme, and are less likely to stop perceiving it as a barrier.
- Parents/carers of older participants are more likely to improve (stop seeing their child's disability as a barrier to involvement), as are those with more than 5% of the supports in their plan being capital supports.
- Parents/carers of participants with a higher level of NDIA support are less likely to start perceiving their child's disability as a barrier, as are participants living in Victoria.

My child can make friends with people outside the family

The percentage of parents/carers reporting that their child can make friends with people outside the family decreased slightly between both baseline and first review, and baseline and second review. This was a result of deteriorations offsetting improvements as set out in Table 4.10 below.

Table 4.10 Breakdown of net movement in longitudinal responses

Longitudinal Period	Number of Baseline Responses in cohort[1]		Improvements: No to Yes		Deteriorations: Yes to No		Net Movement
	No	Yes	Number	%	Number	%	
Baseline to Review 1	9,305	15,593	1345	14.5%	1,489	9.5%	-0.6%
Baseline to Review 2	2,518	4,089	572	22.7%	637	15.6%	-1.0%

[1] 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 4.11 below.

Table 4.11 Key drivers of likelihood of transitions of *"my child can make friends with people outside the family"* response

	Baseline to First Review		Baseline to Second Review	
	Relationship with likelihood of		Relationship with likelihood of	
Variable	Improvement	Deterioration	Improvement	Deterioration
Participant lives in Victoria	↓	↓		
Participant lives in Queensland	↑	↑	↑	
Participant lives in South Australia	↑		↑	
Disability is cerebral palsy, another neurological disability, Down syndrome or an intellectual disability	↑	↓		↓
Disability is a sensory disability		↓		↓
Participant is CALD	↓		↓	↑
Participant is Indigenous	↓			
Participant is older		↓		
Participant entered the Scheme in 2016/17	↑			
Lower level of function	↓	↑	↓	↑
Participant lives in a more remote area		↑		
Higher annualised plan budget	↓		↓	
Between 75% and 95% of supports are capacity building supports		↓		
More than 95% of supports are capacity building supports	↑	↓	↑	
More than 5% of supports are capital supports	↑	↓		
Participant received services from Commonwealth systems before entering the NDIS				↓

	Baseline to First Review		Baseline to Second Review	
	Relationship with likelihood of		Relationship with likelihood of	
Variable	**Improvement**	**Deterioration**	**Improvement**	**Deterioration**
Participant is new (hasn't received services from State or Commonwealth systems before entering the NDIS)			↑	↓
Higher Index of Economic Resources (IER)	↑	↓		

Key findings from Table 4.11 are as follows:

- Participants with cerebral palsy, another neurological disability, Down syndrome, an intellectual disability or a sensory disability were more likely to improve and less likely to deteriorate.
- CALD participants were less likely to improve, and were more likely to deteriorate between baseline and the second review.
- Participants with a lower level of function were less likely to improve and more likely to deteriorate. Participants with a higher annualised plan budget were also less likely to improve.

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 increased slightly between both baseline and first review, and baseline and second review. This was a result of improvements offsetting deteriorations as set out in Table 4.12 below.

Table 4.12 Breakdown of net movement in longitudinal responses

Longitudinal Period	Number of Baseline Responses in cohort[1]		Improvements: No to Yes		Deteriorations: Yes to No		Net Movement
	No	Yes	Number	%	Number	%	
Baseline to Review 1	12,195	12,510	1,373	11.3%	1,256	10.0%	+0.5%
Baseline to Review 2	3,578	3,108	718	20.1%	559	18.0%	+2.4%

[1] 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 4.13 below.

Table 4.13 Key drivers of likelihood of transitions of *"my child has friends that he/she enjoys spending time with"* response

	Baseline to First Review		Baseline to Second Review	
	Relationship with likelihood of		Relationship with likelihood of	
Variable	Improvement	Deterioration	Improvement	Deterioration
Participant lives in Queensland	🟩⬆	🟪⬆	🟩⬆	
Participant lives in South Australia	🟩⬆		🟩⬆	
Participant lives in NT, TAS, WA or ACT			🟩⬆	
Disability is cerebral palsy, another neurological disability, Down syndrome or an intellectual disability	🟩⬆	🟩⬇	🟩⬆	🟩⬇
Disability is global developmental delay/ developmental delay		🟩⬇		
Disability is a sensory disability		🟩⬇	🟩⬆	🟩⬇
Participant is female	🟩⬆		🟩⬆	
Participant is CALD	🟪⬇		🟪⬇	
Participant entered the Scheme in 2016/17	🟩⬆	🟪⬆		
Lower level of function	🟪⬇	🟪⬆	🟪⬇	🟪⬆
Participant lives in a more remote area	🟩⬆			
Higher annualised plan budget	🟪⬇	🟪⬆	🟪⬇	🟪⬆
Between 75% and 95% of supports are capacity building supports	🟩⬆		🟩⬆	
More than 95% of supports are capacity building supports	🟩⬆		🟩⬆	🟩⬇
More than 5% of supports are capital supports	🟩⬆	🟩⬇	🟩⬆	
Participant hasn't received services from State or Commonwealth systems before entering the NDIS			🟩⬆	

	Baseline to First Review		Baseline to Second Review	
	Relationship with likelihood of		Relationship with likelihood of	
Variable	Improvement	Deterioration	Improvement	Deterioration
Higher level of NDIA support	⬇			
Access type is early intervention	⬆			
Higher Index of Economic Resources (IER)			⬆	
Higher Index of Economic Opportunity (IEO)	⬆			

Key findings from Table 4.13 are as follows:

- Female participants were more likely to improve.
- Participants with a lower level of function and participants with a higher annualised plan budget were less likely to improve and more likely to deteriorate.
- Participants with cerebral palsy, another neurological disability, Down syndrome, an intellectual disability or a sensory disability were more likely to improve and less likely to deteriorate.