

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 indicator 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 significant²², 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

Domain (Form)	Indicator	Cohort	Baseline	Indicator at:			Change		Significant ²³	
				Review 1	Review 2	Review 3	Latest year	Overall	Latest year	Overall
Improvement										
DL (SF)	% of parents/carers who say their child is becoming more independent	C3	44.2%	47.1%	51.6%	53.1%	1.5%	9.0%	**	**
		C2	41.7%	46.5%	49.9%		3.4%	8.2%	**	**
		C1	39.0%	45.4%			6.4%	6.4%	**	**
DL (SF)	% of children who spend time away from parents/carers other than at school	C3	29.7%	31.7%	32.9%	32.6%	-0.2%	2.9%		**
		C2	30.4%	31.8%	32.2%		0.4%	1.8%	*	**
		C1	27.0%	28.5%			1.5%	1.5%	**	**
DL (LF)	% of children who manage the demands of their world	C3	46.6%	53.4%	54.3%	64.7%	10.3%	18.1%	*	*
		C2	42.3%	51.9%	46.5%		-5.4%	4.2%		
		C1	42.3%	49.4%			7.1%	7.1%	**	**
LL (LF)	% of parents/carers who know their child's goals at school	C3	73.3%	83.3%	85.0%	89.7%	4.7%	16.4%	*	*
		C2	79.6%	85.0%	80.8%		-4.2%	1.2%		
		C1	76.1%	79.7%			3.6%	3.6%		
LL (LF)	% of parents/carers who think their child is learning at school	C3	58.6%	64.0%	68.1%	69.0%	0.8%	10.3%		*
		C2	60.4%	69.1%	68.4%		-0.7%	8.0%		*
		C1	64.4%	66.4%			2.0%	2.0%		
Context dependent										
S/CP (SF)	% of parents/carers who would like their child to be more involved in activities with other children	C3	79.4%	88.3%	91.3%	92.3%	1.0%	12.9%	**	**
		C2	89.0%	92.6%	93.9%		1.3%	4.9%	**	**
		C1	79.4%	85.7%			6.3%	6.3%	**	**
Deterioration										
LL (SF)	% of children who attend school in a mainstream class	C3	57.0%	56.1%	53.5%	51.0%	-2.5%	-5.9%	**	**
		C2	62.1%	60.1%	57.6%		-2.5%	-4.5%	**	**
		C1	65.9%	63.8%			-2.1%	-2.1%	**	**
LL (SF)	% of children who have been suspended from school	C3	14.7%	15.8%	16.8%	25.0%	8.2%	10.3%	*	*
		C2	17.6%	19.3%	21.6%		2.3%	4.0%		
		C1	13.1%	15.1%			2.0%	2.0%	**	**
S/CP (SF)	% of parents/carers who see their child's disability as a barrier to being more involved	C3	86.7%	90.9%	93.3%	93.8%	0.6%	7.1%	**	**
		C2	87.9%	91.6%	93.1%		1.5%	5.2%	**	**
		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.

²² McNemar's test at the 0.05 level.

²³ ** 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.

Table 4.2 Transitions contributing to the models for cohorts C1, C2 and C3*

Cohort	1 year transitions			2 year transitions ²⁴	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 → R1	R1 → R2	R2 → R3	B → R2	B → R3
C2	B → R1	R1 → R2		B → R2	
C1	B → R1				

*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.

²⁴ 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.

Table 4.3 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	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%

¹The 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”

Reference Category	Variable	1 step transitions						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 Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.
NSW	Participant lives in VIC		↓		↓			↓		↑	
NSW	Participant lives in QLD	↑		↑	↓		↑	↓	↑	↓	
NSW	Participant lives in SA	↑					↑				
NSW	Participant lives in ACT, NT, TAS, WA		↓		↓		↑	↓			↓
Autism	Disability is Down Syndrome or an intellectual disability				↓						

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Autism	Disability is a sensory disability	↑	↓	↑				↑	↓		
Autism	Disability is global developmental delay or developmental delay	↑	↓								
Autism	Disability is "Other"	↑	↓								
N/A	Participant is older			↑	↓	↑		↑	↓		↓
Male	Participant is female							↑			
Non-CALD	Participant is CALD			↓				↓			
Non-Indigenous	Indigenous status is not stated					↓					
N/A	Lower level of function	↓		↓		↓	↑	↓	↑	↓	↑
N/A	Higher annualised total funding	↓	↑	↓	↑			↓	↑	↓	↑
2016/17	Participant entered the Scheme in 2017/18	↓									
2016/17	Participant entered the Scheme in 2018/19	↓									
N/A	Higher baseline utilisation	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑
N/A	Higher utilisation of capacity	↑		↑				↑		↑	

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
	building supports										
0-75% capacity building supports	75%-100% of supports are capacity building supports	↑	↓	↑	↓			↑	↓	↑	
0-75% capacity building supports	More than 5% of supports are capital supports		↓		↓			↑	↓	↑	
Pre-COVID	Review during COVID period	↓	↓			↓					
N/A	General time trend		↓	↓	↓		↓	↓	↓		↓
N/A	Change in time trend post-COVID			↓						↓	
Agency-managed	Plan is managed by a plan manager							↓			
Agency-managed	Plan is fully self-managed	↑				↑		↑		↑	↓
Agency-managed	Plan is partly self-managed	↑									
Major cities	Participant lives outside a major city				↑	↑			↑		
N/A	Participant lives in an area with a higher unemployment rate	↓	↑			↓		↓	↑		
Did not relocate	Participant relocated to a new Local Government Area (LGA)			↓	↑		↑		↑		↑

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS	↑	↓			↑		↑	↓		
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs			↑							
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.

Table 4.5 Breakdown of net movement in longitudinal responses

Longitudinal Period	Number of Baseline Responses in cohort ¹		Context Dependent: No to Yes		Context Dependent: Yes to No		Net Movement
	No	Yes	Number	%	Number	%	
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%

¹The 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”

Reference Category	Variable	1 step transitions						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 Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.
NSW	Participant lives in VIC		↓							↑	
NSW	Participant lives in QLD	↑	↓	↑		↑		↑		↑	
NSW	Participant lives in SA	↑		↑	↑	↑		↑		↑	
NSW	Participant lives in ACT, NT, TAS, WA	↑	↓			↑		↑		↑	
Autism	Disability is cerebral palsy or other		↓								

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
	neurological disability										
Autism	Disability is a sensory disability		↓		↓				↓		
Autism	Disability is global developmental delay or developmental delay	↑	↓								
Autism	Disability is "Other"		↓								
N/A	Participant is older	↑	↓	↑	↓	↑		↑	↓	↑	
Non-CALD	Participant is CALD	↓		↓				↓			
N/A	Lower level of function	↓	↑	↓				↓	↑		
N/A	Higher annualised total funding	↓	↑	↓				↓	↑		
N/A	Higher baseline utilisation	↑									
N/A	Higher utilisation of core supports		↑		↑	↓			↑		↑
N/A	Higher utilisation of capacity building supports		↑						↑		
0-75% capacity building supports	75%-95% of supports are capacity building supports	↓									

Reference Category	Variable	1 step transitions						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.	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	↓									
Agency-managed	Plan is managed by a plan manager	↑	↑								
Agency-managed	Plan is fully self-managed	↑	↓		↓				↓		
Agency-managed	Plan is fully self-managed	↑									
Major cities	Participant lives outside a major city	↑		↑				↑		↑	
N/A	Participant lives in an area with a higher unemployment rate			↓		↓		↓		↓	
Did not relocate	Participant relocated to a new Local Government Area (LGA)		↑		↑		↑	↓	↑		↑
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.

Table 4.7 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	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%

¹The 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”

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
NSW	Participant lives in VIC		↓					↓			

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
NSW	Participant lives in QLD	↑						↑		↑	
NSW	Participant lives in SA	↑	↓	↑				↑		↑	
NSW	Participant lives in ACT, NT, TAS, WA			↓				↓			
Autism	Disability is cerebral palsy or other neurological disability		↓						↓		
Autism	Disability is Down Syndrome or an intellectual disability	↓	↑	↓				↓	↑		
Autism	Disability is a sensory disability		↓						↓		
Autism	Disability is global developmental delay or developmental delay							↓			
Autism	Disability is "Other"		↓						↓		
N/A	Participant is older	↑	↓	↑	↓	↑		↑	↓	↑	↓
Male	Participant is female	↑						↑			
Non-CALD	Participant is CALD	↓	↑	↓	↑			↓	↑	↓	↑
N/A	Lower level of function	↓	↑	↓	↑	↓		↓	↑	↓	↑

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
N/A	Higher annualised total funding	↓	↑	↓	↑			↓	↑	↓	
N/A	Higher baseline utilisation	↓	↑	↓	↑	↓		↓	↑		↑
N/A	Higher utilisation of capacity building supports	↑			↓			↑	↓		
0-75% capacity building supports	75%-95% of supports are capacity building supports	↑		↑		↑		↑	↓	↑	
0-75% capacity building supports	95%-100% of supports are capacity building supports	↑		↑				↑	↓	↑	
0-75% capacity building supports	More than 5% of supports are capital supports			↑				↑	↓	↑	↓
Pre-COVID	Review during COVID period		↓					↓		↓	
N/A	General time trend	↓	↓	↓	↓		↓		↓	↑	
Agency-managed	Plan is fully self-managed		↓						↓		↓
N/A	Lower level of function	↓	↑	↓	↑	↓		↓	↑	↓	↑
Major cities	Participant lives outside a major city	↑	↓	↑	↓		↓	↑	↓		↓
N/A	Participant lives in an area with a higher unemployment rate				↑						

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Did not relocate	Participant relocated to a new Local Government Area (LGA)		↑		↑		↑		↑		
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs		↓	↑	↓		↓	↑	↓	↑	↓
Medium level of NDIA support	Lower level of NDIA support	↑									
Medium level of NDIA support	Higher level of NDIA support	↓						↓			

Key findings from Table 4.8 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.

Table 4.9 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	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%

¹The 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”

Reference category	Variable	1 step transitions						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 Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.	Relationship with likelihood of Imp.	Relationship with likelihood of Det.
NSW	Participant lives in VIC		↓		↓		↓		↓		↓
NSW	Participant lives in QLD	↑	↑	↑	↑		↑	↑			
NSW	Participant lives in SA	↑	↓	↑	↓		↓	↑	↓		↓
NSW	Participant lives in ACT, NT, TAS, WA	↑	↓	↑	↓			↑	↓		↓
Autism	Disability is cerebral palsy or other neurological disability		↓						↓		
Autism	Disability is Down Syndrome or an intellectual disability	↓	↑	↓	↑		↑	↓	↑	↓	↑

Reference category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Autism	Disability is a sensory disability	↑	↓		↓		↓	↑	↓	↑	↓
Autism	Disability is global developmental delay or developmental delay	↓									↑
Autism	Disability is "Other"		↓	↑				↑	↓		
N/A	Participant is older	↓	↑		↑		↑		↑	↓	↑
Male	Participant is female		↓								
Non-CALD	Participant is CALD	↓	↑			↓		↓		↓	
Non-Indigenous	Participant is Indigenous				↑						
N/A	Lower level of function	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑
N/A	Higher annualised total funding	↓	↑					↓			
N/A	Higher baseline utilisation	↓	↑	↓	↑	↓	↑		↑	↓	↑
N/A	Higher utilisation of core supports		↑					↓	↑		↑
N/A	Higher utilisation of capacity building supports	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓
0-75% capacity building supports	75%-95% of supports are capacity building supports	↑	↓					↑		↑	↓

Reference category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
0-75% capacity building supports	95%-100% of supports are capacity building supports	↑	↓	↑				↑	↓	↑	↓
0-75% capacity building supports	More than 5% of supports are capital supports		↓		↓				↓		↓
Pre-COVID	Review during COVID period		↓								
N/A	General time trend	↓									
Agency-managed	Plan is managed by a plan manager	↑	↓						↓		↓
Agency-managed	Plan is fully self-managed	↑	↓		↓		↓	↑	↓	↑	↓
Agency-managed	Plan is partly self-managed		↓					↑		↑	
Major cities	Participant lives outside a major city	↑	↓	↑				↑		↑	
N/A	Participant lives in an area with a higher unemployment rate				↑						
Participant did not relocate	Participant relocated to a new Local Government Area (LGA)	↑	↑	↑	↑		↑	↑			
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS	↑		↑		↑		↑			

Reference category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs	↑	↑	↑		↑		↑			
Entry due to disability	Participant entered the Scheme through early intervention		↓							↑	
Medium level of NDIA support	Higher level of NDIA support		↑		↑				↑		↑

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.

Table 4.11 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	12,039	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%

¹The 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”

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
NSW	Participant lives in VIC										
NSW	Participant lives in QLD										
NSW	Participant lives in SA										
Autism	Disability is cerebral palsy or other neurological disability										
Autism	Disability is Down Syndrome or an intellectual disability										
Autism	Disability is a sensory disability										

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Autism	Disability is global developmental delay or developmental delay	↑	↓								↓
Autism	Disability is "Other"	↑	↓		↓				↓		↓
N/A	Participant is older				↓				↓		
Non-CALD	Participant is CALD		↓					↑	↓		
N/A	Lower level of function	↑					↑				
N/A	Higher annualised total funding							↓			
2016/17	Participant entered the Scheme in 2017/18								↓		
N/A	Higher utilisation of core supports						↑				
N/A	Higher utilisation of capacity building supports		↑	↓	↑			↓	↑		↑
0-75% capacity building supports	75%-95% of supports are capacity building supports	↑	↓						↓		↓
0-75% capacity building supports	95%-100% of supports are capacity building supports	↑	↓					↑	↓	↑	↓

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
0-75% capacity building supports	More than 5% of supports are capital supports	↑	↓	↑	↓			↑	↓		↓
Pre-COVID	Review during COVID period	↓	↓	↓	↓	↓	↓			↓	
N/A	General time trend				↓						↓
Agency-managed	Plan is managed by a plan manager	↓			↑			↓	↑		↑
Agency-managed	Plan is fully self-managed		↓		↓				↓		
Agency-managed	Plan is partly self-managed			↓							
N/A	Lower level of function	↑									
N/A	Participant lives in an area with a higher unemployment rate	↓							↑		
Did not relocate	Participant relocated to a new Local Government Area (LGA)	↑	↑		↑		↑		↑		
Received State/Territory supports	Participant did not previously receive services from Commonwealth or State/Territory programs		↑								
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.

Table 4.13 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	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%

¹The 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”

Reference category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
NSW	Participant lives in VIC	↓	↓				↑	↓		↓	
NSW	Participant lives in QLD		↓	↑			↑	↑	↓		
NSW	Participant lives in SA	↑		↑				↑		↑	
NSW	Participant lives in ACT, NT, TAS, WA		↓								
Autism	Disability is cerebral palsy or other neurological disability		↓		↓				↓		↓
Autism	Disability is Down Syndrome or an intellectual disability	↑						↑	↓	↑	
Autism	Disability is a sensory disability	↑	↓		↓			↑	↓	↑	↓
Autism	Disability is global developmental delay or developmental delay	↑	↓								
N/A	Participant is older					↑					
Male	Participant is female	↓									↑
N/A	Lower level of function	↓	↑	↓		↓	↑	↓		↓	
N/A	Higher annualised total funding	↓	↑	↓	↑			↓	↑		↑

Reference category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
N/A	Higher baseline utilisation	↓				↓					
N/A	Higher utilisation of core supports						↑				
N/A	Higher utilisation of capacity building supports		↑	↓				↓	↑	↓	
0-75% capacity building supports	75%-95% of supports are capacity building supports	↑	↓	↑		↑		↑	↓	↑	↓
0-75% capacity building supports	95%-100% of supports are capacity building supports	↑	↓	↑				↑	↓	↑	↓
0-75% capacity building supports	More than 5% of supports are capital supports	↑	↓	↑		↑		↑	↓	↑	↓
2016/17	Entry year 2017-18	↓									
Pre-COVID	Review during COVID period	↓	↓				↓				
N/A	General time trend	↓	↓	↓	↓			↓	↓		
Agency-managed	Plan is managed by a plan manager	↓	↑					↓	↑	↓	↑
Agency-managed	Plan is fully self-managed	↓		↓				↓			
Agency-managed	Plan is partly self-managed	↓	↑	↓				↓	↑	↓	↑

Reference category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Major cities	Participant lives outside a major city		↑	↑							
N/A	Participant lives in an area with a higher unemployment rate		↓	↓	↓				↓		
Participant did not relocate	Participant relocated to a new Local Government Area (LGA)	↑	↑	↑			↑		↑		
Medium level of NDIA support	Lower level of NDIA support	↑							↓		
Medium level of NDIA support	Higher level of NDIA support		↓						↓		

Key findings from Table 4.14 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.

Table 4.15 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	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%

¹The 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”

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
NSW	Participant lives in VIC							↑			
NSW	Participant lives in QLD	↑						↑			
NSW	Participant lives in SA	↑		↑				↑		↑	
NSW	Participant lives in ACT, NT, TAS, WA	↑						↑			
Autism	Disability is cerebral palsy or other neurological disability	↑	↓	↑	↓		↓	↑	↓	↑	↓
Autism	Disability is Down Syndrome or an intellectual disability		↓		↓				↓	↑	↓

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Autism	Disability is a sensory disability	↑	↓	↑	↓		↓	↑	↓	↑	↓
Autism	Disability is global developmental delay or developmental delay	↑	↓								
Autism	Disability is "Other"		↓		↓		↓		↓		↓
N/A	Participant is older				↓	↑			↓		
Male	Participant is female	↑		↑				↑		↑	
Non-CALD	Participant is CALD	↓						↓		↓	
N/A	Lower level of function	↓	↑	↓		↓	↑	↓	↑	↓	↑
N/A	Higher annualised total funding	↓	↑	↓	↑			↓	↑	↓	
2016/17	Participant entered the Scheme in 2017/18	↓						↓			
2016/17	Participant entered the Scheme in 2018/19	↓									
N/A	Higher baseline utilisation	↓	↑	↓	↑			↓	↑		↑
N/A	Higher utilisation of core supports					↓				↓	
N/A	Higher utilisation of capacity building supports	↑	↑				↑				

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
0-75% capacity building supports	75%-95% of supports are capacity building supports	↑	↓	↑				↑	↓		
0-75% capacity building supports	95%-100% of supports are capacity building supports	↑	↓	↑	↓			↑	↓	↑	↓
0-75% capacity building supports	More than 5% of supports are capital supports	↑	↓					↑	↓	↑	
Pre-COVID	Review during COVID period		↓			↓					
N/A	General time trend		↓	↓	↓			↓	↓		
Agency-managed	Plan is fully self-managed								↓		
Major cities	Participant lives outside a major city	↑		↑				↑			
N/A	Participant lives in an area with a higher unemployment rate	↓	↑					↓		↓	
Did not relocate	Participant relocated to a new Local Government Area (LGA)		↑	↑		↑		↑		↑	
Received State/Territory supports	Participant received services from Commonwealth programs before joining NDIS							↑			
Received State/Territory supports	Participant did not previously receive services from	↑		↑				↑			

Reference Category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
	Commonwealth or State/Territory programs										
Entry due to disability	Participant entered the scheme through Early Intervention		↑								
Medium level of NDIA support	Higher level of NDIA support		↓					↓			

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.

Table 4.17 Breakdown of net movement in longitudinal responses

Longitudinal Period	Number of Baseline Responses in cohort ¹		Context dependent: No to Yes		Context dependent: Yes to No		Net Movement
	No	Yes	Number	%	Number	%	
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%

¹The 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”

Reference Category	Variable	1 step transitions						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	
		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	↑						↑			
NSW	Participant lives in SA		↑								
NSW	Participant lives in ACT, NT, TAS, WA	↑						↓			
Autism	Disability is cerebral palsy or other neurological disability	↓							↑		
Autism	Disability is Down Syndrome or an intellectual disability	↓									

Reference Category	Variable	1 step transitions						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	
		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	↓	↑	↓				↓	↑	↓	
Autism	Disability is global developmental delay or developmental delay		↑								
Autism	Disability is "Other"	↓								↓	
Male	Participant is female		↑						↑		
Non-CALD	Participant is CALD								↓		
N/A	Lower level of function		↓		↓			↑		↑	
N/A	Higher annualised total funding	↑							↓		
2016/17	Participant entered the Scheme in 2017/18		↓		↓				↓		
2016/17	Participant entered the Scheme in 2018/19		↓								
N/A	Higher baseline utilisation		↓		↓				↓		
N/A	Higher utilisation of capacity building supports	↑						↑		↑	

Reference Category	Variable	1 step transitions						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	
		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		↑								
0-75% capacity building supports	95%-100% of supports are capacity building supports		↑					↓			
0-75% capacity building supports	More than 5% of supports are capital supports		↑					↓			
Pre-COVID	Review during COVID period	↓									
N/A	General time trend	↓		↓				↓			
Agency-managed	Plan is managed by a plan manager	↑			↓				↓		
Major cities	Participant lives outside a major city					↓					
N/A	Participant lives in an area with a higher unemployment rate	↓	↓								
Did not relocate	Participant relocated to a new Local Government Area (LGA)									↑	
Received State/Territory supports	Participant received services from Commonwealth	↓									

Reference Category	Variable	1 step transitions						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	
		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	↓									
Medium level of NDIA support	Higher level of NDIA support	↓									

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.

Table 4.19 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 to Yes)
	No	Yes	Number	%	Number	%	
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%

¹The 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”

Reference category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
NSW	Participant lives in VIC		↓								↓
NSW	Participant lives in ACT, NT, TAS, WA		↓		↓						
Autism	Disability is cerebral palsy or other neurological disability				↓		↑				↓
Autism	Disability is Down Syndrome or an intellectual disability				↓						
Autism	Disability is a sensory disability				↓						

Reference category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
Autism	Disability is global developmental delay or developmental delay	↑	↓								
Autism	Disability is "Other"	↑	↓			↑				↑	
N/A	Participant is older							↑	↓		
Non-Indigenous	Participant is Indigenous	↓									
Non-Indigenous	Indigenous status is not stated	↓	↑								↑
N/A	Lower level of function	↓	↑	↓				↓	↑	↓	↑
N/A	Higher annualised total funding			↑							
N/A	Higher baseline utilisation	↓		↓	↑			↓	↑	↓	
N/A	Higher utilisation of capacity building supports		↑								
0-75% capacity building supports	95%-100% of supports are capacity building supports	↑			↑					↑	
0-75% capacity building supports	More than 5% of supports are capital supports	↑						↑		↑	
Pre-COVID	Review during COVID period		↓								

Reference category	Variable	1 step transitions						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.	Imp.	Det.	Imp.	Det.	Imp.	Det.
N/A	General time trend	↓			↓				↓		
Agency-managed	Plan is managed by a plan manager			↓				↓		↓	
Agency-managed	Plan is partly self-managed							↓		↓	
N/A	Lower level of function	↓	↑	↓				↓	↑	↓	↑
Major cities	Participant lives outside a major city	↑									
N/A	Participant lives in an area with a higher unemployment rate		↓								
Did not relocate	Participant relocated to a new Local Government Area (LGA)		↑		↑			↑	↑		
Entry due to disability	Participant entered the Scheme through early intervention				↓				↓		
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.