

NDIS Participant Outcomes

30 June 2020

Appendices A to D

Appendix A – Number of Questionnaires

Appendix B – LF Participation and Representativeness Analysis

Appendix C – Age Adjustment Methodology

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Appendix A. Numbers of questionnaires

A.1 SF Transition Participants

Numbers of baseline SF questionnaires for transition participants and their families and carers are shown in Table A.1. These are the questionnaires included for the Q4 2019-20 NDIS Quarterly Report to Disability Ministers, representing active participants with an initial plan approved during the period 1 July 2016 to 30 June 2020.

Table A.1 Baseline SF questionnaires

For the period 1 July 2016 to 30 June 2020	
Number of participant questionnaires	358,031
Number of family/carer questionnaires	220,055
Total number of questionnaires	578,086
Number of participants contributing at least one participant or family/carer questionnaire	358,186
Number of participants receiving an initial plan	364,763
% of participants receiving an initial plan who contributed at least one participant or family/carer questionnaire	98%

From 1 July 2017, some transition participants started to accumulate one or more years of experience with the Scheme. For this report, active participants who entered the Scheme between 1 July 2016 and 30 June 2019 and who have had at least one plan review as at 30 June 2020, and their families and carers, contribute to the longitudinal analysis. Numbers of questionnaires for these cohorts are shown in Table A.2. The same cohorts contribute to the analysis of questions asking whether the NDIS has helped, except that participants who say it's their first plan are excluded.

Table A.2 SF questionnaires contributing to the longitudinal analysis

Questionnaire	Number	% of 2016-19 baseline
Participant	177,709	71%
Family/carer	93,423	64%
Total	271,132	69%

A.2 LF

Further detail on baseline and longitudinal LF collection is provided in Appendix B

Appendix B. LF participation and Representativeness Analysis

B.1 Summary of Findings

B.1.1 Numbers of questionnaires

2016 cohort, 2017 cohort, 2018 cohort and 2019 cohort first interview

Table B.1 summarises numbers of participants invited to take part in a baseline LF interview, and the numbers who agreed to take part.

Table B.1 LF interview 1 collections

LF interview 1	2016 cohort	2017 cohort	2018 cohort	2019 cohort	Combined
Number invited	2,161	3,604	5,188	6,203	17,156
Number taking part at interview 1	1,117	2,328	2,834	2,998	9,277
% taking part at interview 1	52%	65%	55%	48%	54%
Number providing a family/ carer questionnaire	895	1,830	2197	2374	7,296
% of invitees providing a family/ carer questionnaire	41%	51%	42%	38%	43%
% of respondents providing a family/ carer questionnaire	80%	79%	78%	79%	79%

2016 cohort, 2017 cohort and 2018 cohort second interview

Some of the 2016 cohort participants who were interviewed in 2016, 2017 and 2018, and some of the 2017 cohort participants who were interviewed in 2017, were not able to be re-interviewed in 2019. Reasons for the dropout included death or exit from the Scheme, not being able to contact the participant or their representative, or refusal to take part.

Table B.2 shows the number of participants agreeing to be interviewed for the second time and the number also providing a family/carers questionnaire.

Table B.2 LF interview 2 of 2016 cohort, 2017 cohort and 2018 cohort

LF interview 2	2016 cohort	2017 cohort	2018 cohort	Combined
Number taking part at interview 1	1060	2301	2636	5997
Number taking part at interview 2	792	1543	1650	3,985
% taking part at interview 2	75%	67%	63%	66%
Number providing family/ carer questionnaire	712	1280	1320	3,312
% of invitees providing a family/ carer questionnaire	67%	56%	50%	55%
% of respondents providing a family/ carer questionnaire	90%	83%	80%	83%

2016 cohort and 2017 cohort third interview

Table B.3 shows the number of participants from the 2016 cohort agreeing to be interviewed for the third time.

Table B.3 LF interview 3 of 2016 cohort and 2017 cohort

LF interview 3	2016 cohort	2017 cohort	Combined
Number taking part at interview 2	747	1402	2149
Number taking part at interview 3	541	835	1,376
% taking part at interview 3	72%	60%	64%
Number providing family/ carer questionnaire	451	675	1,126
% of invitees providing a family/ carer questionnaire	60%	48%	52%
% of respondents providing family/ carer questionnaire	83%	81%	82%

2016 cohort fourth interview

Table B.4 shows the number of participants from the 2016 cohort agreeing to be interviewed for the third time.

Table B.4 LF interview 4 of 2016 cohort

LF interview 4	2016 cohort
Number taking part at interview 2	490
Number taking part at interview 3	359
% taking part at interview 3	73%
Number providing family/ carer questionnaire	306
% of invitees providing a family/ carer questionnaire	62%
% of respondents providing family/ carer questionnaire	85%

B.1.2 LF participation – high and low response groups

For the participant survey, significant differences in response rates were observed in some participant groups at interview 1 and interview 2. Participants with psychosocial disability and Indigenous participants have significantly lower response rates at both interview 1 and interview 2. There were no significant differences in response rates between participant groups at either interview 3 or interview 4.

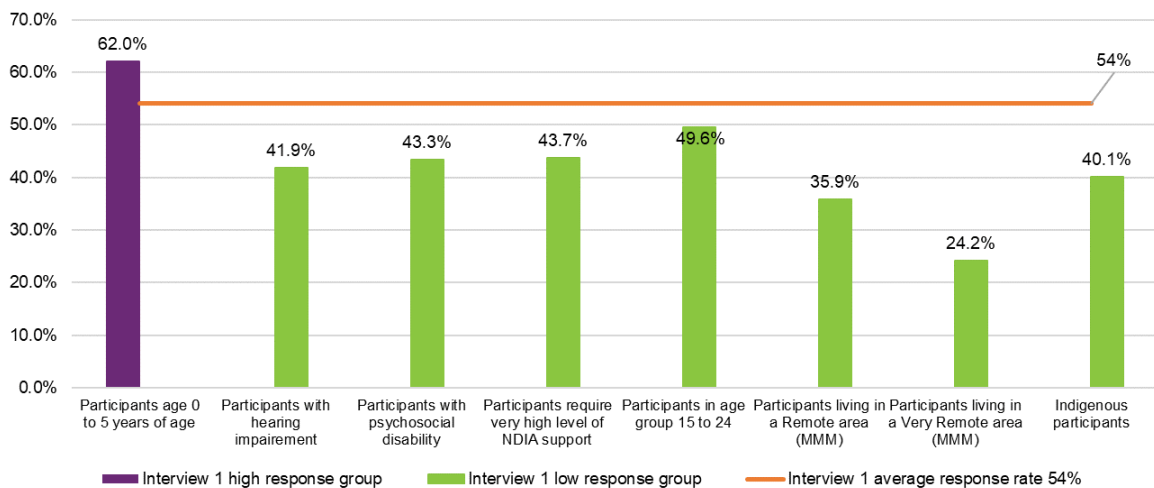
For the family/carer survey, higher and lower response rate groups were identified at interview 1, interview 2 and interview 3. Across three interviews, families/carers of participants who were aged 25 and over have significantly lower response rates, families/carers of participants who have psychosocial disability or spinal cord injury, and who require a very high level of NDIA support, also have lower response rates. At interview 2 and interview 3, families/carers of participants who entered in 2016 have higher response rates than those who entered in later years. There were no significant differences in response rates between groups at interview 4.

Interview 1

Participant Survey

For interview 1, controlling for other factors¹, a significantly higher response rate was observed from families and carers of participants aged between 0 and 5. Significantly lower response rates were observed from participants with hearing impairments, participants with psychosocial disability, participants requiring very high levels of NDIA support, participants living in a remote or very remote area, and participants aged between 15 and 24. A comparison of the response rates between the high response group (purple), low response group (green) and the average wave 1 response rate is provided in Figure B.1.

Figure B.1.2.1 Participant surveys, interview 1, high and low response groups



Family Survey

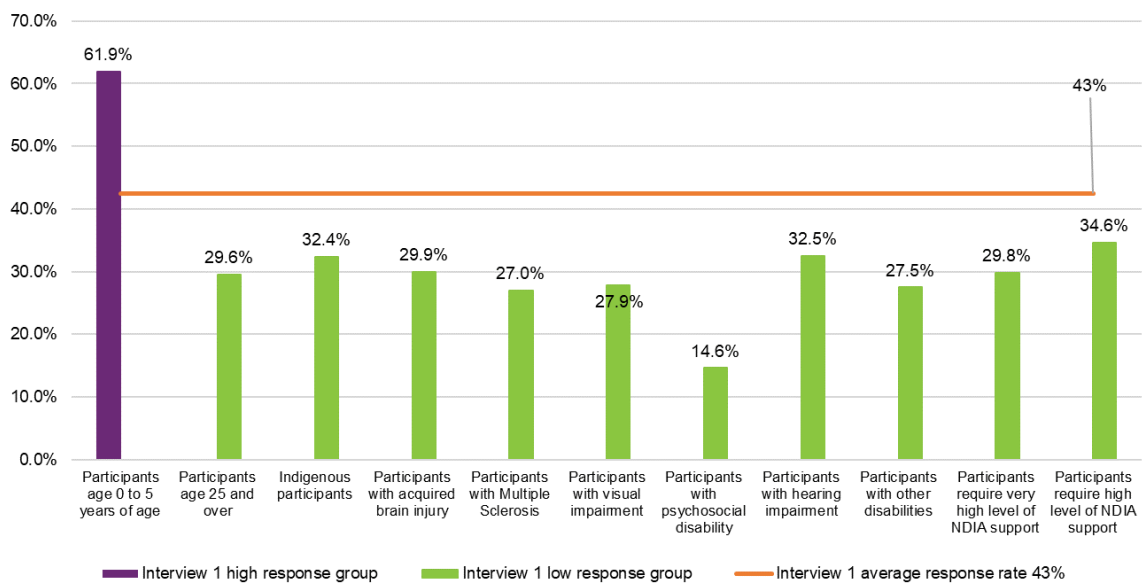
At interview 1, families/carers were less likely to respond if the participant was Indigenous, or required a very high level of NDIA support through the participant pathway. Families/carers of participants with acquired brain injury, multiple sclerosis, psychosocial disabilities, spinal cord injury, hearing impairment, visual impairment, acquired brain injury, or other physical disabilities also had a lower response rate.

Families/carers were significantly more likely to respond if the participant was aged under 5 and less likely to respond if the participants was aged 25 and over.

These results are shown in Figure B.2.

¹ Multiple regression analysis was used to determine low and high response rate groups.

Figure B.1.2.2 High and low response groups for interview 1 – family/carerer



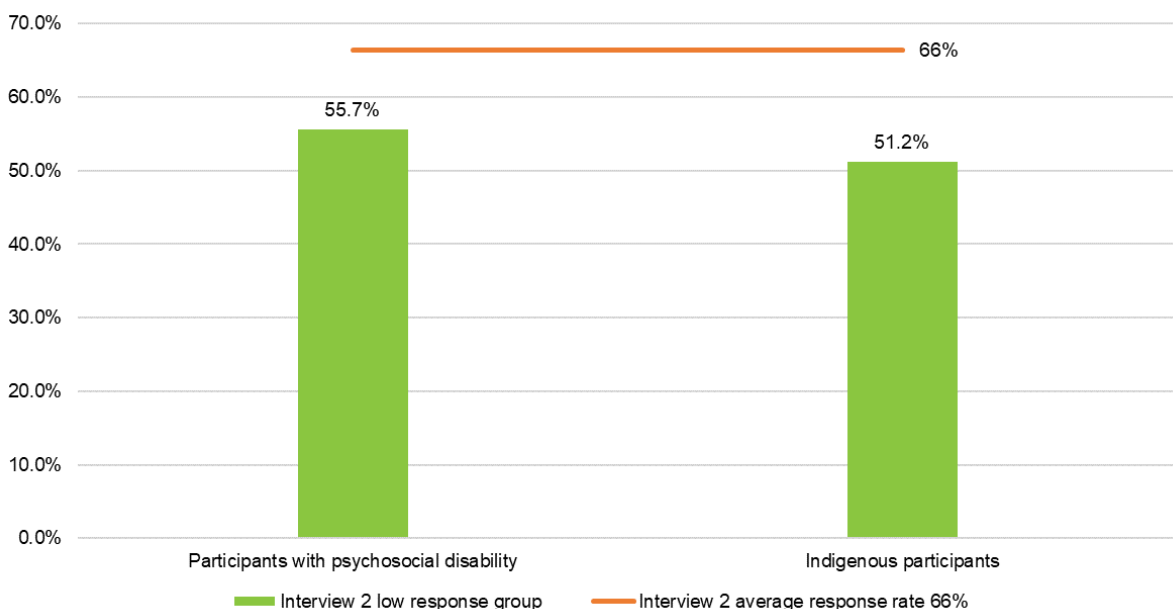
Interview 2

Participants who have responded in interview 1 and are still in the Scheme are then contacted again for interview 2.

Participant survey

At interview 2, participants who are Indigenous and who have psychosocial disabilities are less likely to respond. A comparison of the response rate of these low response groups to the overall interview 2 response rate is provided in Figure B.3.

Figure B.1.2.3 Participant surveys, interview 2, low response groups



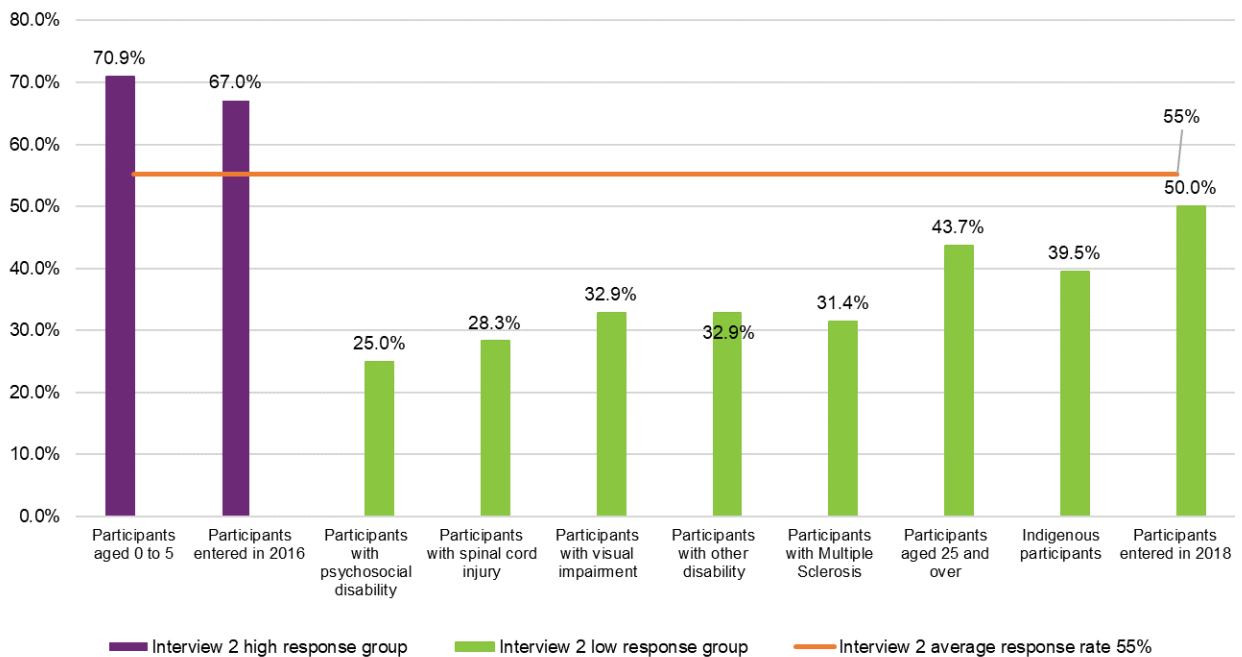
Family/carerer survey

Similar to interview 1, at interview 2 families/carers of participants who were aged under 5 were significantly more likely to respond while families/carers of participants who were aged 25 and over were significantly less likely to respond.

Comparing response rates by entry year, families/carers of participants who entered the Scheme in 2016 were most likely to respond at interview 2, while families/carers of participants who entered in 2018 were least likely to respond.

Families/carers of participants who are Indigenous, have psychosocial disabilities, spinal cord injury, visual impairment, multiple sclerosis and other physical disabilities were less likely to respond. A comparison of the response rates of these high and low response groups to the overall interview 2 response rate is provided in Figure B.4.

Figure B.1.2.4 Family/carer surveys, interview 2, high and low response groups



Interview 3

Participant survey

There were no significantly lower or higher response rate groups at interview 3 for the participant survey.

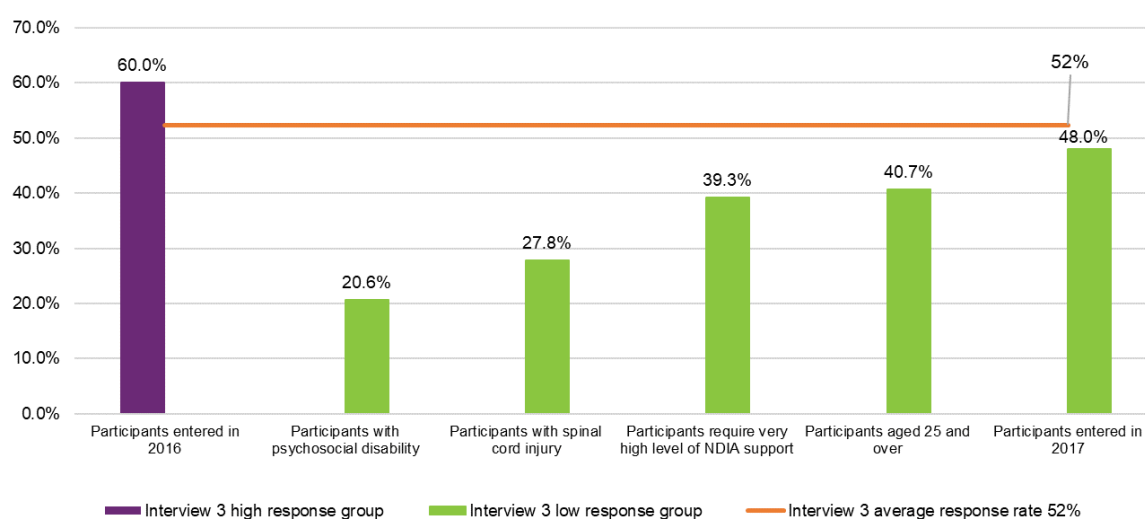
Family/carer survey

At interview 3, comparing family/carer response rates by participant entry year, a significantly higher response rate was observed from families/carers of participants who entered the Scheme in 2016 compared to 2017.

A significantly lower response rate was observed from families/carers of participants aged 25 and over.

Lower response rates were observed from families/carers of participants who have a psychosocial disability, spinal cord injury, or who require a very high level of NDIA support.

Figure B.1.2.5 Family/carer surveys, interview 3, high and low response groups



B.1.3 LF Representativeness

Unlike the SF, which all participants respond to, participation in the LF is by invitation and is voluntary. LF invitees are selected using a sampling approach. The degree of representativeness of the LF participants depends on the representativeness of the LF invitee samples and also on participation rates for different subgroups.

A systematic sampling approach has been used to select participants to contact for LF surveys. In 2016, 2017, 2018 and 2019, the data collection campaign occurred for a three month period usually between July and November. Leading up to each data collection campaign, a sample was drawn using systematic sampling method from new participants entering the Scheme, that is, the last 6000 participants who received access to the Scheme in a window of 3 months leading up to the data collection campaign. Systematic sampling method was chosen for practical reasons, as it is simple and quick to administer, it allows the baseline outcome data² of participants and families/carers to be collected shortly after the participant enters the Scheme. The new sample from each year forms a “cohort”. Participants from each cohort are followed up for as long as they wish to respond. Participants who stop participating in a wave are considered “lost” and no longer followed in subsequent waves. Participants who have died or exited the Scheme for other reasons are also excluded from follow up.

During transition, sampling in a three month window may induce a lack of representativeness due to the way that participants phased into the Scheme.

Since LF participation is voluntary, the degree of representativeness of the LF respondents will also be affected by differential rates of participation amongst different segments of the participant population.

Comparisons of representativeness were made between:

1. Transition participants (Reference group),
2. The initial invitee sample, and

² Baseline data is collected on the situation of participants and families/carers at the time the participant enters the Scheme.

3. LF respondents.

The profiles of these three groups were compared by each participant survey age group, cohort and interview. Representativeness of family/carer questionnaires was not examined due to the significant drop in response rate from participants aged 15 onwards.

Comparisons based on participant survey show that LF respondents from interview 1 are largely representative of the Reference group with the exception of under-sampling from participants living in NSW.

LF respondent representativeness reduced over time with higher interview years, i.e. interview 2, interview 3 and interview 4, due to smaller samples and larger bias in the samples taken in early cohorts particularly in 2016. Overall, combining the four years of data collected, relative to the transition participant Reference group there has been:

- An under-sampling of NSW participants (interview 1-4),
- An under-sampling and lower response rate from participants who are Indigenous, participants who require a high level of NDIA support, participants who live in major cities (interview 2, 3, 4), and participants who are “new”, as defined by the Bilateral Agreement (interview 2 and 4).
- Furthermore, additional differences were observed from interview 4, where participants with high annualised plan budget, and low level of function were under-represented.

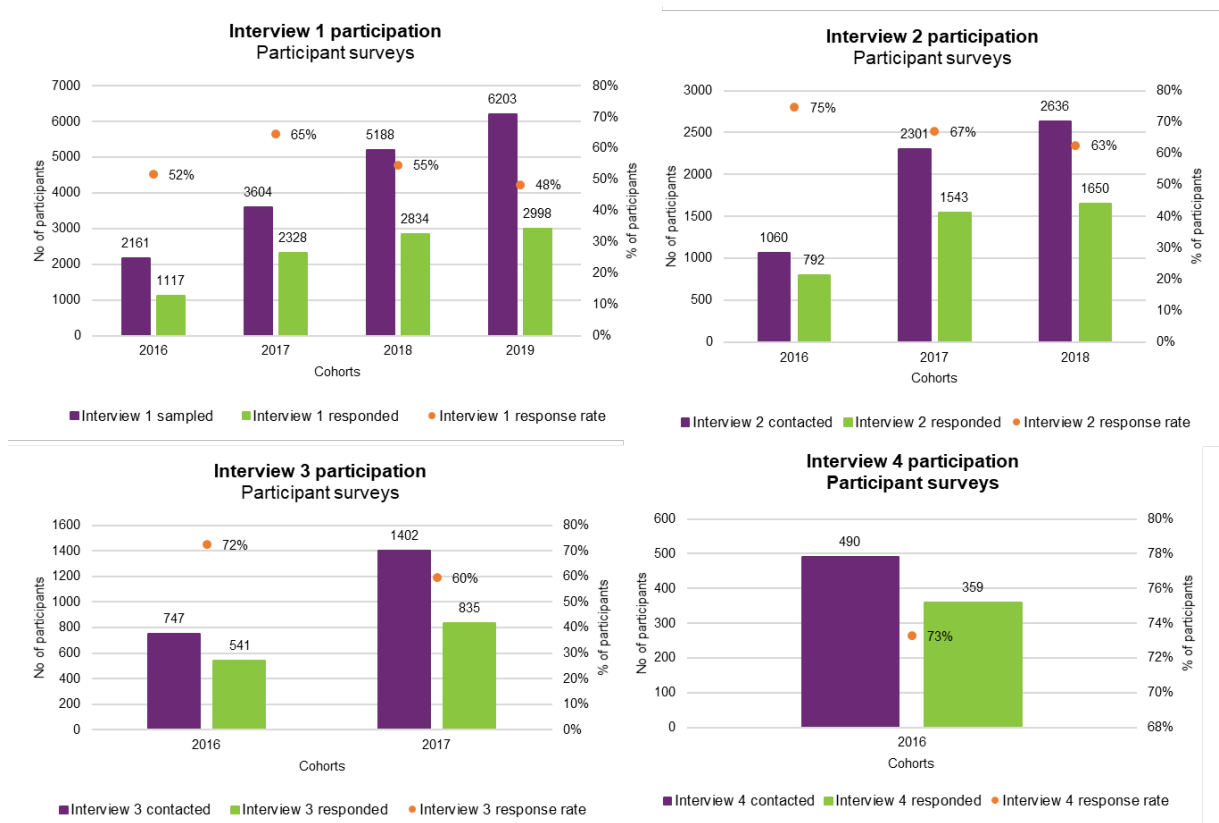
Further details of the representativeness analysis are provided in Appendix B.2.

B.2 Appendix B.2 Detailed Analysis

B.2.1 Appendix B.2.1 – LF Participation Rate

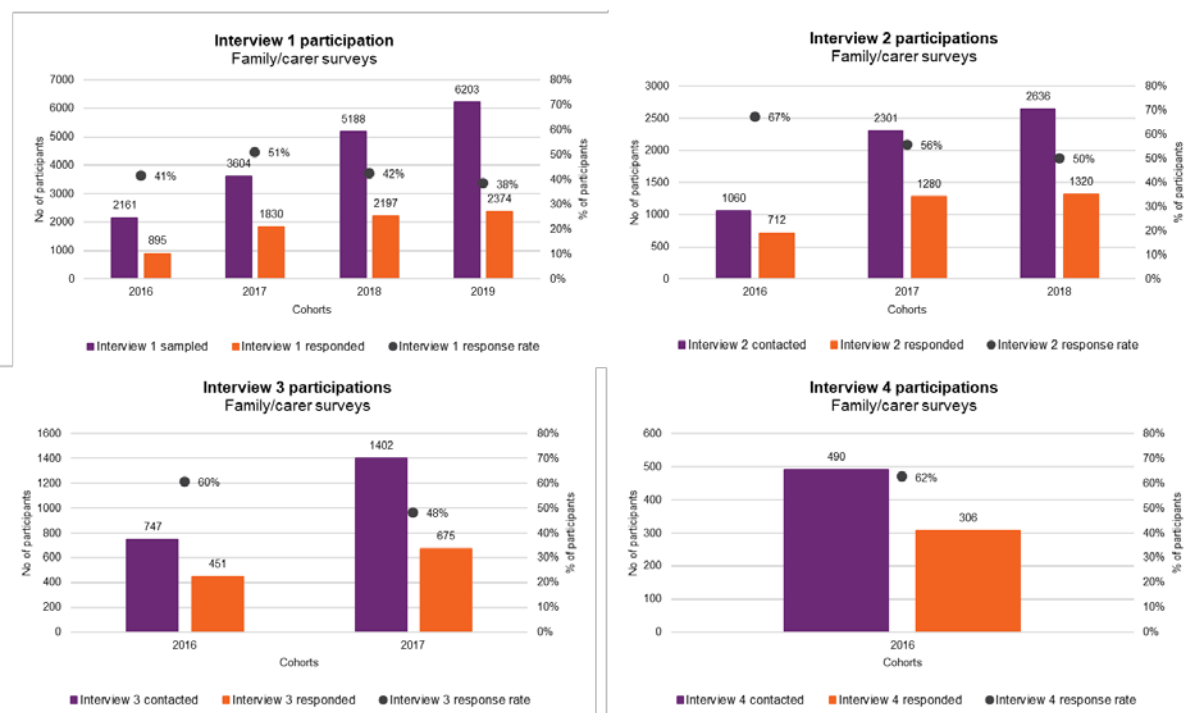
Between 2016 and 2019, a total of 17,156 participants have been contacted for the LF surveys. For participant surveys, an average participation rate of 54% was achieved at first interview, followed by 66% at interview 2, 64% at interview 3, and 73% at interview 4. Families and carers of participants were also invited to respond to the family survey. Participation rates for each interview are shown in Figure B.4.

Figure B.2.1 – LF participant survey: first interview, second interview, third interview and fourth interview participation rate by cohort



Overall, participation in the family/carer surveys was lower than the participant surveys. The average participation rate in family/carer surveys for interview 1 was 43%, followed by 55% for interview 2, 52% for interview 3, and 62% for interview 4.

Figure B.2.2– LF family/carer survey: first interview, second interview, third interview and fourth interview participation rate by cohort



The lower overall family/carer survey participation rate compared to participant surveys mainly reflects the low participation rate from families of participants aged 15 and over.

B.2.2 Appendix B.2.2 – Reference groups

Representativeness of LF respondents from each wave is assessed against participants from the overall Scheme with comparable duration of funding (reference group). A description of each reference group and the number of participants included is shown below in Table B.8.

Due to variation in children’s starting school age, respondent groups for questionnaires Age 0 to Before Starting School and Age Starting School to 14 have been combined into one group then compared to the reference group.

Table B.8 LF reference groups

LF - Cohort and interviews	Transition participant group	No of participants included in the reference group * Does not include ECEI	Participant Survey(s)	No of participants included in the reference group * Does not include ECEI
Interview 1: 2016-2019 Cohorts	Participants who have received one or more active plan as at the 31st of December 2019	348,496	Participant Survey Age 0 to Starting School & Participant Survey Age Starting School to 14	130,659
			Participant Survey Age 15 to 24	59,442
			Participant Survey Age 25 Plus	158,395

LF - Cohort and interviews	Transition participant group	No of participants included in the reference group * Does not include ECEI	Participant Survey(s)	No of participants included in the reference group * Does not include ECEI
Interview 2: 2016-2018 Cohorts	Participants who have received funding in plan(s) cumulatively for more than 12 months as at the 31st of December 2019	233,131	Participant Survey Age 0 to Starting School & Participant Survey Age Starting School to 14	76,158
			Participant Survey Age 15 to 24	44,909
			Participant Survey Age 25 Plus	112,064
Interview 3: 2016-2017 Cohort	Participants who have received funding in plan(s) cumulatively for more than 24 months as at the 31st of December 2019	132,750	Participant Survey Age 0 to Starting School & Participant Survey Age Starting School to 14	40,826
			Participant Survey Age 15 to 24	29,210
			Participant Survey Age 25 Plus	62,714
Interview 4: 2016 Cohort	Participants who have received funding in plan(s) cumulatively for more than 24 months as at the 31st of December 2019	61,197	Participant Survey Age 0 to Starting School & Participant Survey Age Starting School to 14	20,208
			Participant Survey Age 15 to 24	14,755
			Participant Survey Age 25 Plus	26,234

B.2.3 Appendix B.2.3 – Summaries of Comparison between LF Samples against reference groups

A summary of representativeness of the LF respondents compared to the reference group for interview 1 is presented in Table B.4 below. LF respondents include all interview participants who completed interview 1 in 2016, 2017, 2018, 2019 cohorts.

Table B.4: Interview 1 – Participant survey, 2016- 2019 Cohorts combined

Participant characteristics	Magnitude of difference (Large: >20%, Moderate: 10-20%, Small 5-10%, Very Small <5%)		
	Participant Survey Age 0 to Starting School & Participant Survey Starting School to 14	Participant Survey Age 15 to 24	Participant Survey Age 25 and Over
Residential State/Jurisdiction	Moderate Reason: Sampling	Moderate Reason: Sampling	Small Reason: Sampling

	Magnitude of difference (Large: >20%, Moderate: 10-20%, Small 5-10%, Very Small <5%)		
Participant characteristics	Participant Survey Age 0 to Starting School & Participant Survey Starting School to 14	Participant Survey Age 15 to 24	Participant Survey Age 25 and Over
	<i>Under-sampling of participants from NSW and SA, over-sampling from VIC and QLD</i>	<i>Under-sampling of participants from NSW and over-sampling from SA and VIC and QLD</i>	<i>Small under-sampling of participants from NSW</i>

A summary of representativeness of the LF respondents compared to the reference group for interview 2 is presented in Table B.5 below. LF respondents include all interview participants who completed interview 2 in 2016, 2017, 2018 cohorts.

Table B.5: Interview 2 – Participant survey, 2016, 2017 and 2018 Cohorts combined

	Magnitude of difference (Large: >20%, Moderate: 10-20%)		
Participant characteristics	Participant Survey Age 0 to Starting School & Participant Survey Starting School to 14	Participant Survey Age 15 to 24	Participant Survey Age 25 and Over
Residential State/Jurisdiction	Large Reason: Sampling <i>Over-sampling of participants from VIC and QLD, under-sampling of participants from NSW</i>	Large Reason: Sampling <i>Over-sampling of participants from VIC and QLD, under-sampling of participants from NSW</i>	Very small
Indigenous Status	Moderate <i>Low response rate from indigenous participants</i>	Moderate <i>Low response rate from indigenous participants</i>	Very small
Access Entry Type: 1) Commonwealth 2) State 3) New	Moderate Reason: sampling <i>Over-sampling of new participant defined by Bilateral Agreements and participants transitioned from Commonwealth funded programs, under-sampling of participants transitioned from State government funded programs</i>	Small Reason sampling <i>Under-sampling of participants transitioned from State government funded programs</i>	Small Reason: sampling <i>Over-sampling new participant defined by Bilateral Agreements and participants transitioned from Commonwealth funded programs, under-sampling of participants transitioned from State government funded programs</i>

A summary of representativeness of the LF respondent compared to the reference group for interview 3 is presented in Table B.6 below. LF respondents include all interview participants who completed interview 3 in 2016, 2017 cohorts.

Table B.6: Interview 3 – Participant survey, 2016 Cohort and 2017 Cohort

Participant characteristics	Magnitude of difference (Large: >20%, Moderate: 10%-20%)		
	Participant Survey Age 0 to Starting School & Participant Survey Starting School to 14	Participant Survey Age 15 to 24	Participant Survey Age 25 and Over
Residential State/Jurisdiction	Moderate Reason: Sampling <i>Under-sampling of participants from NSW over-sampling from VIC, SA and ACT and QLD</i>	Large Reason: Sampling <i>Under-sampling of participants from NSW over-sampling from SA and ACT.</i>	Moderate Reason: Sampling <i>Over-sampling from SA and ACT, under-sampling from NSW and VIC.</i>
Indigenous Status	Moderate Reason: sampling/response rate <i>Under-sampling of indigenous participants and low response rate</i>	Moderate Reason: sampling/response rate <i>Under-sampling of indigenous participants and low response rate</i>	Very small
Level of NDIA support	Moderate Reason: Sampling <i>Over-sampling of participants requiring medium level of NDIA support, under-sampling of participants requiring low level of support</i>	Moderate Reason: Sampling <i>Over-sampling of participants requiring medium level of NDIA support, under-sampling of participants requiring low level of support</i>	Small Reason: Sampling <i>Over-sampling of participants requiring medium and intensive level of NDIA support, under-sampling of participants requiring low level of support</i>
Residential remoteness	Very small	Very small	Moderate Reason: Sampling <i>Over-sampling of participants from regional areas with population between 15k to 50k, under-sampling of participants from major cities</i>

A summary of representativeness of the LF respondent compared to the Reference group for interview 4 is presented in Table B.7 below. LF respondents include all interview participants who completed interview 4 in 2016 cohorts.

Table B.7: Interview 4 – Participant survey, 2016 Cohort

	Magnitude of difference (Large: >20%, Moderate: 10-20%)		
Participant characteristics	Participant Survey Age 0 to Starting School & Participant Survey Starting School to 14	Participant Survey Age 15 to 24	Participant Survey Age 25 and Over
Residential State/Jurisdiction	Large Reason: Sampling <i>Under-sampling of participants from NSW and VIC and over-sampling from SA and ACT and QLD</i>	Large Reason: Sampling <i>Under-sampling of participants from NSW and VIC and over-sampling from SA and ACT and QLD</i>	Large Reason: Sampling <i>Under-sampling of participants from NSW and VIC, QLD and over-sampling from ACT</i>
Access Entry Type: 1) Commonwealth 2) State 3) New	Moderate Reason: Sampling <i>Over-sampling of new participant defined by Bilateral Agreements, under-sampling of participants transitioned from State government funded programs</i>	Moderate Reason: Sampling <i>Over-sampling of new participant defined by Bilateral Agreements, under-sampling of participants transitioned from State government funded programs</i>	Large Reason: Sampling <i>Over-sampling of new participant defined by Bilateral Agreements and participants who transitioned from Commonwealth government programs. Under-sampling of participants transitioned from State government funded programs</i>
Level of NDIA support	Moderate Reason: Sampling <i>Over-sampling of participants require medium level of NDIA support, under-sampling requiring other level of support</i>	Moderate Reason: Sampling <i>Over-sampling of participants requiring medium level of NDIA support, under-sampling of participants requiring intensive and super intensive level of NDIA support.</i>	Large Reason: Sampling <i>Over-sampling of participants requiring medium level of NDIA support, under-sampling of participants requiring low, intensive and super intensive level of NDIA support</i>
Residential remoteness	Moderate Reason: Sampling <i>Over-sampling of participants living in regional areas.; under-sampling of participants from major cities</i>	Small Reason: Sampling <i>Over-sampling of participants living in regional areas with population between 15-50k, under-sampling of participants living in major cities and large regional areas</i>	Moderate Reason: Sampling <i>Over-sampling of participants living in major cities, under-sampling of participants living in other areas</i>
Indigenous Status	Moderate Reason: Sampling/response rate	Large Reason: Sampling/response rate	Large Reason: Sampling/response rate

Participant characteristics	Magnitude of difference (Large: >20%, Moderate: 10-20%)		
	Participant Survey Age 0 to Starting School & Participant Survey Starting School to 14	Participant Survey Age 15 to 24	Participant Survey Age 25 and Over
	<i>Under-sampling and low response rate from indigenous participants</i>	<i>Under-sampling and low response rate from indigenous participants</i>	<i>Under-sampling and low response rate from indigenous participants</i>
Primary disability	Very small	Very small	Moderate Reason: Sampling <i>Over-sampling of participants with psychosocial disabilities, hearing impairment, under-sampling of participants with intellectual disability and Cerebral Palsy.</i>
Level of function	Very small	Very small	Moderate Reason: Sampling and response rate <i>Over-sampling of participants with high and medium level of function and under-sampling of participants with low level of function.</i> <i>Higher response rate from participants with high level of function and lower response rate from participants with low level of function</i>
Annualised cost of plan	Moderate Reason: sampling and response rate <i>Over-sampling of participants with lower annualised cost of plan, under-sampling of participants with higher annualised cost of plan.</i> <i>Higher response rate from participants with lower annualised cost of plan, lower response rate from participants with higher annualised cost of plan.</i>	Moderate Reason: sampling and response rate <i>Over-sampling of participants with lower annualised cost of plan, under-sampling of participants with higher annualised cost of plan.</i> <i>Higher response rate from participants with lower annualised cost of plan, lower response rate from participants with higher annualised cost of plan.</i>	Large Reason: sampling <i>Under-sampling of participants with very high annualised cost of plan (>100k).</i>

B.2.4 Appendix B.2.4 - Graphs Comparing Representativeness of each Participant Survey by Interview

This Appendix only includes graphs on participant characteristics where significant differences in representativeness have been identified. Each graph compares the LF respondent group with the initial sample drawn and the reference group, so that impact of sampling and response rate can be separately identified. The number of participants in each group are also shown in each graph.

Interview 1:

Reference group: Participants who have received one or more plans as at 31 December 2019.

Entry year cohorts included: 2016 to 2019 cohorts.

Representativeness by residential State/Jurisdiction

Figure B.2.4.1 –Participants aged 0 to 14³

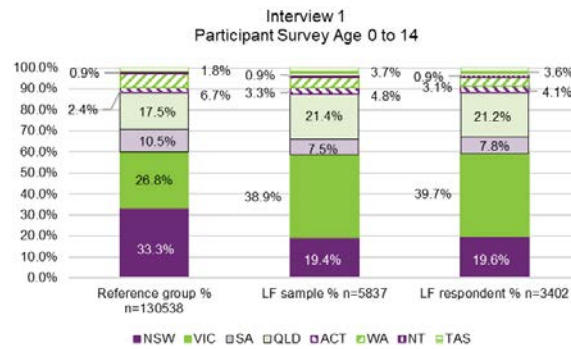


Figure B.2.4.2 – Participants aged 15 to 24

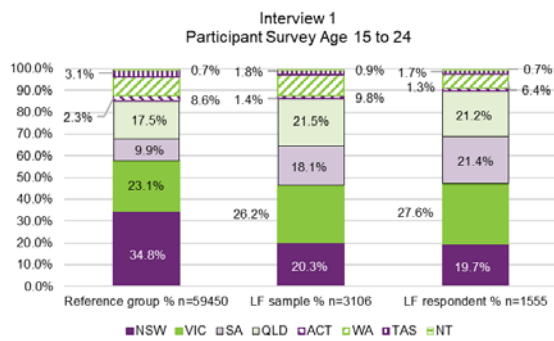
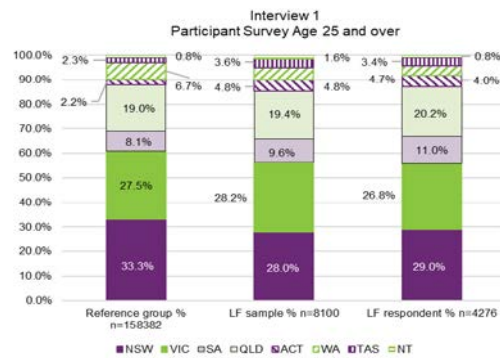


Figure B.2.4.3 – Participants aged 25 and over



³ LF respondents for Participant Survey 0 to Starting School and Participant Survey Starting School to 14 are combined and compared against Transition Participants aged between 0 and 14 at first plan effective date.

Interview 2:

Reference group: Participants who have received funding in plan(s) cumulatively for more than 12 months as at 31 December 2019.

Entry year cohorts included: 2016 to 2018 cohorts.

Representativeness by residential State/Jurisdiction

Figure B.2.4.4 – Participants aged 0 to 14

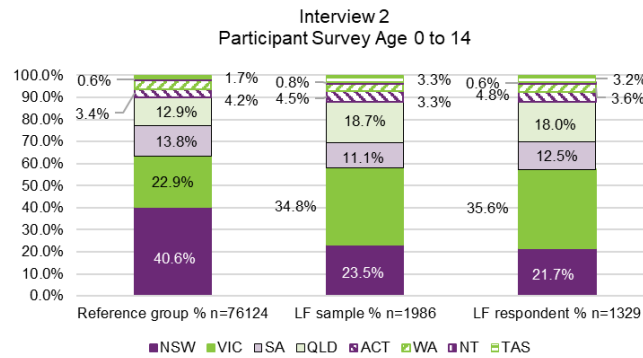


Figure B.2.4.5 – Participants aged 15 to 24

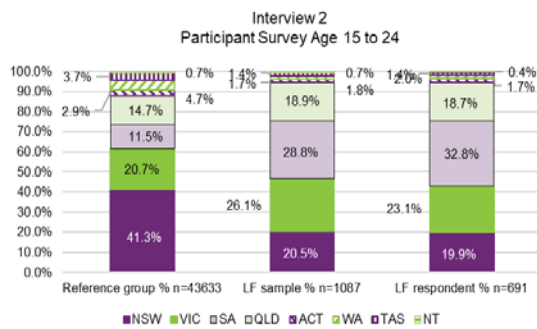
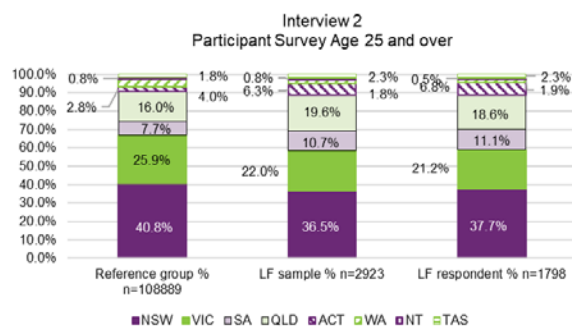


Figure B.2.4.6 – Participants aged 25 and over



Representativeness by Indigenous status

Figure B.2.4.7 – Participants aged 0 to 14

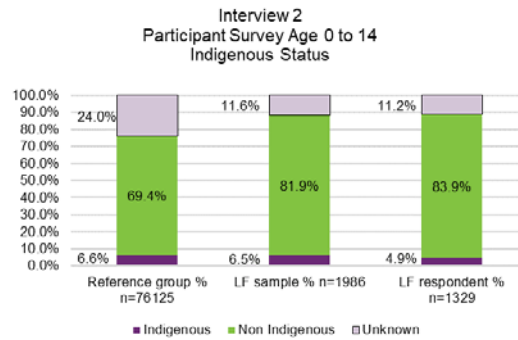


Figure B.2.4.8 – Participants aged 15 to 24

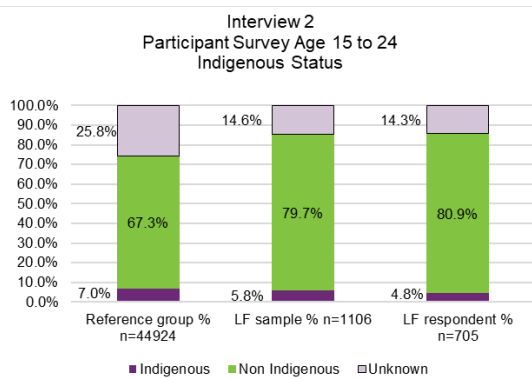
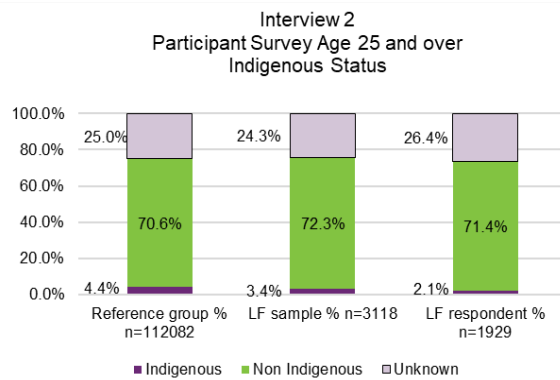


Figure B.2.4.9 – Participants aged 25 and over



Representativeness by access entry type

Figure B.2.4.10 – Participants aged 0 to 14

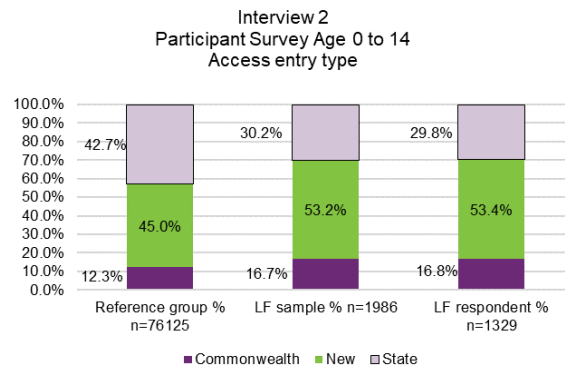


Figure B.2.4.11 – Participants aged 15 to 24

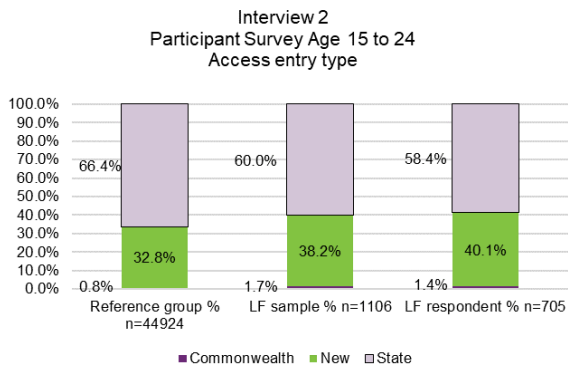
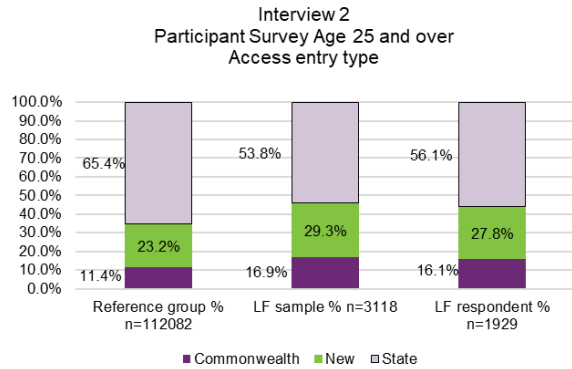


Figure B.2.4.12 – Participants aged 25 and over



Interview 3:

Reference group: Participants who have received funding in plan(s) cumulatively for more than 24 months as at 31 December 2019.

Entry year cohorts included: 2016 to 2017 cohorts.

Representativeness by residential State/Jurisdiction

Figure B.2.4.13 – Participants aged 0 to 14

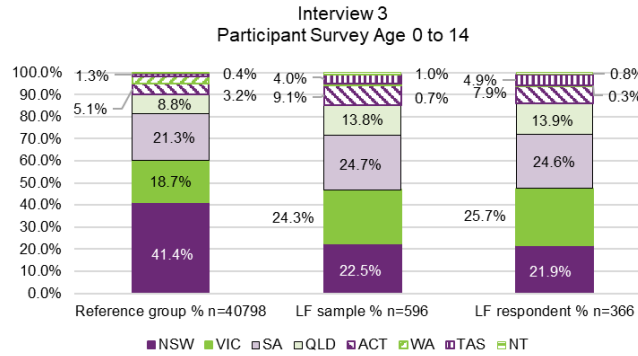


Figure B.2.4.14 – Participants aged 15 to 24

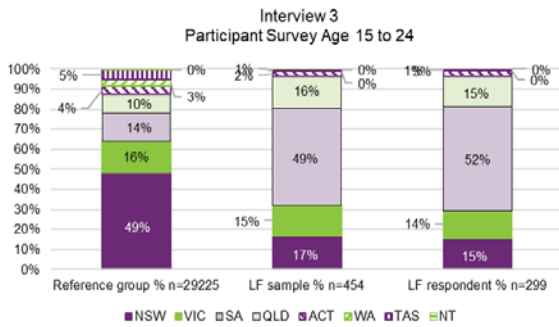
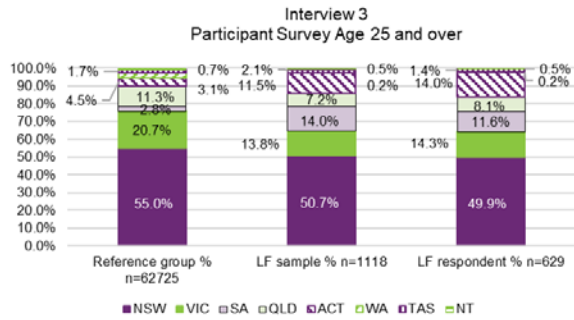


Figure B.2.4.15 – Participants aged 25 and over



Representativeness by indigenous status

Figure B.2.4.16 – Participants aged 0 to 14

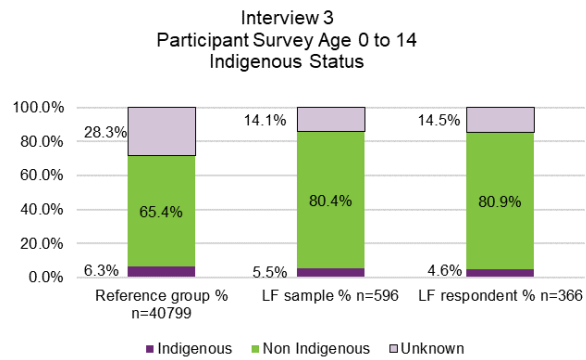


Figure B.2.4.17 – Participants aged 15 to 24

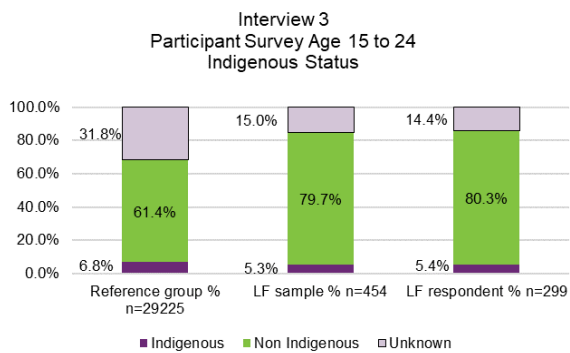
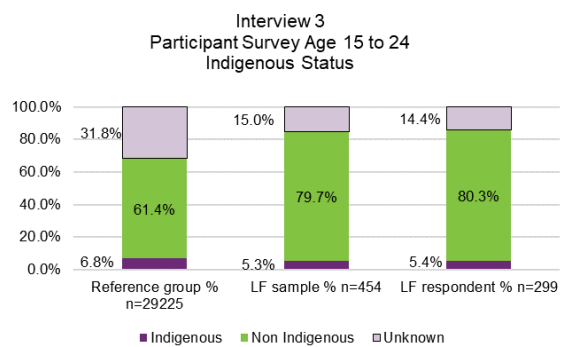


Figure B.2.4.18 – Participants aged 25 and over



Representativeness by level of NDIA support

Figure B.2.4.19 – Participants aged 0 to 14

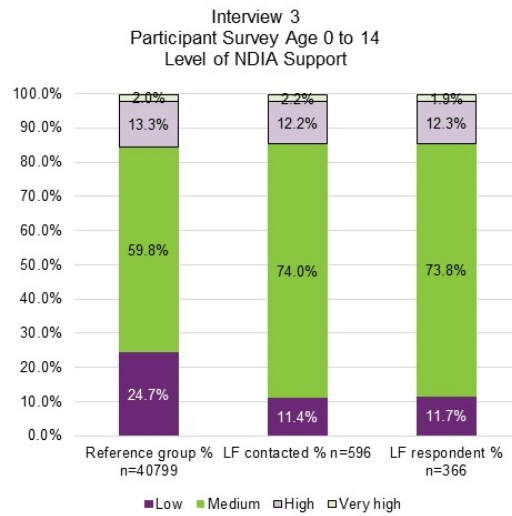


Figure B.2.4.20 – Participants aged 15 to 24

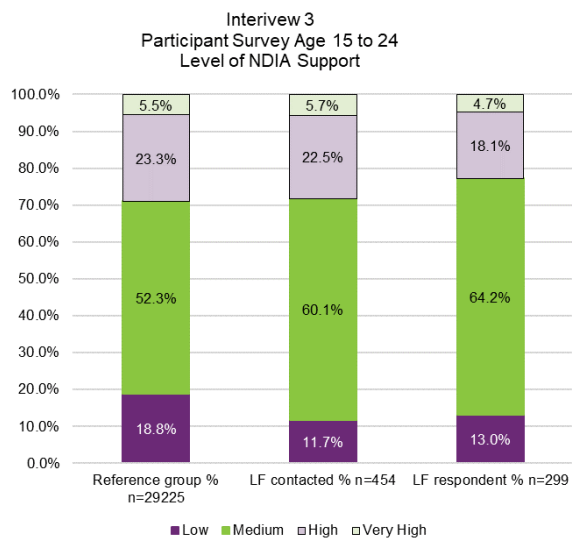
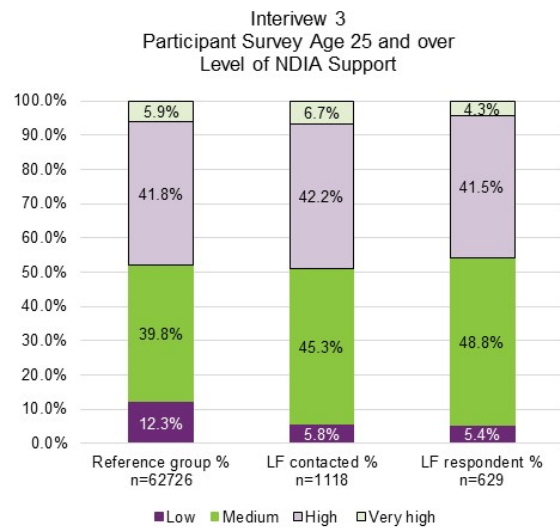


Figure B.2.4.21 – Participants aged 25 and over



Representativeness by residential geographic remoteness

Figure B.2.4.22 – Participants aged 0 to 14

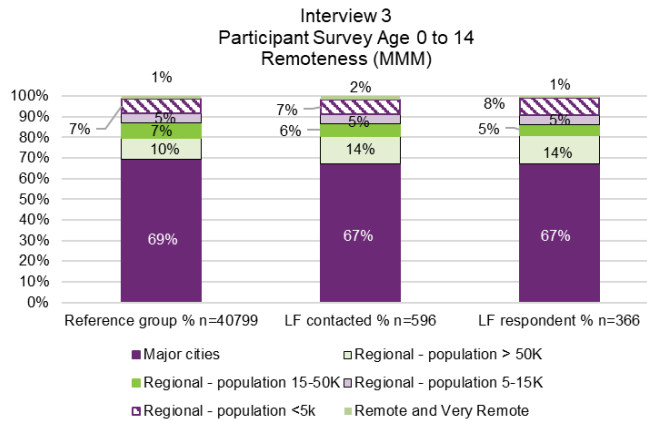


Figure B.2.4.23 – Participants aged 15 to 24

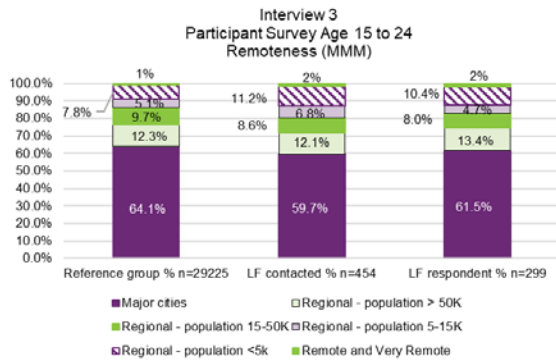
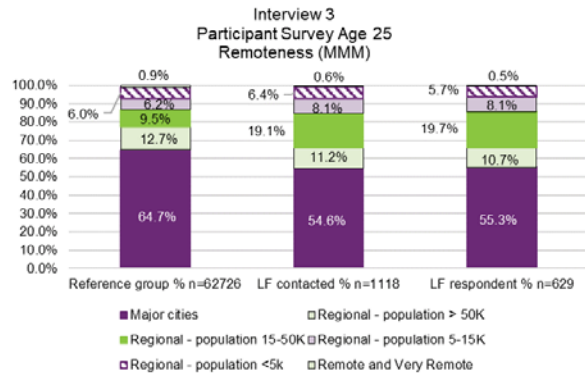


Figure B.2.4.24 – Participants aged 25 and over



Interview 4

Reference group: Participants who have received funding in plan(s) cumulatively for more than 24 months as at the 31st of December 2019.

Entry year cohorts included: 2016 cohort.

Representativeness by residential state/Jurisdiction

Figure B.2.4.25 – Participants aged 0 to 14

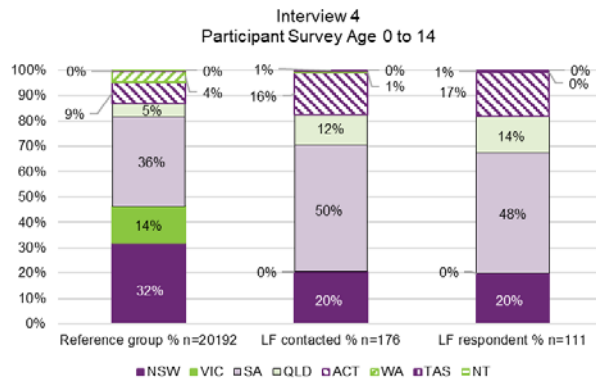


Figure B.2.4.26 – Participants aged 15 to 24

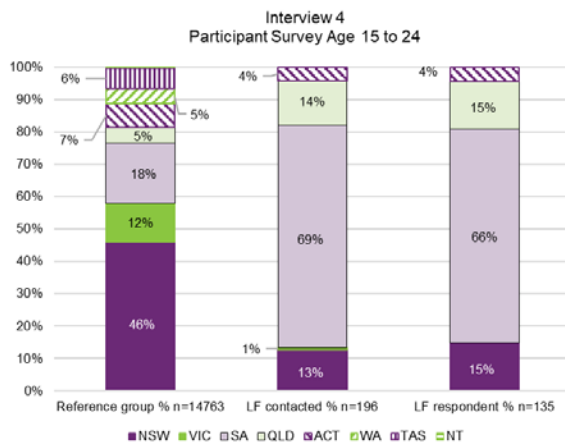
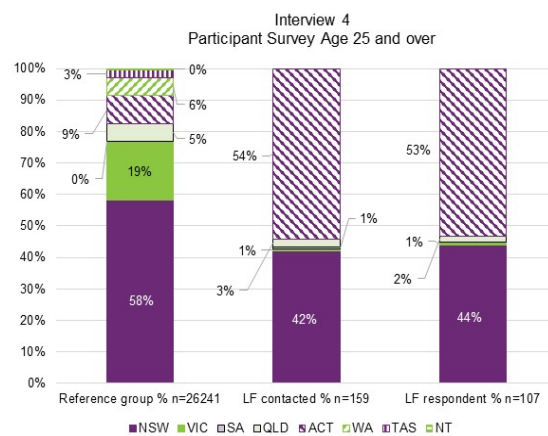


Figure B.2.4.27 – Participants aged 25 and over



Representativeness by residential geographic remoteness

Figure B.2.4.28 – Participants aged 0 to 14

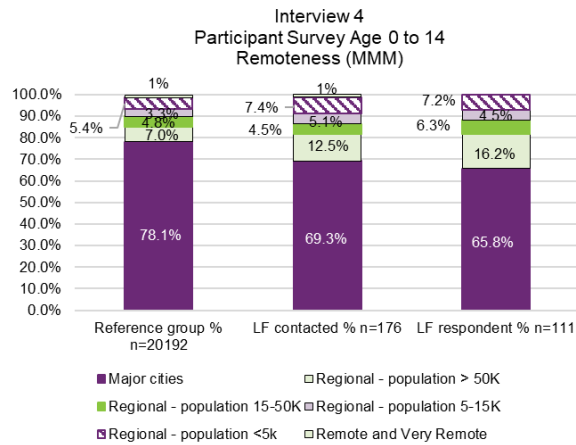


Figure B.2.4.29 – Participants aged 15 to 24

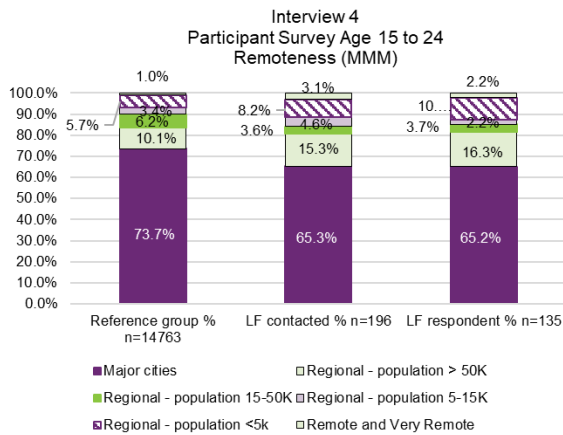
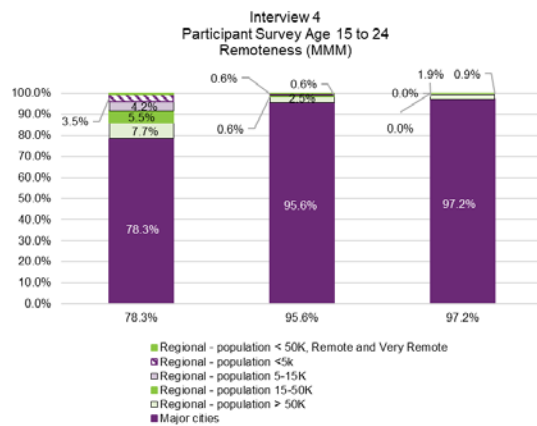


Figure B.2.4.30 – Participants aged 25 and over



Representativeness by indigenous status

Figure B.2.4.31 – Participants aged 0 to 14

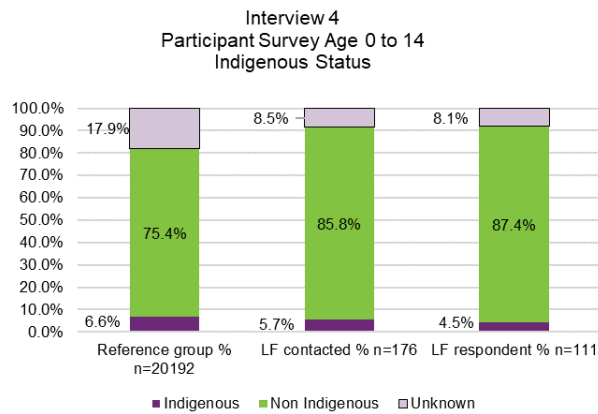


Figure B.2.4.32 – Participants aged 15 to 24

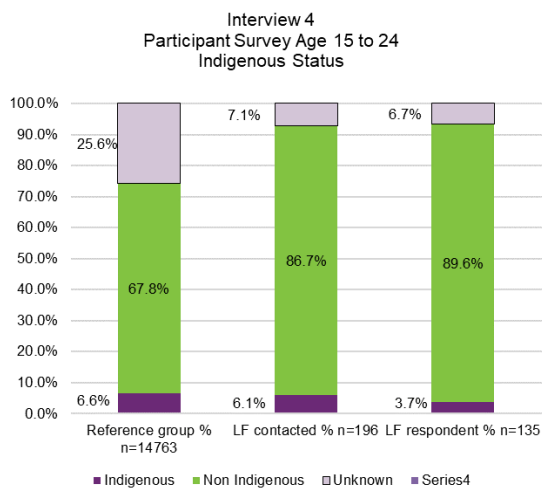
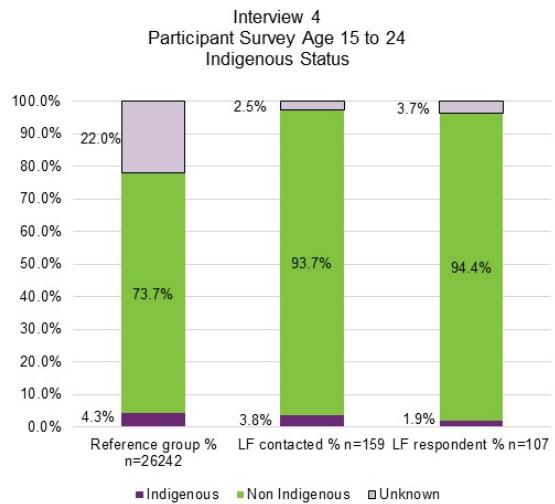


Figure B.2.4.33 – Participants aged 25 and over



Representativeness by access entry type

Figure B.2.4.34 – Participants aged 0 to 14

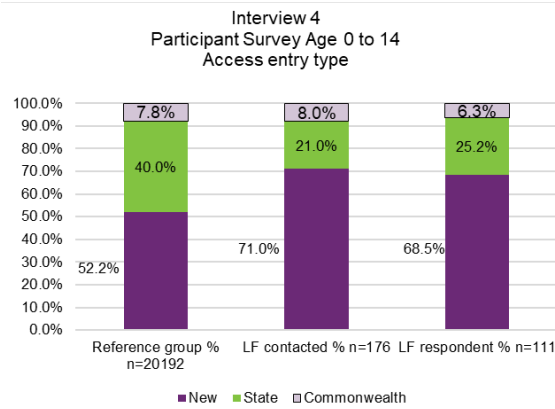


Figure B.2.4.35 – Participants aged 15 to 24

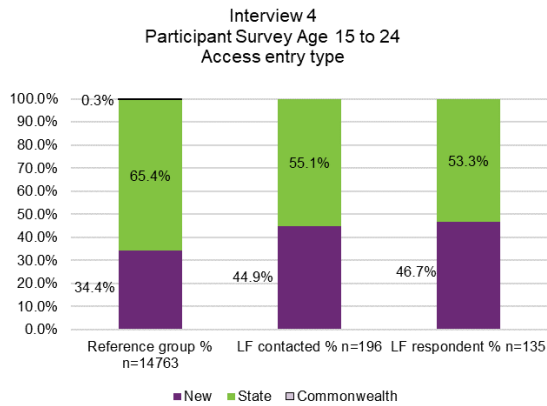
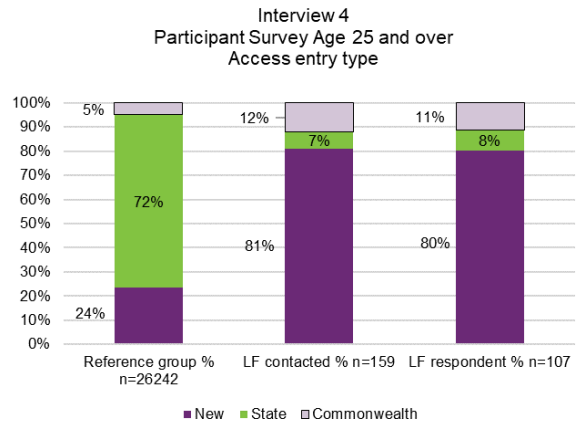


Figure B.2.4.36 – Participants aged 25 and over



Representativeness by level of NDIA support

Figure B.2.4.37 – Participants aged 0 to 14

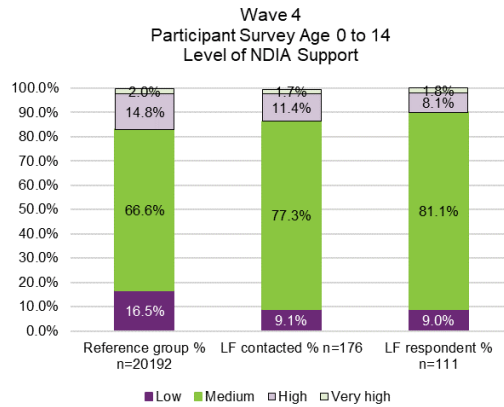


Figure B.2.4.38 – Participants aged 15 to 24

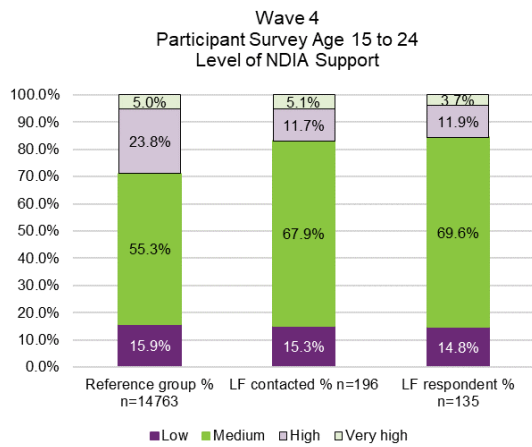
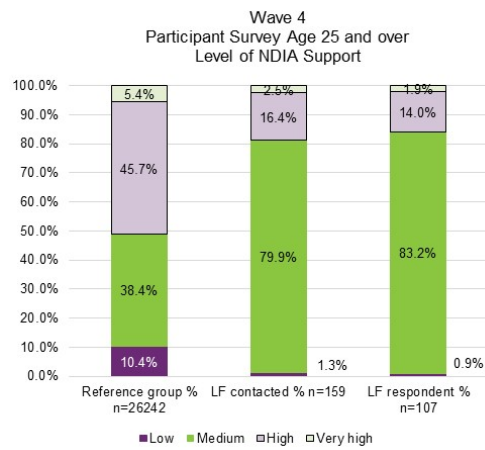


Figure B.2.4.40 – Participants aged 25 and over



Representativeness by primary disability

Figure B.2.4.41 – Participants aged 0 to 14

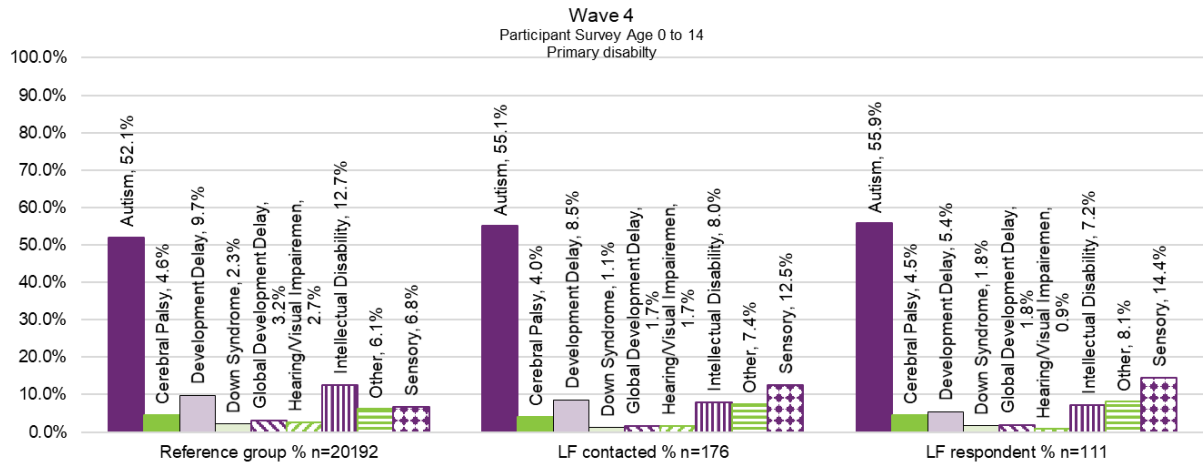


Figure B.2.4.42 – Participants aged 15 to 24

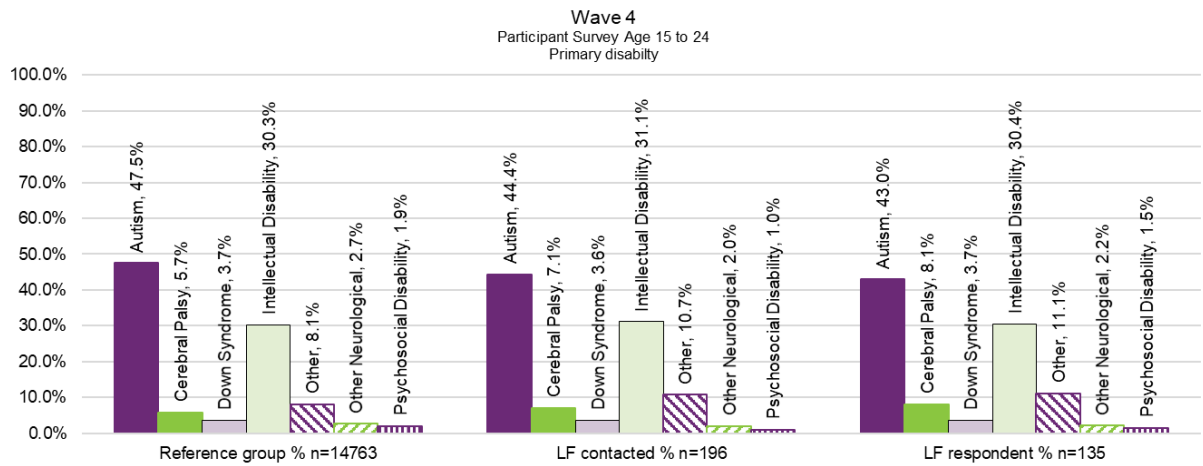
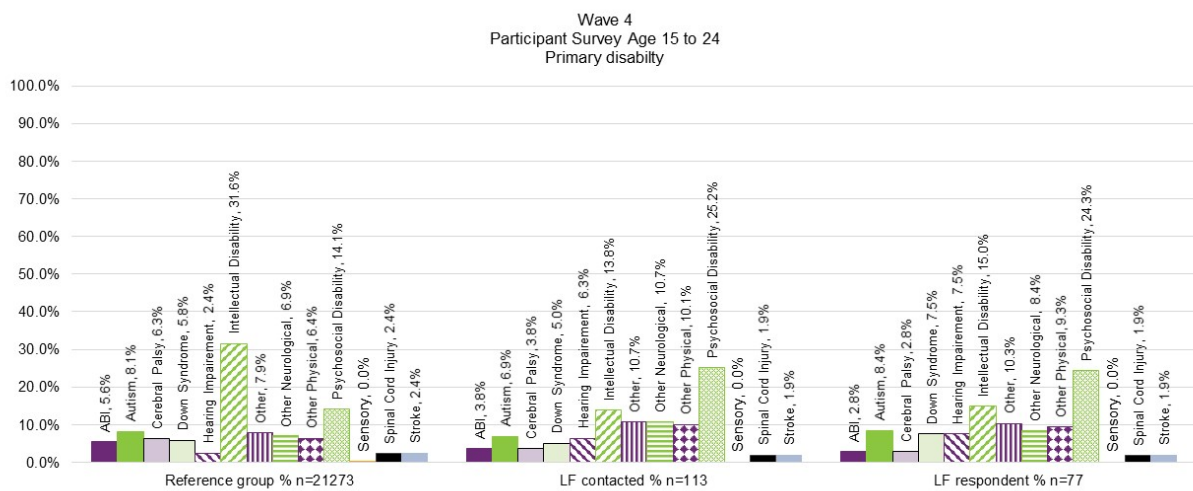


Figure B.2.4.43 – Participants aged 15 to 24



Representativeness by level of function

Figure B.2.4.44 – Participants aged 0 to 14

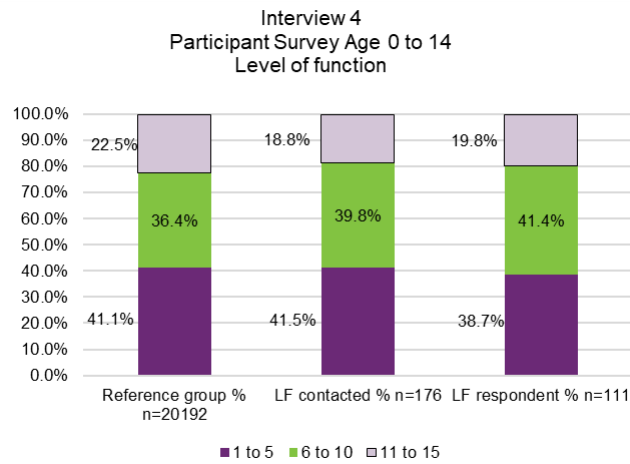


Figure B.2.4.45 – Participants aged 15 to 24

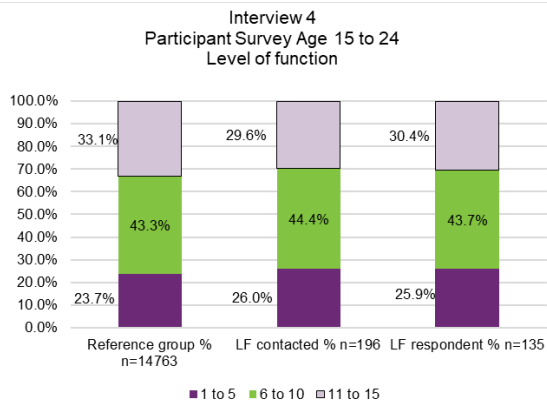
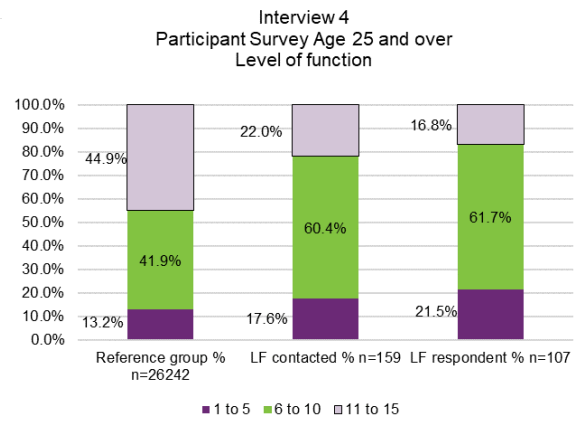


Figure B.2.4.46 – Participants aged 25 and over



Representativeness by annualised cost of plan

Figure B.2.4.47 – Participants aged 0 to 14

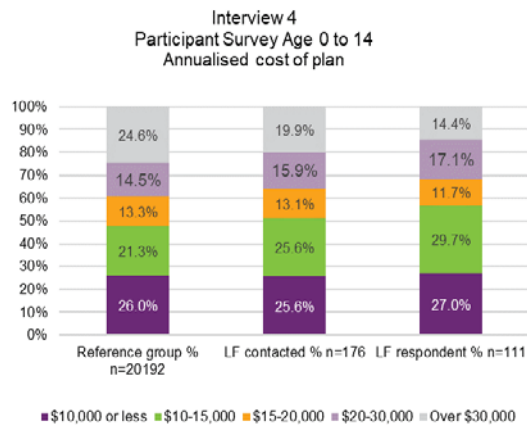


Figure B.2.4.48 – Participants aged 15 to 24

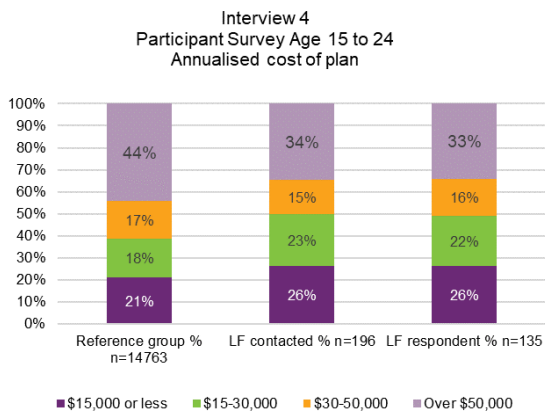
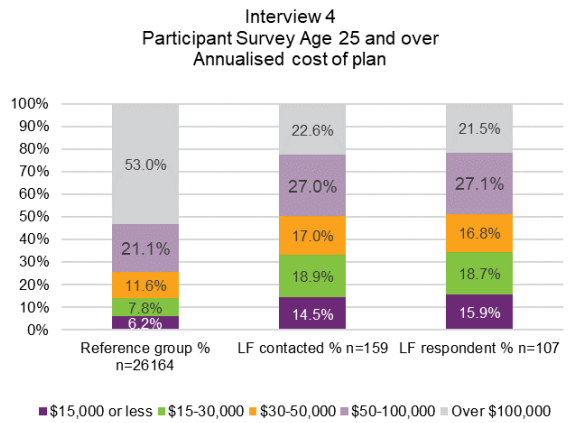


Figure B.2.4.49 – Participants aged 25 and over

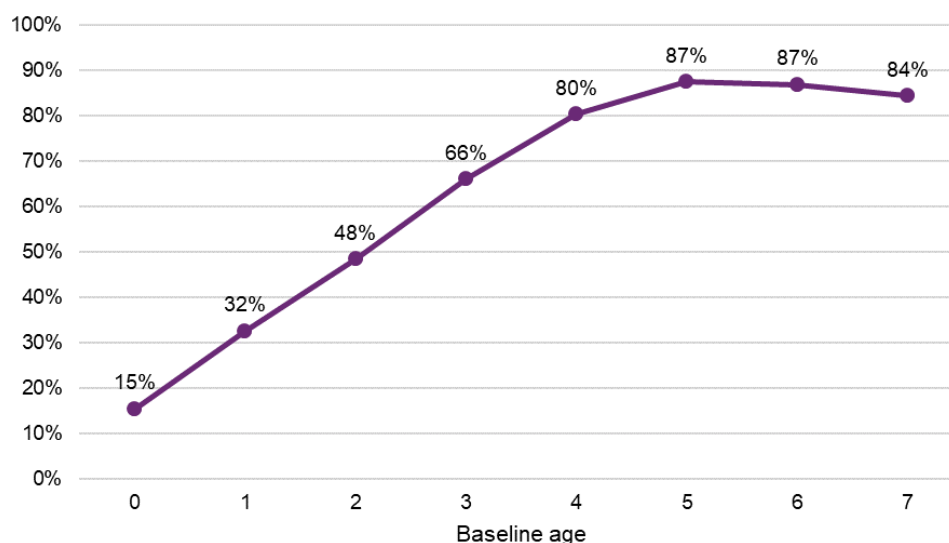


Appendix C. Age Adjustment Methodology

For the youngest two age groups (birth to before starting school and starting school to age 14) in particular, changes over time will include an element of normal age-related development, since children will be approximately one year older at the second time point and two years older at the third time point, compared to when they entered the Scheme. To assess possible impacts of the Scheme, the component of change due to normal age-related development should be removed. For the aggregate longitudinal change analysis, this has been done approximately by adjusting the value of the indicator at the earlier time point (baseline or first review, depending on the comparison). Effectively, the value of the indicator that would have applied to children approximately one year older (for comparisons of baseline with review 1, or review 1 with review 2) or two years older (for comparisons of baseline with review 2) has been used in the comparison with the later time point.

As an example, consider the indicator “% of parents/carers who say their child is able to tell them what he/she wants”, for participants aged 0 to before starting school. Figure C.1 gives an example of how this indicator might vary with participant age at baseline. As expected, the percentage increases with participant age, up to age 5.

Figure C.1 Percentage of parents/carers who say their child is able to tell them what he/she wants at baseline



Consider the comparison between baseline and review 1. For children who are aged 0 at baseline and 1 at review, if there was no real change between baseline and review apart from normal age-related development, we would expect that 32% of these children would be able to tell their parents/carers what they want at review. Hence the adjusted baseline indicator with which to compare the actual percentage at review is 32%, for this group. The overall adjusted baseline indicator is then the weighted average of the adjusted indicators for each distinct group defined by baseline age/review age.

To keep them to a manageable size, the tables summarising aggregate change contained in the report only show the unadjusted changes. However, we refer to the adjusted change results in the commentary where necessary, and the tables only include indicators where a material change occurs on an age-adjusted basis.

Appendix D. Variables used in baseline and longitudinal modelling

D.1 Variables used in baseline modelling

Participants from birth to before starting school

Variable	Meaning	Levels	Reference Category
Categorical			
Access entry type	Whether the participant received supports from Commonwealth or State/Territory programs before entering the NDIS	Services from Commonwealth programs, services from State/Territory programs, did not previously receive services from Commonwealth or State/Territory programs	Participant did not previously receive services from Commonwealth or State/Territory programs
Access request decision reason	Whether participant entered the Scheme due to disability (Section 24 of the NDIS Act) or for early intervention (Section 25)	Entered the Scheme for early intervention, entered the Scheme due to disability	Entered the Scheme for early intervention
Plan management method	How the supports in a participant's plan are managed	Agency-managed, plan managed, self-managed partly and self-managed fully	Agency-managed
Support categories within plans	Percentage of plan budget that is capacity building supports or capital supports	0-75% capacity building, 75-95% capacity building, 95-100% capacity building, 5-100% capital	Over 95% of supports are capacity building supports
Gender	Participant's gender	Male, Female	Male
Indigenous status	Whether participant identifies as Aboriginal and/or Torres Strait Islander	Non-Indigenous, Indigenous	Non-Indigenous

Variable	Meaning	Levels	Reference Category
CALD status	Whether participant is from a Culturally and Linguistically Diverse background	CALD, non-CALD	Non-CALD
Remoteness	Remoteness of participant's place of residence, measured by the Modified Monash Model (MMM)	Major cities, Regional – population less than 5,000, Regional – population between 5,000 and 15,000, Regional – population between 15,000 and 50,000, Regional – population greater than 50,000, Remote/Very Remote	Major cities
State/Territory	State or Territory the participant resides in	New South Wales (NSW), Queensland, South Australia, Victoria, Western Australia (WA), Tasmania, Australian Capital Territory (ACT), Northern Territory (NT)	NSW
Disability type	Participant's primary disability	Autism, Cerebral Palsy, Down Syndrome, Intellectual disability, Global developmental delay, Developmental delay, Other Neurological, Hearing impairment, Visual impairment, Other Sensory / Speech, Spinal Cord Injury / Other Physical, Other (all disabilities apart from those listed)	Developmental delay
Level of NDIA support	The level of NDIA support a participant requires as they move along the participant pathway, having regard to the complexity of their situation	Very High, High, Medium, Low	Low
Covid-19 indicator	Whether the review occurred after the start of Covid-19 (23 March 2020)	Yes, No	No
Continuous			
Annualised plan budget	Plan budget expressed as a yearly equivalent, aggregated over the modelling period		

Variable	Meaning	Levels	Reference Category
Average unemployment rate	Unemployment rate of the Local Government Area (LGA) in which the participant lives		
General time trend	General time trend not related to COVID-19		
Change in time trend post-COVID	Interaction between COVID-19 indicator and general time trend, allowing for a change in slope post-COVID		
Level of function	A numeric variable measuring participant level of function		
Age	Age at Scheme entry		

Participants from starting school to age 14

Variable	Meaning	Levels	Reference Category
Categorical			
Access entry type	Whether the participant received supports from Commonwealth or State/Territory programs before entering the NDIS	Services from Commonwealth programs, services from State/Territory programs, did not previously receive services from Commonwealth or State/Territory programs	Participant received services from State/Territory programs
Access request decision reason	Whether participant entered the Scheme due to disability (Section 24 of the NDIS Act) or for early intervention (Section 25)	Entered the Scheme for early intervention, entered the Scheme due to disability	Entered the Scheme due to disability

Variable	Meaning	Levels	Reference Category
Plan management method	How the supports in a participant's plan are managed	Agency-managed, plan managed, self-managed partly and self-managed fully	Agency-managed
Support categories within plans	Percentage of plan budget that is capacity building supports or capital supports	0-75% capacity building, 75-95% capacity building, 95-100% capacity building, 5-100% capital	Less than 75% of supports are capacity building supports
Gender	Participant's gender	Male, Female	Male
Indigenous status	Whether participant identifies as Aboriginal and/or Torres Strait Islander	Non-Indigenous, Indigenous	Non-Indigenous
CALD status	Whether participant is from a Culturally and Linguistically Diverse background	CALD, non-CALD	Non-CALD
Remoteness	Remoteness of participant's place of residence, measured by the Modified Monash Model (MMM)	Major cities, Regional – population less than 5,000, Regional – population between 5,000 and 15,000, Regional – population between 15,000 and 50,000, Regional – population greater than 50,000, Remote/Very Remote	Major cities
State/Territory	State or Territory the participant resides in	New South Wales (NSW), Queensland, South Australia, Victoria, Western Australia (WA), Tasmania, Australian Capital Territory (ACT), Northern Territory (NT)	NSW
Disability type	Participant's primary disability	Autism, Cerebral Palsy, Down Syndrome, Intellectual disability, Global developmental delay, Developmental delay, Other Neurological, Hearing impairment, Visual impairment, Other Sensory / Speech, Spinal Cord Injury / Other Physical, Other (all disabilities apart from those listed)	Autism

Variable	Meaning	Levels	Reference Category
Level of NDIA support	The level of NDIA support a participant requires as they move along the participant pathway, having regard to the complexity of their situation	Very High, High, Medium, Low	Medium
Covid-19 indicator	Whether the review occurred after the start of Covid-19 (23 March 2020)	Yes, No	No
Continuous			
Annualised plan budget	Plan budget expressed as a yearly equivalent, aggregated over the modelling period		
Average unemployment rate	Unemployment rate of the Local Government Area (LGA) in which the participant lives		
General time trend	General time trend not related to COVID-19		
Change in time trend post-COVID	Interaction between COVID-19 indicator and general time trend, allowing for a change in slope post-COVID		
Level of function	A numeric variable measuring participant level of function		
Age	Age at Scheme entry		

Participants aged 15 to 24

Variable	Meaning	Levels	Reference Category
Categorical			
Access entry type	Whether the participant received supports from Commonwealth or State/Territory programs before entering the NDIS	Services from Commonwealth programs, services from State/Territory programs, did not previously receive services from Commonwealth or State/Territory programs	Participant received services from State/Territory programs
Access request decision reason	Whether participant entered the Scheme due to disability (Section 24 of the NDIS Act) or for early intervention (Section 25)	Entered the Scheme for early intervention, entered the Scheme due to disability	Entered the Scheme due to disability
Plan management method	How the supports in a participant's plan are managed	Agency-managed, plan managed, self-managed partly and self-managed fully	Agency-managed
Support categories within plans	Percentage of plan budget that is capacity building supports or capital supports	0-15% capacity building, 15-30% capacity building, 30-60% capacity building, 60-100% capacity building, 5-100% capital	30% to 60% of supports are capacity building supports
Gender	Participant's gender	Male, Female	Male
Indigenous status	Whether participant identifies as Aboriginal and/or Torres Strait Islander	Non-Indigenous, Indigenous	Non-Indigenous
CALD status	Whether participant is from a Culturally and Linguistically Diverse background	CALD, non-CALD	Non-CALD

Variable	Meaning	Levels	Reference Category
Remoteness	Remoteness of participant's place of residence, measured by the Modified Monash Model (MMM)	Major cities, Regional – population less than 5,000, Regional – population between 5,000 and 15,000, Regional – population between 15,000 and 50,000, Regional – population greater than 50,000, Remote/Very Remote	Major cities
State/Territory	State or Territory the participant resides in	New South Wales (NSW), Queensland, South Australia, Victoria, Western Australia (WA), Tasmania, Australian Capital Territory (ACT), Northern Territory (NT)	NSW
Disability type	Participant's primary disability	ABI / Stroke, Autism, Cerebral Palsy, Down Syndrome, Intellectual disability, Other Neurological, Psychosocial disability, Hearing impairment, Visual impairment, Spinal Cord Injury / Other Physical, Other (all disabilities apart from those listed)	Intellectual disability
Level of NDIA support	The level of NDIA support a participant requires as they move along the participant pathway, having regard to the complexity of their situation	Very High, High, Medium, Low	Medium
Covid-19 indicator	Whether the review occurred after the start of Covid-19 (23 March 2020)	Yes, No	No
Continuous			
Annualised plan budget	Plan budget expressed as a yearly equivalent, aggregated over the modelling period		
Average unemployment rate	Unemployment rate of the Local Government Area (LGA) in which the participant lives		

Variable	Meaning	Levels	Reference Category
General time trend	General time trend not related to COVID-19		
Change in time trend post-COVID	Interaction between COVID-19 indicator and general time trend, allowing for a change in slope post-COVID		
Level of function	A numeric variable measuring participant level of function		
Age	Age at Scheme entry		

Participants aged 25 and over

Variable	Meaning	Levels	Reference Category
Categorical			
Access entry type	Whether the participant received supports from Commonwealth or State/Territory programs before entering the NDIS	Services from Commonwealth programs, services from State/Territory programs, did not previously receive services from Commonwealth or State/Territory programs	Participant received services from State/Territory programs
Access request decision reason	Whether participant entered the Scheme due to disability (Section 24 of the NDIS Act) or for early intervention (Section 25)	Entered the Scheme for early intervention, entered the Scheme due to disability	Entered the Scheme due to disability
Plan management method	How the supports in a participant's plan are managed	Agency-managed, plan managed, self-managed partly and self-managed fully	Agency-managed

Variable	Meaning	Levels	Reference Category
Support categories within plans	Percentage of plan budget that is capacity building supports or capital supports	0-15% capacity building, 15-30% capacity building, 30-60% capacity building, 60-100% capacity building, 5-100% capital	30% to 60% of supports are capacity building supports
Gender	Participant's gender	Male, Female	Male
Indigenous status	Whether participant identifies as Aboriginal and/or Torres Strait Islander	Non-Indigenous, Indigenous	Non-Indigenous
CALD status	Whether participant is from a Culturally and Linguistically Diverse background	CALD, non-CALD	Non-CALD
Remoteness	Remoteness of participant's place of residence, measured by the Modified Monash Model (MMM)	Major cities, Regional – population less than 5,000, Regional – population between 5,000 and 15,000, Regional – population between 15,000 and 50,000, Regional – population greater than 50,000, Remote/Very Remote	Major cities
State/Territory	State or Territory the participant resides in	New South Wales (NSW), Queensland, South Australia, Victoria, Western Australia (WA), Tasmania, Australian Capital Territory (ACT), Northern Territory (NT)	NSW
Disability type	Participant's primary disability	ABI, Stroke, Multiple Sclerosis, Autism, Cerebral Palsy, Down Syndrome, Intellectual disability, Other Neurological, Psychosocial disability, Hearing impairment, Visual impairment, Spinal Cord Injury, Other physical, Other (all disabilities apart from those listed)	Intellectual disability
Level of NDIA support	The level of NDIA support a participant requires as they move along the participant pathway, having regard to the complexity of their situation	Very High, High, Medium, Low	Medium

Variable	Meaning	Levels	Reference Category
Covid-19 indicator	Whether the review occurred after the start of Covid-19 (23 March 2020)	Yes, No	No
Continuous			
Annualised plan budget	Plan budget expressed as a yearly equivalent, aggregated over the modelling period		
Index of Education and Occupation	Population-based SEIFA decile		
Index of Economic Resources	Population-based SEIFA decile		
Average unemployment rate	Unemployment rate of the Local Government Area (LGA) in which the participant lives		
General time trend	General time trend not related to COVID-19		
Change in time trend post-COVID	Interaction between COVID-19 indicator and general time trend, allowing for a change in slope post-COVID		
Level of function	A numeric variable measuring participant level of function		
Age	Age at Scheme entry		

D.2 Variables used in longitudinal modelling

Participants from birth to before starting school

Variable	Meaning	Levels	Reference Category
Categorical			
Access request decision reason	Whether participant entered the Scheme due to disability (Section 24 of the NDIS Act) or for early intervention (Section 25)	Entered the Scheme for early intervention, entered the Scheme due to disability	Entered the Scheme for early intervention
Plan management method	How the supports in a participant's plan are managed	Agency-managed, plan managed, self-managed partly and self-managed fully	Agency-managed
Gender	Participant's gender	Male, Female	Male
Indigenous status	Whether participant identifies as Aboriginal and/or Torres Strait Islander	Non-Indigenous, Indigenous, not stated	Non-Indigenous
CALD status	Whether participant is from a Culturally and Linguistically Diverse background	CALD, non-CALD	Non-CALD
Remoteness	Remoteness of participant's place of residence, measured by the Modified Monash Model (MMM)	Major cities, Other (includes all regional and remote/very remote areas)	Major cities
State/Territory	State or Territory the participant resides in	New South Wales (NSW), Queensland, South Australia, Victoria, Other (WA, Tasmania, ACT, NT combined)	NSW
Disability type	Participant's primary disability	Autism, Cerebral Palsy / Other Neurological, Down Syndrome / Intellectual disability, Global developmental delay / Developmental delay, Sensory disability, Other (includes all disabilities apart from those listed)	Global developmental delay / Developmental delay

Variable	Meaning	Levels	Reference Category
Entry year	Financial year of entry to the Scheme	2016/17, 2017/18, 2018/19	2016/17
Relocated	Whether the participant changed Local Government Area (LGA) since the last review	Yes, No	No
Level of NDIA support	The level of NDIA support a participant requires as they move along the participant pathway, having regard to the complexity of their situation	High, Medium, Low	Low
Covid-19 indicator	Whether the review occurred after the start of Covid-19 (23 March 2020)	Yes, No	No
Continuous			
Annualised plan budget	Plan budget expressed as a yearly equivalent, aggregated over the modelling period		
Utilisation of plan budget	Percentage of plan budget that has been used over the modelling period		
Utilisation of core supports	Percentage of core supports that have been used over the modelling period		
Utilisation of capital supports	Percentage of capital supports that have been used over the modelling period		

Variable	Meaning	Levels	Reference Category
Utilisation of capacity building supports	Percentage of capacity building supports that have been used over the modelling period		
Average unemployment rate	Unemployment rate of the Local Government Area (LGA) in which the participant lives ⁴		
General time trend	General time trend not related to COVID-19		
Change in time trend post-COVID	Interaction between COVID-19 indicator and general time trend, allowing for a change in slope post-COVID		
Level of function	A numeric variable measuring participant level of function		
Age	Age at Scheme entry		

Participants from starting school to age 14

Variable	Meaning	Levels	Reference Category
Categorical			
Access entry type	Whether the participant received supports from Commonwealth or State/Territory programs before entering the NDIS	Services from Commonwealth programs, services from State/Territory programs, did not previously receive services from Commonwealth or State/Territory programs	Participant received services from State/Territory programs

⁴ A weighted average approach has been used which takes into account historical and current unemployment rates by LGA as well as participant movements.

Variable	Meaning	Levels	Reference Category
Access request decision reason	Whether participant entered the Scheme due to disability (Section 24 of the NDIS Act) or for early intervention (Section 25)	Entered the Scheme for early intervention, entered the Scheme due to disability	Entered the Scheme due to disability
Plan management method	How the supports in a participant's plan are managed	Agency-managed, plan managed, self-managed partly and self-managed fully	Agency-managed
Support categories within plans	Percentage of plan budget that is capacity building supports or capital supports	0-75% capacity building, 75-95% capacity building, 95-100% capacity building, 5-100% capital	Less than 75% of supports are capacity building supports
Gender	Participant's gender	Male, Female	Male
Indigenous status	Whether participant identifies as Aboriginal and/or Torres Strait Islander	Non-Indigenous, Indigenous, not stated	Non-Indigenous
CALD status	Whether participant is from a Culturally and Linguistically Diverse (CALD) background	CALD, non-CALD	Non-CALD
Remoteness	Remoteness of participant's place of residence, measured by the Modified Monash Model (MMM)	Major cities, Other (includes all regional and remote/very remote areas)	Major cities
State/Territory	State or Territory the participant resides in	New South Wales (NSW), Queensland, South Australia, Victoria, Other (WA, Tasmania, ACT, NT combined)	NSW
Disability type	Participant's primary disability	Autism, Cerebral Palsy / Other Neurological, Down Syndrome / Intellectual disability, Global developmental delay / Developmental delay, Sensory disability, Other (all other disabilities apart from those listed)	Autism

Variable	Meaning	Levels	Reference Category
Entry year	Financial year of entry to the Scheme	2016/17, 2017/18, 2018/19	2016/17
Relocated	Whether the participant changed Local Government Area (LGA) since the last review	Yes, No	No
Level of NDIA support	The level of NDIA support a participant requires as they move along the participant pathway, having regard to the complexity of their situation	High, Medium, Low	Medium
Covid-19 indicator	Whether the review occurred after the start of Covid-19 (23 March 2020)	Yes, No	No
Continuous			
Annualised plan budget	Plan budget expressed as a yearly equivalent, aggregated over the modelling period		
Utilisation of plan budget	Percentage of plan budget that has been used over the modelling period		
Utilisation of core supports	Percentage of core supports that have been used over the modelling period		
Utilisation of capital supports	Percentage of capital supports that have been used over the modelling period		

Variable	Meaning	Levels	Reference Category
Utilisation of capacity building supports	Percentage of capacity building supports that have been used over the modelling period		
Average unemployment rate	Unemployment rate of the Local Government Area (LGA) in which the participant lives		
General time trend	General time trend not related to COVID-19		
Change in time trend post-COVID	Interaction between COVID-19 indicator and general time trend, allowing for a change in slope post-COVID		
Level of function	A numeric variable measuring participant level of function		
Age	Age at Scheme entry		

Participants aged 15 to 24

Variable	Meaning	Levels	Reference Category
Categorical			
Access entry type	Whether the participant received supports from Commonwealth or State/Territory programs before entering the NDIS	Services from Commonwealth programs, services from State/Territory programs, did not previously receive services from Commonwealth or State/Territory programs	Participant received services from State/Territory programs

Variable	Meaning	Levels	Reference Category
Access request decision reason	Whether participant entered the Scheme due to disability (Section 24 of the NDIS Act) or for early intervention (Section 25)	Entered the Scheme for early intervention, entered the Scheme due to disability	Entered the Scheme due to disability
Plan management method	How the supports in a participant's plan are managed	Agency-managed, plan managed, self-managed partly and self-managed fully	Agency-managed
Support categories within plans	Percentage of plan budget that is capacity building supports or capital supports	0-15% capacity building, 15-30% capacity building, 30-60% capacity building, 60-100% capacity building, 5-100% capital	Between 30% and 60% of supports are capacity building supports
Gender	Participant's gender	Male, Female	Male
Indigenous status	Whether participant identifies as Aboriginal and/or Torres Strait Islander	Non-Indigenous, Indigenous, not stated	Non-Indigenous
CALD status	Whether participant is from a Culturally and Linguistically Diverse background	CALD, non-CALD	Non-CALD
Remoteness	Remoteness of participant's place of residence, measured by the Modified Monash Model (MMM)	Major cities, Other (includes all regional and remote/very remote areas)	Major cities
State/Territory	State or Territory the participant resides in	New South Wales, Queensland, South Australia, Victoria, Other (WA, Tasmania, ACT, NT combined)	NSW
Disability type	Participant's primary disability	Autism, Cerebral Palsy / Other Neurological, Down Syndrome / Intellectual disability, Psychosocial disability, Sensory disability, Other (all disabilities apart from those listed)	Autism

Variable	Meaning	Levels	Reference Category
Entry year	Financial year of entry to the Scheme	2016/17, 2017/18, 2018/19	2016/17
Relocated	Whether the participant changed Local Government Area (LGA) since the last review	Yes, No	No
Level of NDIA support	The level of NDIA support a participant requires as they move along the participant pathway, having regard to the complexity of their situation	High, Medium, Low	Medium
Covid-19 indicator	Whether the review occurred after the start of Covid-19 (23 March 2020)	Yes, No	No
Continuous			
Annualised plan budget	Plan budget expressed as a yearly equivalent, aggregated over the modelling period		
Utilisation of plan budget	Percentage of plan budget that has been used over the modelling period		
Utilisation of core supports	Percentage of core supports that have been used over the modelling period		
Utilisation of capital supports	Percentage of capital supports that have been used over the modelling period		

Variable	Meaning	Levels	Reference Category
Utilisation of capacity building supports	Percentage of capacity building supports that have been used over the modelling period		
School Leaver Employment Supports	Amount of School Leaver Employment Supports in plan budget		
Self-managed employment supports	Amount of self-managed employment supports in plan budget		
Other employment supports	Amount of other employment supports in plan budget		
Australian Disability Enterprise payments	Amount of Australian Disability Enterprise supports in plan budget		
Average unemployment rate	Unemployment rate of the Local Government Area (LGA) in which the participant lives		
General time trend	General time trend not related to COVID-19		
Change in time trend post-COVID	Interaction between COVID-19 indicator and general time trend, allowing for a change in slope post-COVID		
Level of function	A numeric variable measuring participant level of function		

Variable	Meaning	Levels	Reference Category
Age	Age at Scheme entry		

Participants aged 25 and over

Variable	Meaning	Levels	Reference Category
Categorical			
Access entry type	Whether the participant received supports from Commonwealth or State/Territory programs before entering the NDIS	Services from Commonwealth programs, services from State/Territory programs, did not previously receive services from Commonwealth or State/Territory programs	Participant received services from State/Territory programs
Access request decision reason	Whether participant entered the Scheme due to disability (Section 24 of the NDIS Act) or for early intervention (Section 25)	Entered the Scheme for early intervention, entered the Scheme due to disability	Entered the Scheme due to disability
Plan management method	How the supports in a participant's plan are managed	Agency-managed, plan managed, self-managed partly and self-managed fully	Agency-managed
Support categories within plans	Percentage of plan budget that is capacity building supports or capital supports	0-15% capacity building, 15-30% capacity building, 30-60% capacity building, 60-100% capacity building, 5-100% capital	Less than 15% of supports are capacity building supports
Gender	Participant's gender	Male, Female	Male
Indigenous status	Whether participant identifies as Aboriginal and/or Torres Strait Islander	Non-Indigenous, Indigenous, not stated	Non-Indigenous

Variable	Meaning	Levels	Reference Category
CALD status	Whether participant is from a Culturally and Linguistically Diverse background	CALD, non-CALD	Non-CALD
Remoteness	Remoteness of participant's place of residence, measured by the Modified Monash Model (MMM)	Major cities, Other (includes all regional and remote/very remote areas)	Major cities
State/Territory	State or Territory the participant resides in	New South Wales, Queensland, South Australia, Victoria, Other (WA, Tasmania, ACT, NT combined)	NSW
Disability type	Participant's primary disability	Autism, Cerebral Palsy / Other Neurological, Down Syndrome / Intellectual disability, Psychosocial disability, Sensory disability, Spinal cord injury / Other physical, Other (all disabilities apart from those listed)	Down Syndrome / Intellectual disability
Entry year	Financial year of entry to the Scheme	2016/17, 2017/18, 2018/19	2016/17
Relocated	Whether the participant changed Local Government Area (LGA) since the last review	Yes, No	No
Level of NDIA support	The level of NDIA support a participant requires as they move along the participant pathway, having regard to the complexity of their situation	High, Medium, Low	Medium
Covid-19 indicator	Whether the review occurred after the start of Covid-19 (23 March 2020)	Yes, No	No
Continuous			

Variable	Meaning	Levels	Reference Category
Annualised plan budget	Plan budget expressed as a yearly equivalent, aggregated over the modelling period		
Utilisation of plan budget	Percentage of plan budget that has been used over the modelling period		
Utilisation of core supports	Percentage of core supports that have been used over the modelling period		
Utilisation of capital supports	Percentage of capital supports that have been used over the modelling period		
Utilisation of capacity building supports	Percentage of capacity building supports that have been used over the modelling period		
School Leaver Employment Supports	Amount of School Leaver Employment Supports in plan budget		
Self-managed employment supports	Amount of self-managed employment supports in plan budget		
Other employment supports	Amount of other employment supports in plan budget		
Australian Disability Enterprise payments	Amount of Australian Disability Enterprise supports in plan budget		

Variable	Meaning	Levels	Reference Category
Average unemployment rate	Unemployment rate of the Local Government Area (LGA) in which the participant lives		
General time trend	General time trend not related to COVID-19		
Change in time trend post-COVID	Interaction between COVID-19 indicator and general time trend, allowing for a change in slope post-COVID		
Level of function	A numeric variable measuring participant level of function		
Age	Age at Scheme entry		