

## 2. Participants from birth to before starting school

### 2.1 Key findings

#### Box 2.1: Comparison of 2019-20 entrants with prior year entrants on key characteristics

- As at 30 June 2020, the combined baseline constitutes four years of experience (participants entering the Scheme between 1 July 2016 and 30 June 2020).
- The report focusses on baseline results for 2019-20 entrants, but also includes a brief comparison with results for prior year entrants. Differences between participants by key characteristics (such as disability type and level of function) can occur over time, for example due to phasing in the transition period.
- Compared to prior year entrants, participants aged from birth to before starting school who entered the Scheme in 2019-20 tend to be:
  - Younger.
  - More likely to have developmental delay or global developmental delay and less likely to have autism.
  - More likely to have high level of function.
  - More likely to require a low level of NDIA support through the participant pathway and less likely to require a medium level of support.<sup>8</sup>
  - Less likely to live in New South Wales (NSW) or South Australia (SA) and more likely to live in Queensland (QLD).
  - More likely to identify as Indigenous (9.0% compared to 6.5%), and more likely to be from a CALD background (10.7% compared to 8.3%).
  - Much more likely to have not received services from State/Territory or Commonwealth programs prior to entering the Scheme, more likely to have entered the Scheme for early intervention (72.8% compared to 50.4%) and less likely to have entered due to disability.<sup>9</sup>
  - More likely to have baseline annualised plan budget over \$20,000, and more likely to fully self-manage their baseline plan (36.2% compared to 25.2%) or to use a plan manager (30.6% compared to 8.4%) rather than agency manage.
  - Similar with respect to remoteness of residence and gender.

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<sup>8</sup> The level of NDIA support a participant requires as they move along the participant pathway, having regard to the complexity of their situation.

<sup>9</sup> Participants accessing the Scheme under Section 24 of the NDIS Act 2013 enter the Scheme due to disability, whereas participants accessing the Scheme under Section 25 of the Act enter the Scheme for early intervention.

## Box 2.2: Baseline indicators for participants entering in 2019-20 – overall

- At baseline, 94.8% of participants in the birth to before starting school group who entered the Scheme in 2019-20 lived with their parents (compared to 93.6% of prior year entrants). 90.6% live in a private home either owned or rented from a private landlord (89.8% for prior years), and 7.4% live in a private home rented from a public authority (8.0% for prior years).
- Parents/carers are surveyed about their concerns in eight developmental areas. The area with the highest level of concern for both 2019-20 entrants and prior year entrants was language/communication (94.6% for 2019-20 entrants and 93.8% for prior year entrants), followed by social interaction (86.2% for 2019-20 entrants and 86.1% for prior year entrants). For 2019-20 entrants, 68.1% of parents/carers expressed concerns in six or more of the eight areas (similar to 67.3% for prior year entrants).
- Most children exhibited evidence of growing autonomy, with 68.5% of parents and carers of 2019-20 entrants saying that their child was able to tell them what they want (compared to 70.6% entering in previous years).
- Baseline outcomes related to family life were generally similar for 2019-20 entrants and prior year entrants. Overall, 65.3% of parents/carers of 2019-20 entrants say that their child fits into the everyday life of the family, similar to 66.4% for prior year entrants.
- For participants entering in 2019-20, 52.3% used some form of childcare, similar to earlier entrants (53.7%). Children's experiences at childcare were generally positive. Of 2019-20 entrants using group childcare, 92.6% said that other children were welcoming and 93.1% said that other families were welcoming (compared to 93.6% and 94.6% for prior year entrants, respectively).
- The percentage of participants with friends who they enjoy playing with was lower than previous years (36.3% for the latest entry year cohort compared to 47.9% in prior years). The percentage participating in age-appropriate community, cultural or religious activities was also lower (46.4% compared to 51.5%).
- The percentage of participants using specialist services is lower for 2019-20 entrants (49.3%) compared to prior year entrants (71.3%). Of the participants using these services, 84.0% of parents/carers of 2019-20 entrants thought that these services helped with their child's skill development, compared to 91.0% from prior years.

### Box 2.3: Baseline indicators for participants entering in 2019-20 – participant characteristics

- Participants with a hearing impairment as their primary disability type, participants with a higher level of function and participants who are self-managing part or all of their plan tend to have better baseline outcomes across most indicators.
- Participants with autism or global developmental delay as their primary disability, participants from a CALD background and participants from an area with a higher unemployment rate tended to have worse baseline outcomes across most indicators.
- Participants with intellectual disability or Down syndrome had more positive baseline results for some relationship and community participation indicators. They are more likely to get along with their brothers and sisters (86.5% for participants with intellectual disability and 91.3% for participants with Down syndrome, compared to 79.4% overall), more likely to fit in with the everyday life of the family (68.6% for participants with intellectual disability and 73.6% for participants with Down syndrome, compared to 65.3% overall), and more likely to be welcomed or actively included when they participate in community (72.6% and 74.7%, compared to 63.3% overall), but are less likely to be able to tell their parent/carer what they want (23.4% compared to 68.5% overall).
- Indigenous participants had worse baseline outcomes related to living and housing arrangements than non-Indigenous participants. Indigenous participants are significantly less likely to live with their parents (81.5% compared to 96.4% for non-Indigenous participants) and are less likely to use specialist services that assist their learning and development (37.3% compared to 50.3%).
- Having friends they enjoy playing with, participating in community activities, and using childcare or specialist services were significant positive factors in having better baseline outcomes.
- Participants with a lower baseline plan budget had better baseline outcomes for most indicators. The percentage of parents/carers with concerns in six or more areas of development increases from 33.3% for annualised plan budget \$10,000 or less to 86.1% for annualised plan budget over \$30,000 and of those who participate in community activities, the percentage who feel welcomed or actively included decreases from 78.7% for plan budget less than \$10,000 to 50.9% for plan budget over \$30,000.
- Parents/carers of participants living in regional and remote areas are significantly less likely to have concerns about their child's development in six or more areas than those living in major cities (60.9% to 64.2% for participants living in regional and remote areas compared to 71.1% for participants living in major cities).
- COVID-19 had a significant impact on participant outcomes and results were mixed. The percentage of participants who said their child participates in age appropriate community, cultural or religious activities decreased, the percentage of parents/carers who say their child fits in with the everyday life of the family increased, and the percentage of parents/carers with concerns in six or more areas of their child's development decreased.

## 2.2 Outcomes framework questionnaire domains

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

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

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

Participants answer the outcomes questionnaire applicable to their age/schooling status at the time of interview. Hence the birth to before starting school baseline cohort comprises children who are yet to start school when they enter the Scheme.

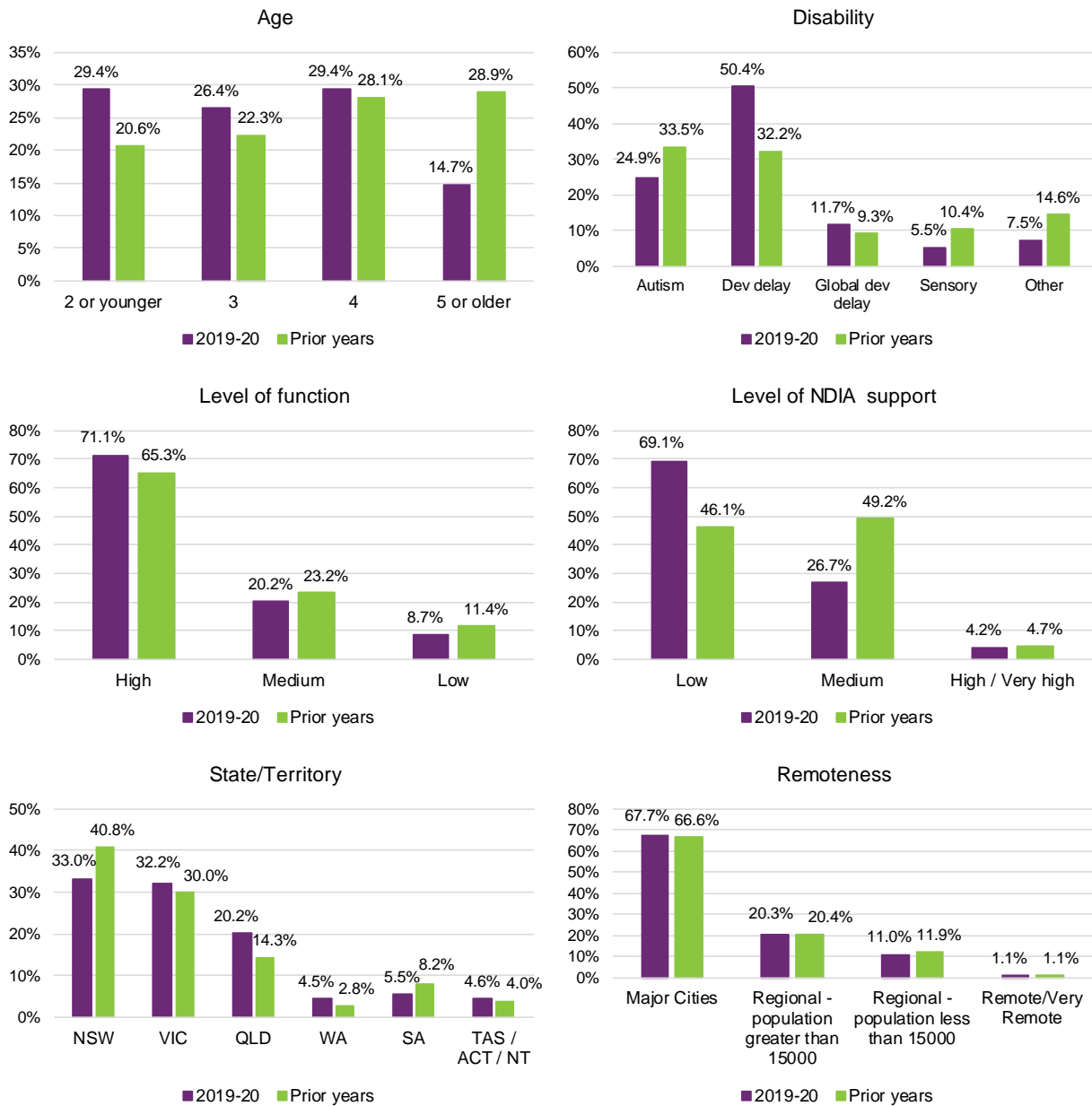
## 2.3 Comparison of 2019-20 entrants with prior year entrants on key characteristics

As at 30 June 2020, the combined baseline constitutes four years of experience (participants entering the Scheme between 1 July 2016 and 30 June 2020). The results presented in Sections 2.4 and 2.5 focus on the most recent year of baseline experience, namely 2019-20 entrants.

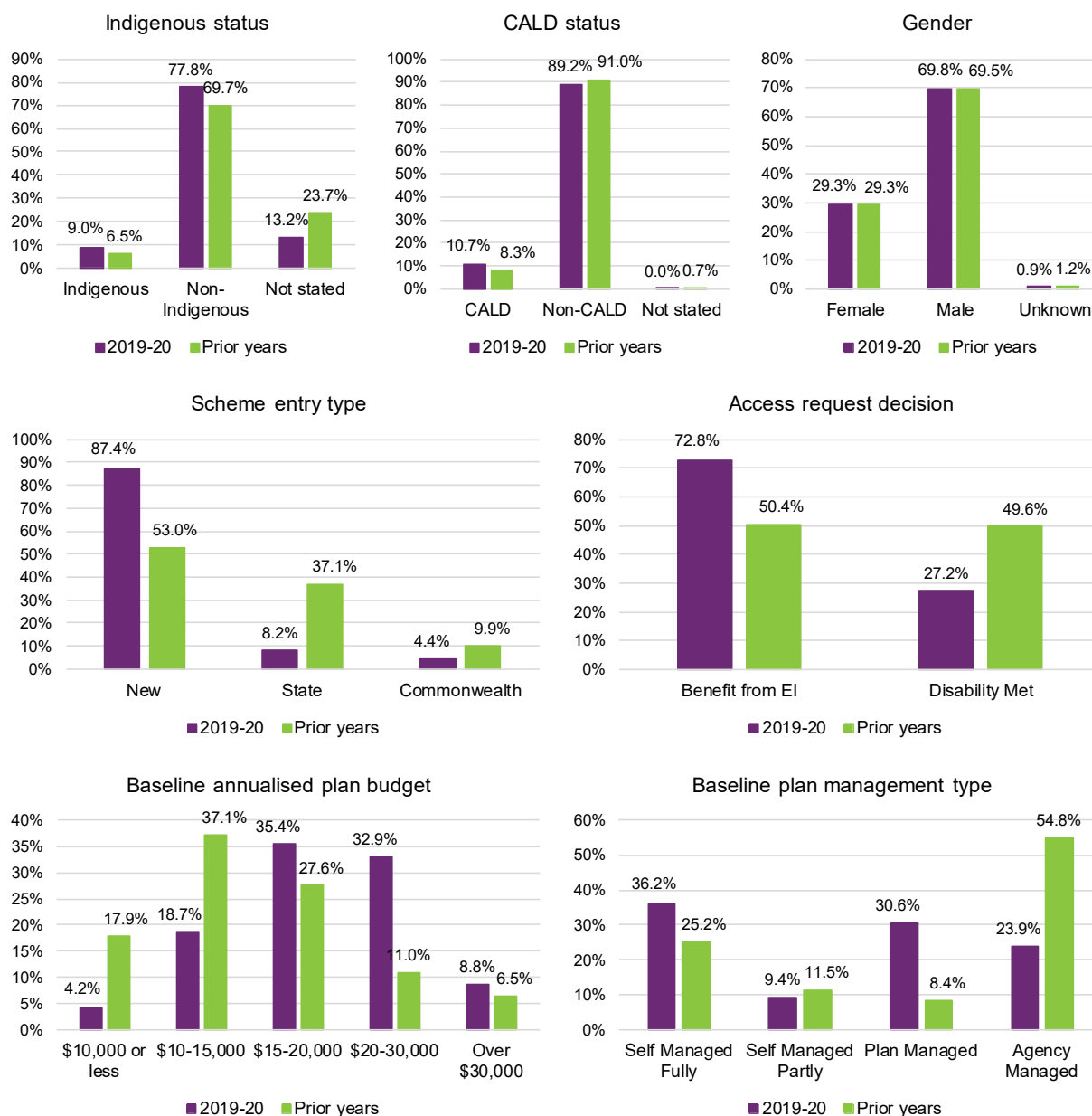
Differences between participants by key characteristics (such as disability type and level of function) can occur over time, for example due to phasing in the transition period. A brief summary of how 2019-20 entrants compare to participants entering in the earlier three year period with respect to key characteristics is provided in this section. Baseline results for 2019-20 entrants are summarised in Section 2.4 (overall) and 2.5 (by participant characteristics), including brief comparisons with results for prior year entrants.

Figure 2.1 and Figure 2.2 summarise distributions by key characteristics for 2019-20 and prior year entrants.

**Figure 2.1 Distributions by key characteristics – 2019-20 entrants compared with prior year entrants**



**Figure 2.2 Distributions by key characteristics – 2019-20 entrants compared with prior year entrants**



The graphs in Figure 2.1 and Figure 2.2 show that compared to prior year entrants, participants who entered the Scheme in 2019-20 tend to be:

- Younger (29.2% aged 2 or younger and 14.7% aged 5 or older, compared to 20.6% and 28.9% for prior year entrants).
- More likely to have developmental delay (50.4% compared to 32.2% for prior year entrants) or global developmental delay (11.7% compared to 9.3%) and less likely to have autism (24.9% compared to 33.5%), a sensory disability (hearing or visual impairment or another sensory/speech disability, 5.5% compared to 10.4%) or other disabilities (7.5% compared to 14.6%).
- More likely to have high level of function (71.1% compared to 65.3%) and less likely to have medium or low level of function.

- More likely to require a low level of NDIA support through the participant pathway (69.1% compared to 46.1%) and less likely to require a medium level of support (26.7% compared to 49.2%).
- Less likely to live in NSW (33.0% compared to 40.8%) or SA (5.5% compared to 8.2%), more likely to live in QLD (20.2% compared to 14.3%), and slightly more likely to live in other States/Territories.
- Slightly more likely to identify as Indigenous (9.0% compared to 6.5%, noting that the percentage not stated is lower for 2019-20 entrants).
- Slightly more likely to be from a CALD background (10.7% compared to 8.3%).
- Much more likely to have not received services from State/Territory or Commonwealth programs prior to entering the Scheme (87.4% compared to 53.0%).
- Much more likely to have entered the Scheme for early intervention (s24) (72.8% compared to 50.4%) than due to disability (s25) (27.2% compared to 49.6%).
- More likely to have baseline annualised plan budget over \$20,000 (41.7% compared to 17.5%).
- More likely to fully self-manage their baseline plan (36.2% compared to 25.2%) or to use a plan manager (30.6% compared to 8.4%) and less likely to agency manage (23.9% compared to 54.8%).

However, distributions by remoteness and gender were very similar between 2019-20 entrants and prior year entrants.<sup>10</sup>

## 2.4 Baseline indicators for participants entering in 2019-20 – overall

### Participant living and housing arrangements

At baseline, 94.8% of participants in the birth to before starting school group who entered the Scheme in 2019-20 lived with their parents, 2.1% lived with other family members and 2.0% with non-relatives, such as foster carers.

Most participants entering the Scheme in 2019-20 (90.6%) are in a private home either owned or rented from a private landlord. 7.4% of participants live in a private home rented from a public authority.

Baseline living and housing arrangements for 2019-20 entrants are similar to those for entrants in earlier years. For example, 93.6% of prior year entrants lived with their parents at baseline, 89.8% lived in a private home either owned or rented from a private landlord, and 8.0% lived in a private home rented from a public authority.

### Areas of development

The SF asks parents/carers whether they have concerns about their child's development in eight different areas (multiple areas can be chosen). For 2019-20 entrants:

- The percentage of parents/carers expressing concern at baseline varied from 57.5% to 94.6%, depending on the area.
- The area with the highest level of concern was language/communication, where 94.6% of parents/carers had concerns, followed by social interaction, at 86.2%.

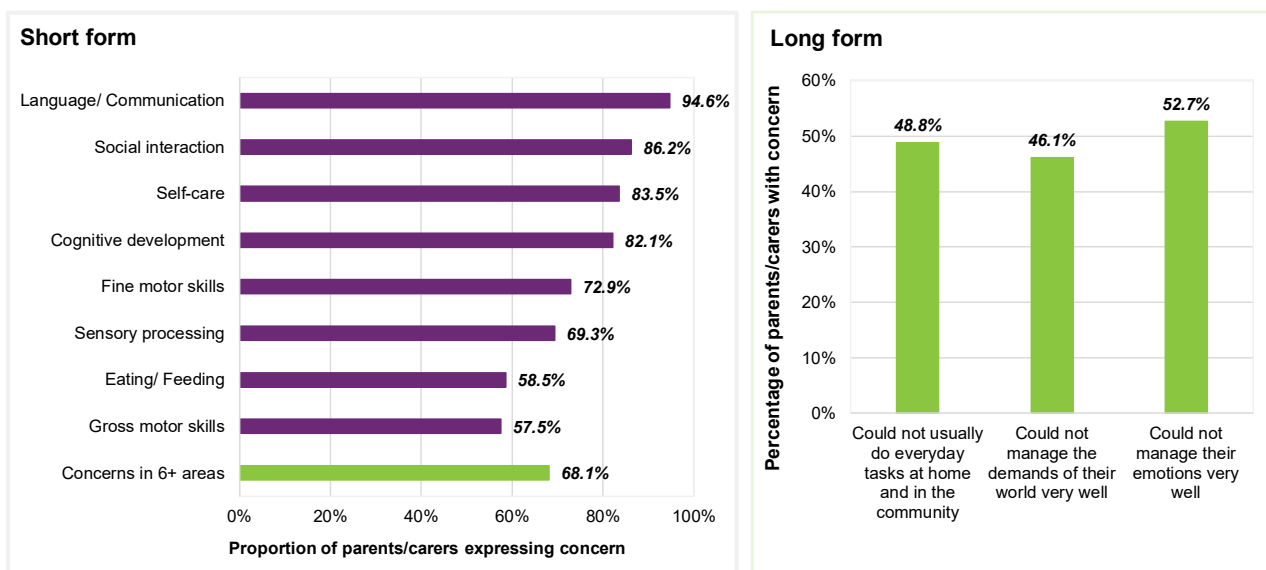
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<sup>10</sup> Chi-squared tests for differences in the distributions were performed, but due to the large volume of baseline data, they are powered to detect very small differences. For participants aged 0 to before starting school, there was no significant difference for gender (p=0.76), the p-value for remoteness was 0.0002, and all other p-values were less than 0.0001.

- Similar percentages of parents/carers had concerns related to self-care (83.5%) and cognitive development (82.1%).
- Percentages were also similar for fine motor skills (72.9%) and sensory processing (69.3%).
- Smaller percentages had concerns regarding eating/feeding (58.5%) and gross motor skills (57.5%).
- Most parents/carers had concerns in multiple areas, with 68.1% expressing concerns in six or more of the eight areas.

Compared to participants entering in earlier years, higher percentages had concerns with self-care (83.5% compared to 79.4%) and cognitive development (82.1% compared to 77.7%), and a lower percentage had concerns with sensory processing (69.3% compared to 76.8%).

**Figure 2.3 Proportion of parents/carers expressing concern – 2019-20 entrants**



The LF asks parents/carers whether their child can usually manage their emotions, and the demands of their world. At baseline, 52.7% of parents and carers of 2019-20 entrants thought that their child could not manage their emotions very well, and 46.1% thought that they could not manage the demands of their world very well. 48.8% thought that their child could not usually do everyday tasks at home and in the community.

### Autonomy

Most children exhibited evidence of growing autonomy, with 68.5% of parents and carers of 2019-20 entrants saying that their child was able to tell them what they want (compared to 70.6% entering in previous years), and 92.1% of LF respondents saying that their child takes action once they have decided to do something.

### Family life

For 2019-20 entrants, less than half (45.3%) of parents/carers think there is enough time to meet the needs of all family members (slightly lower than 51.0% of prior year entrants). Of those with more than one child, 57.5% expressed some concern about the effect of having a sibling with disability on their other children, however 79.4% say that their child with disability gets along with their siblings. Overall, 65.3% say that their child fits into everyday family life (similar to 66.4% for prior year entrants). Evidence of integration into family life is provided by children assisting their parents/carers with tasks at home (73.7%, similar to 72.7% of prior year entrants) and outside the home (81.9% compared to 80.6% of prior year entrants).



57.3% of children are able to make friends with people outside the family (slightly lower than 61.0% of prior year entrants).

### **Childcare**

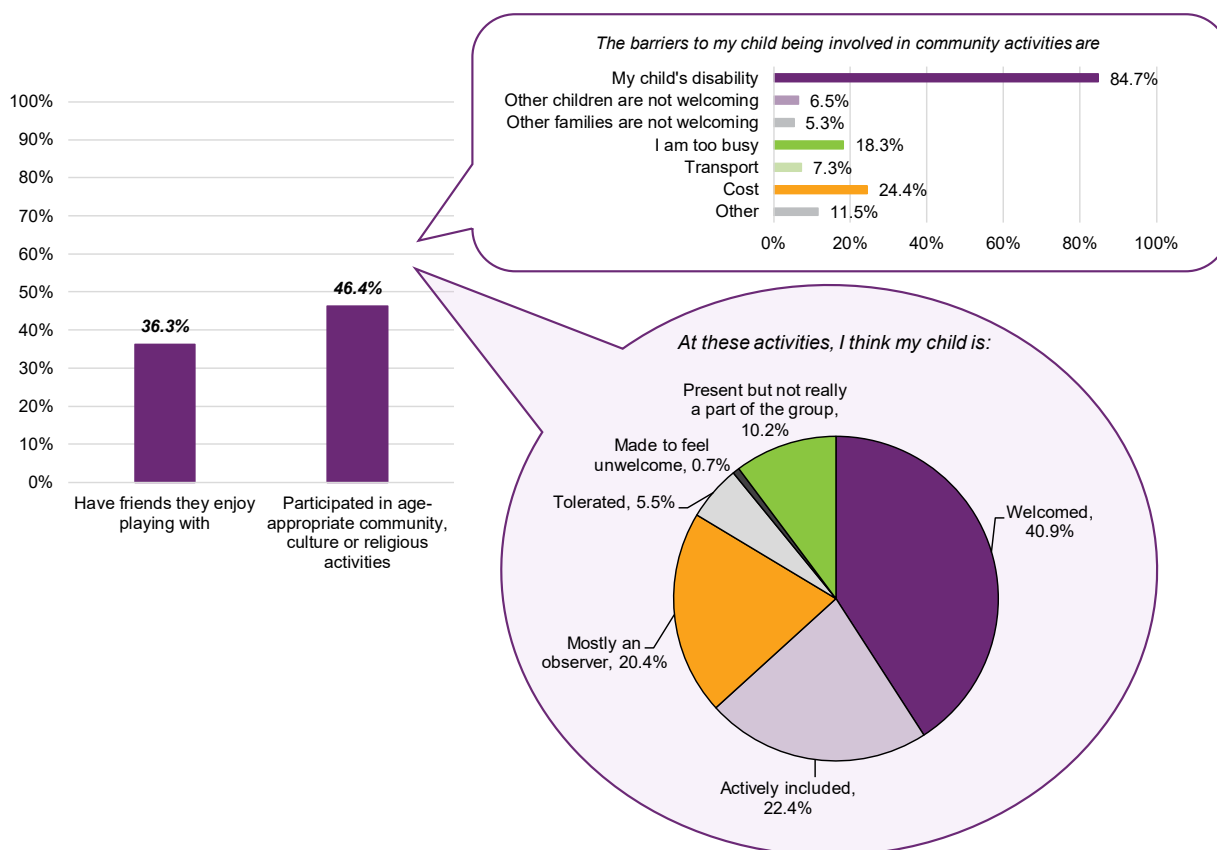
The LF includes a number of extra questions related to childcare. For the relatively small sample of 731 participants entering in 2019-20, 52.3% used some form of childcare, similar to earlier entrants (53.7%). It was not uncommon for parents/carers to experience a lot of difficulty in finding good quality childcare (11.3%), finding the right person to take care of their child (10.7%), and finding childcare at short notice (24.3%). The most common form of childcare used was centre-based, including family day care, long day care, or any other care at a childcare centre. 71.5% of parents/carers used this form of childcare either while at work or while not at work, with a higher proportion using it while at work (52.9%) than while not at work (35.9%). These percentages are slightly higher than for participants entering in earlier years (64.4%, 44.1%, and 31.8%).

Children's experiences at childcare were generally positive. Of 2019-20 entrants using group childcare, 92.6% said that other children were welcoming and 93.1% said that other families were welcoming. 87.9% of those using childcare thought that their child was asked to do tasks at an appropriate level, and 95.9% felt that their cultural heritage was respected (where applicable). Evidence of childcare services working together with the parent/carer to support the child was less strong, with 80.4% thinking the childcare helped them assist their child, 72.5% thinking the childcare involves them in planning for their child, and 65.4% saying the childcare helped them to plan for the future. 64.5% thought their childcare service was being assisted by their early intervention service (where applicable) to support their child.

### **Participation**

36.3% of children entering the Scheme in 2019-20 have friends they enjoy playing with (lower than 47.9% for previous years' entrants). Most often these friends are at pre-school (66.0%), or social or family gatherings (50.1%). 46.4% of children participated in age-appropriate community, cultural or religious activities (compared to 51.5% of prior year entrants), with 63.3% of parents/carers feeling that their child was welcomed or actively included in these activities (62.5% of prior year entrants). 65.5% of parents wanted their child to be more involved in community activities, with 84.7% perceiving their child's disability as a barrier to being more involved. Other barriers to greater involvement included cost (24.4%) and being too busy (18.3%). Non-welcoming behaviour of other children (6.5%) or other families (5.3%) were less frequently cited as barriers by parents/carers of 2019-20 entrants than by parents/carers of entrants in earlier years, where 11.2% thought that other children were not welcoming and 8.9% thought that other families were not welcoming. A lower percentage also found transport to be a barrier (7.3% compared to 10.6%).

**Figure 2.4 Social and community participation, barriers and inclusion**



### Specialist services

The percentage of participants using specialist services (such as speech pathology or occupational therapy) that assist with their learning and development is lower for 2019-20 entrants to the Scheme (49.3%) compared to entrants in earlier years (71.3%), reflecting a general downward trend by entry date.

From the SF, 84.0% of parents/carers of 2019-20 entrants thought that these services helped their child's skill development (91.0% for entrants in earlier years) and 86.2% thought they supported them to assist their child (91.6% for entrants in earlier years).

From the LF, 95.2% thought that the services involved them, 89.1% that they respected the family/carer's cultural heritage, and 91.4% that they helped plan for the future. However the percentage thinking that the services assisted staff at their child's other activities (such as childcare/pre-school) to support their child was lower, at 61.2%.







## 2.5 Baseline indicators for participants entering in 2019-20 – participant characteristics

Baseline indicators for participants entering the Scheme in 2019-20 have been analysed by participant characteristics using one-way analyses and multiple regression modelling.

Across most domains, the participant's level of function, primary disability type, age, where they live, and the extent to which they make friends and participate in community are the characteristics most predictive of outcomes in the multiple regression models, which control for other factors.

Key findings for each characteristic are summarised below. Tables summarising the direction of the effect for selected characteristics, in the regression models for selected outcomes, are also included. The arrow symbols in the tables indicate whether participants from a group are more likely (up arrow) or less likely (down arrow) to respond “Yes” to a question. Table 2.1 provides a key to aid interpretation of the arrow symbols, including some examples.

**Table 2.1 Definition of symbols used in baseline key driver tables**

Symbol	Meaning	Impact of characteristic	Example
	More likely to have a positive outcome	Positive	Participants with visual impairment are more likely to participate in age-appropriate community, cultural or religious activities
	Less likely to have a positive outcome	Negative	Participants from a CALD background who participate in community activities are less likely to be welcomed or actively included
	More likely to have a negative outcome	Negative	Parents/carers of children with global developmental delay are more likely to have concerns in six or more developmental areas
	Less likely to have a negative outcome	Positive	Parents/carers of participants living in regional and remote areas are less likely to have concerns in six or more developmental areas
	More likely to respond “Yes” to the question	Could be either positive or negative, depends on context	Parents/carers of children from a CALD background are more likely to want their child to be more involved in community activities
	Less likely to respond “Yes” to the question	Could be either positive or negative, depends on context	Parents/carers of participants living in regional areas are less likely to want their child to be more involved in community activities

## Primary disability

Most participant outcomes vary significantly by primary disability type. Typically, for a given disability type, the direction (positive or negative) of the relationship with outcomes is consistent across domains.

Table 2.2 shows baseline participant outcomes for which primary disability type is a significant ( $p < 0.05$ ) predictor in the multiple regression model, and the direction of the effect for selected disability types.<sup>11</sup>

<sup>11</sup> The reference category for the models is developmental delay (the largest disability group for this age range). Hence the arrows are interpreted relative to participants with developmental delay, for example, a green “up” arrow means better outcomes than participants with developmental delay.

**Table 2.2 Relationship of disability type with the likelihood of selected outcomes**

Outcome	Participant primary disability					
	Autism	Cerebral palsy	Global developmental delay	Intellectual disability	Down syndrome	Hearing Impairment
Lives with their parents	↑		↓			
Lives in home owned or rented from private landlord	↑					↑
Parent/carer has concerns in 6 or more areas of development	↑	↓	↑			↓
Uses specialist services	↑	↑	↑	↑		↓
Able to tell parent/carer what they want		↑	↓		↓	↑
Gets along with brothers/ sisters	↓	↑		↑	↑	↑
Can make friends with people outside the family	↓	↑	↓			↑
Joins in completing tasks at home	↓	↑	↓			↑
Joins in completing tasks outside home	↓	↑				↑
Fits in with the everyday life of the family	↓	↑		↑	↑	↑
Has friends he/she enjoys playing with	↓	↑	↓	↑		↑
Participates in age appropriate community, cultural or religious activities	↓		↓			↑
Is welcomed or actively included in community activities	↓	↑		↑	↑	↑
Parent/carer would like child to be more involved	↑	↓	↑	↓	↓	↓

Outcome	Participant primary disability					
	Autism	Cerebral palsy	Global developmental delay	Intellectual disability	Down syndrome	Hearing Impairment
Child's disability is a barrier to being more involved	↑				↓	↓

Disability type was a significant ( $p < 0.05$ ) predictor in all but two of the 17 regression models.<sup>12</sup>

Controlling for other variables, for participants entering the Scheme in 2019-20:

- Participants with hearing impairment had significantly better baseline outcomes for all 13 indicators classified as positive or negative. In addition, they were less likely to use specialist services (33.1% compared to 49.3% overall on a one-way basis), and their parents/carers were less likely to want their child to be more involved in community activities (44.1% compared to 65.5%).
- Participants with cerebral palsy also tended to have better baseline outcomes for most indicators. Parents/carers were less likely to want their child to be more involved in community activities (56.0% compared to 65.5%), however participants with cerebral palsy were the most likely to use specialist services (78.6% compared to 49.3%).
- Participants with intellectual disability or Down syndrome had more positive baseline results for some relationship and community participation indicators. For example, they are more likely to get along with their brothers and sisters (86.5% for participants with intellectual disability and 91.3% for participants with Down syndrome, compared to 79.4% overall), more likely to fit in with the everyday life of the family (68.6% for participants with intellectual disability and 73.6% for participants with Down syndrome, compared to 65.3% overall), and more likely to be welcomed or actively included when they participate in community (72.6% and 74.7%, compared to 63.3% overall). However, participants with Down syndrome are less likely to be able to tell their parent/carer what they want (23.4% compared to 68.5% overall).
- Participants with autism are more likely to live with their parents and more likely to live in a home that is owned or rented from a private landlord. However, they have significantly worse baseline outcome across most other indicators, particularly relationship indicators such as getting along with siblings (70.4% compared to 79.4% overall), making friends outside the family (44.3% compared to 57.3%), and having friends they enjoy playing with (29.1% compared to 36.3%). Their parents/carers are the most likely to have concerns in six or more areas of development (81.5% compared to 68.1% overall), and to perceive their child's disability as a barrier to being more involved (92.2% compared to 84.7%).
- Participants with global developmental delay also tend to have worse baseline outcomes. They are significantly less likely to be able to tell their parent/carer what they want (61.4% compared to 68.5% overall), to make friends outside the family

<sup>12</sup> The two indicators for which disability was not significant were "Specialist services help the child to gain the skills she/he needs to participate in everyday life" and "Specialist services support me to assist my child".

(54.7% compared to 57.3%), to have friends they enjoy playing with (32.8% compared to 36.3%), and to participate in community activities (43.3% compared to 46.4%). Their parents/carers are more likely to have concerns in six or more areas of development (74.1% compared to 68.1%). Participants with global developmental delay are less likely to live with their parents at baseline (91.5% compared to 94.8% overall).

- Although not shown in Table 2.2 due to smaller numbers, participants with spinal cord injury or another physical disability tended to have more positive baseline outcomes, particularly in relation to child development, relationships and community participation.

There were also some significant differences by disability for LF indicators. For example:

- Participants with autism are less likely to be able to manage their emotions (33.8% compared to 47.3% overall) and the demands of their world (43.1% compared to 53.9% overall). Parents/carers of participants with autism are also less likely to think there is enough time each week to meet the needs of all family members (33.8% compared to 45.3% overall), and more likely to be worried about the effect of having a sibling with disability on their other children (67.3% compared to 57.5%).
- Participants with a sensory disability<sup>13</sup> were more likely to be able to manage the demands of their world (74.7% compared to 53.9% overall). Parents/carers of participants with a sensory disability are also more likely to think there is enough time each week to meet the needs of all family members (74.7% compared to 45.3% overall).
- Participants with an intellectual disability or Down syndrome are less likely to think there is enough time each week to meet the needs of all family members (35.5% compared to 45.3% overall)
- Participants with developmental delay or global developmental delay are more likely to think there is enough time each week to meet the needs of all family members (48.2% compared to 45.3% overall), and less likely to be worried about the effect of having a sibling with disability on their other children (49.6% compared to 57.5%).

Comparing 2019-20 entrants with prior year entrants, baseline results by disability are generally similar. As for 2019-20 entrants, participants with hearing impairment tended to have better baseline outcomes, and participants with autism or global developmental delay tended to have worse baseline outcomes.

However, there were a few minor differences on specific indicators. For example, for prior year entrants, parents/carers with global developmental delay were the most likely to have concerns in six or more developmental areas, followed by parents/carers of participants with Down syndrome (controlling for other factors in the regression modelling). For 2019-20 entrants, parents/carers of participants with autism were the most likely to have concerns, followed by parents/carers of participants with global developmental delay, and there was no significant difference between participants with Down syndrome and those with developmental delay.

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<sup>13</sup> Hearing impairment, visual impairment, or another sensory/speech disability (combined due to small numbers in the LF).

## Level of function / annualised plan budget<sup>14</sup>

Almost all baseline outcomes vary significantly with participant level of function and annualised plan budget. Baseline indicators are generally better for participants with higher level of function / lower annualised plan budget.

Table 2.3 shows baseline participant outcomes for which level of function and annualised plan budget are significant ( $p < 0.05$ ) predictors in the multiple regression model, and the direction of the effect.

**Table 2.3 Relationship of level of function and plan budget with the likelihood of selected outcomes**

Outcome	Higher level of function	Lower annualised plan budget
Lives in home owned or rented from private landlord	↑	↑
Parent/carer has concerns in 6 or more areas of development	↓	↓
Uses specialist services	↑	↓
Services help child to gain life skills	↑	
Services support parent/carer to assist child	↑	
Able to tell parent/carer what they want	↑	↑
Gets along with brothers/ sisters	↑	↑
Can make friends with people outside the family	↑	↑
Joins in completing tasks at home	↑	↑
Joins in completing tasks outside home	↑	↑
Fits in with the everyday life of the family	↑	↑
Has friends he/she enjoys playing with	↑	↑
Participates in age appropriate community, cultural or religious activities	↑	↑

<sup>14</sup> Note that variations in baseline outcomes by annualised plan budget reflect characteristics associated with having a higher or lower plan budget, rather than the amount of the plan budget itself, since participants are at the start of their first plan at baseline.

Outcome	Higher level of function	Lower annualised plan budget
Is welcomed or actively included in community activities	↑	↑
Parent/carer would like child to be more involved	↓	↓
Child's disability is a barrier to being more involved	↓	↓

Level of function was a significant ( $p < 0.05$ ) predictor in all but one of the 17 regression models, and annualised plan budget in all but three of the models.<sup>15</sup>

Controlling for other variables, for participants entering the Scheme in 2019-20:

- Participants with higher level of function have better baseline outcomes for all indicators in Table 2.3 that are categorised as positive or negative. In particular:
  - The percentage of parents/carers with concerns in six or more areas of development increases from 62.1% for participants with high level of function, to 80.1% for those with medium level of function, and 88.4% for those with low level of function.
  - The percentage of parents/carers who say their child is able to tell them what she/he wants decreases from 72.6% for participants with high level of function, to 66.2% for those with medium level of function, and 39.8% for those with low level of function.
  - The percentage who can make friends with people outside the family decreases with level of function (64.2%, 46.6% and 25.3% for participants with high, medium and low level of function, respectively); as does the percentage who have friends they enjoy playing with (41.3%, 28.9% and 12.8%).
  - Participants with high level of function are more likely to participate in age appropriate community, cultural or religious activities (49.3%, 42.4% and 31.8% for participants with high, medium and low level of function, respectively), and are more likely to be welcomed or actively included when they do participate (67.4%, 54.9% and 37.3%).
  - Parents/carers of participants with high level of function are less likely to want their child to be more involved in community activities (62.6% compared to 71.9% for participants with medium level of function and 74.4% for participants with low level of function), and less likely to perceive their child's disability as a barrier to being more involved (81.1% compared to 90.3% and 96.6%).
- Participants with a lower baseline plan budget also have better baseline outcomes for most of the indicators, generally reflecting the trends by level of function. For example:

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<sup>15</sup> Neither level of function nor annualised plan budget was a significant predictor of whether the child lives with their parents. In addition, annualised plan budget was not significant in the models for "Specialist services help the child to gain the skills she/he needs to participate in everyday life" and "Specialist services support me to assist my child".



- The percentage of parents/carers with concerns in six or more areas of development increases from 33.3% for annualised plan budget \$10,000 or less to 86.1% for annualised plan budget over \$30,000.
- The percentage of parents/carers who say their child is able to tell them what she/he wants initially increases with plan budget, from 70.8% for annualised plan budget \$10,000 or less to 75.7% for plan budget \$15,000-\$20,000. However, it then decreases to 41.1% for annualised plan budget over \$30,000.
- The percentage of participants who have friends they enjoy playing with decreases for plan budgets over \$15,000, from 46.1% to 17.7% for plan budget over \$30,000.
- Of those who participate in community activities, the percentage who feel welcomed or actively included decreases from 78.7% for plan budget less than \$10,000 to 50.9% for plan budget over \$30,000.
- The percentage of parents/carers who would like their child to be more involved in community activities increases from 52.6% to 72.0% as plan budget increases from less than \$10,000 to over \$30,000. The percentage who perceive their child's disability as a barrier to greater involvement also increases, from 70.0% to 94.7%.

With regard to use of specialist services, Table 2.3 suggests different directions for the effect of higher level of function compared to the effect of lower annualised plan budget. On a one-way basis (consistent with the multiple regression modelling), the percentage using specialist services increases with plan budget, from 39.8% for plan budget \$10,000 or less to 66.9% for annualised plan budget over \$30,000. For level of function, on a one-way basis the percentage using specialist services is lower for participants with high level of function (47.1%) compared to participants with medium or low level of function (54.1%-55.5%). However, the multiple regression modelling suggests a slight decreasing trend with declining level of function, controlling for other factors (including plan budget).

Both one-way analyses and multiple regression modelling indicate a slight decreasing trend in satisfaction with services as level of function declines. On a one-way basis, the percentage of parents/carers who think that the services they use help their child to gain skills to participate in everyday life decreased from 84.7% for participants with high level of function to 79.7% for those with low level of function. The percentage who think that the services support them in assisting their child declined from 86.8% to 83.2%.

There were also some significant differences by level of function and plan budget for LF indicators. For example, participants with higher level of function / lower plan budget were more likely to be able to:

- Manage their emotions (54.2% for participants with high level of function compared to 34.4% for those with low level of function; 64.6% for plan budget \$10,000 or less reducing to 36.1% for plan budget over \$20,000).
- Manage the demands of their world (61.4% for participants with high level of function compared to 38.7% for those with low level of function; 75.0% for plan budget \$10,000 or less reducing to 41.2% for plan budget over \$20,000).
- Do everyday tasks at home/in the park/at childcare (61.0% for participants with high level of function compared to 32.3% for those with low level of function; 77.1% for plan budget \$10,000 or less reducing to 40.3% for plan budget over \$20,000).

Parents/carers of participants with higher level of function / lower plan budget are also more likely to think there is enough time each week to meet the needs of all family members, and

less likely to be worried about the effect of having a sibling with disability on their other children.

Comparing 2019-20 entrants with participants entering in earlier years, baseline trends by level of function and annualised plan budget are very similar. For both 2019-20 entrants and prior year entrants, baseline indicators are generally better for participants with higher level of function / lower annualised plan budget, particularly those related to child development and community participation.

### Age, Gender, Indigenous status and CALD status

Table 2.4 shows baseline participant outcomes for which age, gender, Indigenous status or CALD status are significant ( $p < 0.05$ ) predictors in the multiple regression model, and the direction of the effect.

**Table 2.4 Relationship of age, gender, Indigenous status and CALD status with the likelihood of selected outcomes**

Outcome	Participant is older	Participant is female	Participant is Indigenous	Participant is from a CALD background
Lives with their parents		↓	↓	↑
Lives in home owned or rented from private landlord	↓	↓	↓	
Parent/carer has concerns in 6 or more areas of development		↓		↓
Uses specialist services	↓		↓	↓
Services help child to gain life skills	↑			↓
Services support parent/carer to assist child	↓			↓
Able to tell parent/carer what they want	↑			↓
Gets along with brothers/ sisters				↓
Can make friends with people outside the family	↑			↓
Joins in completing tasks at home	↑	↑	↓	↓
Joins in completing tasks outside home	↑			↓

Outcome	Participant is older	Participant is female	Participant is Indigenous	Participant is from a CALD background
Fits in with the everyday life of the family	↓			
Has friends he/she enjoys playing with	↑	↑		↓
Participates in age appropriate community, cultural or religious activities	↑	↑		
Is welcomed or actively included in community activities	↓	↑		↓
Parent/carer would like child to be more involved	↑	↓		↑
Child's disability is a barrier to being more involved	↑			

### Age<sup>16</sup>

Age was a significant predictor in 14 of the 17 regression models.

Controlling for other factors, for participants entering the Scheme in 2019-20, older participants were more likely to:

- Be able to tell their parents/carers what they want (90.8% for participants aged five or older compared to 39.0% for those two or younger).
- Make friends with people outside the family, have friends they enjoy playing with, and participate in community activities (52.2% for participants aged five or older compared to 41.5% for those two or younger).
- Join in completing tasks at home (80.9% for participants aged five or older compared to 60.3% for those two or younger) and outside the home (85.9% compared to 77.6%).

Some of these effects are likely to be at least partly due to normal age-related development (for example, the ability to communicate would be expected to increase with age for all children).

Some baseline indicators were less positive for older children. Often, most of the deterioration was observed between the 0 to 2 year age group, and the 3 year old age group. Older participants were less likely to:

- Live in a home that is owned or rented from a private landlord (although the effect on a one-way basis was small, decreasing from 90.9% for participants aged 2 or younger to 89.8% for those aged 5 or older).

<sup>16</sup> Note this is the cross-sectional effect of age on baseline outcomes, rather than longitudinal.

- Fit in with the everyday life of the family (largely due to a decrease from 67.7% for 0 to 2 year olds to 63.1% for 3 year olds).
- Be welcomed or actively included when they participate in community activities. On a one-way basis, the percentage decreased from 65.4% to 60.0% between ages 0 to 2 and age 3, before increasing to 67.3% for those aged 5 or older.

Parents/carers of older children were also more likely to want their child to be more involved in community activities (59.4% for 0 to 2 year olds increasing to 67.4% for 3 year olds and 68.4% for those 5 and over), and to perceive their child's disability as a barrier to being more involved in community activities (increasing from 82.0% for 0 to 2 year olds to 87.0% for 3 year olds, then decreasing to 84.5% for those aged 5 or older).

There were also some significant differences by age for LF indicators:

- The percentage of children who can manage their emotions decreased from 63.3% for 0 to 2 year olds to 39.3% for 4 year olds before increasing slightly to 44.1% for those aged 5 or older.
- The percentage of children who take action or indicate the need for assistance to take action when they decide to do something increased from 79.7% for those aged 0 to 2, to 95.0% for those aged 5 or older.
- The percentage of parents/carers who think there is enough time to meet the needs of all family members decreased from 57.0% for those aged 0 to 2, to 36.8% for those aged 5 or older.

### *Gender*

Gender was a significant predictor in eight of the 17 regression models.

For many of the baseline indicators, females had more positive outcomes than males.

Controlling for other factors, for participants entering the Scheme in 2019-20:

- Parents/carers of female participants were less likely to have concerns in six or more areas of development (64.2% compared to 69.7% for male participants).
- Female participants were more likely to join in completing tasks at home (75.1% compared to 73.1% for males), and to have friends they enjoy playing with (37.9% compared to 35.6%).
- Female participants were more likely to participate in community activities (48.7% compared to 45.3% for males), and to be welcomed or actively included when they do so (66.7% compared to 61.7%). Parents/carers of female participants were less likely to want their child to be more involved in community activities (62.5% compared to 66.7% for males).

However, the models also indicated that female participants were significantly less likely to live with their parents, and to live in a home that was owned by their family or rented from a private landlord. On a one-way basis, the differences were small.

From the LF, the percentage of children who take action or indicate the need for assistance to take action when they decide to do something was significantly higher for females (94.0%) compared to males (91.4%).

### *Indigenous status*

Indigenous status was a significant predictor in four of the 17 regression models.

Two of these indicators related to living/housing arrangements, with Indigenous participants being significantly less likely to:

- Live with their parents (81.5% compared to 96.4% for non-Indigenous participants).

- Live in a home that is owned by their family or rented from a private landlord (72.1% compared to 92.6% for non-Indigenous participants). Conversely, Indigenous participants are much more likely to live in public housing (23.9% compared to 4.0%).

Indigenous participants were less likely to join their parent/carer when they complete tasks at home, and less likely to use specialist services that assist their learning and development (37.3% compared to 50.3%).

#### *CALD status*

CALD status was a significant predictor in 13 of the 17 regression models.

CALD participants were significantly more likely to live with their parents (98.6% compared to 94.4% for non-CALD participants) at baseline, and their parents/carers were less likely to have concerns in six or more areas of development.

However, they tend to have less positive baseline outcomes on a number of other indicators, particularly in relation to family and community life.

Controlling for other factors, for participants entering the Scheme in 2019-20, CALD participants were less likely to:

- Be able to tell their parent/carer what they want (54.5% compared to 70.1% for non-CALD participants).
- Get along with their siblings (73.0% compared to 80.1% for non-CALD participants).
- Make friends with people outside the family (40.6% compared to 59.2% for non-CALD participants), and have friends they enjoy playing with (22.9% compared to 37.9%).
- Join in completing tasks at home (61.7% compared to 75.1% for non-CALD participants) and outside the home (76.0% compared to 82.6%).
- Be welcomed or actively included when they participate in community activities (54.0% compared to 64.3%).

CALD participants were also significantly less likely to use specialist services (44.4% compared to 49.9% for non-CALD participants), and to be satisfied with the services they use: 80.9% said the services help their child to gain skills needed to participate in everyday life, and 83.1% said the services supported them to assist their child, compared to 84.3% and 86.5%, respectively, for non-CALD participants.

More positively, from the LF, parents/carers of CALD participants were more likely to think there was enough time to meet the needs of all family members (53.8% compared to 44.0% for non-CALD participants).

Comparing baseline outcomes by age, gender, Indigenous and CALD status for 2019-20 entrants with prior year entrants:

- Trends by age are largely similar, with some indicators being better at baseline for older participants (partly due to normal age-related development), and some indicators (particularly for community participation) being worse. However, for 2019-20 entrants, baseline age was not identified as a significant predictor in the multiple regression model for parents/carers having concerns in six or more developmental areas, whereas it was identified as a significant predictor for prior year entrants.
- Differences by gender are consistent, with some baseline indicators being more positive for females than for males.
- The more extensive modelling for 2019-20 entrants this year identified Indigenous status as a significant predictor for four out of 17 baseline indicators, whereas none

of the six indicators modelled last year included Indigenous status. The lower use of specialist services by Indigenous participants, and differences in living and housing arrangements that were identified in multiple regression modelling for 2019-20 entrants were also noted from one-way analyses for the combined baseline last year.

- Differences between CALD and non-CALD participants are largely consistent. However, for 2019-20 entrants, the regression modelling indicated that parents/carers of CALD participants were less likely to have concerns in six or more areas of development, whereas the modelling for prior year entrants did not identify a difference between CALD and non-CALD participants on this indicator.

## Geography

Table 2.5 shows baseline participant outcomes for which State/Territory or remoteness are significant ( $p < 0.05$ ) predictors in the multiple regression model, and the direction of the effect.<sup>17,18</sup>

**Table 2.5 Relationship of State/Territory and remoteness with the likelihood of selected outcomes**

Outcome	State/Territory							Remoteness				
	VIC	QLD	SA	WA	TAS	ACT	NT	2	3	4	5	6/7
Lives with their parents			↓	↑				↓				
Lives in home owned or rented from private landlord		↑		↑	↓	↓			↓	↓	↑	↓
Parent/carer has concerns in 6 or more areas of development				↓	↓		↓	↓	↓	↓	↓	↓
Uses specialist services	↓	↓	↑	↑		↓	↓	↓	↓	↓	↓	↑
Services help child to gain life skills			↓									
Services support parent/carer to assist child			↓		↓	↓						
Able to tell parent/carer what they want	↑	↑	↑	↓								
Gets along with brothers/ sisters		↑			↑		↑					

<sup>17</sup> Remoteness uses the Modified Monash Model (MMM), <https://www.health.gov.au/resources/publications/modified-monash-model-fact-sheet> 1=metropolitan, 2=regional centres, 3=large rural towns, 4=medium rural towns, 5=small rural towns, 6=remote communities, 7=very remote communities. 6 and 7 are combined due to small numbers.

<sup>18</sup> Reference categories in the models are NSW for State/Territory and 1 (metropolitan) for remoteness.

Outcome	State/Territory							Remoteness				
	VIC	QLD	SA	WA	TAS	ACT	NT	2	3	4	5	6/7
Can make friends with people outside the family		↑			↑	↑	↓		↑	↑	↑	
Joins in completing tasks at home	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	
Joins in completing tasks outside home	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	
Fits in with the everyday life of the family		↓	↓	↓		↓	↑		↑			
Has friends he/she enjoys playing with	↓		↑	↓			↓	↑				
Participates in age appropriate community, cultural or religious activities	↑	↑		↑	↑	↑	↑	↑	↓		↓	
Is welcomed or actively included in community activities					↑	↓	↑	↓	↓			
Parent/carer would like child to be more involved	↓	↓	↓		↓		↓	↓	↓	↓	↓	↑

### State/Territory

There are some differences in baseline outcomes by State/Territory of residence. For example:

- Participants living in the Northern Territory (NT) are the most likely to participate in age-appropriate community, cultural or religious activities (68.2% compared to 46.4% overall). Parents and carers are also more likely to say that their child fits in with the everyday life of the family. However, NT participants are less likely to be able to make friends outside the family, and less likely to have friends they enjoy playing with.
- Compared to 63.3% of participants overall, participants living in Tasmania (TAS) (76.0%) and NT (69.3%) are more likely to feel welcomed or actively included when they participate in community activities.
- Participants in the Australian Capital Territory (ACT) and NT are the least likely to use specialist services (28.5% and 33.3%, respectively, compared to 49.3% overall) and those in Western Australia (WA) are the most likely (67.5%).
- Participants living in NSW and the ACT are less likely to join their parent/carer in completing tasks at home and outside the home.
- Participants in NSW and SA are less likely to participate in age-appropriate community, cultural or religious activities.

## Remoteness

Remoteness was a significant predictor in 13 of the 17 regression models, with a number of baseline outcomes being more positive for participants living in regional and remote areas compared to those for participants living in major cities:

- Parents/carers of participants living in regional and remote areas are significantly less likely to have concerns about their child's development in six or more areas than those living in major cities (60.9% to 64.2% for participants living in regional and remote areas compared to 71.1% for participants living in major cities).
- Participants living in regional areas with population between 5,000 and 50,000 are more likely to be able to make friends with people outside the family.

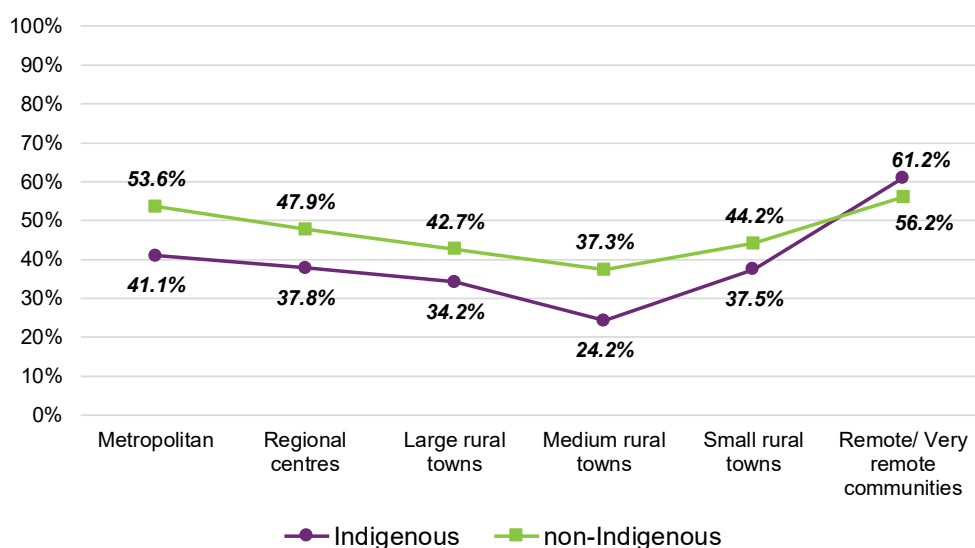
In addition, parents/carers of participants living in all regional areas are less likely to want their child to be more involved in community activities. However, participants living in remote/very remote areas are more likely to want their child to be more involved.

Participants in remote/very remote areas are less likely to live in a home that is owned by their family or rented from a private landlord, being much more likely to live in public housing (25.7% compared to 7.4% overall).

Use of specialist services is less widespread for participants living in regional areas compared to those living in major cities. However, participants living in remote/very remote areas are more likely to use specialist services (56.1% compared to 53.0% for those living in major cities and 36.2% to 45.8% for those living in regional areas).

The trend in use of specialist services by remoteness and Indigenous status is illustrated in Figure 2.5. Initially there is a decline with increasing remoteness, followed by an increase for small rural towns and remote/very remote communities. Use of specialist services is less prevalent amongst Indigenous participants for all levels of remoteness except remote/very remote communities.

**Figure 2.5 Use of specialist services at baseline by Indigenous status and remoteness**



Comparing 2019-20 entrants with prior year entrants, baseline outcomes show similar variations by State/Territory and remoteness, for most indicators.

As discussed, the overall percentage who say their child uses specialist services that assist their learning and development is substantially lower for 2019-20 entrants compared to prior



year entrants (49.3% compared to 71.3%). However, looking at variations by State/Territory, for both entry period cohorts the percentage is lowest in the ACT and highest in WA. The decrease for 2019-20 entrants compared to prior year entrants has been most pronounced for the NT: 33.3% of the 300 NT participants entering in 2019-20 said they used specialist services at baseline, compared to 66.3% of the 255 entering in prior years. Conversely, the decrease was smaller for SA, which had the second highest specialist service usage for 2019-20 entrants, compared to only the sixth highest for prior year entrants.

Looking at specialist service usage by remoteness, trends for major cities and regional areas are generally similar. However, the higher usage in remote/very remote areas noted for 2019-20 entrants was not observed for prior year entrants, where the percentage for remote/very remote areas was similar to the percentages for regional areas with population less than 50,000.

Controlling for other factors, for 2019-20 entrants, remoteness was not a significant predictor in the model for parents/carers saying their child is able to tell them what they want, whereas for prior year entrants it was a significant predictor (indicating an improvement with increasing remoteness). On a one-way basis, there is a similar slight increasing trend in this indicator with remoteness for regional areas compared to major cities for both 2019-20 entrants and prior year entrants. For both cohorts there is also a drop when moving from regional areas with population less than 5000 to remote/very remote areas. However, the drop is more pronounced for 2019-20 entrants (from 73.2% to 53.4%) than for prior year entrants (75.6% to 65.7%).

### Plan management type<sup>19,20</sup>

Table 2.6 shows baseline participant outcomes for which plan management type is a significant ( $p < 0.05$ ) predictor in the multiple regression model, and the direction of the effect.

**Table 2.6 Relationship of plan management type with the likelihood of selected outcomes**

Outcome	Self managed fully	Self managed partly	Plan managed
Lives with their parents	↑	↑	
Lives in home owned or rented from private landlord	↑	↑	↑
Parent/carer has concerns in 6 or more areas of development	↑	↑	↑
Uses specialist services	↑	↑	↑
Services help child to gain life skills	↑		↓
Services support parent/carer to assist child	↑		

<sup>19</sup> Note that these baseline differences reflect characteristics of participants whose families/carers choose to self manage, rather than the self-management process itself (since the results are at the start of the participant's first plan).

<sup>20</sup> Reference category in the models is Agency-managed.

Outcome	Self managed fully	Self managed partly	Plan managed
Fits in with the everyday life of the family	↓		↓
Participates in age appropriate community, cultural or religious activities	↑	↑	↑
Parent/carer would like child to be more involved	↑	↑	↑
Child's disability is a barrier to being more involved	↑		

There were significant differences by plan management type for 10 of the 17 baseline regression models.

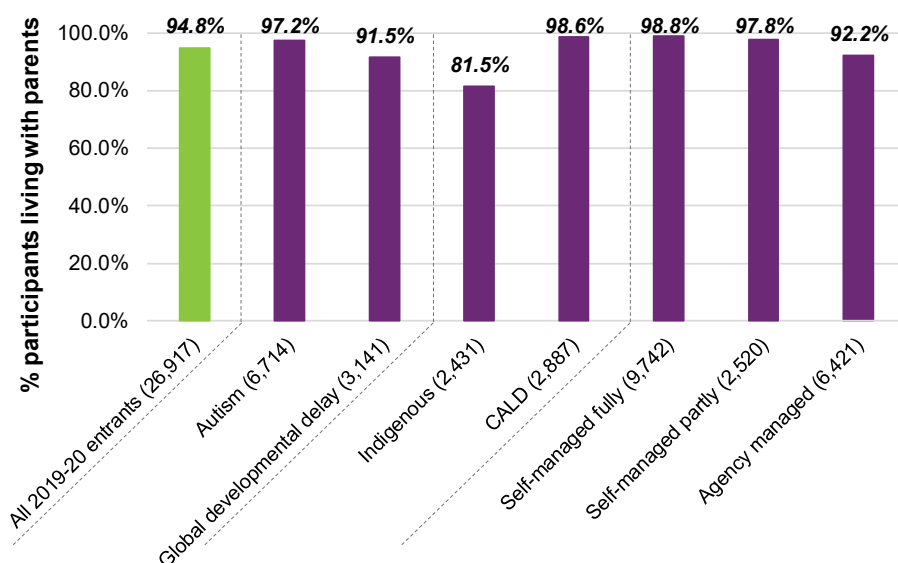
Compared to participants with Agency-managed baseline plans, those with self-managed plans and those using a plan manager were significantly more likely to participate in community activities. Those with fully self-managed plans were the most likely to participate (52.4% compared to 42.2% of those with Agency-managed plans and 46.4% overall).

Parents/carers who self manage (partly or fully) or have a plan manager were more likely to want their child to be more involved in community activities (67.9% for those who self-manage fully compared to 60.9% of those with Agency-managed plans). Those who self-manage fully were more likely to perceive their child's disability as a barrier to being more involved (86.5% compared to 82.4% of those with Agency-managed plans), however there was no significant difference between Agency-managed and those who either partly self-manage or use a plan manager. Those who self manage (partly or fully) or have a plan manager were also more likely to have concerns in six or more developmental areas (71.4% for those who self-manage fully compared to 62.9% of those with Agency-managed plans).

Use of specialist services was more prevalent amongst those who self-manage or have a plan manager than amongst those whose plans are Agency-managed, with 61.0% of those who self-manage using specialist services compared to 38.1% of those with Agency-managed plans.

Participants who self-manage are more likely to live with their parents (98.8% for those who fully self-manage compared to 92.2% of those with Agency-managed plans). They are also less likely to live in public housing (2.1% compared to 12.5% for those with Agency-managed plans).

**Figure 2.6 Percentage of participants living with their parents at baseline – 2019-20 entrants**



Comparing 2019-20 entrants with those entering in prior years, the same trends by plan management type were observed for living and housing arrangements, and utilisation of specialist services.

However, for 2019-20 there were no significant differences by plan management type for whether children who participate in community activities are welcomed or actively included, whereas for prior year entrants, those who self-managed (partly or fully) were found to be less likely to be welcomed or actively included.

### **Friendships, community participation, use of childcare and specialist services, and unemployment rate in participant's LGA of residence**

Table 2.7 shows baseline participant outcomes for which friendships, community participation, use of childcare and specialist services, and unemployment rate in participant's LGA of residence are significant ( $p < 0.05$ ) predictors in the multiple regression model, and the direction of the effect.

**Table 2.7 Relationship of friendships, community participation, use of childcare and specialist services, and unemployment rate in participant's LGA of residence with the likelihood of selected outcomes**

Outcome	Has friends they enjoy playing with	Participates in community activities	Uses childcare	Uses specialist services	Higher unemployment rate
Lives with their parents	↓		↓		
Lives in home owned or rented from private landlord		↑	↑	↑	
Parent/carer has concerns in 6 or more areas of development	↓	↓		↑	↑

Outcome	Has friends they enjoy playing with	Participates in community activities	Uses childcare	Uses specialist services	Higher unemployment rate
Uses specialist services	↑	↑	↑		↓
Services help child to gain life skills	↑	↑	↑		↓
Services support parent/carer to assist child	↑	↑	↑		
Able to tell parent/carer what they want	↑	↑	↑	↑	↓
Gets along with brothers/ sisters	↑	↑		↑	↓
Can make friends with people outside the family	↑	↑	↑		↓
Joins in completing tasks at home	↑	↑	↑		↓
Joins in completing tasks outside home	↑	↑	↑		↓
Fits in with the everyday life of the family	↑	↑	↑	↑	↑
Has friends he/she enjoys playing with		↑	↑	↑	↓
Participates in age appropriate community, cultural or religious activities	↑		↑	↑	↓
Is welcomed or actively included in community activities	↑			↑	↓
Parent/carer would like child to be more involved		↑		↑	
Child's disability is a barrier to being more involved	↓			↑	↑

Having friends they enjoy playing with was a significant positive factor in 14 of the 17 baseline regression models. It was also associated with higher use of specialist services. However, it was associated with a lower likelihood of living with parents.

Participation in community activities was also a significant positive factor, in 13 of the 17 models. Even though their child already participates in community activities, parents/carers were more likely to express a desire for greater involvement.

Use of specialist services was a positive factor in seven of the multiple regression models. These children were more likely to participate in community activities and more likely to be welcomed or actively included when they do participate. However, their parents/carers were more likely to want their child to be more involved, more likely to perceive their child's disability as a barrier to being more involved, and more likely to have concerns in six or more developmental areas.

Use of childcare was generally a positive factor in the multiple regression models. It was also associated with higher use of specialist services. However, it was associated with a lower likelihood of living with parents.

A higher unemployment rate was generally associated with worse baseline outcomes, although participants living in higher unemployment areas were more likely to fit in with the everyday life of the family.

Comparing 2019-20 entrants with those entering in prior years, the same positive associations between having friends and using childcare and specialist services were observed.

### **Impact of COVID-19**

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

#### *Methodology*

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

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

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

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

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

would also be needed. Some qualitative research into economic and social participation outcomes, including the effect of the pandemic, is being undertaken.

### *Results*

For participants aged from birth to before starting school who entered the Scheme in 2019-20, there were six indicators for which one or both of the COVID-related terms was significantly different from zero.

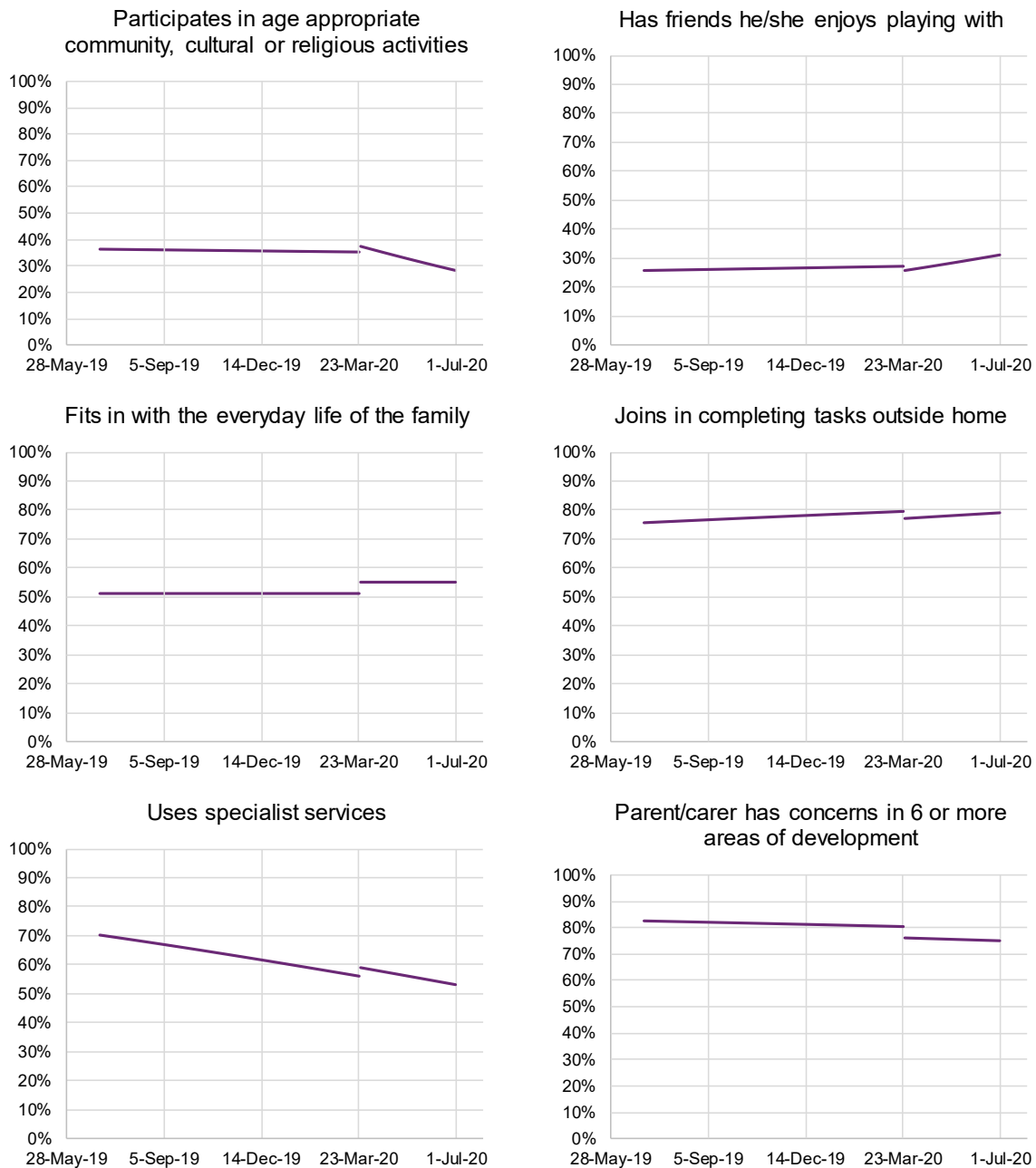
The percentage of parents/carers who say their child participates in age appropriate community, cultural or religious activities remained relatively constant over time between 1 July 2019 and 23 March 2020, but since that date a significant decline over time has been observed. This result is illustrated in Figure 2.7 (top left plot), which shows fitted trend lines by entry date.<sup>21</sup> The discontinuity in slope at 23 March 2020 is apparent.

The percentage of children who have friends they enjoy playing with also exhibited a discontinuity in slope before and after the assumed COVID impact date. However, for this indicator there was a slight increase over the post-COVID period (top right plot of Figure 2.7).

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<sup>21</sup> The trends are illustrated for selected typical values for other variables in the model.

**Figure 2.7 Estimated trend over time for indicators where one or both COVID-related terms was significantly different from zero**



The other indicators where COVID-related terms were significant in the models were:

- The percentage of parents/carers who say their child fits in with the everyday life of the family: there was a significant step up in this indicator at 23 March 2020, but no significant time trend either before or after this date.
- The percentage of children who join their parent/carer in completing tasks outside the home: there was a significant step down in this indicator at 23 March 2020. The same general increasing trend was observed both before and after 23 March 2020.
- The percentage of children who use specialist services: there was a significant step up in this indicator at 23 March 2020. The same general decreasing trend was observed both before and after 23 March 2020.

- The percentage of parents/carers with concerns in six or more areas of their child's development: there was a significant step down in this indicator at 23 March 2020. The same general decreasing trend was observed both before and after 23 March 2020.

Trend lines for these other indicators are also illustrated in Figure 2.7.

Box 2.4 summarises the key findings from this section.

#### **Box 2.4: Summary of findings**

- Participants with a hearing impairment as their primary disability type, participants with a higher level of function and participants who are self-managing part or all of their plan tend to have better baseline outcomes across most indicators.
- However, participants with autism or global developmental delay as their primary disability type, participants from a CALD or Indigenous background and participants from an area with a higher unemployment rate tended to have worse baseline outcomes across most indicators.
- Participants who have friends they enjoy playing with, who participate in community activities and who use childcare or specialist services tend to have significantly better baseline outcomes.
- COVID-19 had a significant impact on participant outcomes and results were mixed. The percentage of participants who said their child participates in age appropriate community, cultural or religious activities has shown a decreasing trend since the start of the pandemic. However, the percentage of parents/carers who say their child fits in with the everyday life of the family increased, and the percentage of parents/carers with concerns in six or more areas of their child's development decreased.