



Outcomes for participants with Autism Spectrum Disorder (ASD)

National Disability Insurance Agency



Outline



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- Key points
- Prevalence estimates
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 - NDIS participants
- NDIS participants with ASD
 - trends over time and and comparisons with other disabilities
- The NDIS outcomes framework
 - Baseline outcomes upon entering the Scheme
 - Longitudinal outcomes
 - Has the NDIS helped?

Introduction



The National Disability Insurance Scheme (NDIS) provides reasonable and necessary funding to people with a permanent and significant disability to access the supports and services they need to live and enjoy their life.

There are a number of pathways potential participants can access the NDIS:

- Early Childhood Early Intervention (ECEI) helps children aged 0–6 years to access supports and services tailored to the child’s needs prior to becoming a participant of the NDIS.*
- Potential participants can make an access request to become a participant of the Scheme. The NDIS makes decisions about whether someone is eligible and, if so, how much funding they will receive in their NDIS plan.
- Participants can access the Scheme via permanent disability (s24) or early intervention (s25) pathways as set out in the NDIS Act 2013.

This presentation focuses on participants who have made an access request and received a NDIS plan through the permanent disability (s24) or early intervention (s25) pathways. ECEI is recorded off-system and more analysis will be presented on this as the data moves on-system.

The following sections present information on:

- Population data compared with NDIS data on the prevalence of ASD.
- Trends in participants with ASD in the Scheme.
- Analysis of outcomes for participants with ASD.

* At 30 June 2018, there were approximately 6,800 children supported in the ECEI gateway who had not made a request for access. A further 3,700 had been supported in the gateway and had exited the gateway without needing support from the Scheme.

Key points

Key points (1)



ASD is currently the largest primary disability category for the NDIS.

As at 31 December 2018, 29% of active participants with an approved plan had a primary disability of ASD, followed by intellectual disability, with 27%.¹

Additionally, about 5% of participants had ASD as a secondary disability, with two-thirds of these having a primary intellectual disability.

ASD prevalence rates² from the ABS Survey of Disability, Ageing and Carers (SDAC) show an increasing trend over time, from 0.3% in 2009 to 0.5% in 2012 and 0.7% in 2015.

Scheme prevalence rates have also increased over time. For the more mature trial site locations:

- All-age prevalence rates range from 0.4% in ACT to 0.7% in SA and the Hunter region
- Rates generally increase to a peak at around age 8 to 11 before declining
- For Hunter and Barwon, Scheme prevalence rates are now comparable to SDAC 2015 prevalence rates.

¹ Since 2017-18 Q1 Developmental Delay and Global Developmental Delay have been reported separately to the Intellectual Disability category. If these were included, the proportion of participants with a primary disability of Intellectual Disability would increase to 33%.

² Includes Autistic disorder, Asperger's disorder, Rett's Syndrome, Childhood Disintegrative Disorder and Pervasive Developmental Disorder not otherwise stated (PDD-NOS). Includes all those who reported one of these as a long-term condition.

Key points (2)

Trends in recent quarters reveal some differences between participants with ASD and participants with other disabilities:

For access met decisions, quarterly growth rates are higher for ASD than for the group of other disabilities in the age range 7 to 44. Similar results are observed for growth in plan approvals.

Ineligibility rates are lower for participants with ASD compared to the group of participants with other disabilities, across all age groups.

Compared to the group with disabilities other than ASD, average committed supports for participants with ASD are:

- Similar or lower for ages 0 to 24
- Higher for ages 25 and over.
- Differences by age may reflect the different mix of disabilities and also SIL.

Utilisation for participants aged 18 and under with ASD has shown a slight increasing trend in recent quarters, and is also slightly higher for most age groups compared with other disability groups.

Key points (3)



Comparing length of time in Scheme for participants with ASD and those with other disabilities:

- Early intervention participants with ASD tend to have been in the scheme for longer than participants with other disabilities; however
- The distributions of time in scheme are more similar for disability met participants

A preliminary comparison of time from access met to first plan approval suggests there has been minimal difference between participants with ASD and participants with other disabilities in recent quarters, however further analysis is being conducted.

Further research into children in the ECEI gateway is also being undertaken.

Key points (4)



On entering the Scheme, outcomes for participants with ASD are worse in many respects than those for participants with other disabilities. For example:

0 to school:

Participants with ASD are more likely than most other disability groups to experience difficulties in six or more areas of development and are less likely to be able to make friends, to participate in community activities, and to feel welcomed or included when participating.

School to 14:

Participants with ASD were the least likely to feel happy/ genuinely included at school.

15 and over:

Participants with ASD are less likely to choose who supports them, and more likely to have no friends other than family or paid staff.

Key points (5)

Results for longitudinal change in outcomes over one year for participants with ASD are largely positive, with improvements seen across a number of the key indicators:

0 to school:

Significant improvements are observed for the percentage of children with ASD being able to express what they want, and the percentage of children who are welcomed or actively included in community activities.

School to 14:

Changes are less positive than for the youngest children. However, improvements are seen for the percentage of children with ASD becoming more independent, and the percentage welcomed or actively included when they spend time with friends or in community activities.

15 to 24:

Improvements are observed for the percentage of participants with ASD who have been actively involved in a community, cultural or religious group, and the percentage who have a paid job. However, there has been a deterioration in the percentage with no friends other than family or paid staff.

25 and over:

Improvements are observed for the percentage of participants with ASD who have been actively involved in a community, cultural or religious group. However, there has been a deterioration in the percentage who choose who supports them, and the percentage who choose what they do each day.

Key points (6)

Results for longitudinal change in outcomes when comparing participants with ASD with other disabilities, include:

0 to school:

The improvement in the percentage welcomed when they participate in community activities is slightly greater for participants with ASD, however the percentage with concerns in six or more areas has increased (deteriorated) more for participants with ASD.

School to 14:

Changes tended to be slightly more positive for participants with ASD, particularly the percentage who say their child is becoming more independent, and the percentage welcomed or actively included when they spend time with friends or in community activities.

15 to 24:

There has been a bigger deterioration in the percentage with no friends other than family or paid staff for participants with ASD. However, participants with ASD are more likely to improve in relation to feeling safe in their home.

25 and over:

There has been a bigger deterioration in the percentage with no friends other than family or paid staff for participants with ASD. Participants with ASD have also fared worse on the two choice and control indicators: choosing who supports them and choosing what they do each day. However, participants with ASD are more likely to improve in relation to feeling safe in their home.

Key points (7)



Perceptions of whether the NDIS has helped show:

0 to school:

Participants with ASD show a small but consistent trend to respond more positively than those with other disabilities.

School to 14:

Participants with ASD respond slightly more positively, except for the education domain where results are similar.

15 to 24:

There is very little difference between responses for participants with ASD and those with other disabilities.

25 and over:

Participants with ASD tend to respond slightly more positively for the relationships, home, lifelong learning, work and community participation domains. Responses tend to be similar to other participants for choice and control and daily living, and very slightly worse for health.

Prevalence estimates

Survey of Disability, Ageing and Carers (SDAC)

Background

Autism spectrum disorder (ASD) is “the collective term for a group of neurodevelopmental disorders characterised by persistent deficits in social communication and social interaction, and by repetitive patterns of behaviour and restricted interests”³.

Reported population prevalence of ASD has been increasing worldwide since the 1990s. Explanations put forward include⁴:

- **Etiological factors**, such as increasing parental age and environmental influences; and
- **Non-etiological factors**, such as increased awareness and changing diagnostic criteria.

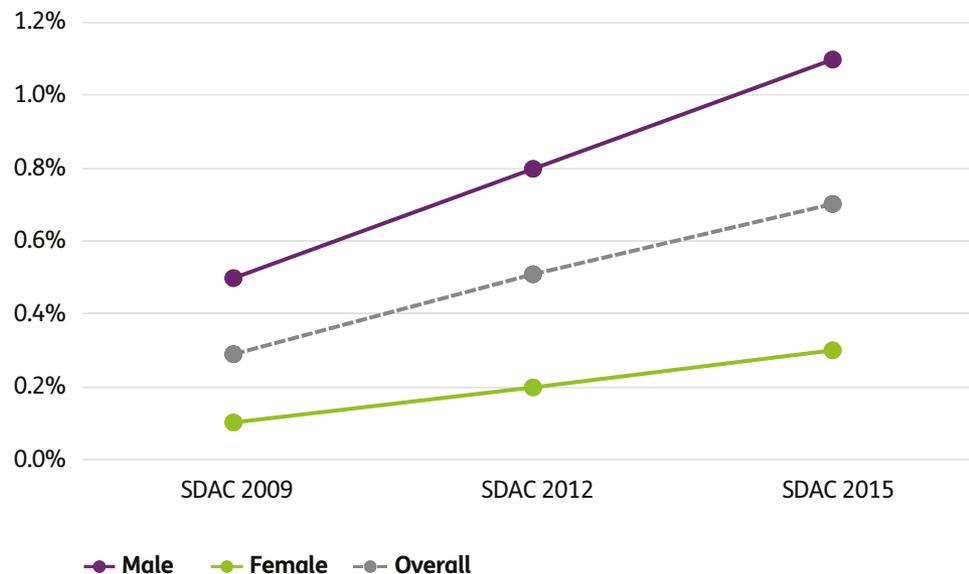
ASD is currently the largest primary disability category for the NDIS. As at 31 December 2018, 29% of active participants with an approved plan had a primary disability of ASD, followed by intellectual disability, with 27%.

³ Whitehouse AJO, Evans K, Eapen V, Wray J. A national guideline for the assessment and diagnosis of autism spectrum disorders in Australia. Cooperative Research Centre for Living with Autism, Brisbane, 2018.

⁴ T. May, E. Sciberras, A. Brignell and K. Williams, “Autism spectrum disorder: updated prevalence and comparison of two birth cohorts in a nationally representative Australian sample,” *BMJ Open*, vol. 7, p. e015549, 2017.

Overall prevalence estimates from the Survey of Disability, Ageing and Carers (SDAC)

The SDAC collects information on disability from a sample of Australian households. The information is collected from interviews and relies on self-report of disability status and type. Estimated ASD⁵ prevalence rates from the 2009, 2012 and 2015 SDAC show an increasing trend.



Male prevalence rate is about 4 times the female rate.

This is consistent with international studies, e.g. the Centers for Disease Control and Prevention (CDC) found that boys are 4.5 times more likely than girls to be diagnosed with ASD in the US.

⁵ Includes Autistic disorder, Asperger’s disorder, Rett’s Syndrome, Childhood Disintegrative Disorder and Pervasive Developmental Disorder not otherwise stated (PDD-NOS). Includes all those who reported one of these as a long-term condition.

SDAC classification of core activity limitation

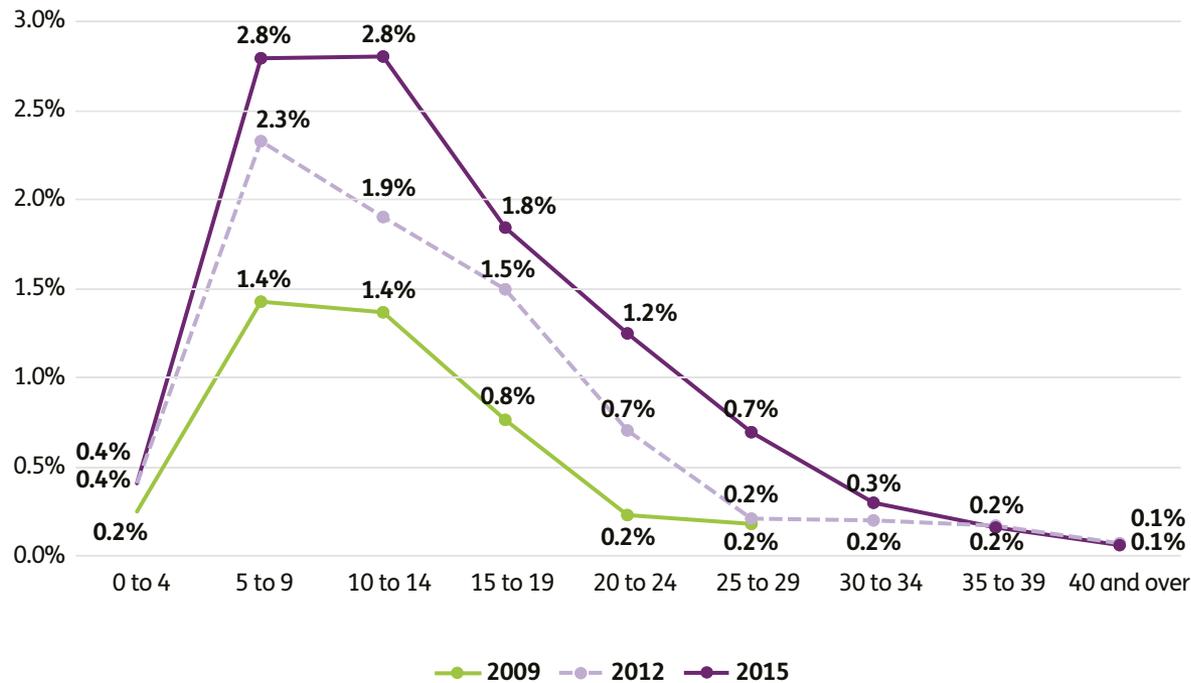


SDAC “core activity limitation”:
assistance required with at least
one of three activities: mobility,
communication, self-care.

The most common activity
restriction for people with autism is
communication, followed by mobility.

Limitations are classified as profound,
severe, moderate or mild. There
appears to have been a shift towards
milder levels for autism over time.
For example, SDAC 2009 estimated
that 68% of people with autism had
a profound or severe communication
restriction, compared to 51% for
SDAC 2015.

SDAC prevalence estimates by age group



Rates increase to a peak around 5 to 14 years of age before declining at older ages.

Rates have been increasing over time, for all except the oldest age groups.

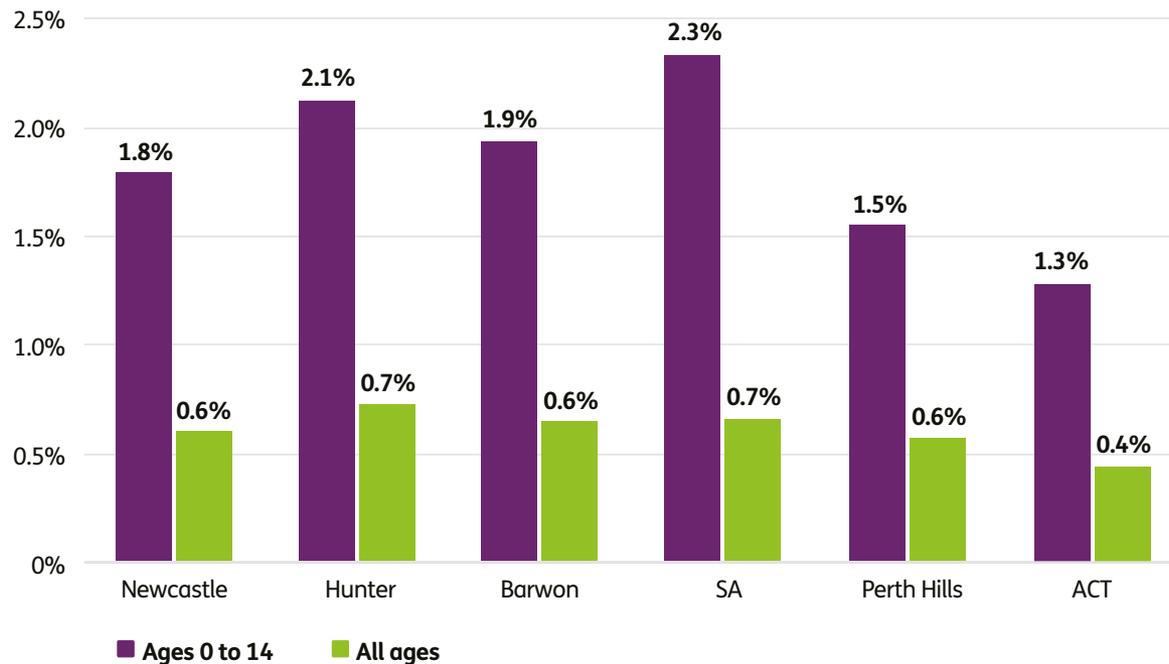
However increases are pushing into successively older age groups, as the different birth cohorts age.

NDIS

Participants

Scheme prevalence for trial site locations

As at 31 December 2018

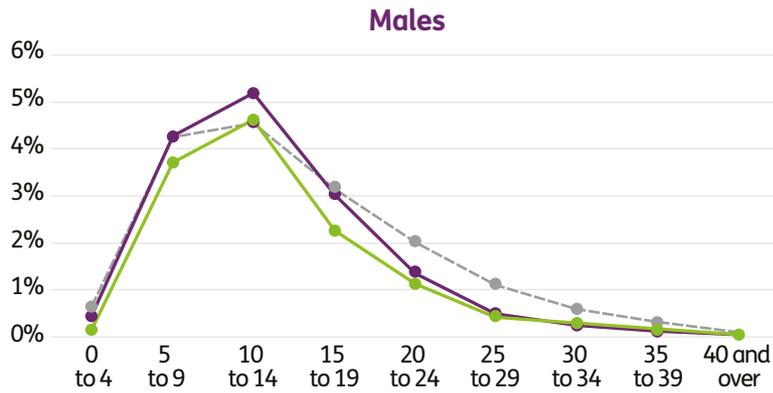


Overall prevalence rates for the more mature trial site locations range from 0.4% in ACT to 0.7% in Hunter and SA⁶.

For ages 0 to 14 only, prevalence rates range from 1.3% in ACT to 2.3% in SA.

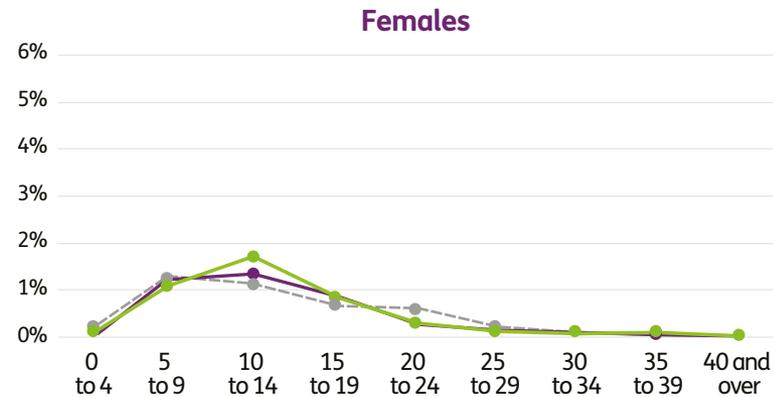
⁶ In SA, only children aged 13 and under were brought into the scheme during the trial period. During 2016-17, young people up to the age of 17 started to transition. Hence all age prevalence may be understated.

Comparison of Scheme prevalence with SDAC 2015: Hunter and Barwon

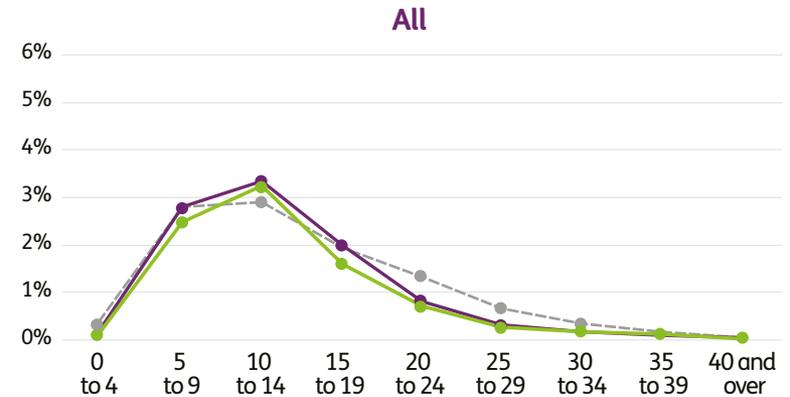


For males, Hunter and Barwon rates are around 90-115% of SDAC 2015 rates⁷ for age groups 5 to 9 and 10 to 14, with lower percentages for other age groups.

For females, Hunter and Barwon rates are around 120-150% of SDAC 2015 rates for age group 10 to 14 and 15 to 19.



— SDAC 2015 — Hunter — Barwon



⁷ SDAC rates include all those who reported ASD as a long-term condition (had lasted or was likely to last for six months or more).

Scheme prevalence for trial site locations by age

As at 31 December 2018



ACT has lower prevalence rates, with male rates peaking at less than 3.5% and female rates at around 1%.

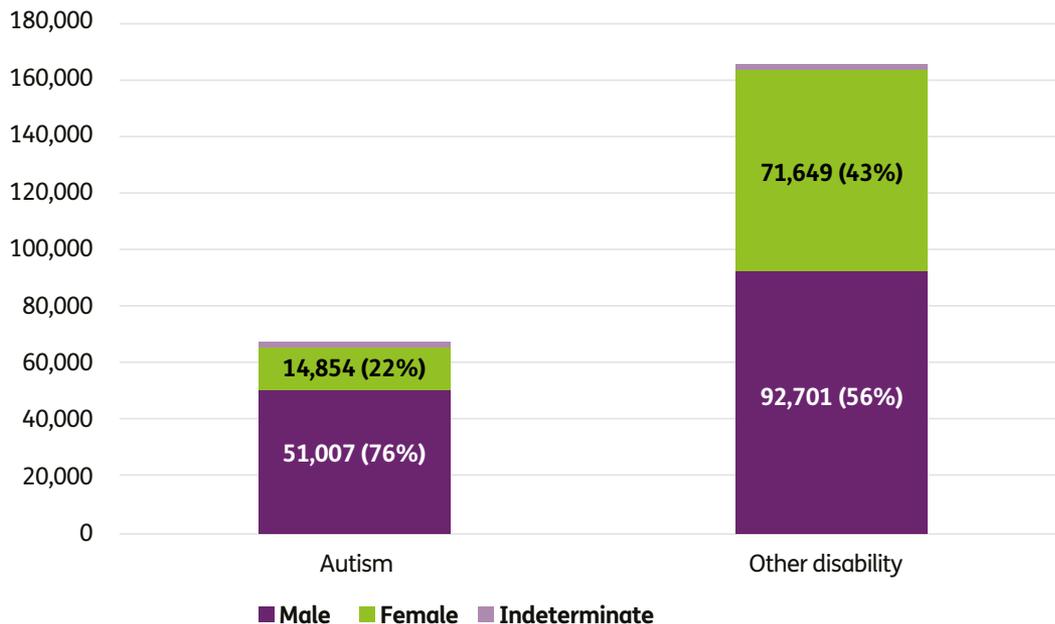
Rates for Perth Hills are also lower, with male rates peaking at around 4% and female rates at around 1%.

In other sites, male rates generally peak at around 5% to 6% and female rates at around 1% to 2%.

Rates generally increase to a peak at around age 8 to 11 before declining, except in ACT and Perth Hills. The trend for ACT is flatter between ages 8 and 14 while rates for Perth Hills males continue to increase to age 13.

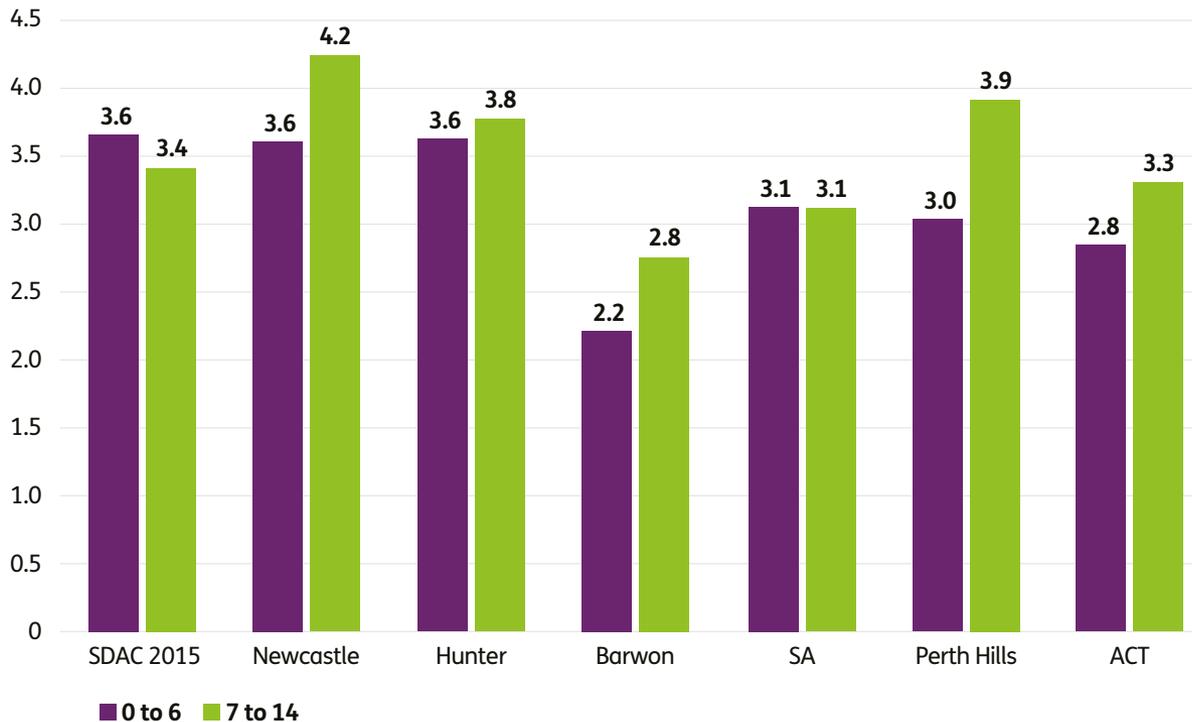
NDIS participants with ASD by gender

Gender distribution at 31 December 2018, for participants with an approved plan



Autism has a higher percentage of males (76%) than any other disability type.

Ratio of Male to Female prevalence rates



Ratios are lower for Barwon than for the other trial sites.

Ratios tend to be higher for the 7 to 14 age group compared to the 0 to 6 group (unlike SDAC 2015).

Increases in prevalence rates

31 March to 31 December 2018

Increases of 5% (Barwon) to 22% (Perth Hills) have been observed between 31 March 2018 and 31 December 2018.

Higher percentage increases have been observed for females and for older age groups (but off a lower base).

As at	Newcastle	Hunter	Barwon	Perth Hills	ACT
31 March 2018	0.54%	0.64%	0.61%	0.46%	0.37%
31 December 2018	0.59%	0.72%	0.64%	0.57%	0.44%
% increase	9%	12%	5%	22%	17%

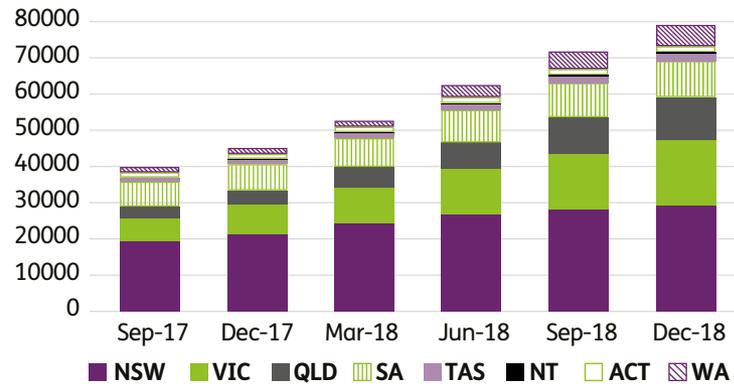
NDIS participants with ASD

Trends over time and
comparisons with other
disabilities

Access met (cumulative) by quarter

Participants with ASD

By State/Territory

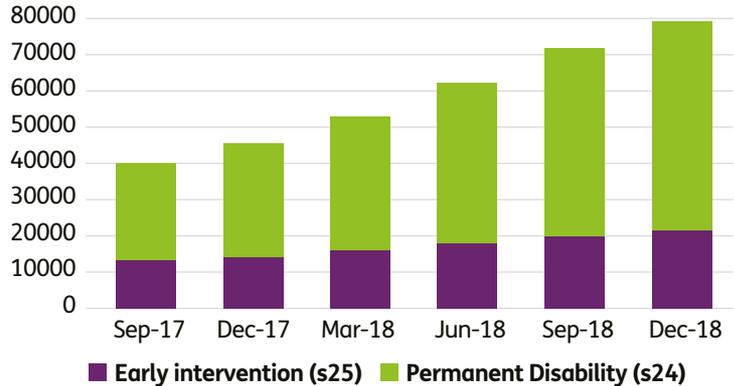


VIC, QLD and WA account for a growing % of participants with ASD.

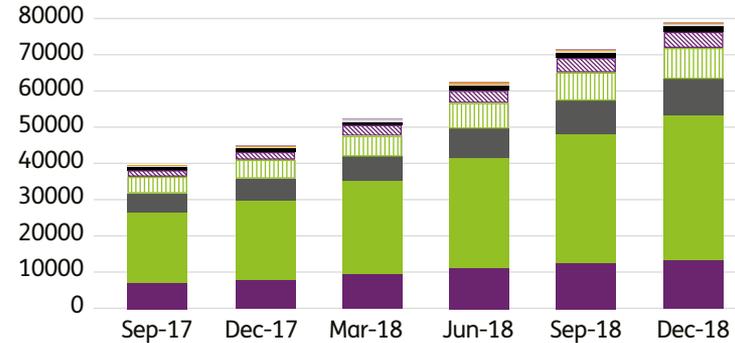
Distributions by age group have remained stable over the most recent six quarters.

The percentage entering due to disability has grown from 68% to 73% over the most recent six quarters.

By access decision reason



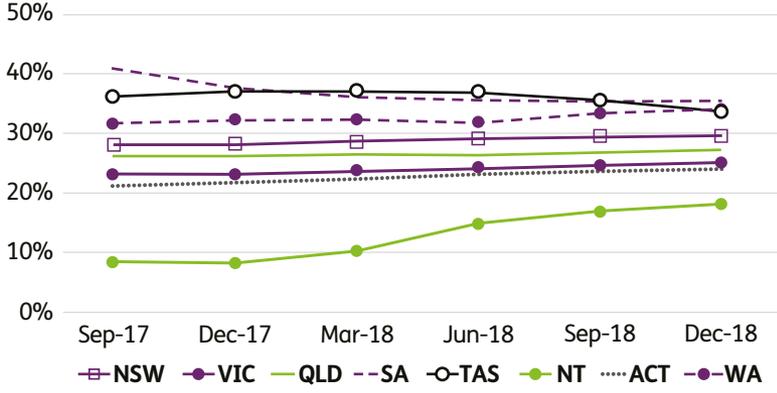
By age group



Access met (cumulative) by quarter

Participants with ASD as a proportion of all participants

By State/Territory

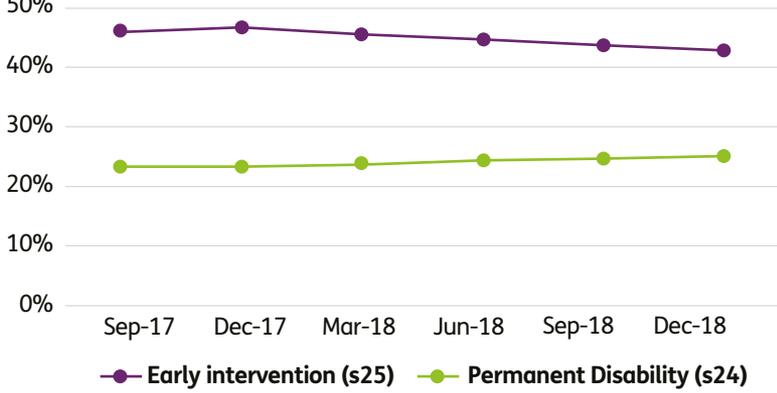


The percent of participants with ASD varies by state and has been increasing in every state except for SA and TAS where children phased early.

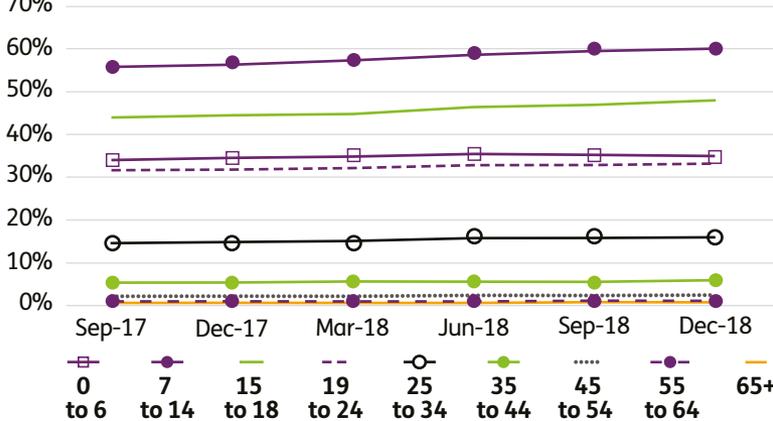
The proportion of participants with ASD has increased for age groups 7 to 14 and above over the most recent six quarters.

The proportion of participants entering due to disability that have ASD has grown from 23% to 25% over the most recent six quarters.

By access decision reason

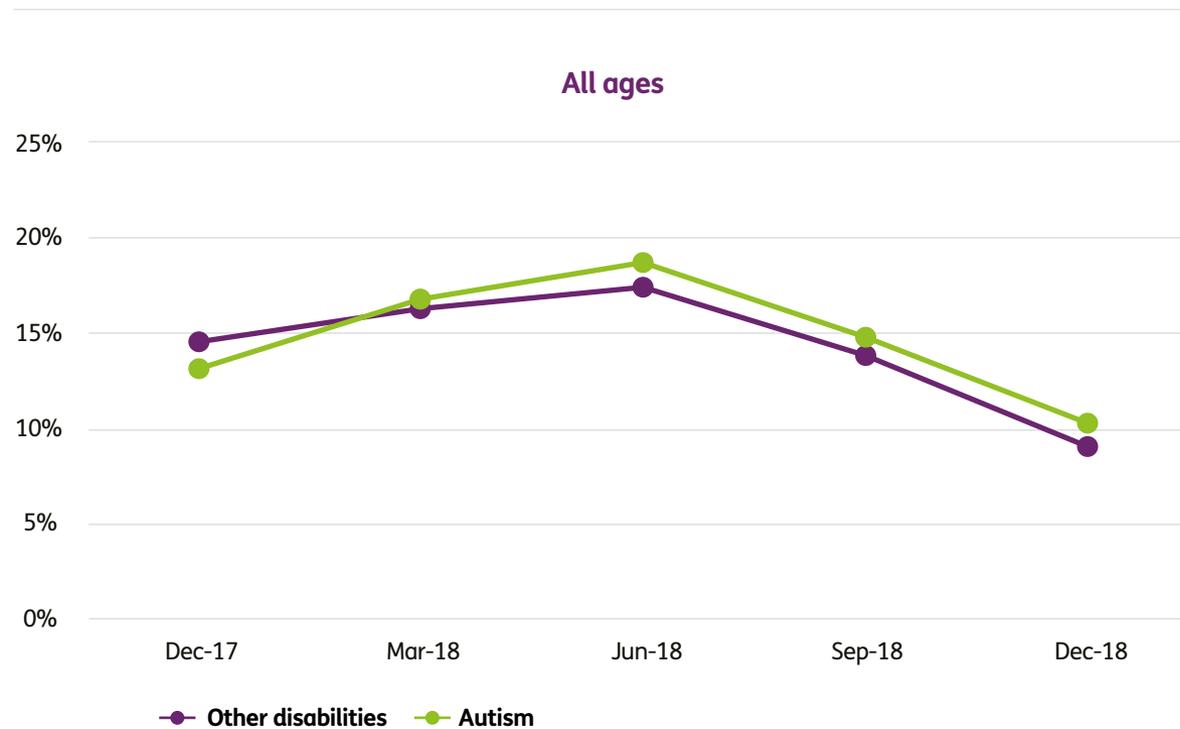


By age group



Growth in access met by quarter

ASD versus other disabilities



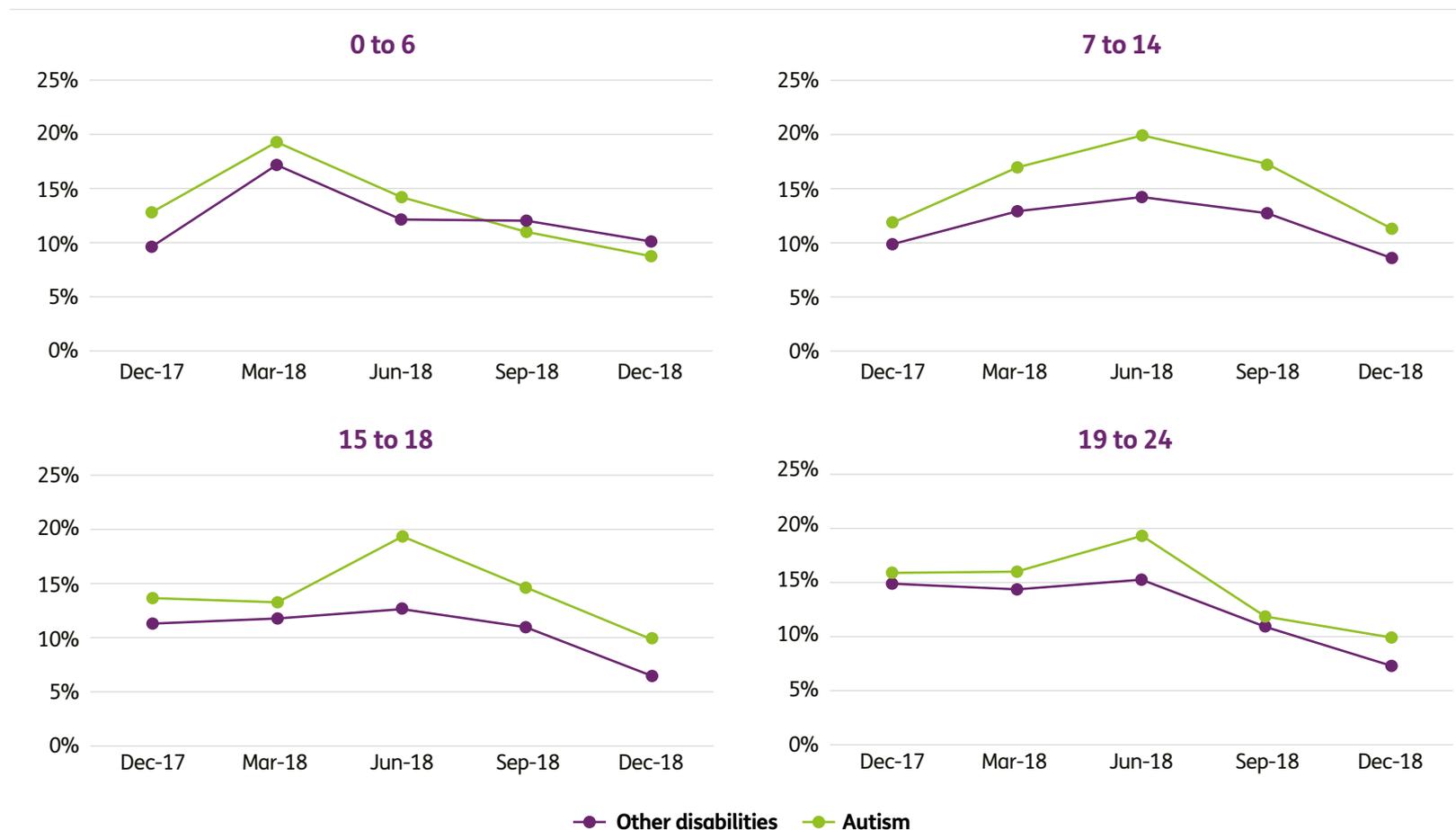
Overall growth rates are slightly higher for participants with ASD than other disabilities in recent quarters.

However, overall growth rates mask differences between ASD and other disabilities due to different age distributions between the two disability groups.

For age groups 7 to 44, quarterly growth rates are higher for ASD than for other disabilities, as shown on the following slides.

Growth in access met by quarter and age

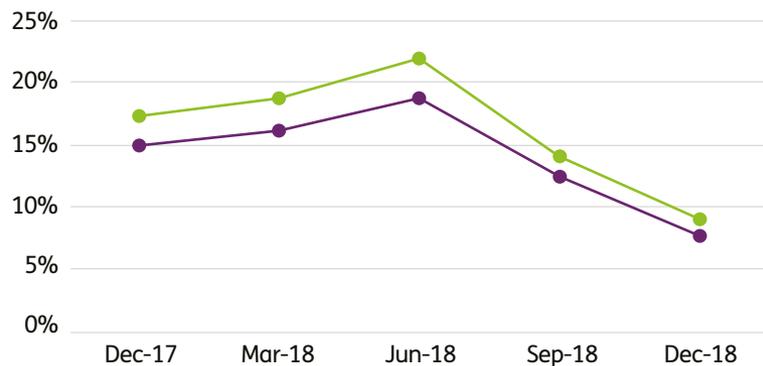
ASD versus other disabilities



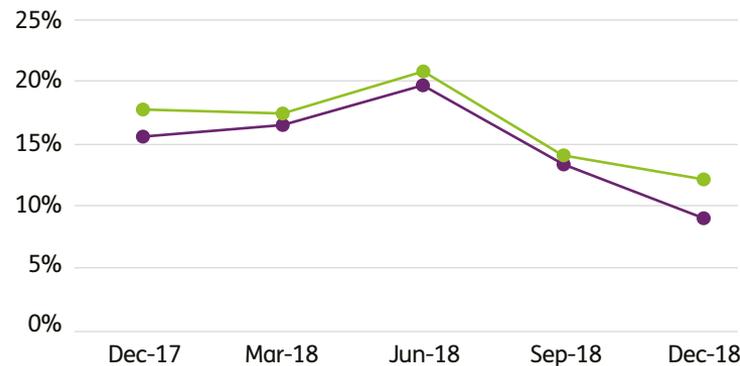
Growth in access met by quarter and age ASD versus other disabilities



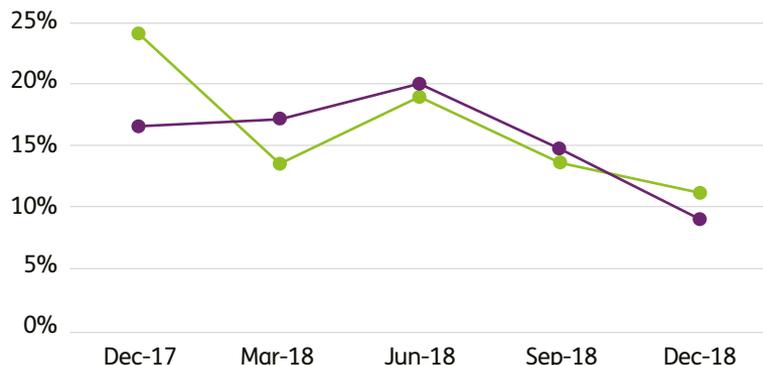
25 to 34



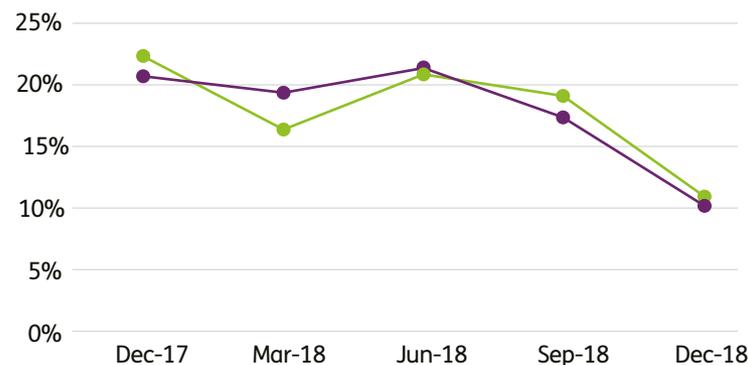
35 to 44



45 to 54

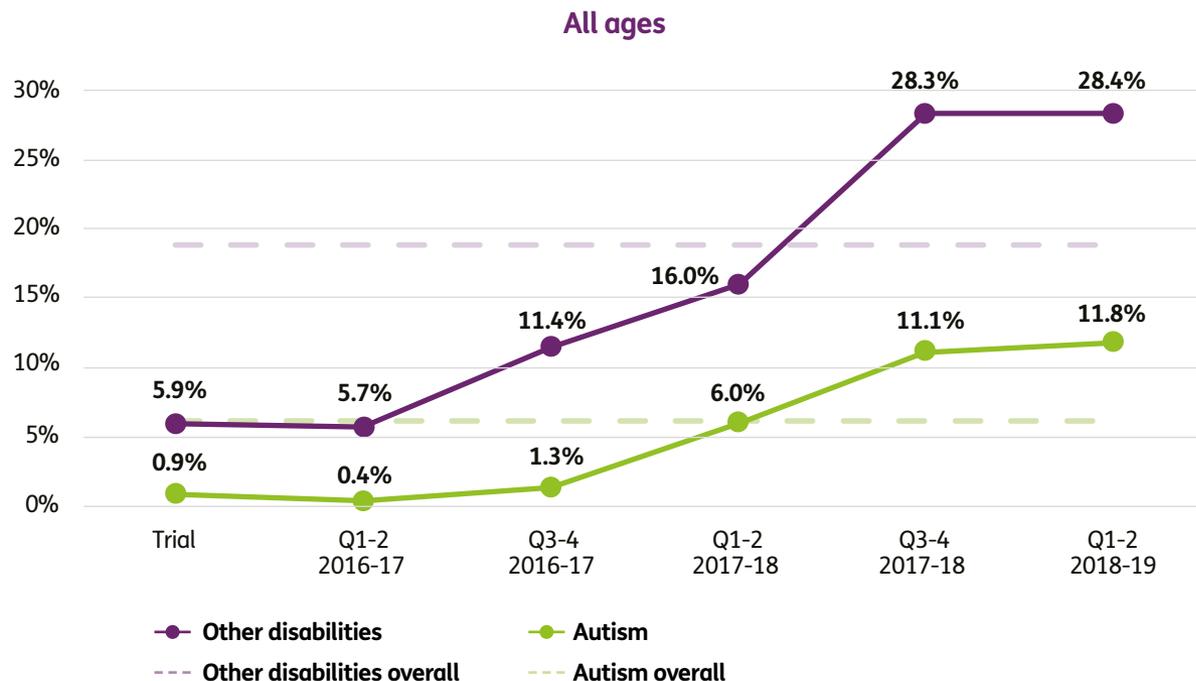


55 to 64



● Other disabilities ● Autism

Ineligibility rates⁸ by half-year ASD versus other disabilities



For Q3-4 2017-18 and Q1-2 2018-19, overall ineligibility rates for participants with disabilities other than ASD were around 2.5 times those for participants with ASD (28% for other disabilities combined compared to 11-12% for participants with ASD).

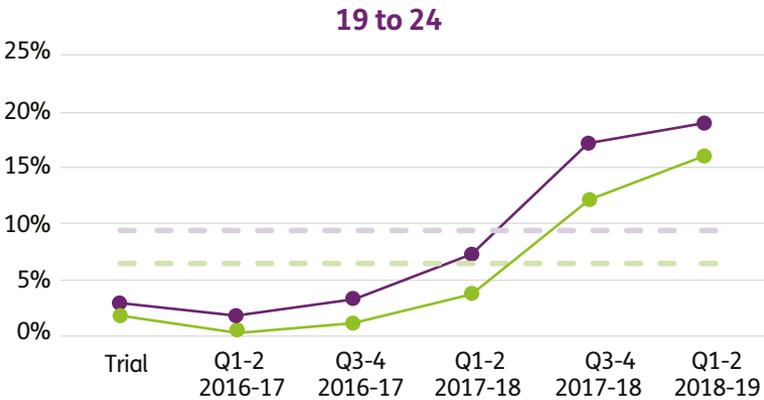
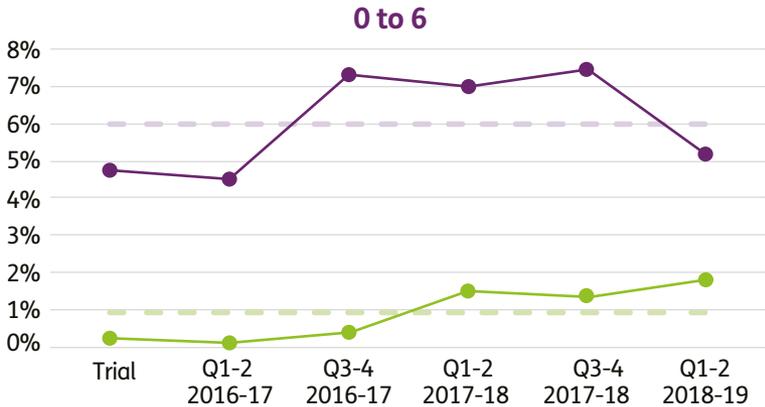
Ineligibility rates have increased in recent quarters across all disabilities as the number of participants transferring from the existing system has decreased.

Ineligibility rates were higher for all age groups, as shown on the following slides.

⁸ “Access not met” decisions as a percentage of all decisions.

Ineligibility rates⁹ by half-year and age

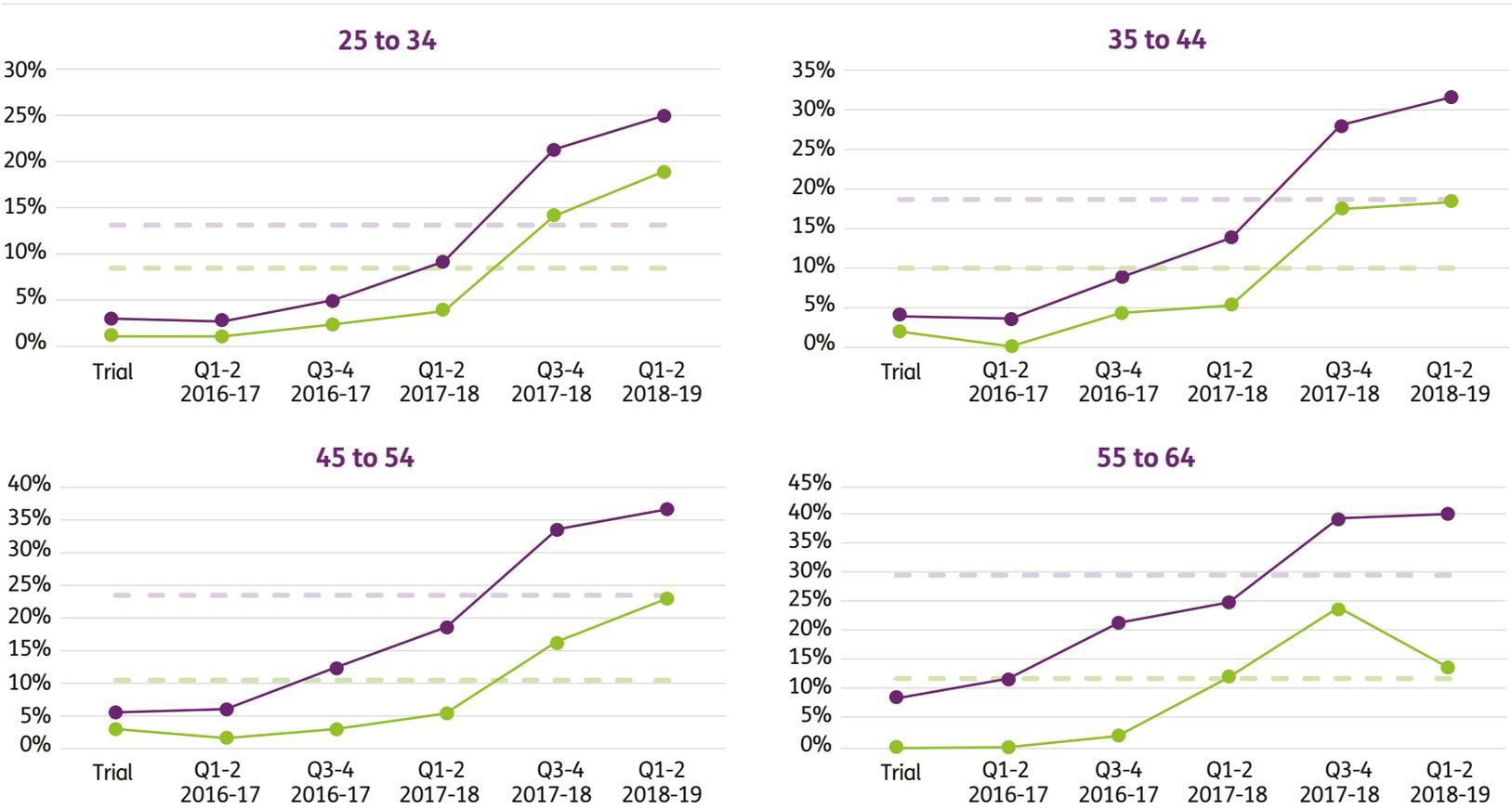
ASD versus other disabilities



⁹ "Access not met" decisions as a percentage of all decisions.

● Other disabilities
 --- Other disabilities overall
 ● Autism
 --- Autism overall

Ineligibility rates¹⁰ by half-year and age ASD versus other disabilities



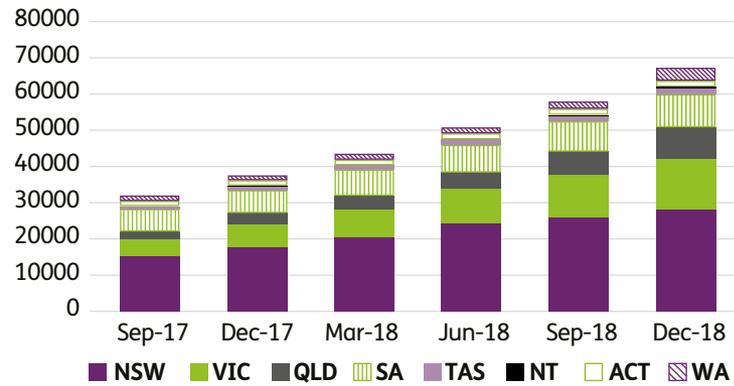
¹⁰ "Access not met" decisions as a percentage of all decisions.

● Other disabilities - - - Other disabilities overall ● Autism - - - Autism overall

Approved plans (cumulative) by quarter

Participants with ASD

By State/Territory

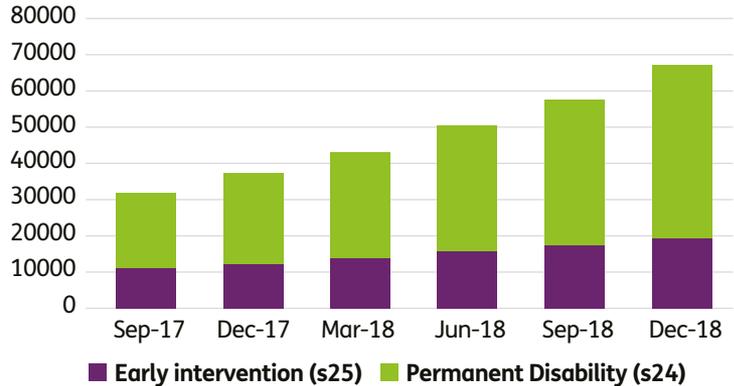


VIC, QLD and WA account for a growing % of participants with ASD.

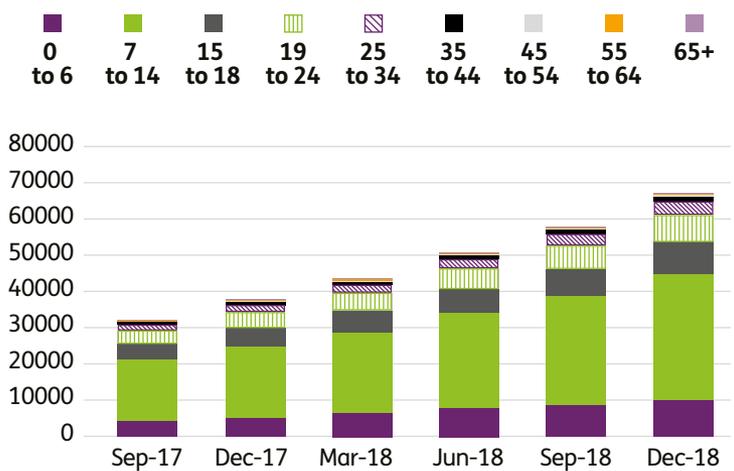
Distributions by age group have remained stable over the most recent six quarters.

The percentage entering due to disability has grown from 64% to 71% over the most recent six quarters.

By access decision reason



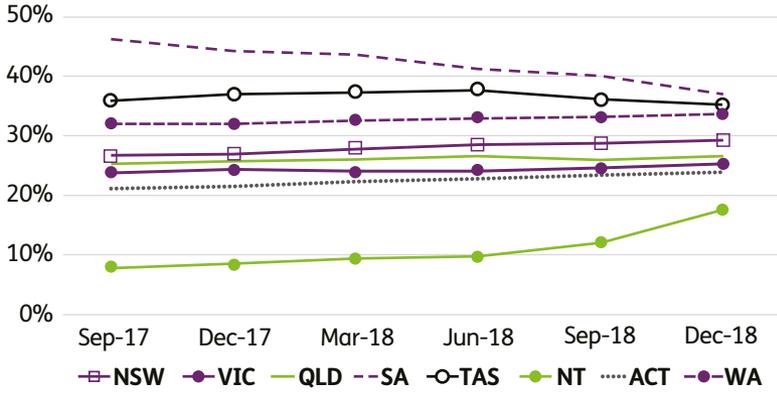
By age group



Approved plans (cumulative) by quarter

Participants with ASD as a proportion of all participants

By State/Territory

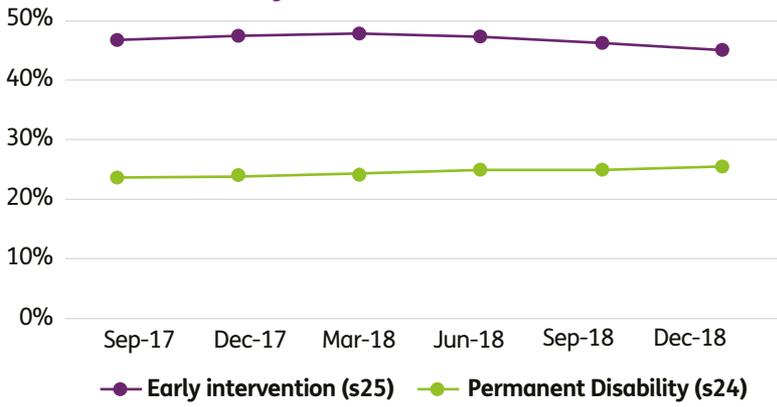


The percent of participants with ASD varies by state and has been increasing in every state except for SA and TAS where children phased early.

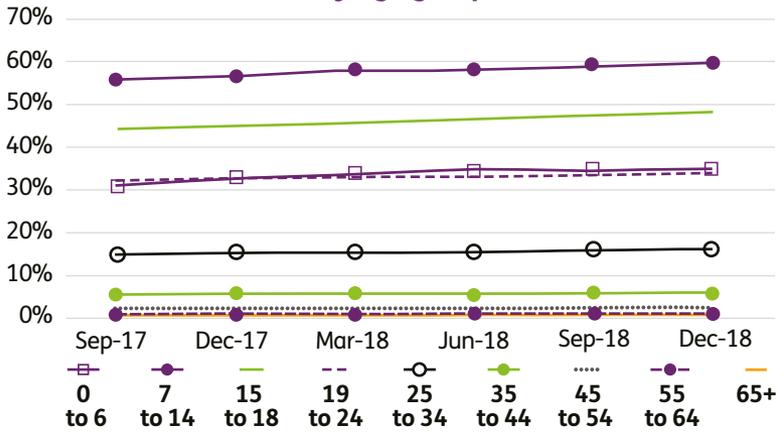
The proportion of participants with ASD has increased across all age groups over the most recent six quarters.

The proportion of participants entering due to disability that have ASD has grown from 23% to 25% over the most recent six quarters.

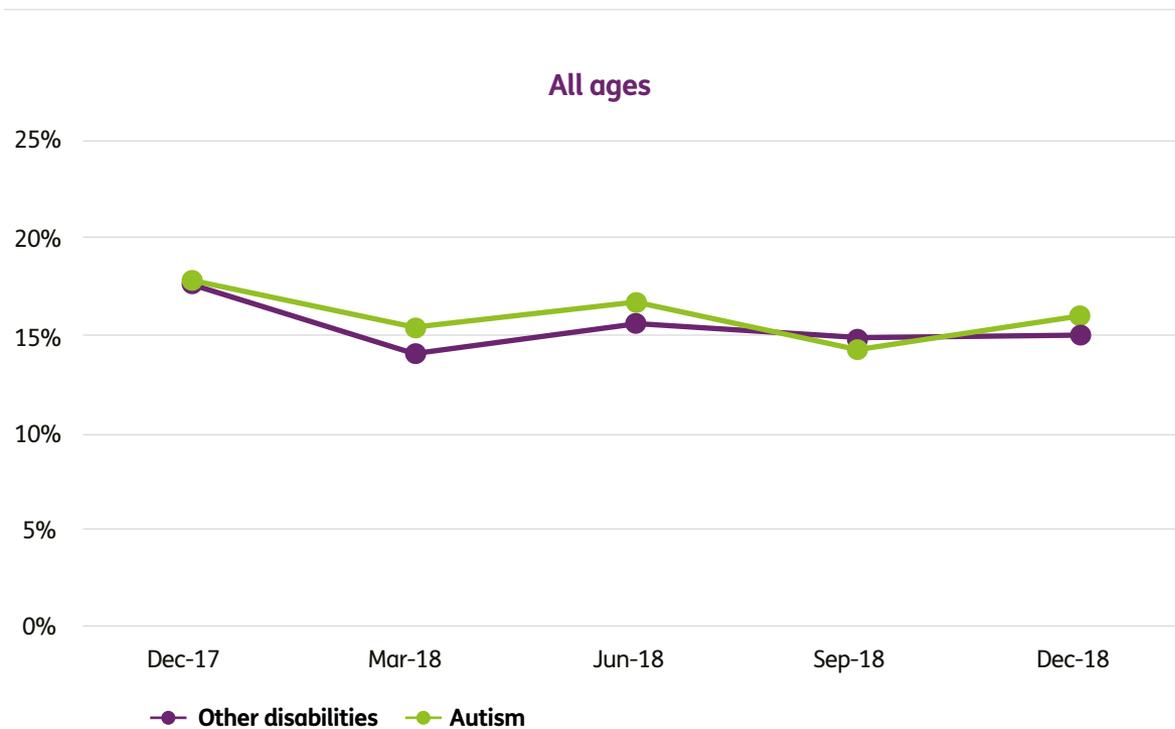
By access decision reason



By age group



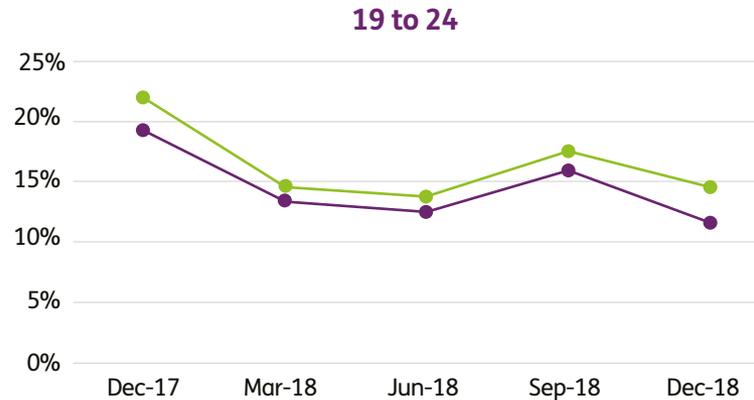
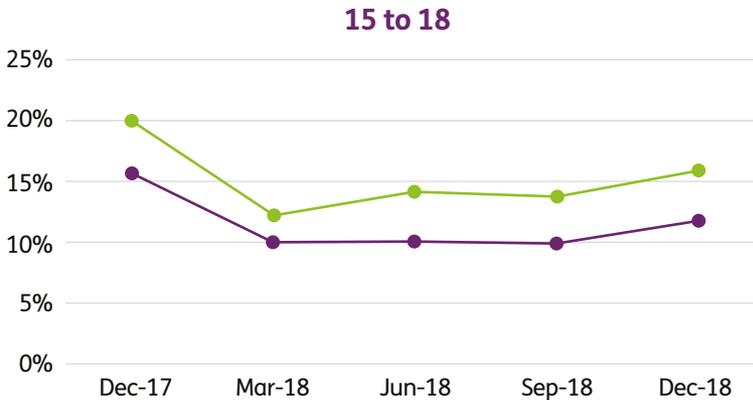
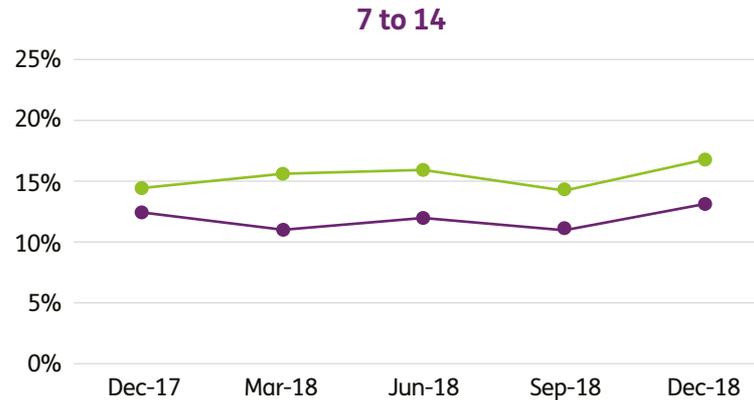
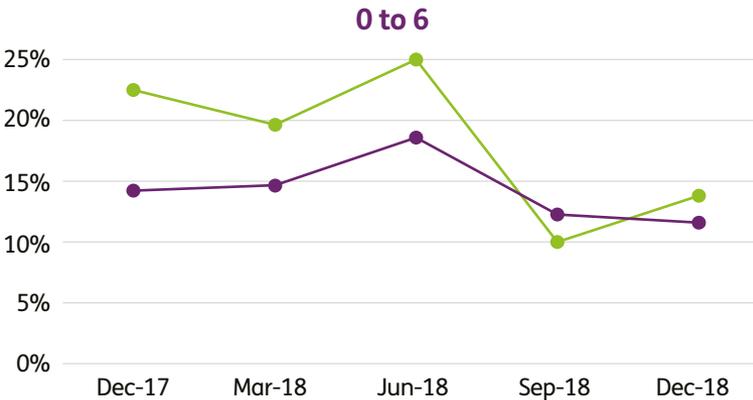
Growth in approved plans by quarter ASD versus other disabilities



As for access met, differences in plan approval growth rates between ASD and other disabilities occur by age group, but are less apparent overall.

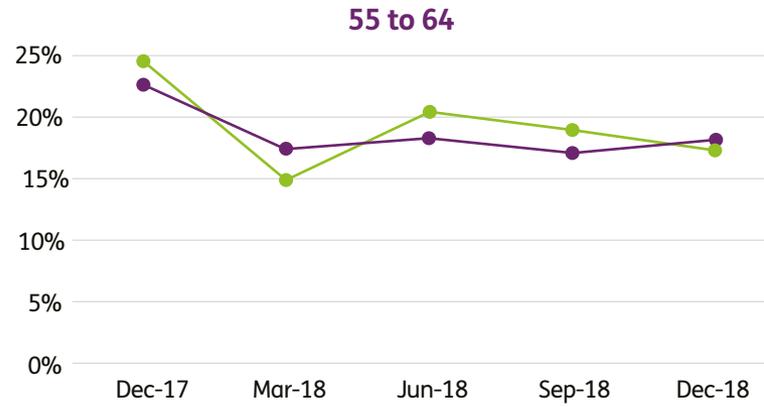
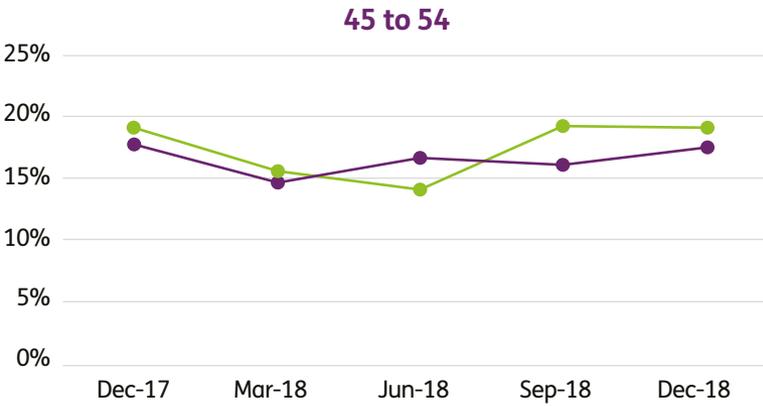
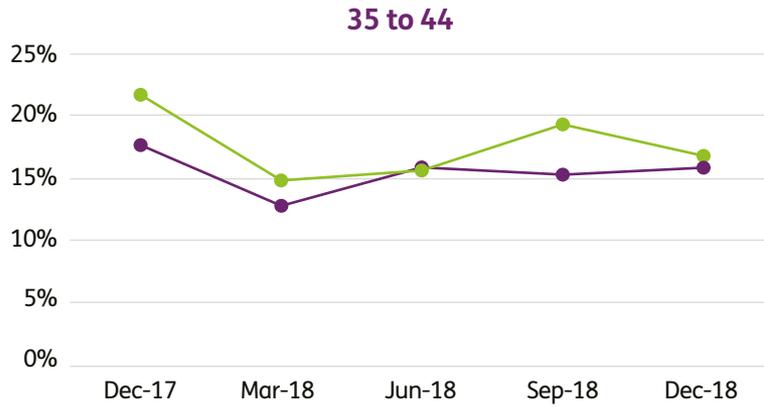
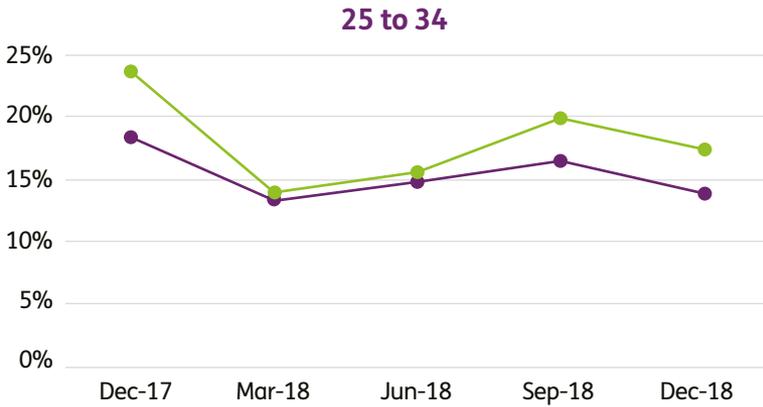
Also similar to access, for age groups 7 to 44, quarterly growth rates are higher for ASD than for other disabilities, as shown on the following slides.

Growth in approved plans by quarter and age ASD versus other disabilities



● Other disabilities ● Autism

Growth in approved plans by quarter and age ASD versus other disabilities

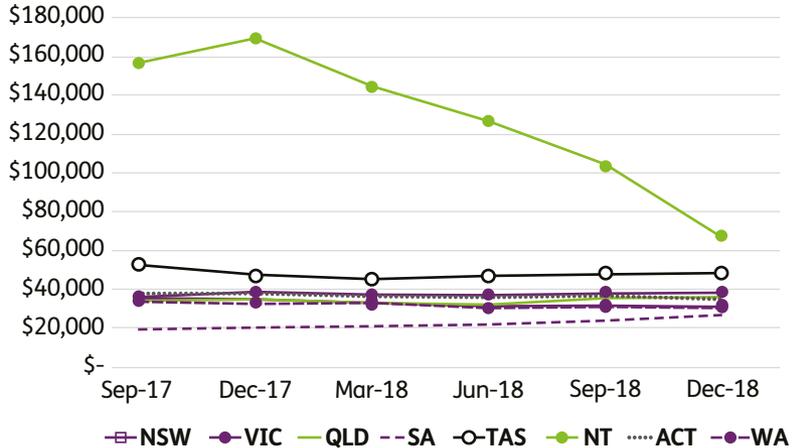


● Other disabilities ● Autism

Average committed supports by quarter

Participants with ASD

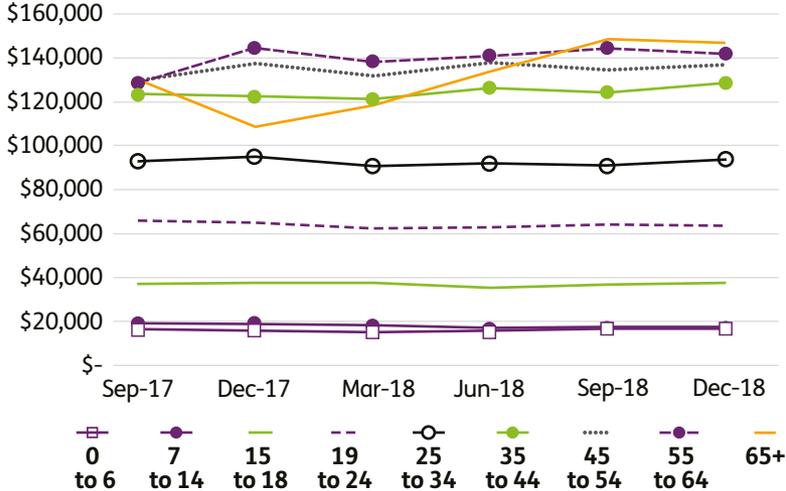
By State/Territory



Average committed supports for NT have declined over recent quarters. This is reflective of the phasing pattern where clients of Supported Accommodation services phased in earlier than other existing participants.

Slight increases have occurred for SA and TAS in the last three quarters.

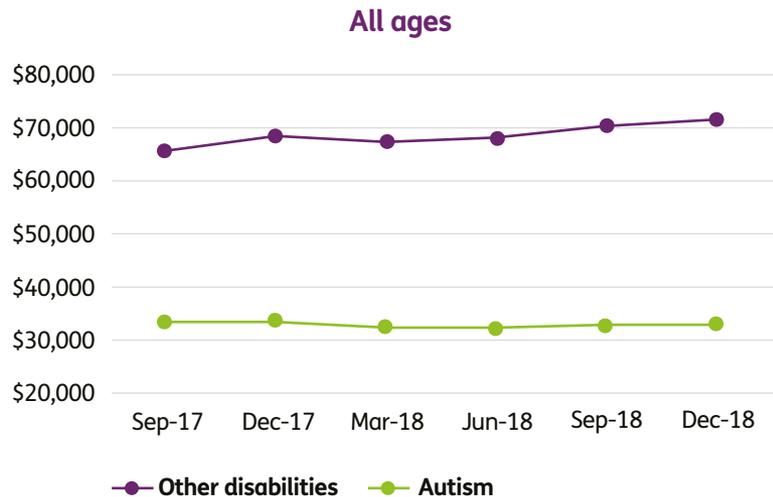
By age group



Increases have been observed for the 65 and over age groups, but the number of plans is relatively small.

Average committed supports by quarter

ASD versus other disabilities



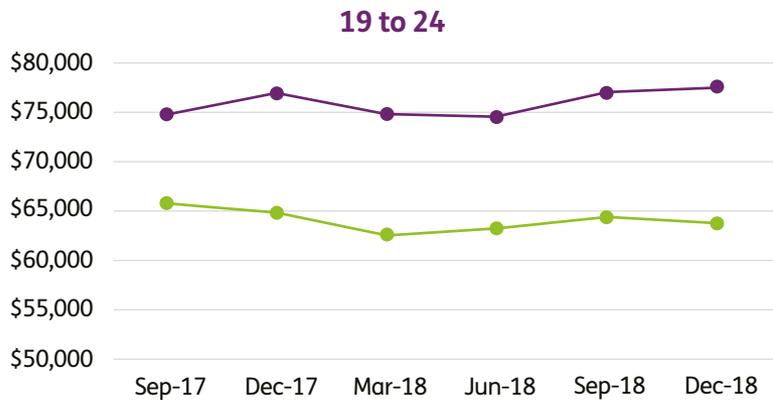
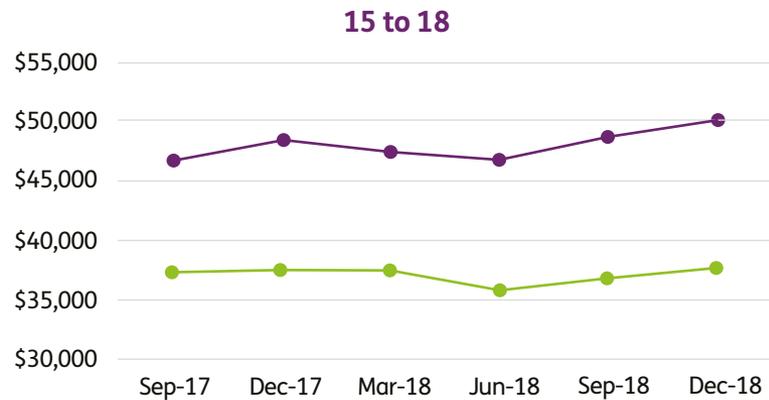
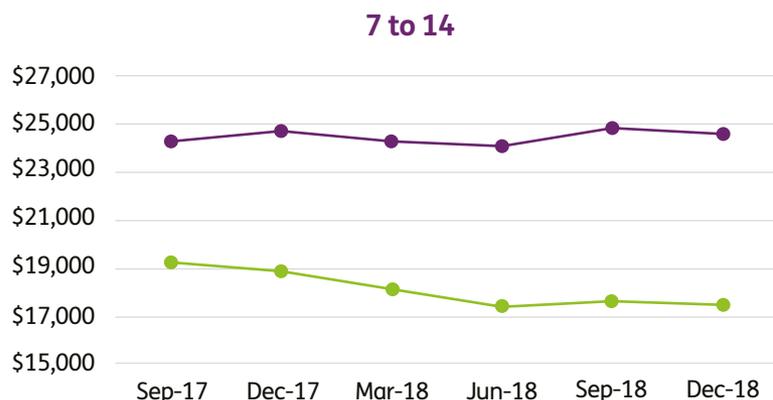
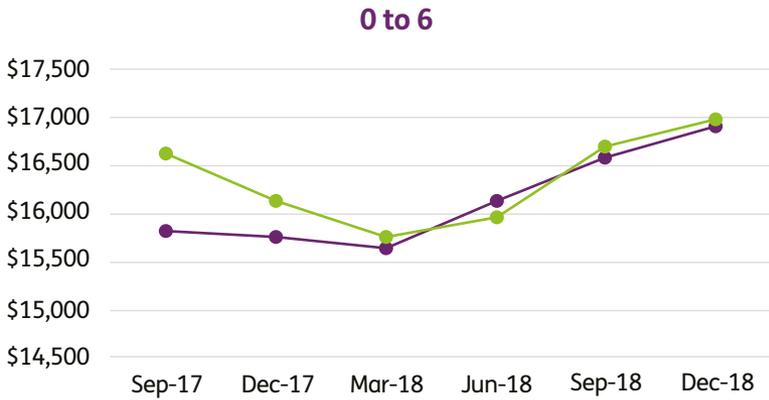
Overall, average committed supports are around twice as high for the group of other disabilities compared to ASD, largely due to the younger age for ASD.

However the relationship differs considerably by age group, as shown on the following slides:

- For the 0 to 6 age group, averages are similar for ASD compared to other disabilities
- For age groups 7 to 14, 15 to 18, and 19 to 24, the average for ASD is lower than the average for other disabilities
- For older age groups, the average for ASD is higher than the average for other disabilities.

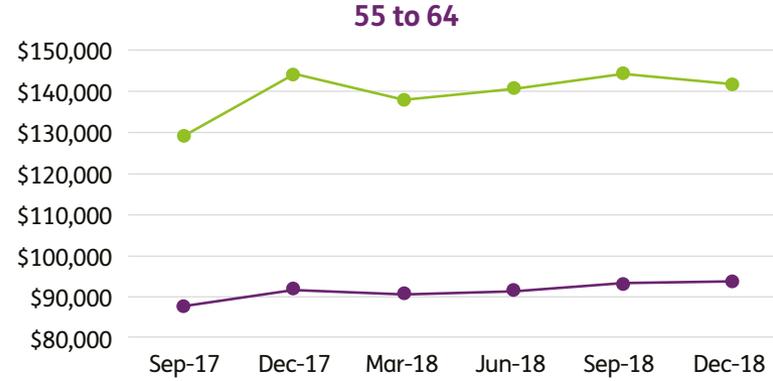
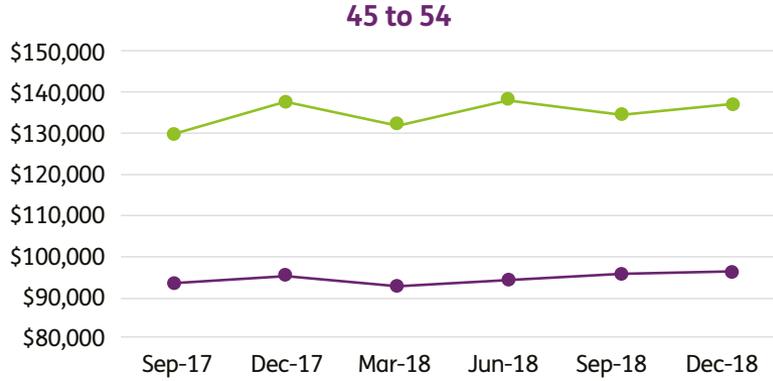
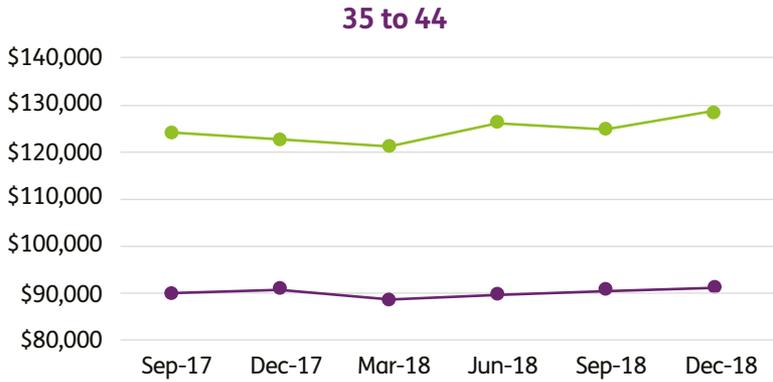
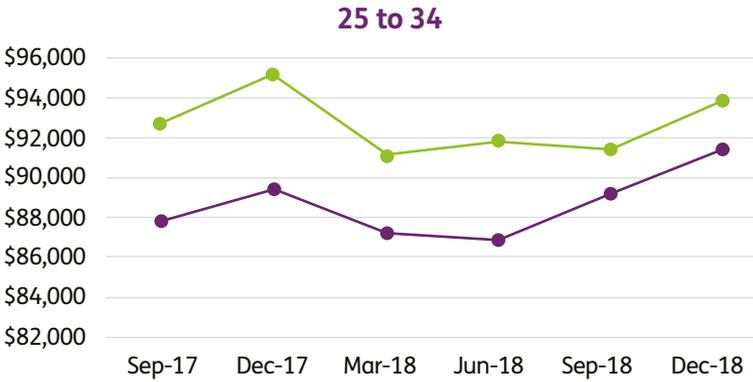
These differences reflect the different mix of disabilities for different age groups.

Average committed supports by quarter and age ASD versus other disabilities



— Other disabilities — Autism

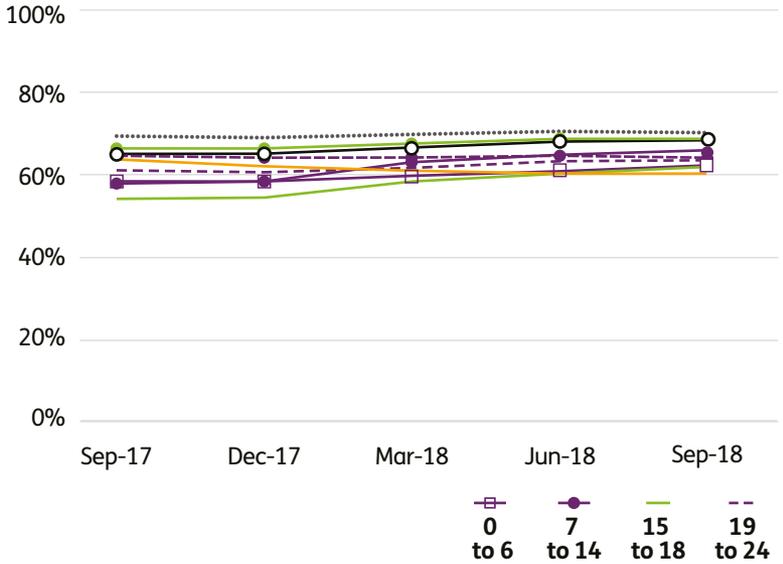
Average committed supports by quarter and age ASD versus other disabilities



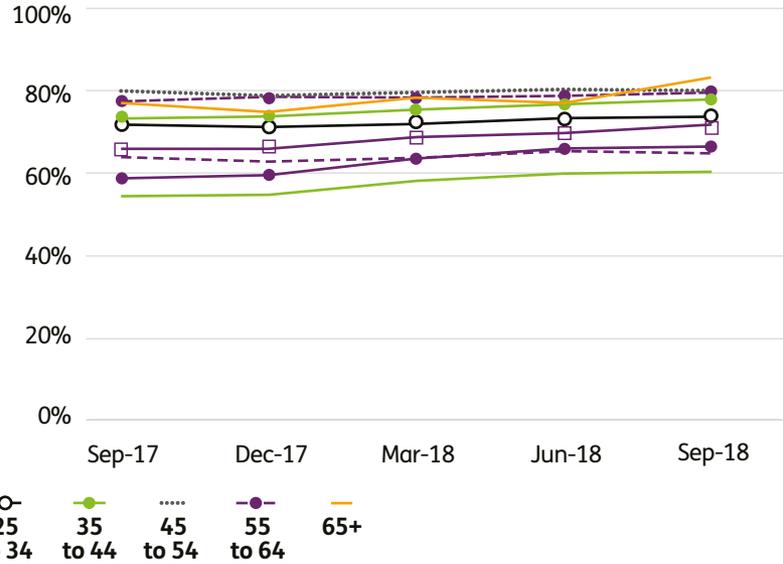
—● Other disabilities —● Autism

Utilisation by quarter and age group ASD versus other disabilities

Other disabilities by age group



ASD by age group



A gradual increase in utilisation has been observed for the three youngest age groups.

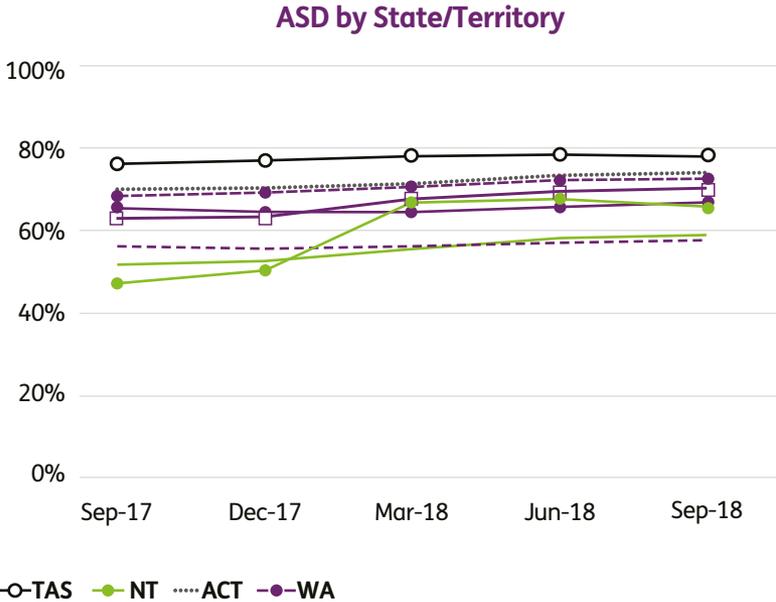
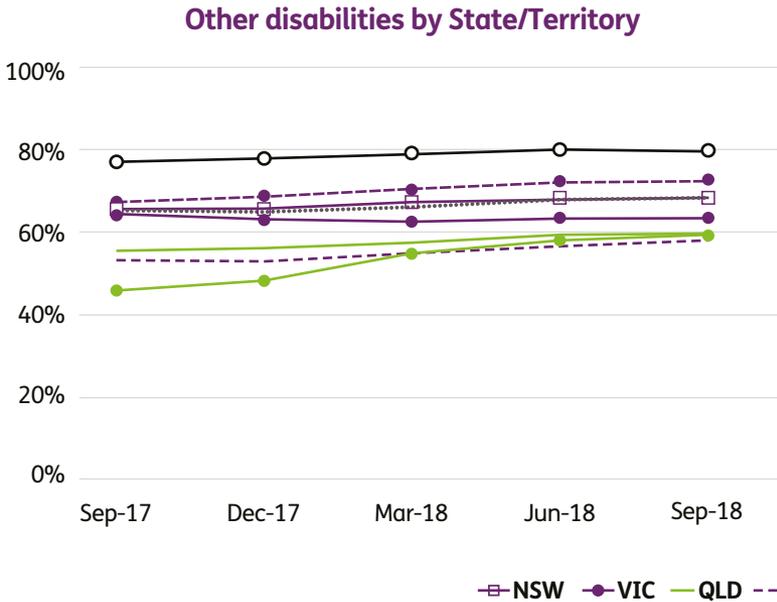
Considering all age groups combined, utilisation has been similar between participants with ASD (63-68% over the five quarters to Sep-18) and other participants (64-66%).

However there are differences by age:

- Utilisation is higher for ASD participants compared to other participants for age groups 0 to 6, and from age 19 onward, with the gap tending to widen for older ages.
- Utilisation is very similar for ASD and other participants for age groups 7 to 14 and 15 to 18.

Utilisation by quarter and State/Territory

ASD versus other disabilities



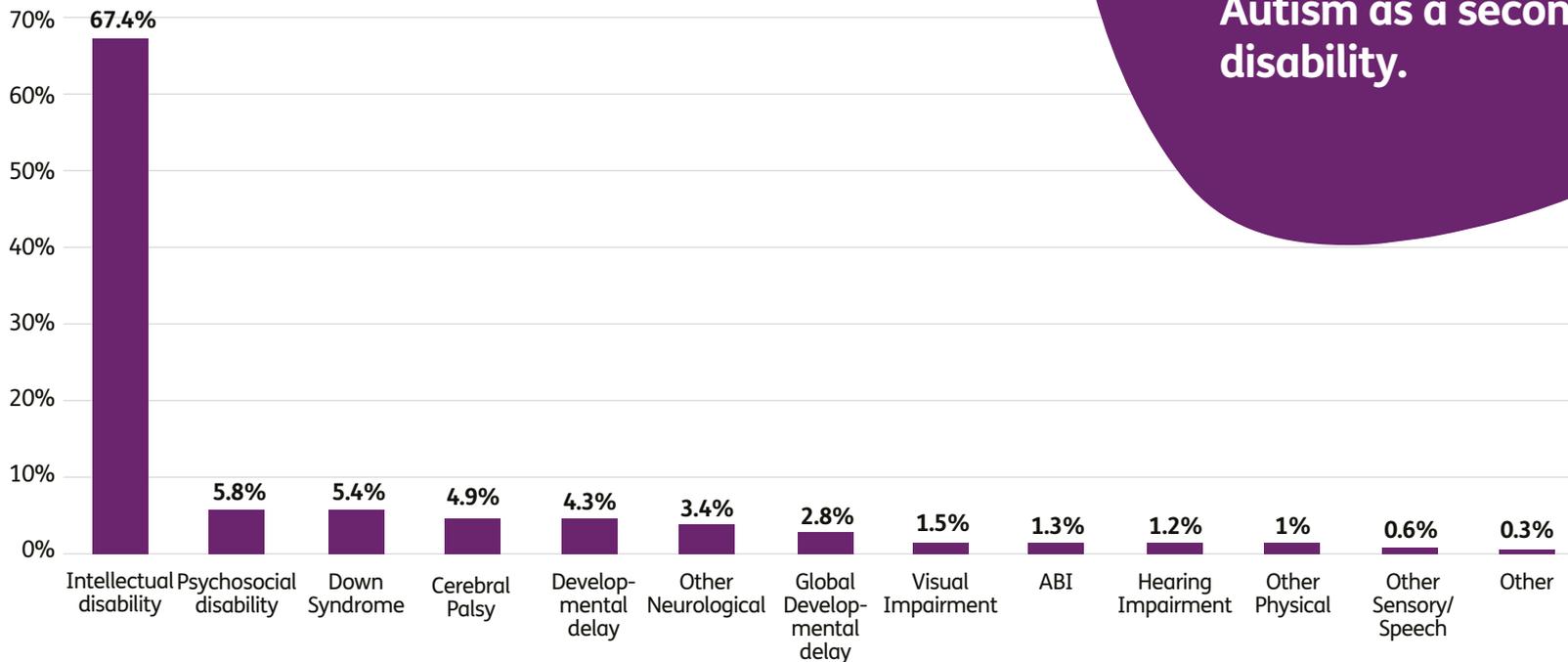
Increases have been observed for NT, and to a lesser extent, NSW and QLD.

Utilisation has been higher for participants with ASD in NT and ACT, but similar in other States and Territories.

ASD as a secondary disability

10,168, or about 5% of participants currently in the Scheme, have Autism as a secondary disability.

Around two-thirds of these participants have intellectual disability as their primary disability. 6% have a primary psychosocial disability, 5% have Down syndrome, and 5% have cerebral palsy.



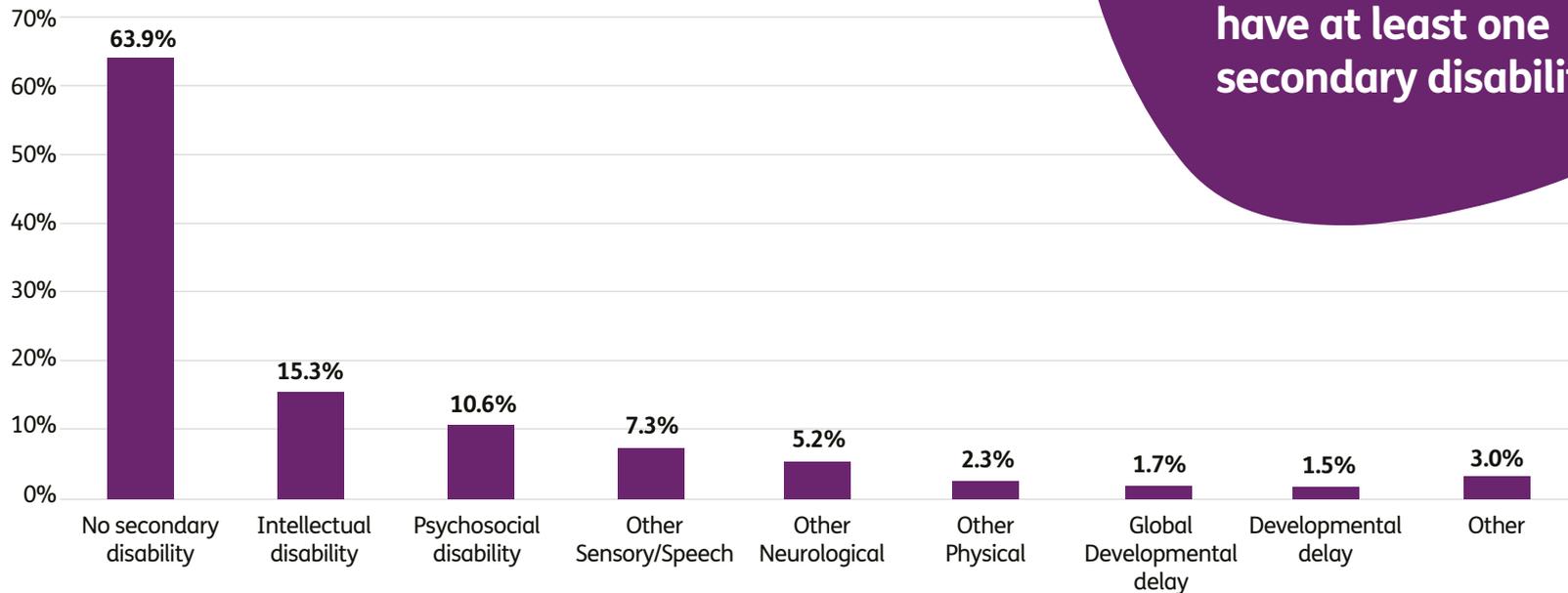
10,168, or about 5% of participants currently in the Scheme, have Autism as a secondary disability.

Secondary disabilities for NDIS participants with a primary disability of ASD

24,193, or about 36% of participants who have Autism as a primary disability, have at least one secondary disability.

The most common secondary disabilities are intellectual disability (15%), psychosocial disability (11%), other sensory or speech disability (7%) and other neurological disability (5%).

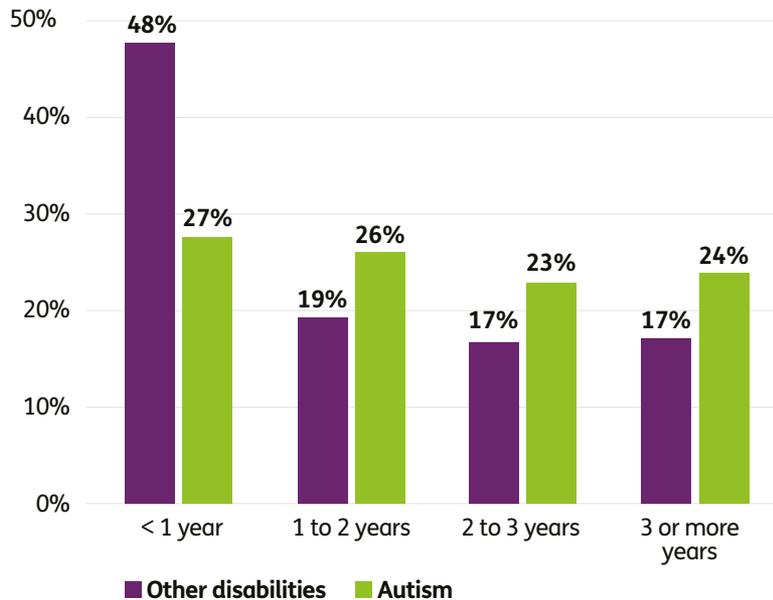
24,193, or about 36% of participants who have Autism as a primary disability, have at least one secondary disability.



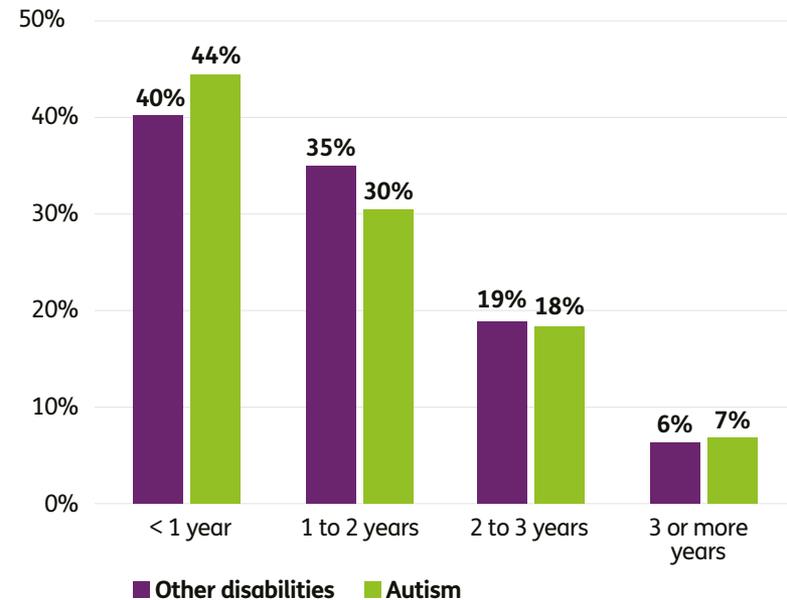
Note: percentages add up to more than 100% as some participants have multiple secondary disabilities.

Length of time in scheme by access decision reason ASD versus other disabilities

Early intervention (s25)



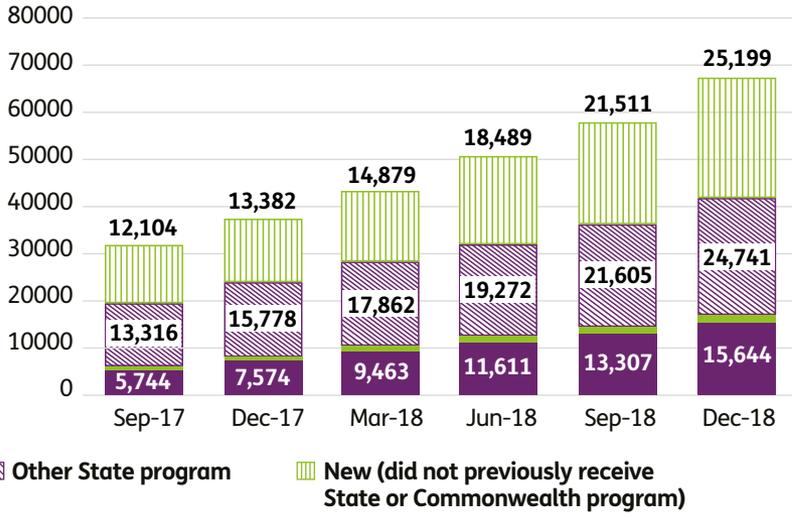
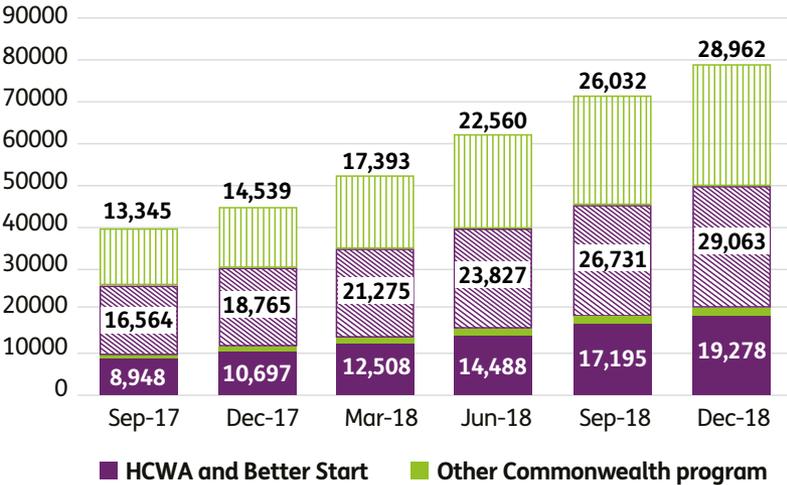
Disability met (s24)



Early intervention participants with ASD tend to have been in the scheme for longer than participants with other disabilities.

The distributions of time in scheme are more similar for disability met participants.

NDIS participants with ASD who received support from HCWA/Better Start^{11,12} - trend

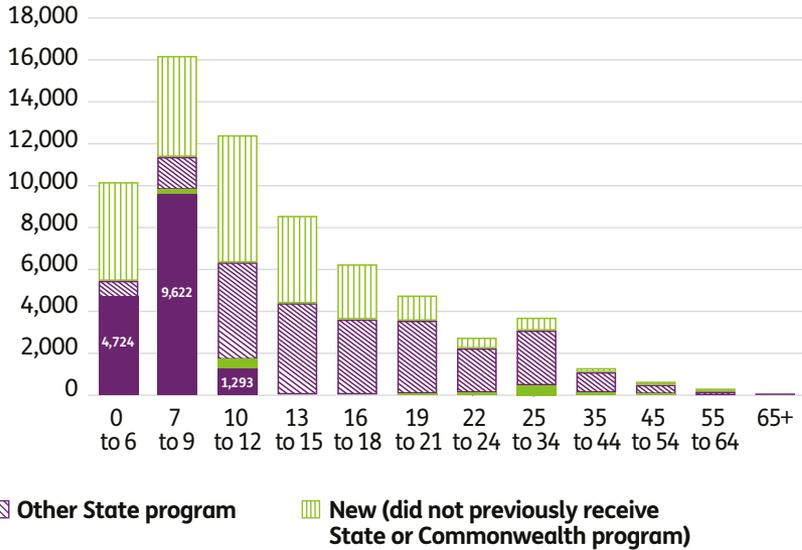
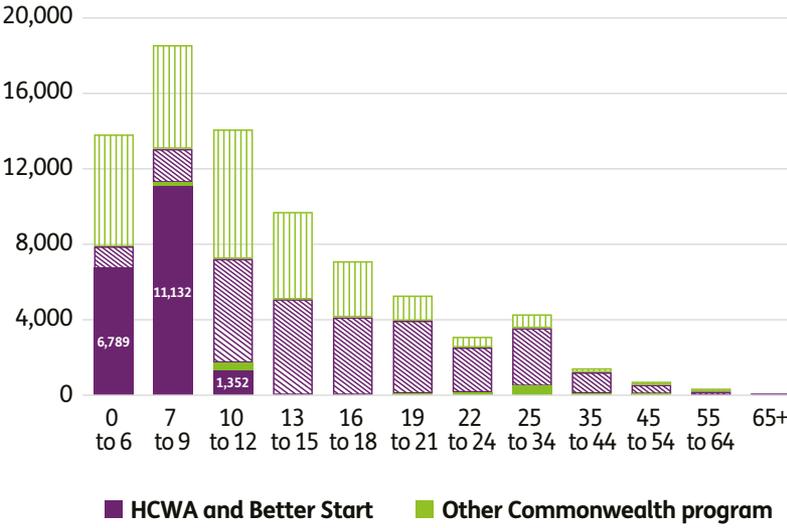


Access met: as at 31 December 2018, 19,278 participants with ASD (24%) had received HCWA (and/or Better Start).

Plan approvals: as at 31 December 2018, 15,644 participants with ASD who had an approved plan (23%) had received HCWA (and/or Better Start).

¹¹ As at 31 December 2018, 98.7% of the “HCWA and Better Start” category is HCWA, 1.1% is Better Start, and 0.2% is both.
¹² Data on HCWA/Better Start are current as at 31 December 2018.

NDIS participants with ASD who received support from HCWA/Better Start^{13,14} - by age



Access met by age: as at 31 December 2018: 49%, 60%, and 10% of participants with ASD aged 0 to 6, 7 to 9, and 10 to 12, respectively, had received HCWA (and/or Better Start).

Plan approvals by age: as at 31 December 2018: 46%, 59%, and 10% of participants with ASD aged 0 to 6, 7 to 9, and 10 to 12, respectively, had received HCWA (and/or Better Start).

¹³ As at 31 December 2018, 98.7% of the “HCWA and Better Start” category is HCWA, 1.1% is Better Start, and 0.2% is both.
¹⁴ Data on HCWA/Better Start are current as at 31 December 2018.

Methodology for analysing outcomes

Methodology roadmap



Baseline outcomes

Measure how participants are going at their point of entry into the NDIS.

Longitudinal outcomes

Describe how outcomes have changed for participants during the time they have been in the Scheme.

Has the NDIS helped?

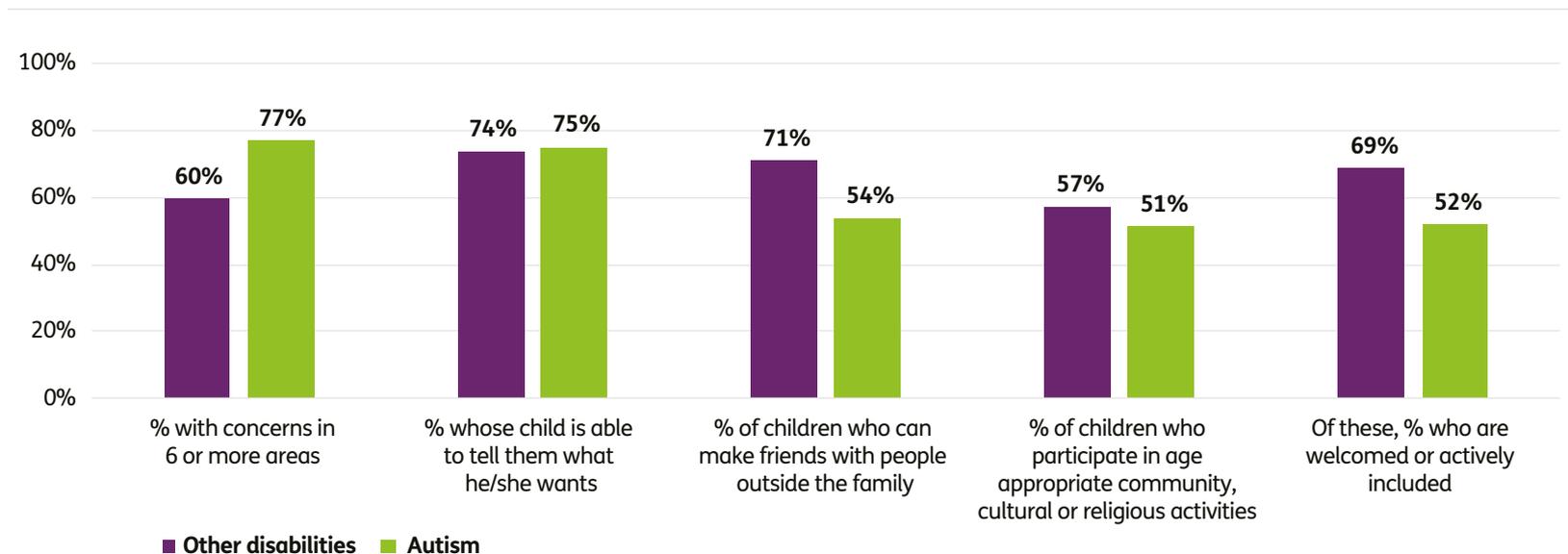
The outcomes framework includes a question at the end of each domain asking whether the participant thinks that the NDIS has helped in areas related to that domain.

For each of the above, the analysis of outcomes looks at the 0 to before school, school to age 14, ages 15 to 24, and ages 25 and over groups separately, and focuses on indicators specific to each life stage.

Participants

**from birth to before
starting school**

Participants from 0 to before starting school: Key indicators at baseline



Baseline key indicators tend to be worse for participants with ASD compared to participants with other disabilities (considered as a group). The exception is the percentage of parents/carers who say their child is able to tell them what he/she wants, which is similar for participants with ASD and other disabilities.

Multiple regression modelling confirms that children with autism are more likely than most other disability groups to experience difficulties in six or more areas of development and are less likely to be able to make friends, to participate in community activities, and to feel welcomed or included when participating.

Participants from 0 to before starting school: Concerns in major developmental areas

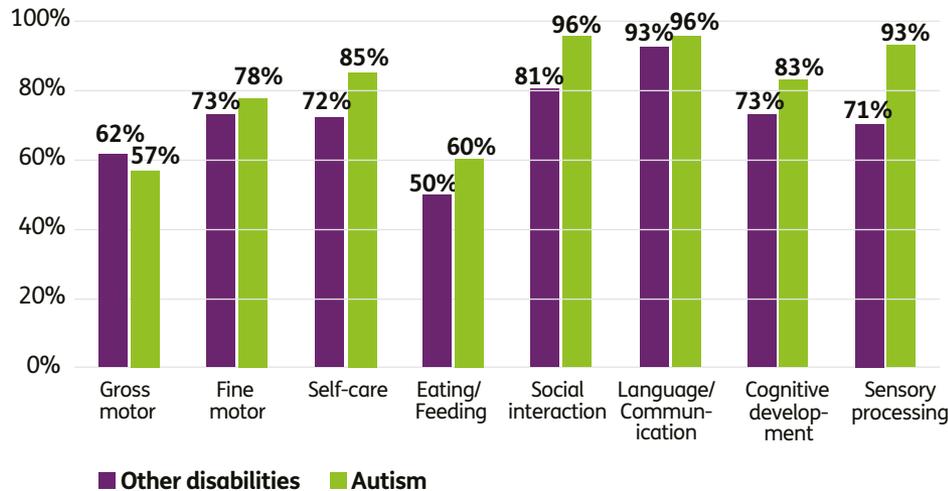
The first domain of the SF investigates whether pre-school children are gaining functional, developmental and coping skills appropriate to their ability and circumstances.

The first question asks if the parent/carer has any concerns about their child's development in the areas:

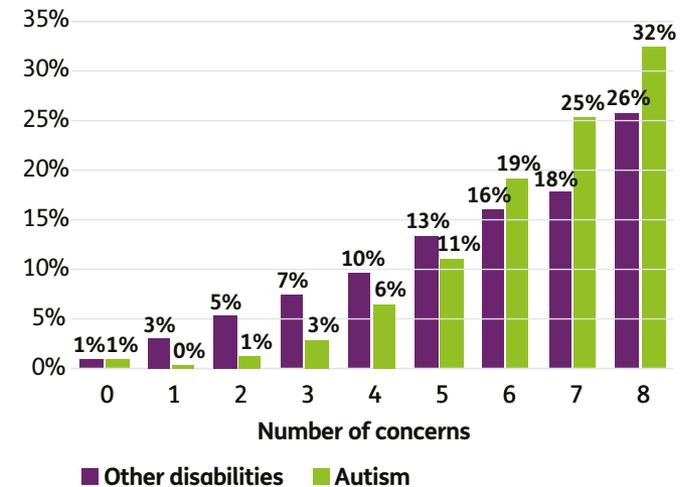
- Gross motor skills
- Fine motor skills
- Self-care
- Eating/Feeding
- Social interaction
- Language/Communication
- Cognitive development
- Sensory processing

Participants from 0 to before starting school: Concerns in major developmental areas at baseline

% with concerns in each area



Number of concerns



Parents/carers of participants with ASD are more likely to have concerns in each of the eight areas surveyed except for gross motor skills. The largest differences between parents/carers of children with autism and parents/carers of children with other disabilities occur for sensory processing (93% versus 71%) and social interaction (96% versus 81%).

Parents/carers of participants with ASD have concerns in more areas: 77% have concerns in six or more areas compared to 60% for other disabilities combined.

Participants from 0 to before starting school: Concerns about sensory processing at baseline

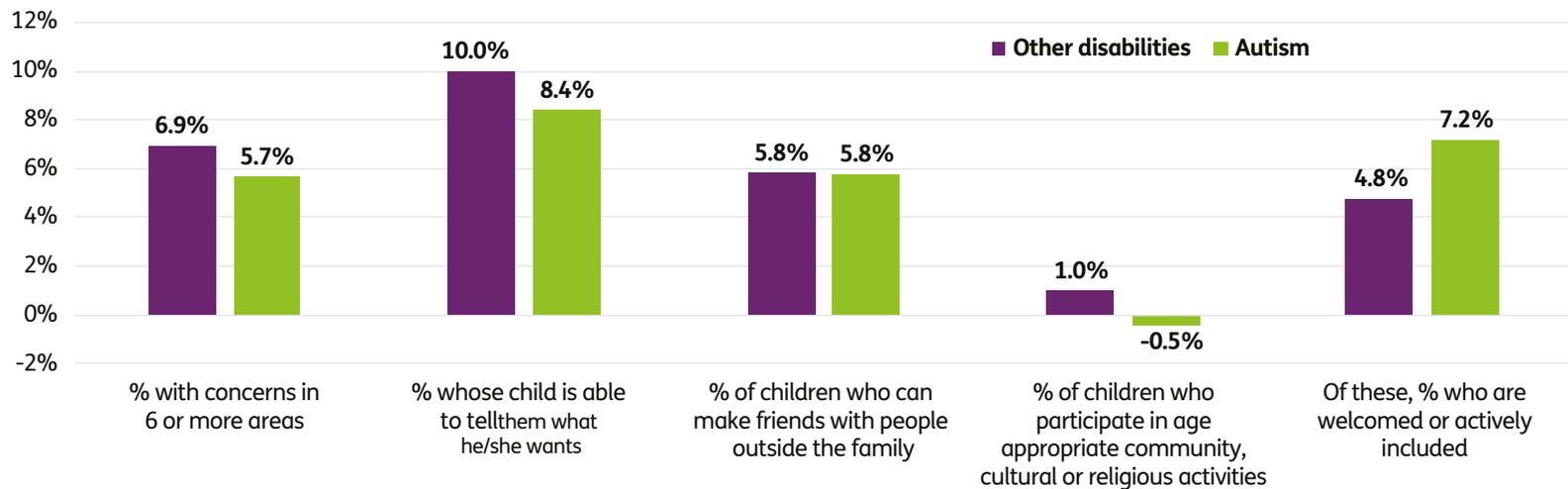
Results on the previous slide do not control for differences between participants with ASD and participants with other disabilities, such as differences by age, gender, level of function, CALD and Indigenous status.

Multiple regression models can be used to control for other factors apart from whether the participant has ASD or another disability.

For example, in a model for the probability of having concerns about sensory processing at baseline, the probability:

- Increases with participant age
- Increases as participant level of function decreases
- Is lower for girl participants
- Is lower for CALD participants
- Is not significantly different for Indigenous and non-Indigenous participants
- Remains higher for participants with ASD, after controlling for the above factors.

Participants from 0 to before starting school: Change in key indicators¹⁵



In aggregate, significant improvements were observed for the percentage whose child can tell them what they want, the percentage who can make friends with people outside the family, and the percentage welcomed when they participate in community activities. A significant deterioration (increase) was observed in the percentage with concerns in six or more areas.

Based on a simple comparison of change, differences between participants with ASD and other disabilities are generally slight, although the improvement in the percentage welcomed when they participate in community activities is greater for participants with ASD.

¹⁵ Note that at least some of the change may be normal age-related development as children are one year older at review.

Participants from 0 to before starting school: % with concerns in six or more areas

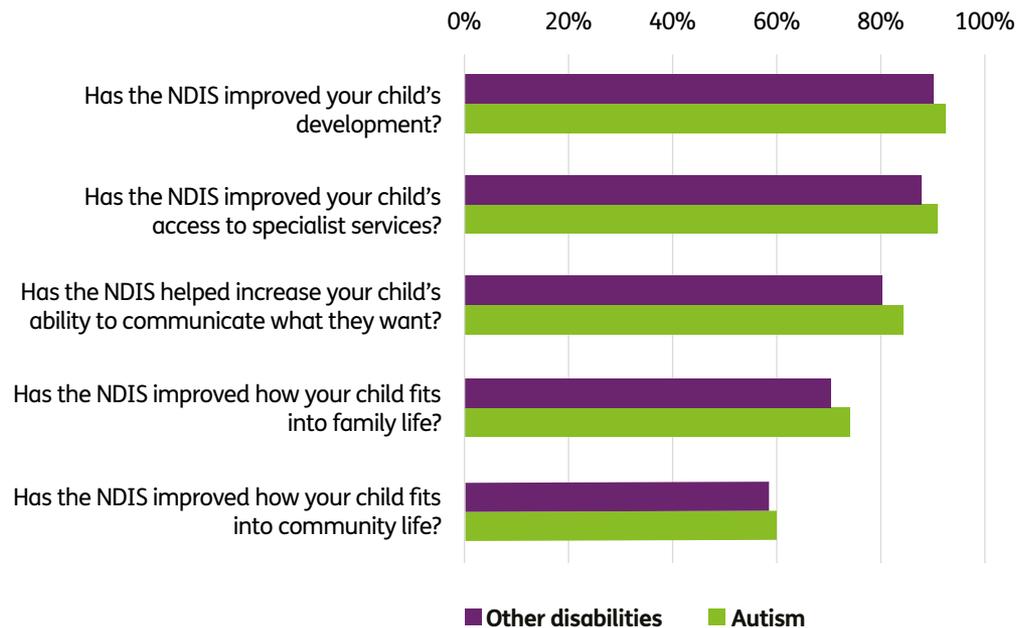
Based on a multiple logistic regression model for deterioration in the percentage with concerns in six or more areas (for the subset who did not have concerns in six or more areas at baseline):

Deterioration was more likely for participants with ASD, as well as those with global developmental delay. Deterioration was less likely for those with a hearing impairment.

Deterioration was also more likely for those with lower level of function.

A number of other factors, including age, geography, plan cost and utilisation, as well as the child's ability to make friends and participate in community activities, were also significant predictors in the model.

Participants from 0 to before starting school: Has the NDIS helped?

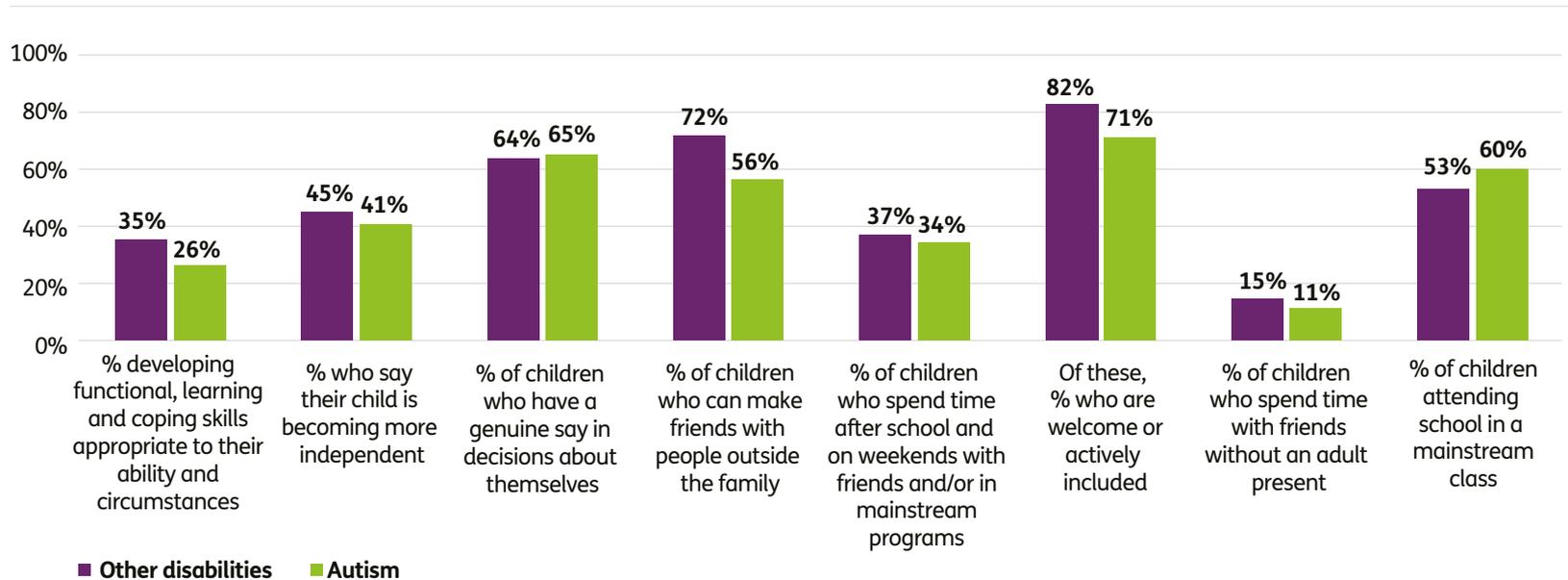


Participants with ASD show a small but consistent trend to respond more positively than the group of participants with other disabilities.

Participants

from starting school
to age 14

Participants from starting school to age 14: Key indicators at baseline



Participants with ASD tend to do worse on most baseline indicators than participants with other disabilities.

In particular, participants with ASD are less likely to be able to make friends with people outside the family, and are less likely to be welcomed or actively included when they spend time with friends or in community activities.

However, children with ASD are more likely to attend school in a mainstream class.

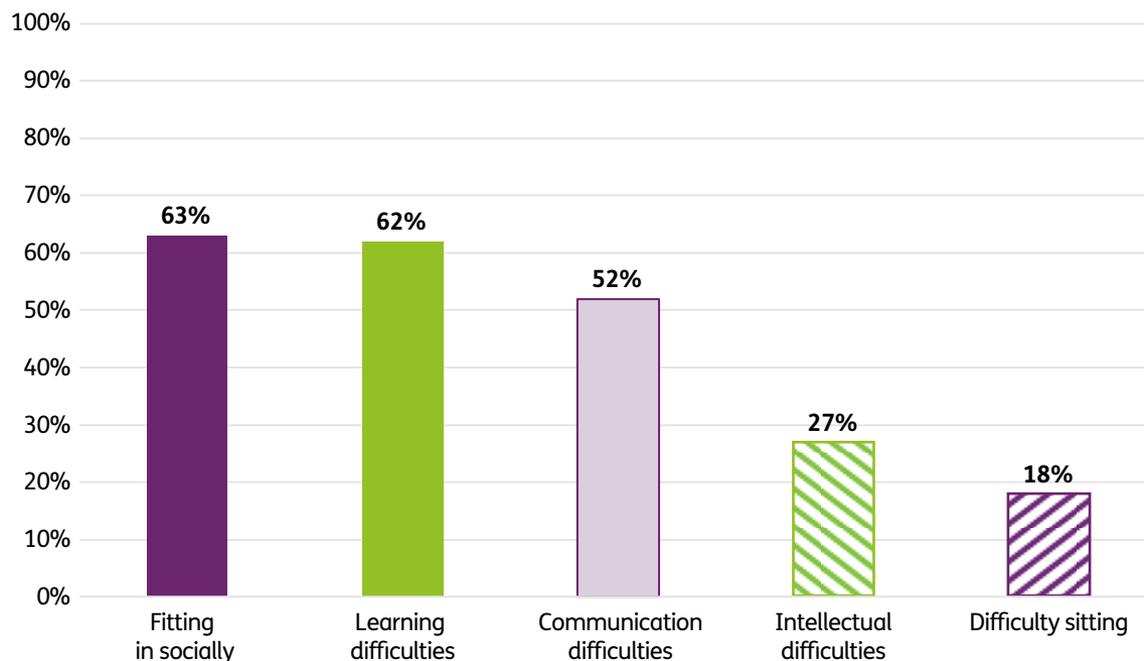
Participants from starting school to age 14: School experiences at baseline

The SF asks parents/carers whether they think their child is happy at school, and the LF asks whether they think their child is genuinely included at school.

Multiple regression models revealed that:

- Children with ASD were the least likely to feel happy at school; and
- Children with ASD were the least likely to feel genuinely included at school.

School experiences of children with ASD: SDAC 2015¹⁶



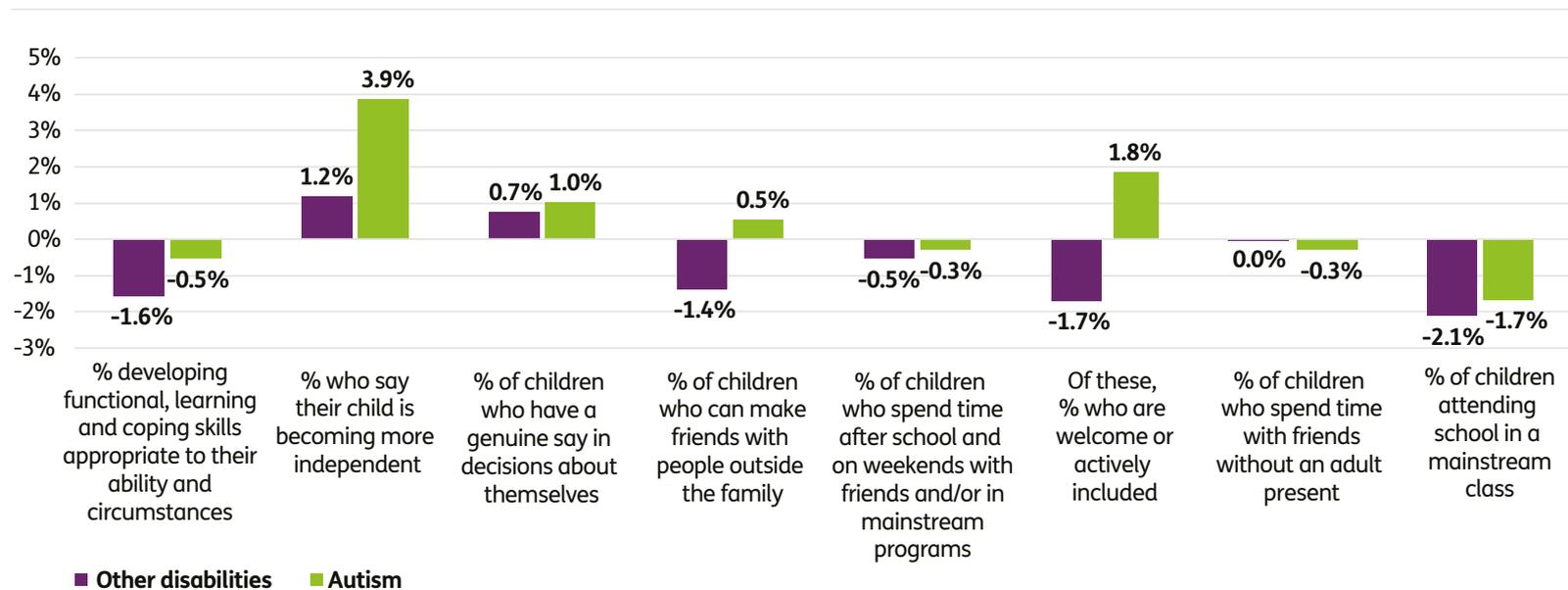
From SDAC 2015, 83,700 children and young people (aged 5–20) with ASD and disability were estimated to be living in households and attending school.

28% attended a special school, compared to 21% of school age to 14 NDIS participants with ASD (and 28% of participants with other disabilities).

85% reported difficulty at school, with the five most common types of difficulty shown in the graph. Fitting in socially (63%) and learning difficulties (62%) were the most common.

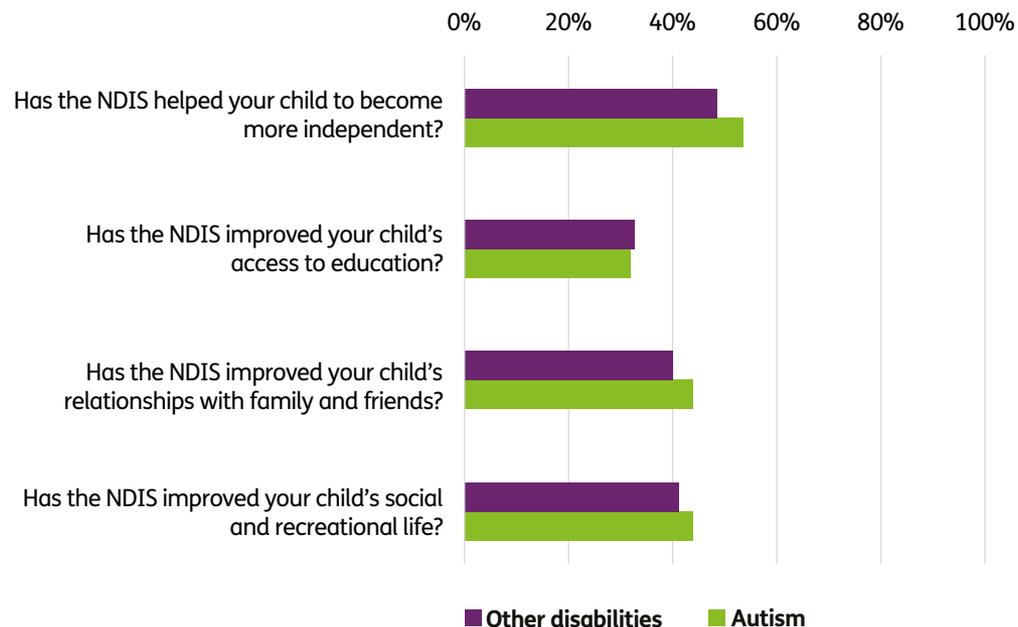
¹⁶ <https://www.aihw.gov.au/reports/disability/autism-in-australia/contents/autism> AIHW analysis of ABS SDAC 2015 data.

Participants from starting school to age 14: Change in key indicators



In aggregate, changes were less positive than for the youngest children. However the changes observed tended to be slightly more positive (or less negative) for participants with ASD compared to the group of participants with other disabilities. This is particularly the case for the percentage who say their child is becoming more independent, and the percentage welcomed or actively included when they spend time with friends or in community activities.

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

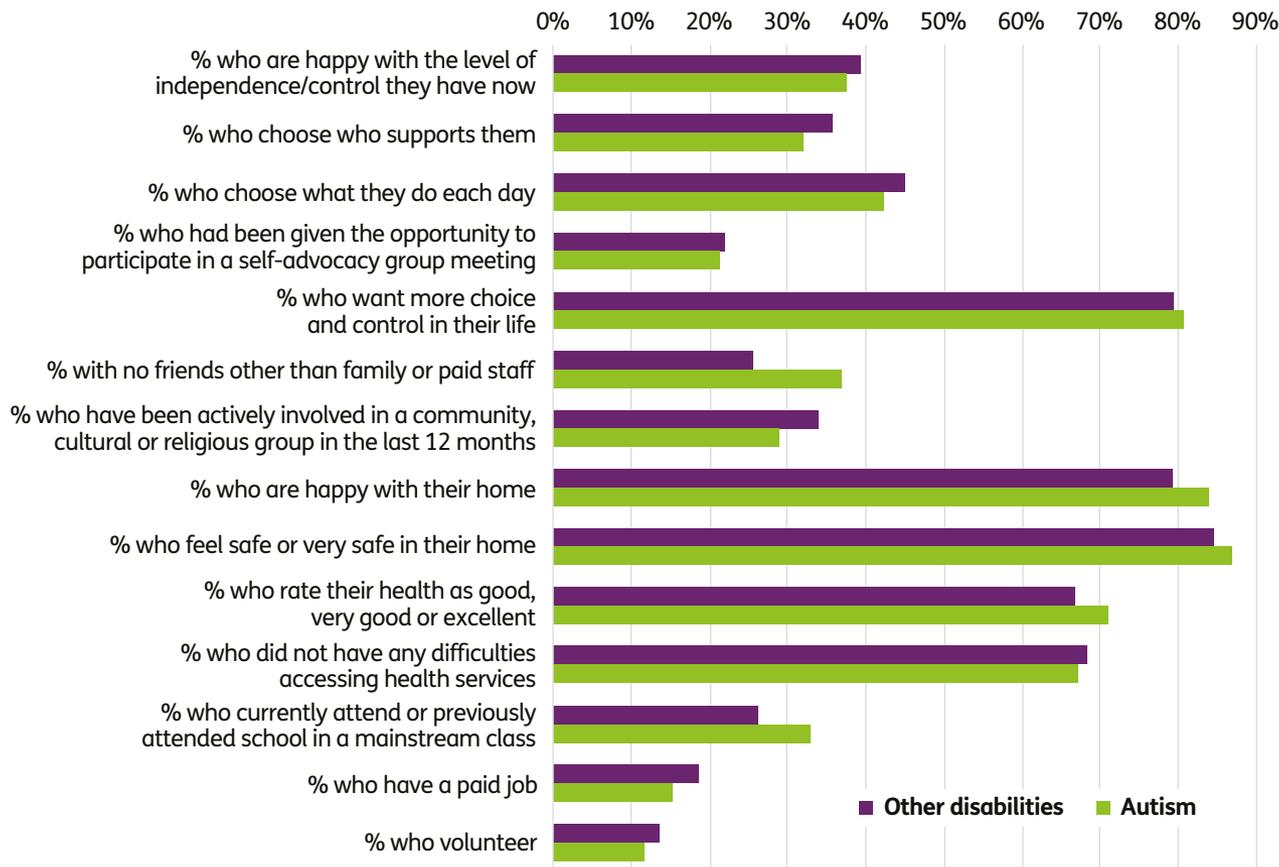


Participants with ASD respond slightly more positively than the group of participants with other disabilities, except for the education domain where results are similar.

Participants

aged 15 to 24

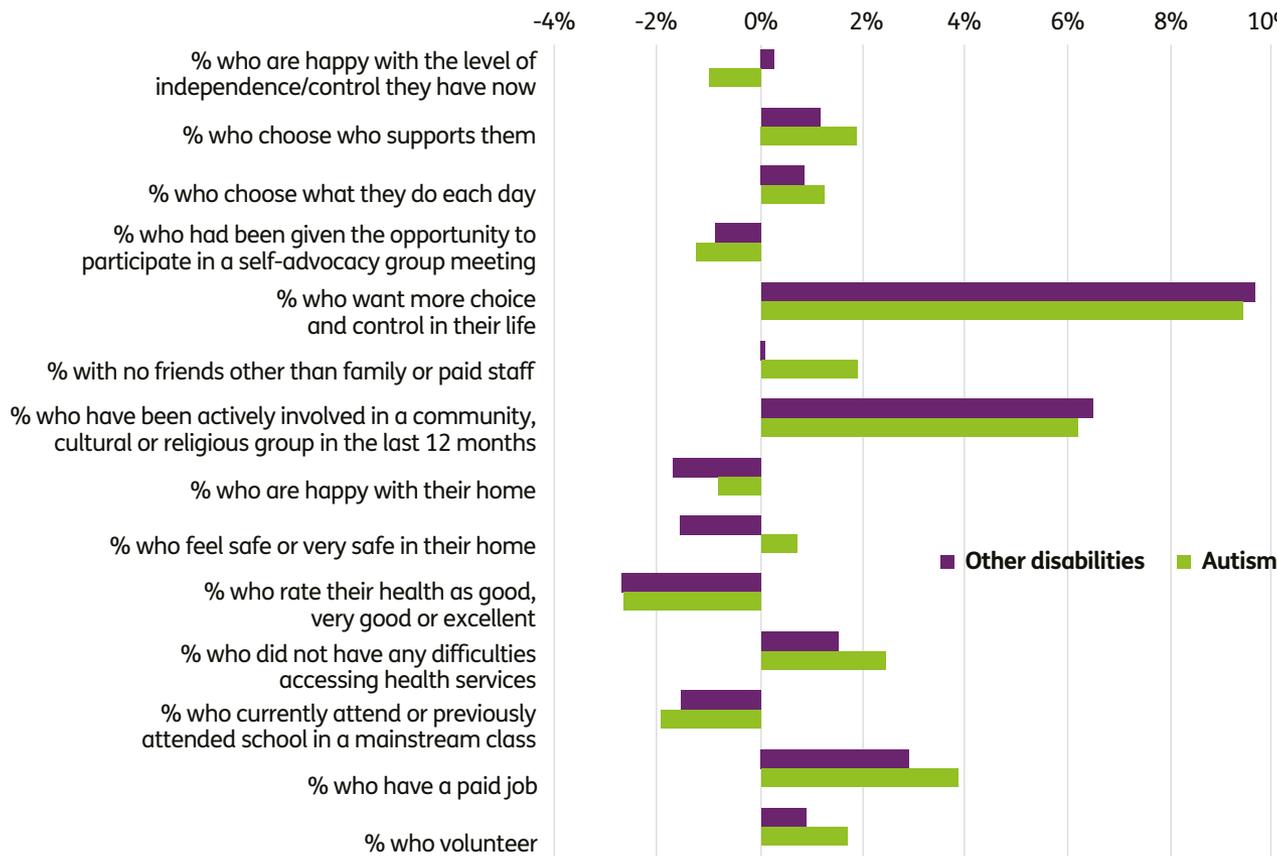
Participants aged 15 to 24: Key indicators at baseline



In multiple regression models, participants with ASD are less likely to choose who supports them, and more likely to have no friends other than family or paid staff.

Participants with ASD are more likely to currently attend or to have previously attended school in a mainstream class. They are also slightly more likely to be happy with their home and to rate their health as good, very good or excellent.

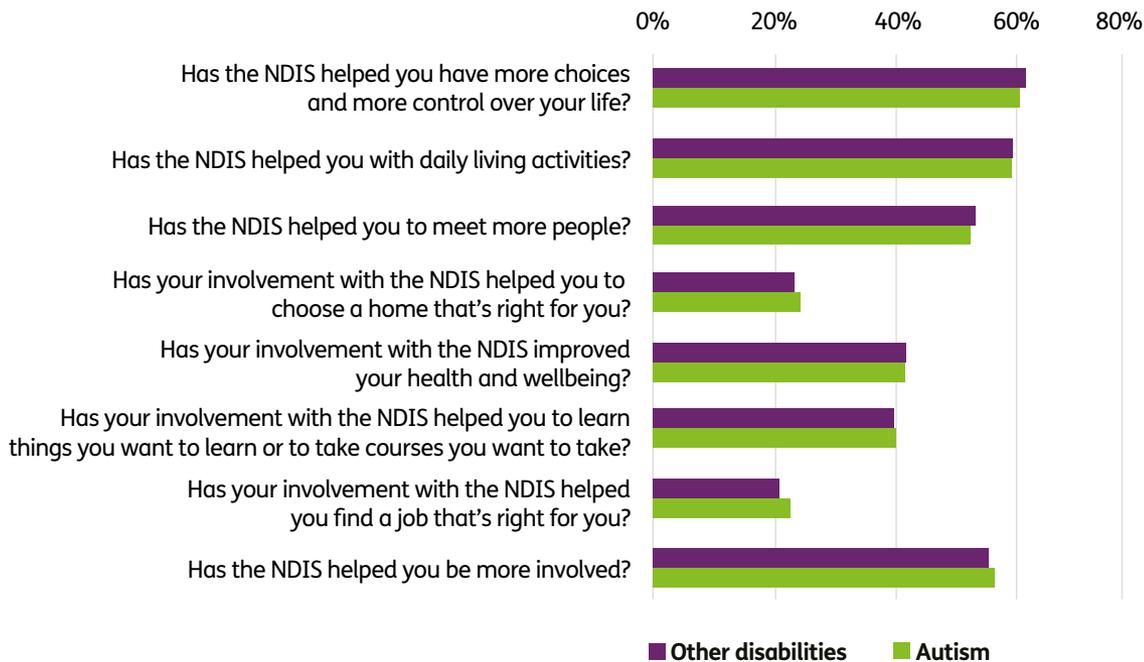
Participants aged 15 to 24: Change in key indicators



In one-way analyses, there has been a bigger deterioration in the percentage with no friends other than family or paid staff for participants with ASD. This is confirmed by a multiple regression model for the subset with no friends other than family or paid staff at baseline, modelling the probability of improvement one year later.

However, participants with autism are more likely to improve in relation to feeling safe in their home.

Participants aged 15 to 24: Has the NDIS helped?

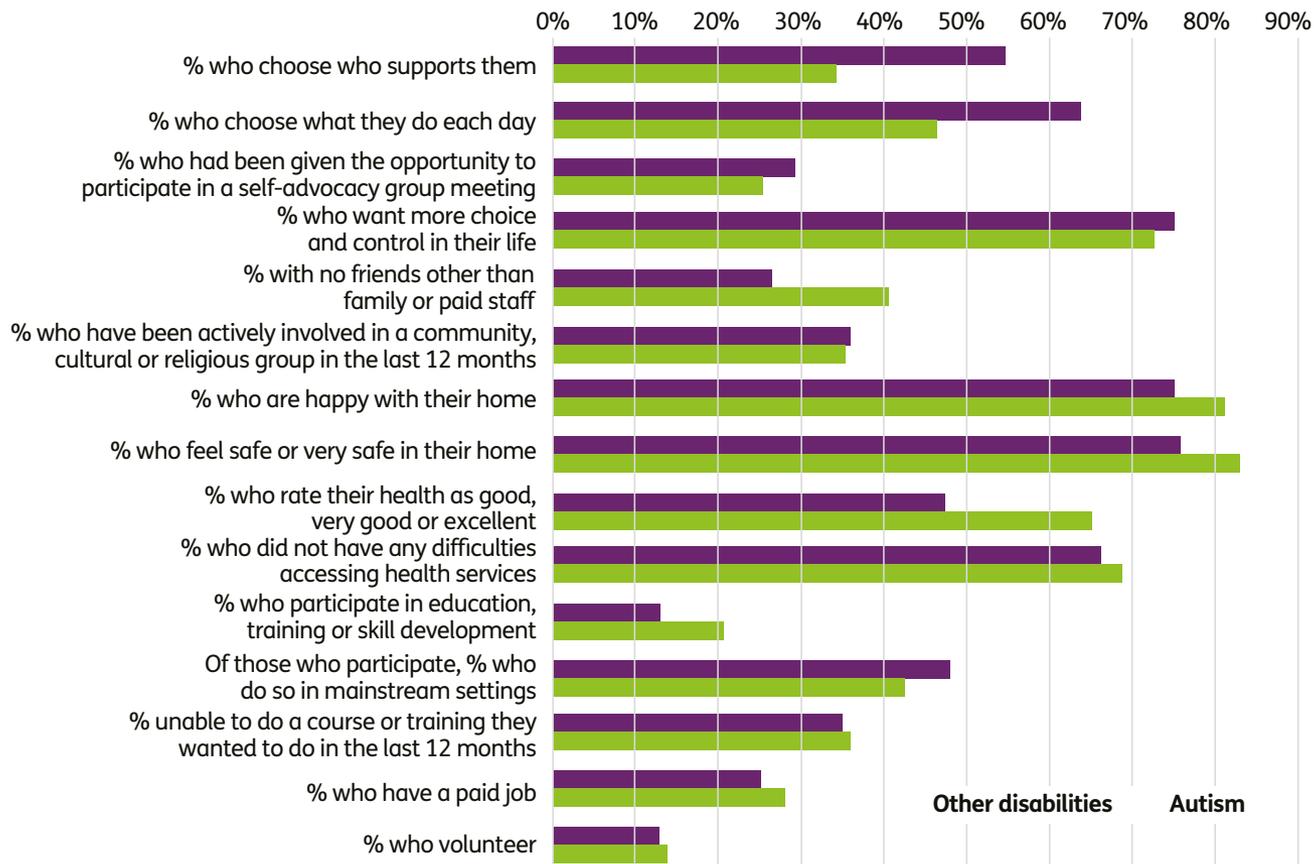


For the 15 to 24 cohort, there is very little difference between responses for participants with ASD and responses for the group of participants with other disabilities.

Participants

aged 25 and over

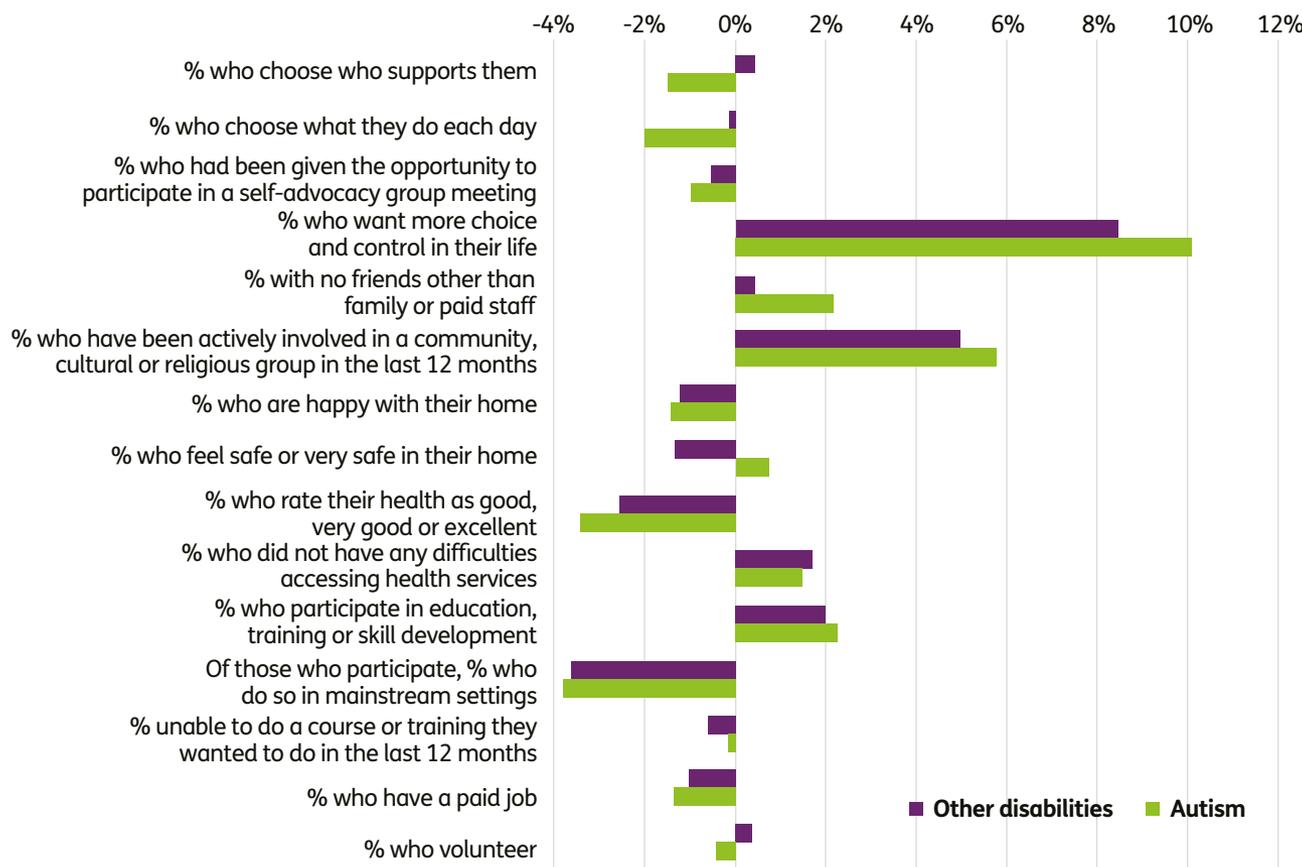
Participants aged 25 and over: Key indicators at baseline



Participants with ASD are much less likely to choose who supports them, and to choose what they do each day. They are also more likely to have no friends other than family or paid staff.

Participants with ASD are slightly more likely to be happy with their home and to feel safe there, and more likely to rate their health as good, very good or excellent.

Participants aged 25 and over: Change in key indicators

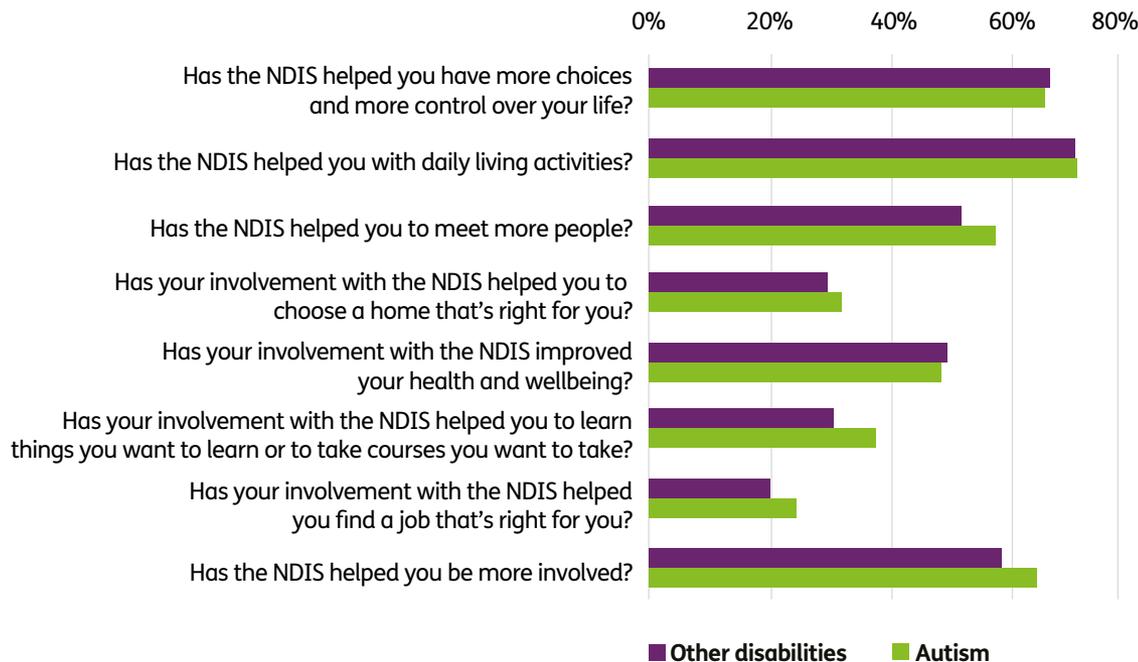


There has been a bigger deterioration in the percentage with no friends other than family or paid staff for participants with ASD compared to other disabilities.

Participants with ASD have also fared worse on the two choice and control indicators: choosing who supports them and choosing what they do each day.

Participants with autism are more likely to improve in relation to feeling safe in their home.

Participants aged 25 and over: Has the NDIS helped?

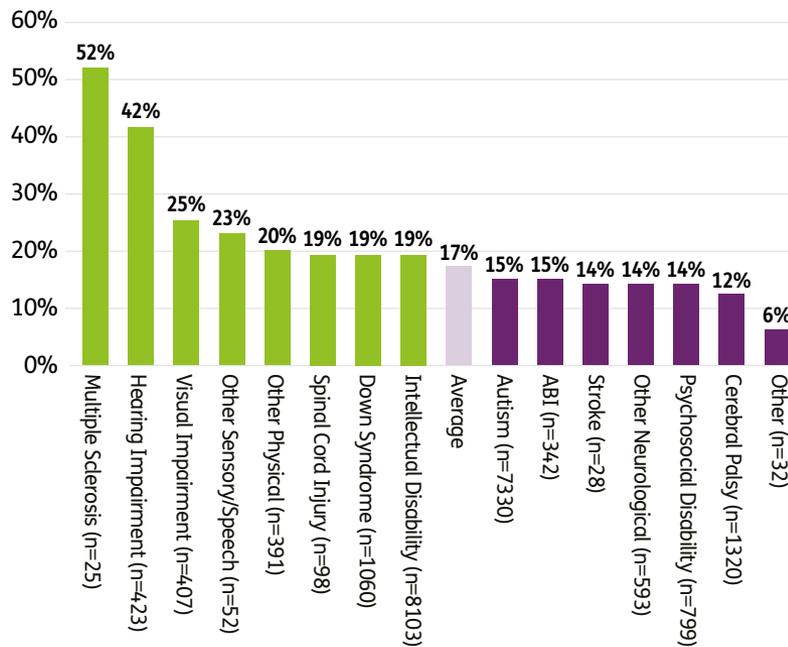


Participants with ASD tend to respond slightly more positively for the relationships, home, lifelong learning, work and community participation domains.

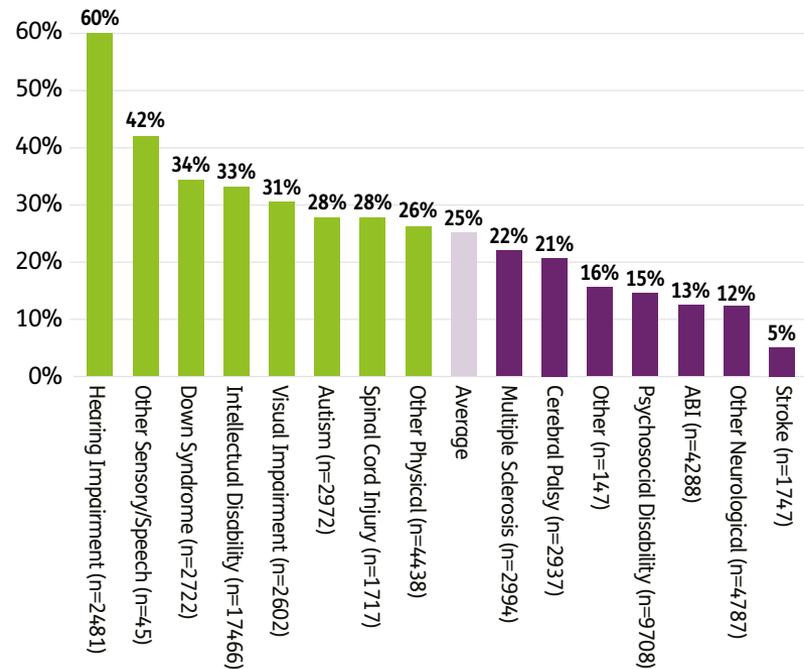
Responses tend to be similar to other participants for choice and control and daily living, and very slightly worse for health.

Participants 15 and over: Employment: % with a paid job at baseline by disability

15 to 24



25 and over

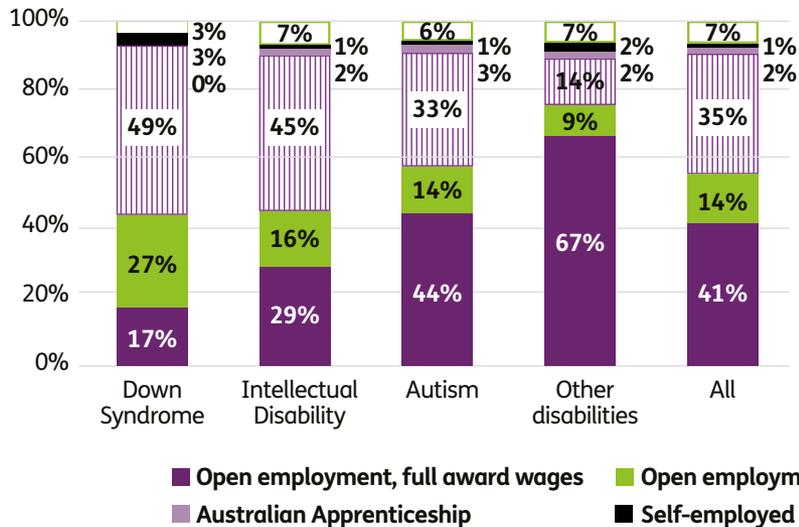


15% of participants with ASD aged 15 to 24 have a paid job, slightly lower than the overall average of 17%.

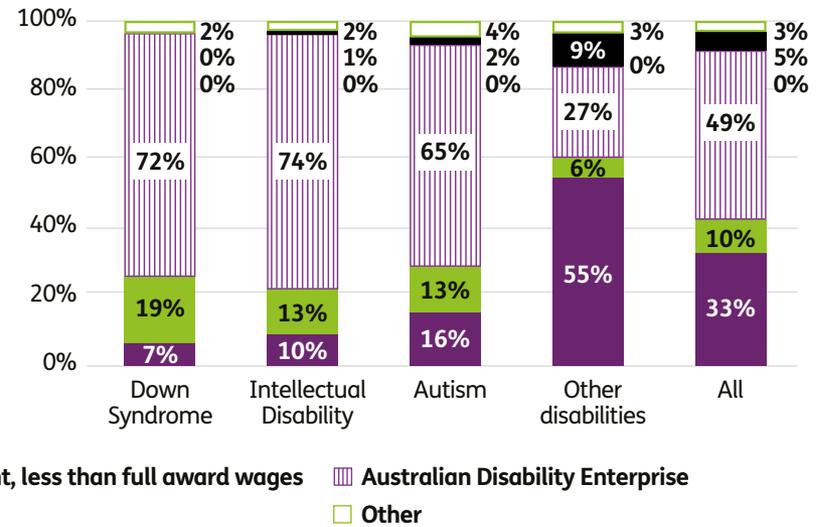
28% of participants with ASD aged 25 and over have a paid job, slightly higher than the overall average of 25%.

Participants 15 and over: Employment: Type of employment by disability

15 to 24



25 and over

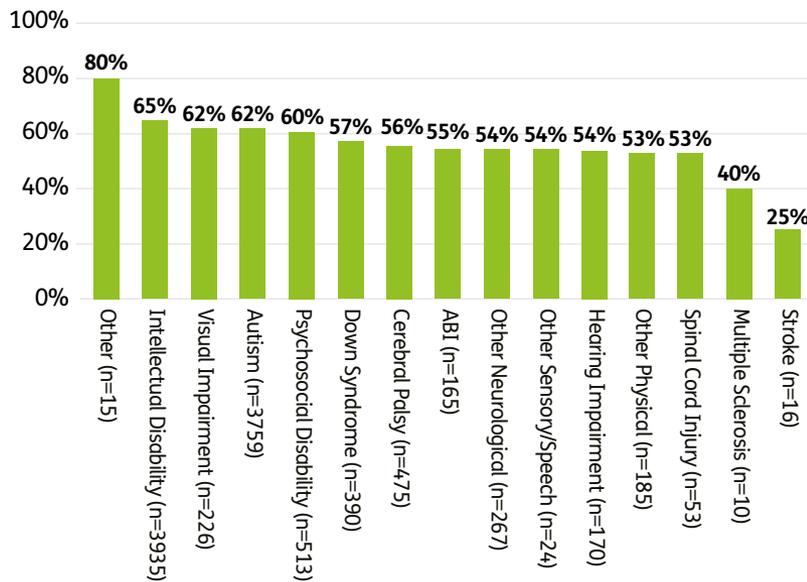


Participants aged 15 to 24 with ASD have the third lowest percentage in open employment at full award wages compared to other disabilities (44% compared to 41% overall).

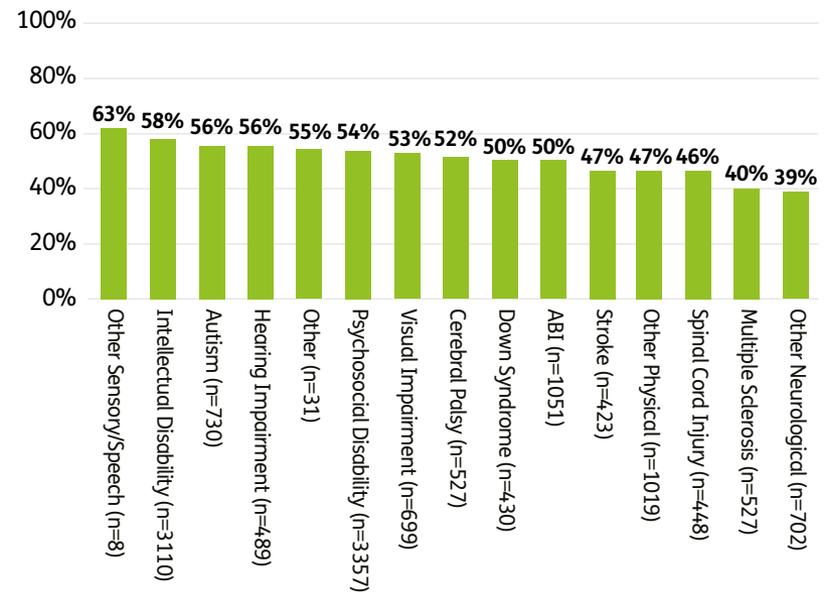
Participants aged 25 and over with ASD have the third lowest percentage in open employment at full award wages compared to other disabilities (16% compared to 33% overall).

Participants 15 and over: Employment: Employment goals by disability (jobseekers)

15 to 24



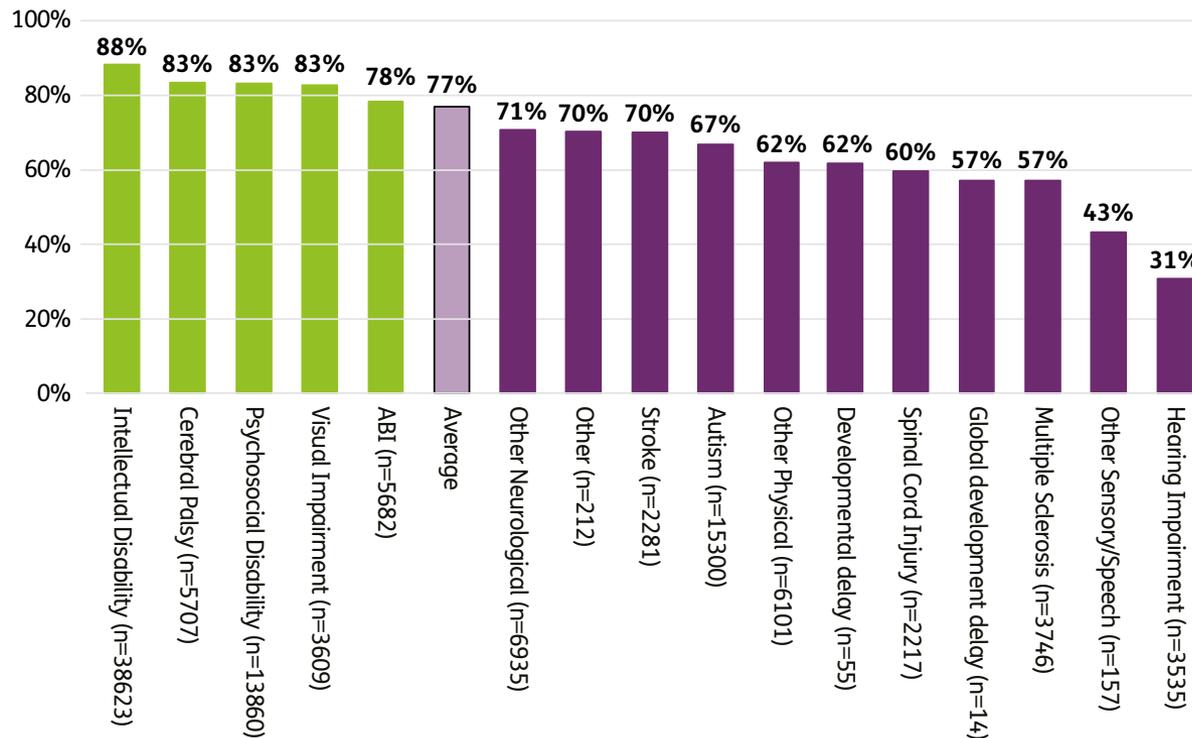
25 and over



62% of participants aged 15 to 24 with ASD who don't have a paid job but would like one have a work goal in their plan, higher than most other disabilities and equal to the overall average.

56% of participants aged 25 and over with ASD who don't have a paid job but would like one have a work goal in their plan, higher than most other disabilities and above the overall average of 52%.

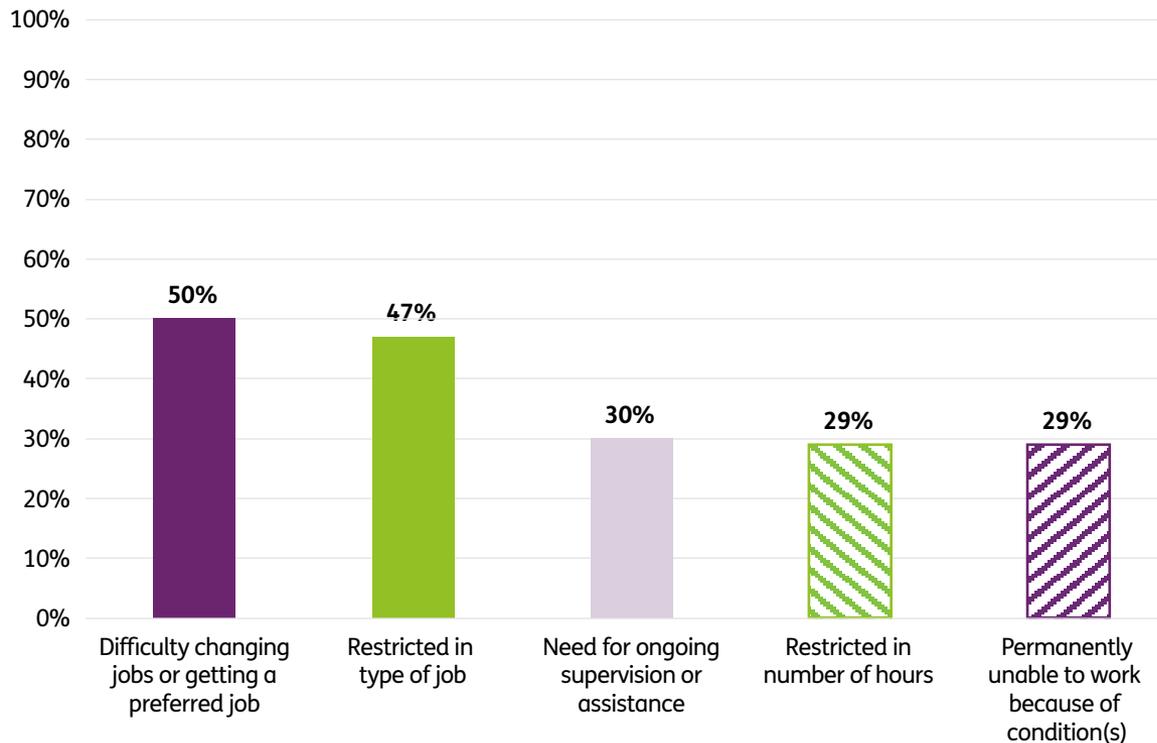
Participants 15 and over: % receiving the DSP by disability



Preliminary data linkage results suggest 67% of participants with ASD are receiving the Disability Support Pension (DSP).

This is lower than the overall average of 77%, however this may partly reflect the younger age distribution for ASD participants.

Employment experiences of 15 to 64 year olds with ASD: SDAC 2015¹⁷



- From SDAC 2015, 29% of people aged 15 to 64 with ASD were permanently unable to work due to their condition or disability.
- Difficulty changing jobs or getting a preferred job was the most common employment restriction, experienced by 50%.
- The five most common employment restrictions are shown in the graph.

¹⁷ <https://www.aihw.gov.au/reports/disability/autism-in-australia/contents/autism> AIHW analysis of ABS SDAC 2015 data.



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