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Understanding Autism Prevalence

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Overview



Global autism prevalence trends

Drivers of rising autism prevalence

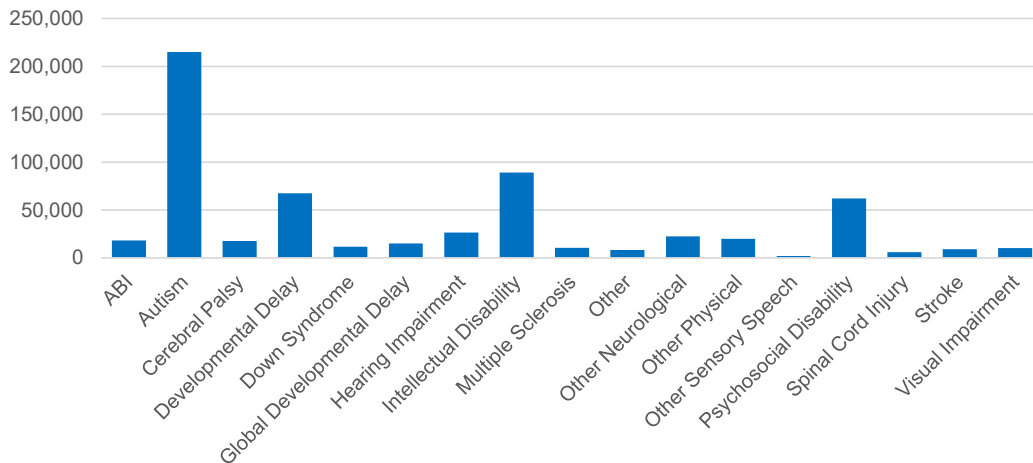
Considerations for future reform

Neurodiversity and Autism

Neurodiversity refers to the idea that “people experience and interact with the world around them in many different ways”.

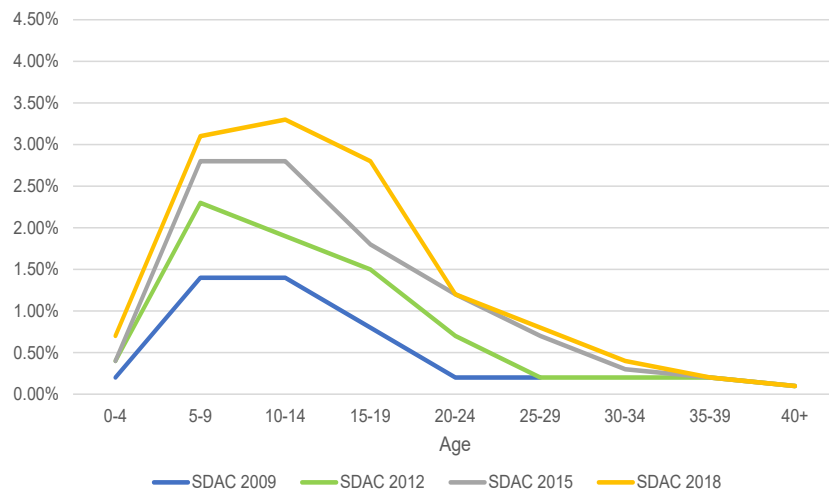
It includes people with disabilities stemming from neurological or developmental conditions, the most prominent being that of autism.

NDIS participants with autism account for 35% of all participants.

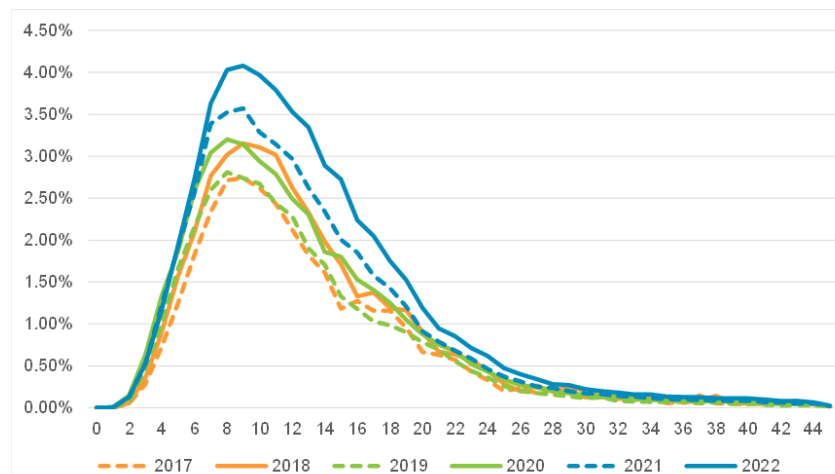


Autism Prevalence in Australia

Survey of Disability Ageing and Carers (ABS)



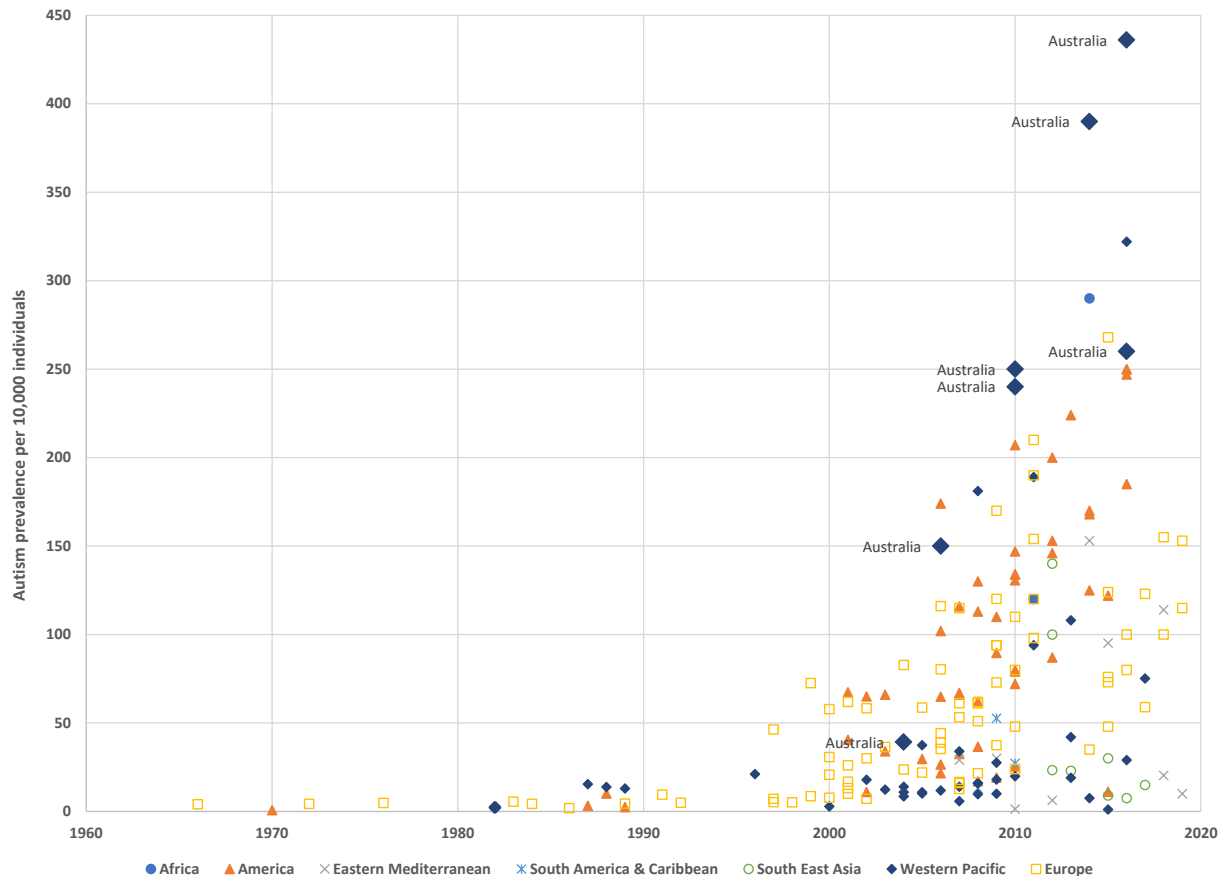
National Disability Insurance Agency (NDIA)



Global Prevalence Trends

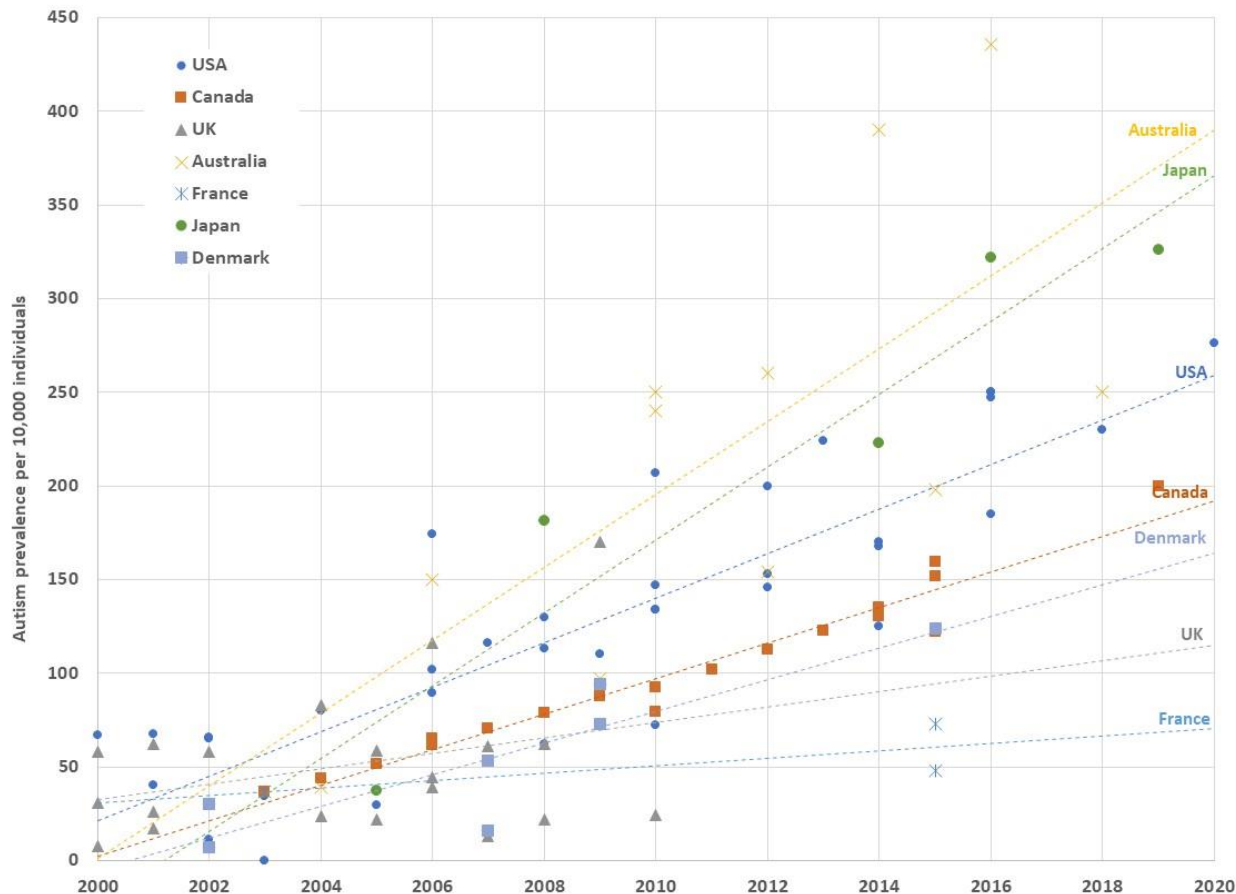
Worldwide, the number of people being diagnosed with autism has been rising with a marked increase observed over the last decade.

Median estimates of prevalence have increased from between 60 and 70 people (2012) to 100 people with autism out of every 10,000 individuals (2022).



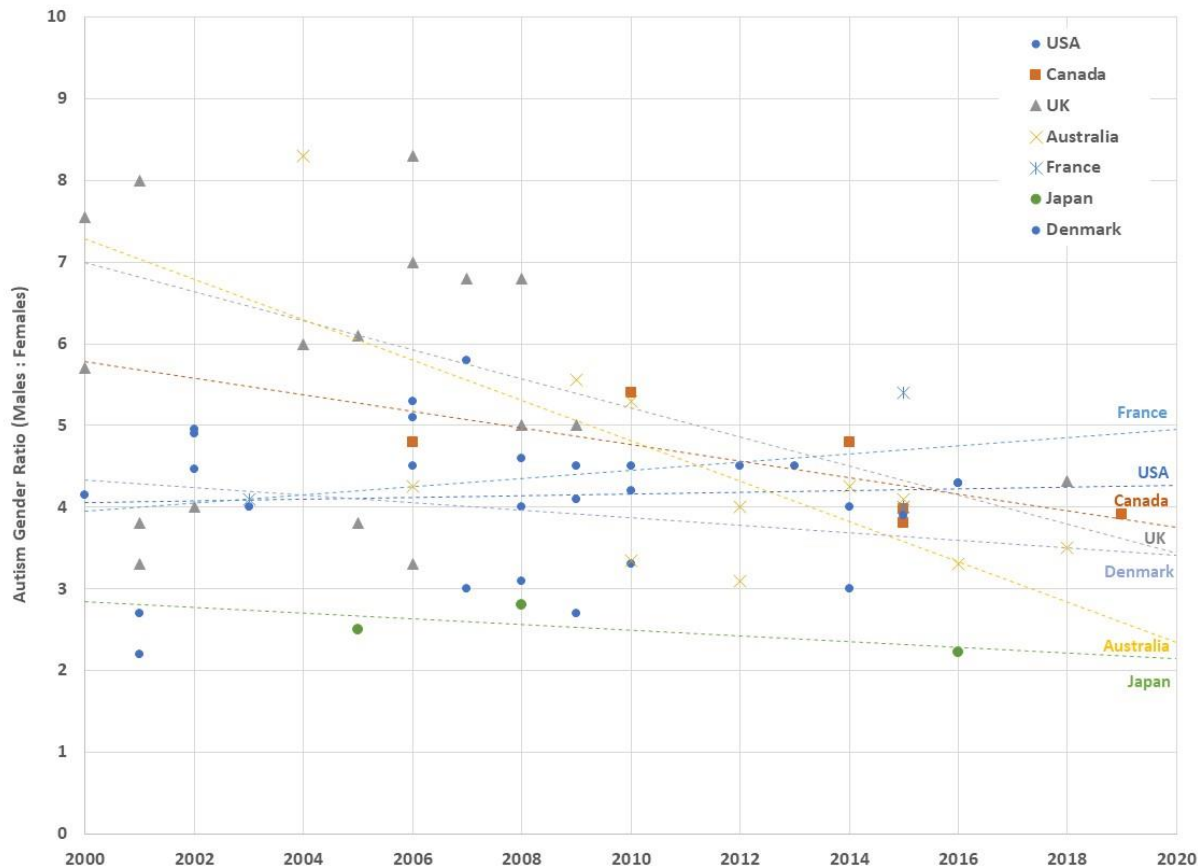
Prevalence in Children

Growth in estimates of autism prevalence in children is steeper in Australia than growth in other countries with similar economies and health systems.



Historically, studies in developed countries report that the prevalence of autism in boys is more than four times higher than in girls.

In Australia, recent estimates of the gender ratio suggest it could be as low as 3.1 to 3.5.



Socioeconomic and Racial Disparity

- Earlier studies found limited evidence of the association between autism and social disadvantage once diagnostic methods and service availability were taken into account. However, recent studies show that children facing greater socioeconomic disadvantage are more likely to receive an autism diagnosis.
- Historically lower rates of autism prevalence in children facing from culturally and linguistically diverse backgrounds have reversed and are more likely to be diagnosed than their Caucasian counterparts.
- These findings suggest a potential catch up in diagnosis in cohorts who were previously underdiagnosed.

Drivers of Rising Autism Prevalence

Changing Diagnostic Criteria

Diagnostic Substitution

Increasing Awareness

Genetic and Environmental Factors

Availability of Government Supports

Government Supports

Pre NDIS

Studies of Helping Children with Autism (HCWA) and Western Australian programs showed clear spikes in the frequency distribution of age at diagnosis just before the end of the eligibility period for funding.

Observed difference in prevalence between the younger and older cohorts in the Longitudinal Study About Children (LSAC) could stem from eligibility for HCWA.

NDIS

The marked rise in Australian prevalence coincides with the introduction of the NDIS, however there is limited research on the impact of the NDIS on autism prevalence.

Analysis



Aim

To understand the impact of the NDIS on autism rates in Australia



Natural Experiment

Staggered roll out of the NDIS across various regions for selected age groups between 1 July 2013 and 1 October 2018

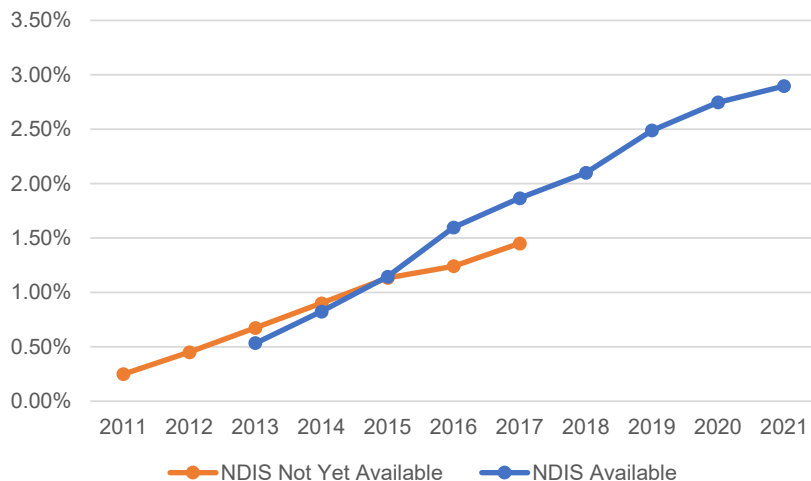


PLIDA (formerly MADIP) Data

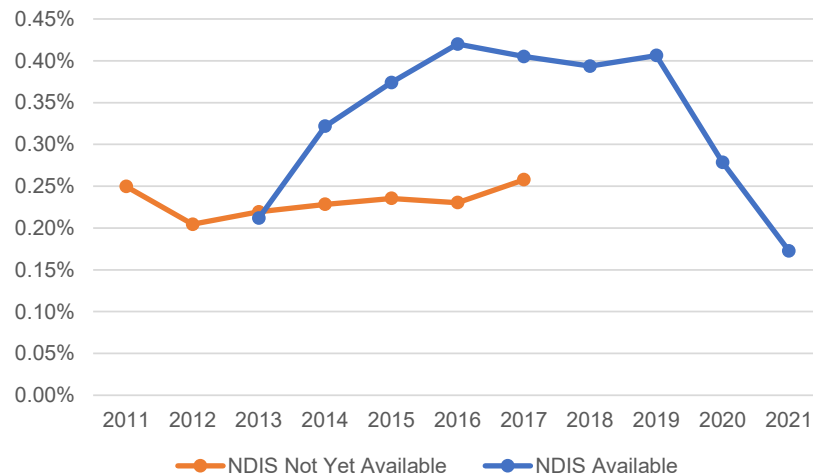
Medicare Benefits Schedule (MBS)
National Disability Insurance Scheme (NDIS)
Multiple Census data

Autism Rates for 0 to 14 year olds

Cumulative Rates

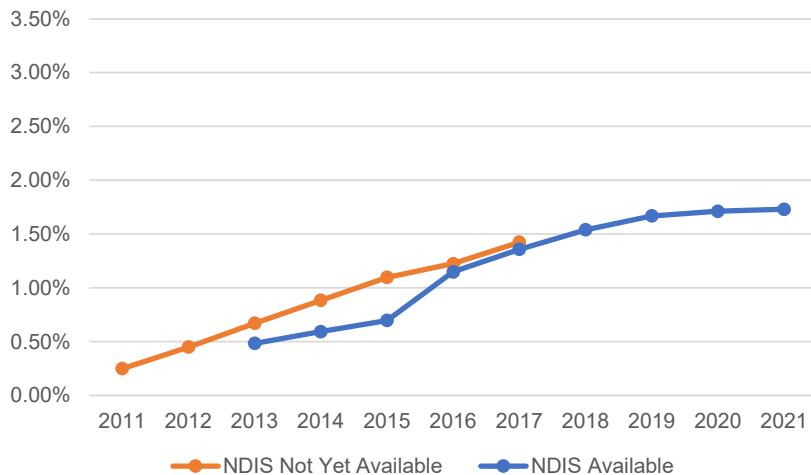


Incremental Rates

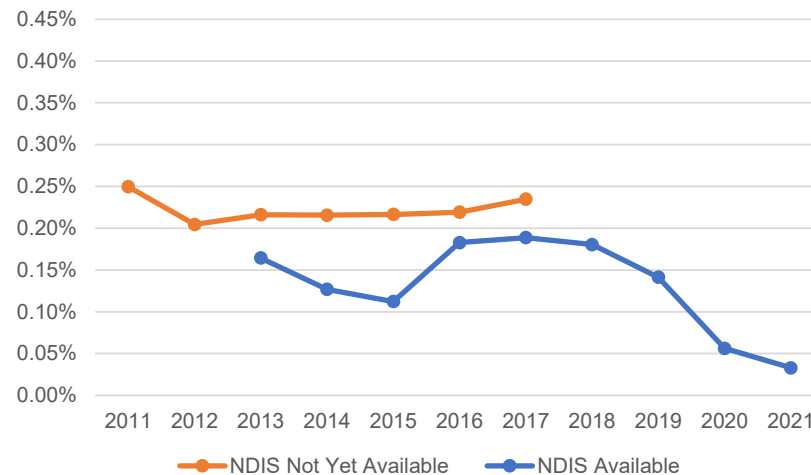


Autism Rates for 0 to 14 year olds (MBS data)

Cumulative Rates

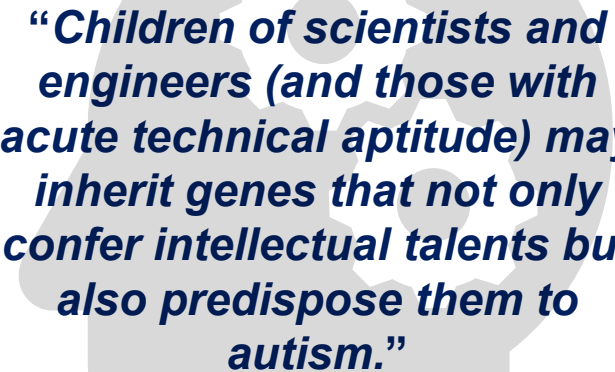


Incremental Rates



Considerations for Future Reform

1. Neurodiversity is no longer rare.
2. Institutional change should reflect this demographic shift.
3. NDIS reform should be considered within wider disability system reform.
4. Further acceptance of disability in society is needed.



“Children of scientists and engineers (and those with acute technical aptitude) may inherit genes that not only confer intellectual talents but also predispose them to autism.”

Baron-Cohen, 2012



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Thank you

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