

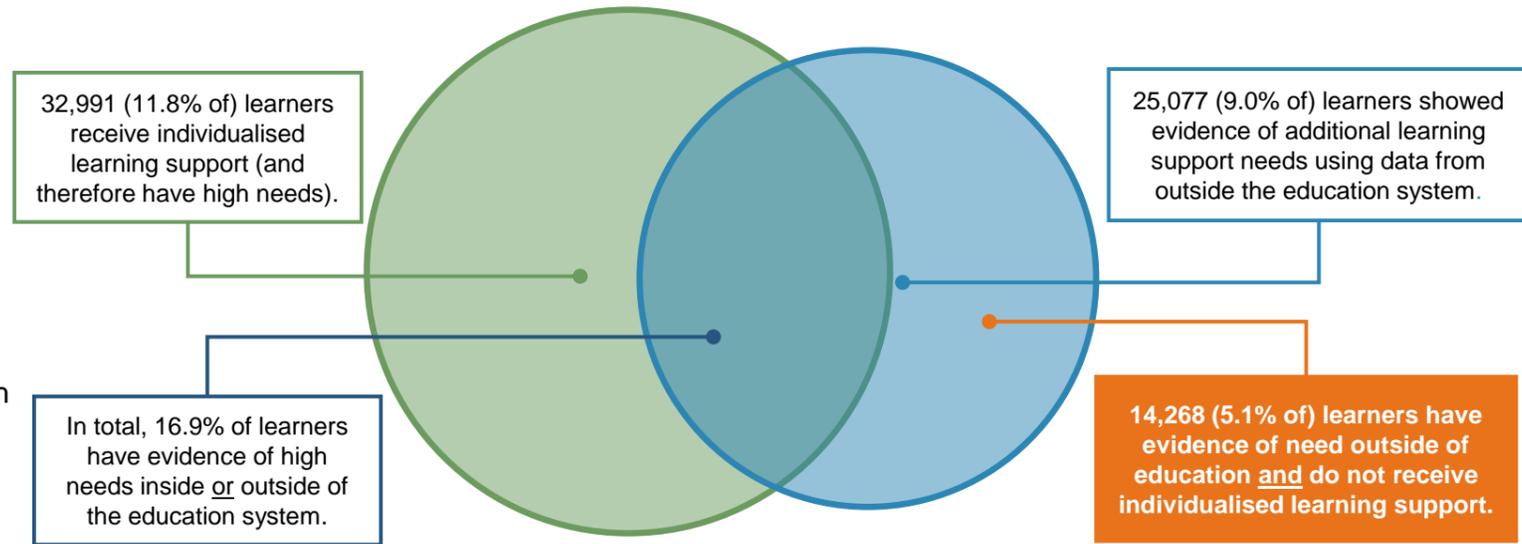
# Highest Needs Review: What do we know about learners with the highest needs?

## We used the IDI to identify learners with the highest needs:

- We focused on 280,000 learners born between 2009-2012, and followed their lives from birth to age 9-12. We looked at a range of data sources in Stats NZ's Integrated Data Infrastructure (IDI) to identify evidence that might indicate a high need for learning support.

## Identification of those with the highest needs was based on:

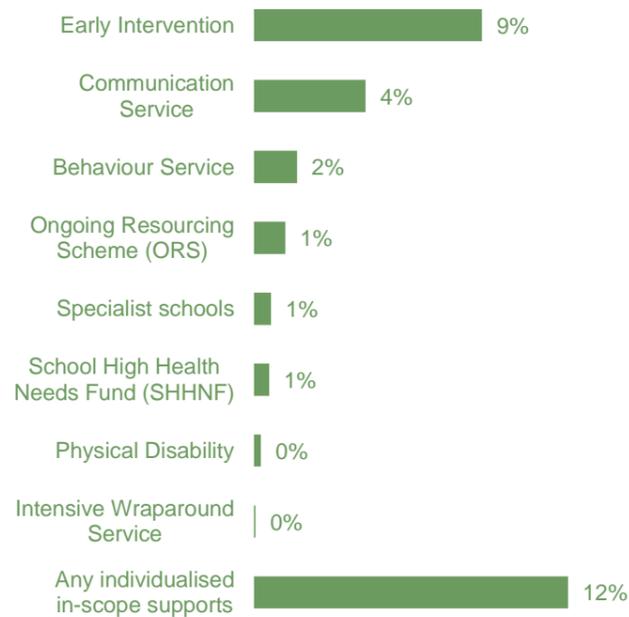
- Needs and support within the education system:** eight individualised learning supports that are provided to learners with the highest needs (which are in-scope for the Highest Needs Review)
- Needs identified using data from outside of the education system:** data from the health sector (for example B4 School Checks, specialist acute mental health service data, hospitalisations, primary diagnosis); and Census 2013 and Census 2018 containing the Washington Group Short Set questions on disability or equivalent. We further classified these needs into five main types, distinguishing between cognitive/learning, behavioural, communication, sensory and physical needs.



## The education system identifies many learners with support needs

Many individualised supports are application-based. Learners receiving supports definitely have learning support needs, but some other learners with high needs might never apply.

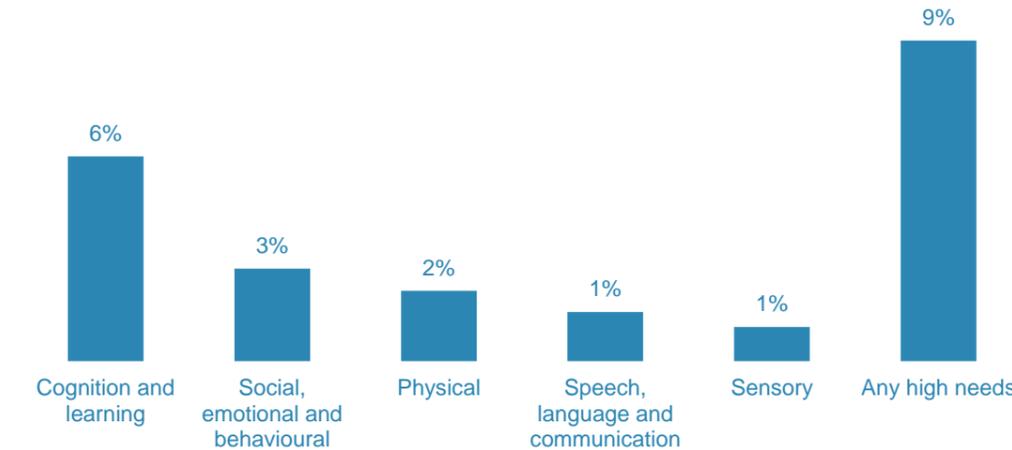
About 42% of learners in our population receive at least one form of learning support. Our analysis focuses on those receiving eight forms of *individualised* support. Other learning support services provided are out of scope of the Highest Needs Review. There are also other forms of learning support offered by schools, which do not show up in the data.



Learners receiving support are disproportionately male (16.1% of all male learners receive support, vs 11.8% overall), Māori (14.8%), and live in Te Tai Tokerau (14.8%). They are less likely to live in Auckland (10.7%).

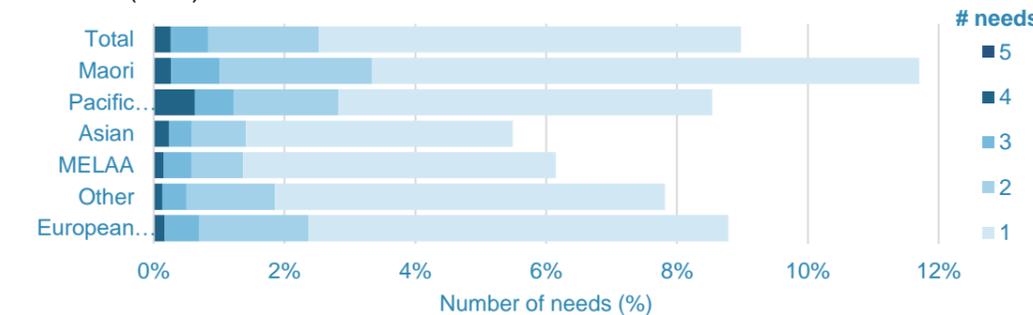
## Data outside the education system identifies a slightly different group of learners with high needs

Using the IDI, we have identified a group of learners (9% or 25,077) who have health diagnoses, functional assessments by disability experts, or parent/teacher reports of major concerns/impairments. These learners all have demonstrated "high needs" in some domain, but might not all need individualised learning support.



Most of these needs were identified at early ages: 59% of the time, the first evidence of high needs occurred before age 5. Almost two-thirds of social/emotional (66%) and cognition/learning (60%) needs were identified before learners reached school age.

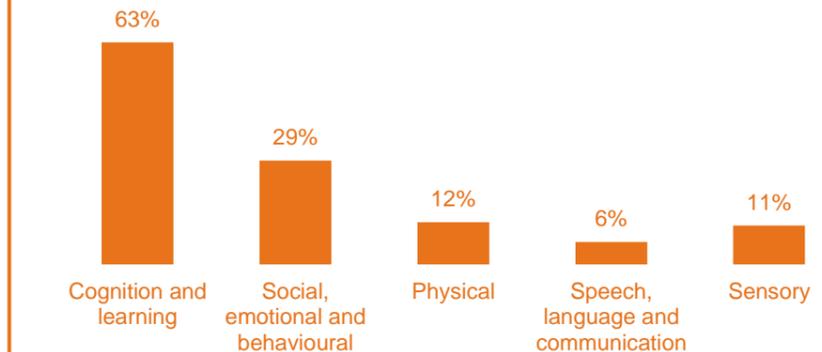
High needs are most common in Māori learners, where 3% of Māori learners have high needs in multiple categories. High needs are also more common among males (11%); NZ born (10%) and learners who have had a report of concern to Oranga Tamariki (15%).



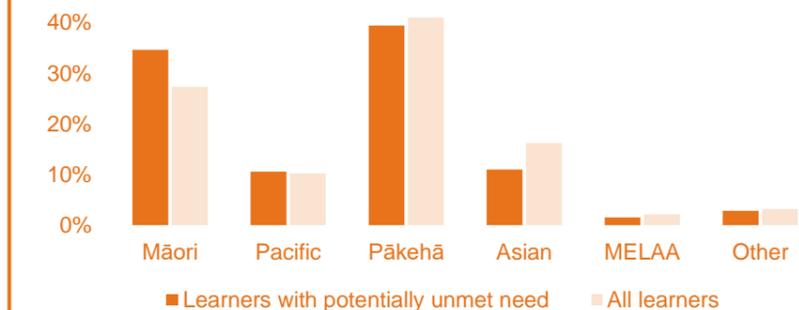
## However, there is a group of learners who may not be receiving the support they need

14,268 (or 5.1%) of learners did not have any record of individualised support but did have evidence of high needs using data from outside the education system.

Learning support need is best assessed by education experts in the context of a learning environment, and not all of these learners may need individualised support. However, the bulk (63% or 8,979) of learners in this group had evidence of high cognition or learning needs, meaning it is likely they face substantial barriers to learning. This represents 3.2% of all learners in our population group.



More than one-third of learners with potentially unmet need are Māori – greater than the 27% of all learners who are Māori. Pacific learners also show evidence of higher needs: Pacific learners in this group are more likely to have 3+ needs but no record of individualised support.



## Implications of the questions we answered

### The education system could more proactively identify those who may need learning support:

- We could identify clear evidence of high or very high needs that are likely to create barriers to learning in 9% of all learners.
- In 3.2% of all learners, there was evidence of potentially unmet high cognitive/learning needs. This is consistent with reports from whānau and the sector that there are many learners who are missing out on crucial support services.
- In most of these cases, evidence of this need first appears before learners even reach school age (usually through the B4 School Check or health diagnosis).
- Ensuring shared data and referrals from health to education could save many whānau and education providers the burden and stress of applying for individualised learning support, and reduce the chance that some learners miss out on support that they need.

### There needs to be flexible pathways of identifying learning support needs through the education system:

- We found that two-thirds of learners who receive individualised support in the education system have no evidence of need in the health system.
- This implies that the education system should not solely rely on the health system to identify need, and that there is considerable scope for needs identified by teachers to feed back to health or social supports.

### Māori learners particularly stand to gain from more proactive identification and follow-up of need:

- Māori learners were more likely to be identified in health data as having evidence of high needs, and the group of learners with potentially unmet needs was far more likely to be Māori than the overall population.
- This is consistent with evidence in the health system that services are often set up in ways that prevent or discourage Māori from accessing them.
- Improvements in the process for identifying and following up on need, and making these improvements with an eye to what works for Māori, are likely to improve learning and health outcomes for Māori learners and reduce inequities.

## Implications of the questions we were not able to answer

### There is a case for more frequent, more comprehensive and more integrated screening processes in both the education and health systems:

- While there is a comprehensive screening programme to identify the support needs for children in the early years of life, only one component (the B4 School Check) extends to an age where the bulk of children are in the education sector, and none cover schooling years, when many needs (such as behavioural support needs or neurodiversity) might manifest.
- This analysis has shown that high learning needs are being identified through these health screening points, but has also raised questions that cannot be answered with the data currently collected across government, such as “exactly how many of those with potentially unmet needs have actually unmet needs?” and “how many learners have needs that go unidentified in both the education and health systems?”
- This points to the benefit of new mechanisms to identify need, which are across the whole population, frequent, and shared between the health and education sectors, extending into later childhood.

### We continue to work with the Ministry of Education to investigate this data further, and integrate it with other evidence from the Highest Needs Review:

- We are triangulating the findings of this IDI analysis with evidence from New Zealand and international research, internal data and insight from Ministry of Education learning support practitioners, and the experiences of learners, whānau, teachers and the disability community that has been collected through Ministry of Education’s engagement. We are also exploring the future outcomes and experiences of learners in our “unmet needs” group.

These results are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI) which is carefully managed by Stats NZ. For more information about the IDI please visit <https://www.stats.govt.nz/integrated-data/>.

Access to the data used in this study was provided by Stats NZ under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. The results presented in this study are the work of the author, not Stats NZ or individual data suppliers. **November 2022**



# Appendix: How we identified need

For all learners in our population group, we used the IDI to construct indicators of high or very high needs

These came from four main data sources: diagnoses; NASC assessments; parent/teacher reports in the B4 School Check; and parental reports in the Census.

## Diagnoses

In the IDI, we have access to data on diagnoses from Inpatient, Day Patient, Outpatient, Community, Mental Health or Addictions Specialists.

We mapped individual diagnoses to need categories using:

### Cognition and learning:

- Global developmental delay
- Intellectual disability

### Social, emotional and behavioural:

- Substance abuse/dependence
- Emotional regulation
- Internalising and externalising behaviours
- Autism spectrum disorder
- Oppositional defiance disorder
- Conduct disorder
- Attention deficit hyperactivity disorder
- Intermittent explosive disorder
- Bipolar disorder

### Physical:

- Mobility diagnoses
- Motor skills diagnoses
- Pain
- Medical conditions

We also identified learners as having a high sensory need if they received support from the Ministry of Social Development relating to vision or hearing.

## NASC assessments

Needs Assessment Service Coordination (NASC) services are organisations in the health and disability sector that assess the needs of people who have very high support needs as a result of disability, mental health, or older age. The results of these assessments are used to provide supports within the health system. We considered any NASC-identified need as a high need. We mapped them to need categories using:

### Cognition and learning:

- Developmental delay
- Intellectual disability

### Social, emotional and behavioural:

- Emotional problems
- Relationship problems

### Physical:

- Mobility
- Motor skills
- Pain
- Activity
- Self-care

### Speech, language and communication:

- Speech
- Communication

### Sensory:

- Vision
- Hearing
- Ataxia

## Census

The 2018 Census contains the Washington Group Short Set, a series of five questions asking about difficulties the respondent faces in every day life. For children, this was encouraged to be completed by their parent. The children in our population would have aged 6-9 at the time of the Census.

Each question had four response options: No difficulty; Some difficulty; A lot of difficulty; or Cannot do at all. In each category, we coded a response of “a lot of difficulty” as high need and “cannot do at all” as very high need. We mapped the questions to the need categories using:

### Cognition and learning:

- Do you have difficulty remembering or concentrating?

### Speech, language and communication:

- In your usual language, do you have difficulty communicating, for example understanding or being understood?

### Sensory:

- Do you have difficulty seeing, even if wearing glasses?
- Do you have difficulty hearing, even if using a hearing aid(s)?

### Physical:

- Do you have difficulty walking or climbing steps?
- Do you have difficulty with self-care, such as washing all over or dressing?

## B4 School Check

More than 90% of children in New Zealand participate in the B4 School Check, a health screening exercise. This contains the Strengths and Difficulties Questionnaire, which is collection of statements that parents and teachers report agreement to. The statements are grouped into four categories, and each has three response options: Not true; Somewhat true; or Certainly true.

Each response yields a score of 0-2 (generally 0: not true; 2: certainly true, except statements marked by \* are scored in the opposite direction). We defined a high need if learners had a score of 7 (out of a maximum of 10) in any group of statements.

### Hyperactivity scale (mapped to cognition and learning)

- Restless, overactive, cannot stay still for long
- Constantly fidgeting or squirming
- Easily distracted, concentration wanders
- \*Thinks things out before acting
- \*Good attention span, sees chores or homework through to the end

### Emotional problems scale (mapped to social/emotional)

- Often complains of headaches, stomach-aches or sickness
- Many worries or often seems worried
- Often unhappy, depressed or tearful
- Nervous or clingy in new situations, easily loses confidence
- Many fears, easily scared

### Peer problems scale (mapped to social/emotional)

- Rather solitary, prefers to play alone
- Picked on or bullied by other children
- Gets along better with adults than other children
- \*Has at least one good friend
- \*Generally liked by other children

### Conduct problems scale (mapped to social/emotional)

- Often loses temper
- Often fights with other children or bullies them
- Often argumentative with adults
- Can be spiteful to others
- \*Generally well-behaved, usually does what adults request

