

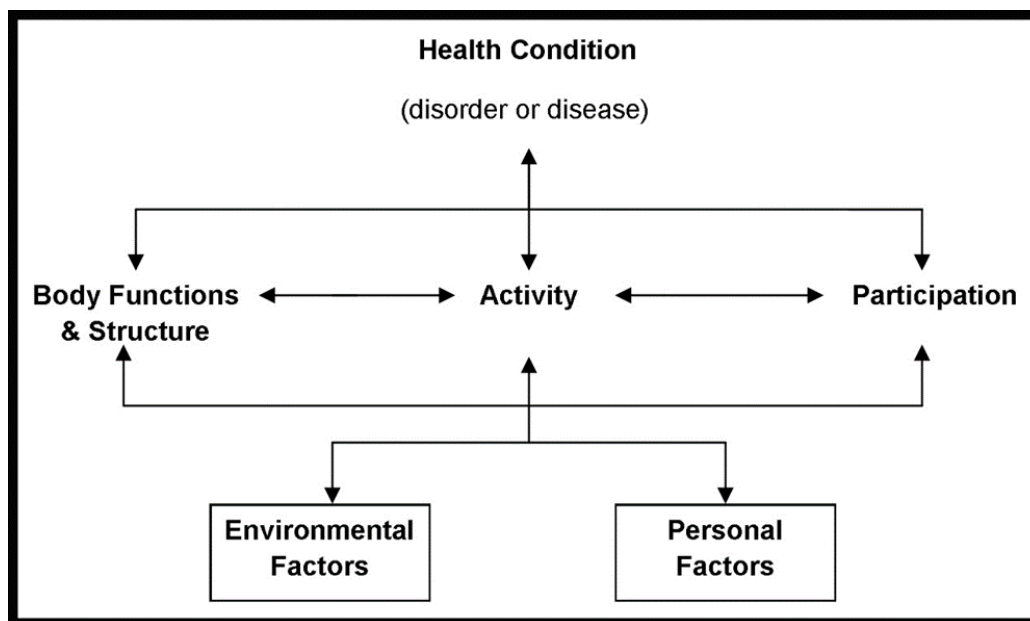
Assessing functioning has become more and more important for people with disabilities. Being able to show how your condition or symptoms impact your daily life is a key step for many different things, including:

- Accessing the National Disability Insurance Scheme.
- As part of the diagnostic process for ASD
- To set goals and plan therapy

Many measures can be used to assess functioning, particularly for young children with (or suspected of) neurodevelopmental conditions like Autism, ADHD or Global Developmental Delay. Some of the commonly used measures in Australia are the Vineland-3, PEDI-CAT and ABAS-3.

But, we don't know if these measures are assessing all the things they should be. So our researchers designed a way to assess this, which we call content validity.

The International Classification of Functioning, Disability, and Health (ICF) is a model researchers and health professionals use to understand functioning. It shows how lots of different things interact to influence someone's functioning.



For example, a child's fine motor skills aren't the only thing that means they might find eating dinner difficult. It's a combination of:

- their fine motor skills,
- what is being served for dinner,
- what cutlery they have to use,
- if they like the food they are eating, and
- if there is anything distracting them.

For each part of the ICF there is a list of codes that can be used to describe that topic (e.g. communication, mobility). These codes are 'nested' (going from broad to narrow detail). The ICF has

over 1600 of these codes, so other research has been done to find the ones most relevant for people and children with different conditions. These are called ICF Core Sets, and there are Core Sets for ASD, ADHD, Cerebral Palsy, and Early Delay and Disability.

We searched and found the biggest measures (that assessed the most areas, not necessarily the longest) for children under six years that have or might have a neurodevelopmental condition. To be able to assess and understand what the measures of functioning are assessing, we took these ten measures (some with different versions) and found ICF codes that matched what each question was assessing. This process is called ICF linking.

For example, in the PEDI-CAT there is a question that asks if a child “Holds and drinks from an open cup or glass”. This was linked to the ICF code ‘Drinking’.

Two researchers individually chose ICF codes to match each question. If we didn’t pick the same code, we discussed it until we agreed on which code it should be. If we needed to, we asked a third person for their opinion. By the end of this process the researchers all agreed on the codes that had been linked to the questions. We found that most measures focused on activities and participation and only two assessed the environment.

We then compared the ICF codes that had been linked to the measures against the ICF Core Sets for ASD, ADHD, Cerebral Palsy (CP) and Early Delay and Disability (EDD) (but only the versions for children aged 0-5 years). We also combined the individual Core Sets to make a Core Set we called “Early neurodevelopmental” (eND). We could then calculate which measure covered the most of each ICF Core Set (which could be considered the ‘best’ measure for children with that condition). Below are the measures that covered the most of each Core Set:

ASD	ADHD	CP	EDD	eND
<ul style="list-style-type: none"> • Vineland-3 (59%) • MPR (57%) • DAYC-2 (54%) 	<ul style="list-style-type: none"> • ABAS-3 (51%) • DAYC-2; MPR; SCOPE (49%) 	<ul style="list-style-type: none"> • SCOPE (48%) • ABAS-3; Bayley-4; DAYC-2; MPR; Vineland-3 (45%) 	<ul style="list-style-type: none"> • MPR (63%) • DAYC-2 (61%) • Bayley-4 (54%) 	<ul style="list-style-type: none"> • MPR (57%) • DAYC-2 (54%) • Vineland-3 (50%)

These results can be used by researchers and clinicians to help them decide which measure might be best for them to use when assessing a child’s functioning. However, what a measure assesses is not the only thing to consider when clinicians or researchers pick which one to use. They also need to consider things like:

- if a measure is able to pick up changes in a child,
- if two clinicians using the same measure on the same child would get the same result
- how long it takes to use
- how expensive it is.