

CHILD DEVELOPMENT UNIT (CDU)

Presented by Sandra Smith



Newborn Service
National Women's Health
Auckland City Hospital

CDU Presentation

- Concerns have been raised because the assessment tools used by the CDU have been revised.
- This presentation is to inform you of where we are up to now in examining the affect of the revision.

Use of Standardised Tools

Standardised tools are used for the neurodevelopment monitoring of our pre-term, low birth-weight babies.

(In accordance with the Australia NZ Neonatal Network (ANZNN))



These assessment tools have been used by
our clinic since 1985.



For 1 and 2 year olds

We use the Bayley Scales of Infant and Toddler Development (3rd edition).



For 4 year olds

We use 2 tools:

1. The Stanford-Binet Intelligence Scales

(5th edition)

2. The Vineland Adaptive Behaviour Scales

(2nd edition)



Bayley Scales

- BSID-II (2nd Ed.) was revised from 2000
- Bayley-III was put into use from 2006

The Manual Says:

Correlations between Bayley II and Bayley III are *“moderate”*. This is not unexpected given the “addition and alteration of many items”.

Composite Scores

- Bayley-III are approx. 7 points higher than the relevant index scores from its predecessor.

Research says:

- Many studies have replicated the data in the Bayley-III manual
- Some studies have described differences of up to 10 points, particularly in the Motor domains

What questions does this raise?

- Are we overestimating children's development now?
- Were we underestimating their development using the BSID-II?
- Does it make a difference to our outcomes?

Our Findings are Consistent

- With the findings in the literature

AND

- The commentary in the test manual

Stability of other Assessment Tools

Outcomes for our other assessment tools were reasonably stable, but noted higher scores for the Bayley Scales from 2006.

Use of the most up-to-date Psychometric Assessment

- Bayley-III is currently used to provide the outcomes for our test population

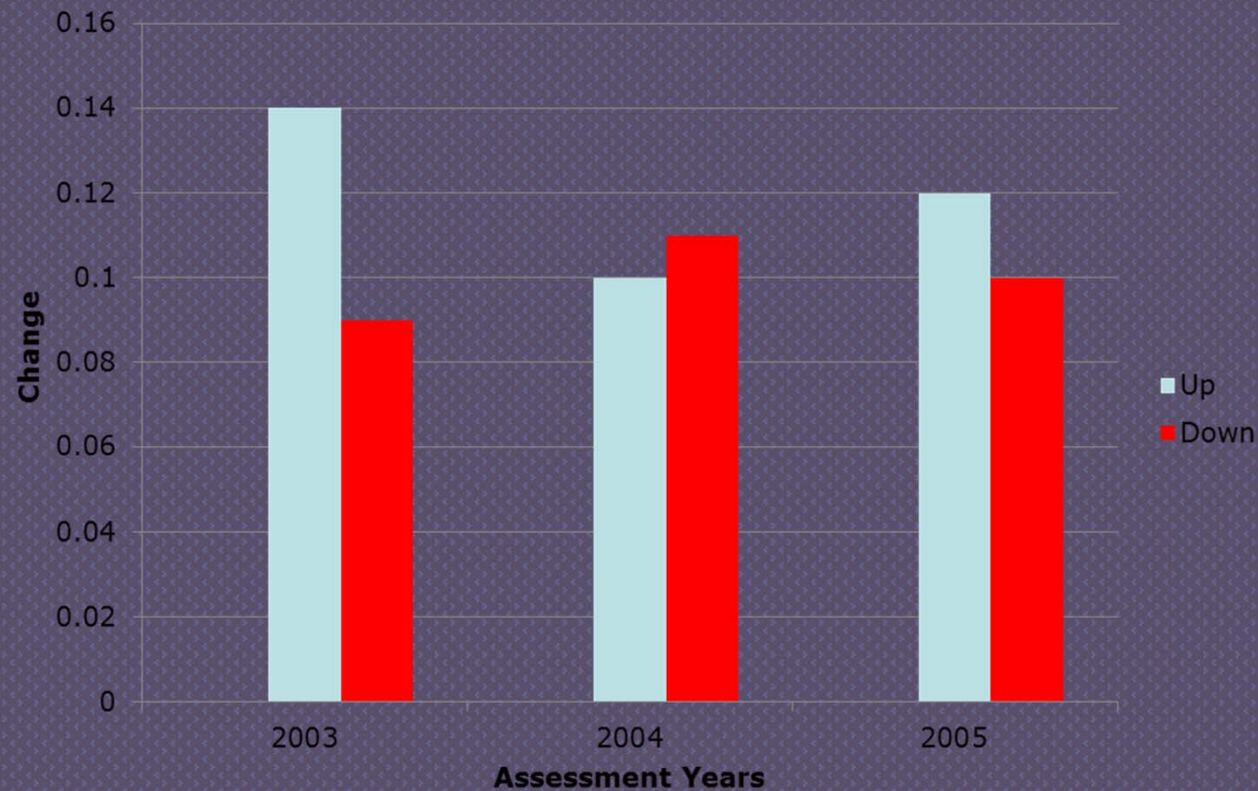
Outcomes are reported by categories:

Category	Description
1	Severe Disability
2	Mild to moderate disability
3	Bayley Motor Score 1 SD below mean
4	Cognitive score in average range

Looked at the distribution of outcomes by Category to see what has been affected by the new Bayley Scales scores.

What does this mean?

Children tested on Bayley-II at 2 years and S-B at 4 years



Children tested on Bayley-III at 2 years and S-B at 4 years



Back to our original questions:

1. Are we over-estimating now?
2. Or were we underestimating then?
3. Does it make a difference to our outcomes?



In Summary

- Using Bayley-III we seem to miss some children at 2 years, but are picking them up at 4 years.
- However using Bayley-II we were also missing children at 2 years and picking them up at 4 years.

Conclusion

- We don't rely solely on the data to make referrals.
- We talk to parents and teachers
- We observe behaviour

Sandra Smith, Psychologist, CDU