

1-1-2020

## Commentary on "Longitudinal Change in Common Impairments in Children With Cerebral Palsy From Age 1.5 to 11 Years"

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### Citation of this paper:

Brunton, Laura and Scholtes, Cheryl, "Commentary on "Longitudinal Change in Common Impairments in Children With Cerebral Palsy From Age 1.5 to 11 Years"" (2020). *Paediatrics Publications*. 867.  
<https://ir.lib.uwo.ca/paedpub/867>

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### “How should I apply this information?”

Young children with cerebral palsy (CP) may experience a mixture of improvements (balance, strength), stability (endurance), and/or progression of CP-related impairments. This research may help clinicians make decisions about how to use their resources to focus on areas that may be more impactful for children in specific Gross Motor Function Classification System (GMFCS) levels (ie, strengthening for GMFCS I, flexibility for GMFCS IV/V).

Function and participation are the primary goals of therapy, with less priority given to monitoring of impairments or maintenance of abilities. This study supports the usefulness of impairment-based measures and may help clinicians better understand the complexities of CP. Further this underscores the need to monitor children with valid and responsive outcome measures to demonstrate value of interventions—regardless if they are actively targeting change or focused on maintenance of function and/or the prevention or worsening of secondary impairments.

### “What should I be mindful about when applying this information?”

The study may be underpowered to detect differences across GMFCS groups. The small sample size and the heterogeneity associated with CP may have led to the premature conclusion that changes do not occur in some constructs overtime. This highlights the need to think critically about interventions and ongoing measurement of secondary conditions by GMFCS level. The relative distribution of children across the GMFCS levels and the numbers needed to detect small changes overtime often limit the documentation of clinically important changes in research evidence.

Some of the outcome measures in this study are not familiar (though freely available on the *CanChild* website) and require judicious choice for implementation in clinical practice. For example, the Early Clinical Assessment of Balance may have a ceiling effect whereby children score the maximum 100 points. This measure then will not adequately capture change to conclude stability or lack of improvement.

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*The authors declare no conflicts of interest.*

DOI: 10.1097/PEP.0000000000000677