

FREQUENTLY ASKED QUESTIONS (FAQs) RELATED TO THE MOTOR GROWTH CURVES

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PREDICTION OF GROSS MOTOR FUNCTION:

FAQs relating to the motor growth curves:

Q. What are the motor growth curves, and what information do they provide?

A. The curves can be used to describe patterns of gross motor function for children with cerebral palsy over time, and to estimate a child's future motor capabilities (similar to height and weight growth charts). The motor growth curves present a plot of GMFM-66 scores (on the vertical axis) by age (across the horizontal axis) for each of the five GMFCS levels. They were developed from data obtained from a large, population-based sample of children with cerebral palsy (Rosenbaum et al., 2002).

Rosenbaum, P., Walter, S., Hanna, S., Palisano, R., Russell, D., Raina, P., Wood, E., Bartlett, D.J., & Galuppi, B.E. (2002) Prognosis for Gross Motor Function in Cerebral Palsy: Creation of motor development curves. Journal of the American Medical Association, 288:1357-1363.

Q. How can I obtain a copy of the motor growth curves?

A. The motor growth curves can be downloaded from the *CanChild* web site at www.canchild.ca either individually for a specific GMFCS level or for all 5 curves together in one document.

Q. Who can use the motor growth curves?

A. Anyone who can administer and score the GMFM-66 can plot an individual child's score.

Q. How can the motor growth curves be used?

A. On first assessment using the GMFM-66, a child's relative ranking compared to children in the population-based sample can be determined. With repeated scoring over time, it is possible to determine whether a child is functioning as well as expected, better than expected or more poorly than expected **(to be developed after completion of the clinical tracking paper – S. Hanna)**.

Q. How frequently should a child's GMFM-66 score be plotted?

A. There is no recommended frequency however plotting scores at yearly intervals would be appropriate.

Q. What are the implications for services when the GMFM-66 scores reach a plateau?

A. It is important to be aware that while children with cerebral palsy may reach a plateau in the abilities specifically measured by the GMFM-66, decisions regarding service provision should not be based on their GMFM-66 scores alone. Gross motor function in children with cerebral palsy may continue to change over time as they use these abilities in the context of daily life. It is also important to keep in mind that children with cerebral palsy continue to develop important *quality* of movement aspects which may, in turn, improve overall gross motor performance. The goals of service provision may shift away from a focus on the development of motor skills towards such goals as the prevention of secondary impairments. As well, physical goals may be replaced with communication or other goals. Decisions regarding service provision must take all of these factors into account.