The Gross Motor Function Measure: What’s App?

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Background and Timeline

The Gross Motor Function Measure (GMFM) is a clinical assessment tool designed and validated to evaluate changes in the gross motor function of children and youth with cerebral palsy and assist in realistic goal setting.

The GMFM has evolved over the years. Suggestions to develop a GMFM App were received and explored further based on survey feedback from 40 clinicians, researchers, and educators.

GMAE-3

The Gross Motor Ability Estimator (GMAE) is the computer program used to calculate GMFM-66 scores. The App will use an updated algorithm: the GMAE-3.

Previously, the GMAE-2 imputed a raw score based on the items tested and then converted this to a GMFM-66 score and assigned errors based on the score. The updated GMAE-3 algorithm computes the GMFM-66 score directly from the item calibrations (item difficulty scores) that a child is tested on; standard errors are more accurate and are based on the number of items tested. The difference between the GMAE-2 score and the GMAE-3 score will generally be quite small.

The GMAE-3 algorithm reflects a slightly more accurate measure of motor function than the previous algorithm for children with higher and lower functioning and should be the preferred measure moving forward. It will be possible to convert GMAE-2 scores to GMAE-3 scores using the App.

The following figure is a plot of both scores for a sample of 25 children using GMFM Item Sets. The black line represents perfect agreement between the scores.

GMFM App

How will I be able to get a copy of the GMFM App?

- The GMFM App will be available for purchase via the CanChild Shop.
- Check the CanChild website for updates on launch date and cost (www.canchild.ca).

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In collaboration with colleagues at Mohawk College, our local community college, CanChild has re-designed the GMAE Software to create the GMFM App.