

# FREQUENTLY ASKED QUESTIONS (FAQs) RELATED TO THE GMFM-88

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Published and Distributed by *CanChild*

## MEASUREMENT OF FUNCTION:

### FAQs relating to the GMFM-88:

#### **Q. What is the GMFM-88?**

A. The GMFM-88, or Gross Motor Function Measure 88 (previously known as the GMFM or Gross Motor Function Measure), is the original 88-item measure designed to evaluate change in gross motor function over time or with intervention for children with cerebral palsy. It has also been validated for use with children who have Down syndrome.

#### **Q. Who can use the GMFM-88?**

A. The GMFM-88 was designed for use primarily by physical therapists who are familiar with children with cerebral palsy, and the administration and scoring criteria outlined in the manual.

#### **Q. How can someone learn to use the GMFM-88?**

A. It is important for someone wanting to learn the GMFM-88 to read through the manual with particular emphasis on the administration and scoring guidelines. Practice with several children will help users feel comfortable with the items and administration methods. Comparing GMFM-88 scores with other therapists familiar with the measure should help point out inconsistencies that would need clarification. GMFM-88 training workshops are no longer available but a self-instructional CD ROM is available from Cambridge University Press (Ordering information available at [Wiley-Blackwell Publishing](#)). This program provides useful training tips and allows assessors to work through several examples of each GMFM-88 item.

**Q. How long does it take to learn the GMFM-88 items?**

A. The time to learn the GMFM-88 varies with the skill of the assessor, familiarity with standardized assessments and comfort and rapport with children with cerebral palsy. It takes a minimum of 3 hours to read through the manual and an additional 3 or more hours to work through the CD ROM training.

**Q. How long does it take to administer and score the GMFM-88?**

A. Administering the GMFM-88 may take approximately 45-60 minutes for someone familiar with the measure, depending on the skill of the assessor, the ability level of the child (the more they can do the more items need to be tested!), and the child's level of cooperation and understanding. This time will increase if the assessor wants to evaluate the use of ambulatory aids and/or orthotics in addition to an unaided assessment. Sometimes 2 sessions are required to complete all of the items. Item scoring is completed at the time of test administration. Calculation of dimension and total scores takes approximately 5 minutes with a calculator.

**Q. For what ages has the GMFM-88 been validated?**

A. The original validation sample included children 5 months to 16 years old. The GMFM-88 is appropriate for children or adolescents with cerebral palsy or Down syndrome whose motor skills are at or below those of a 5-year old child without any motor disability.

**Q. Has the GMFM-88 been tested with, and found valid and reliable, for adults with cerebral palsy?**

A. We are unaware of work done with adults; however the GMFM-88 has been used with adolescents. The GMFM-66 would likely be a more appropriate measure than the GMFM-88 for adults because not all items need to be assessed to get an accurate estimate of gross motor function.

**Q. Can the GMFM- 88 be used for children with diagnoses other than cerebral palsy?**

A. While the GMFM-88 was designed and validated for children with cerebral palsy, there is evidence that the GMFM-88 version of the measure is also valid for use with children with Down syndrome. (Note: the GMFM-66 is **only** valid for children with cerebral palsy, because the scaling was developed with data only from children with cerebral palsy.) Because the GMFM-88 samples motor skills that are typical of normal developmental milestones, it may be useful for children other than for those with whom

it has been validated (i.e. children who have had a brain injury); however, reliability and validity should be established prior to using it with other groups of children.

**Q. Are there guidelines for administering the GMFM-88 in the home or community settings?**

A. No there are no guidelines for the home setting. Any modification to the equipment should be as close as possible to the recommended equipment and documented to ensure consistency with testing over time.

**Q. How accurate is an obtained total score using the GMFM-88?**

A. It is important to recognize that every time an assessor completes an evaluation with an individual child, the obtained total score is an estimate of the child's gross motor function. The GMFM-88 does not provide a way for a therapist to determine how accurate (or error free) the obtained score is. However accuracy is increased by minimizing variation in: (1) the assessors (i.e. training to be reliable users), (2) the child (i.e. ensuring the child is comfortable and rested) and (3) the environment (i.e. in the same room, with the same equipment).

**Q. How frequently should the GMFM-88 be administered?**

A. There are no guidelines provided about frequency of administration. Considerations include, but are not limited to:

- (1) age (more frequent evaluations in younger children),
- (2) type and intensity of intervention over a specified period of time (pre- and post-evaluations around interventions that are expected to make a difference),
- (3) estimate of the amount of time that the child will require to learn a gross motor function(s),
- (4) concurrent health status (evaluation around the time the child experiences other health concerns to establish the impact on gross motor function),
- (5) a facility's administrative requirement for an annual evaluation, and
- (6) responsiveness of the GMFM-88. Responsiveness of the GMFM-88 has been shown over a 6-month time interval and generally is more responsive to change for children under 3 years old.

**Q. How can change in GMFM-88 scores be interpreted?**

A. Because of the tremendous variation among children with cerebral palsy, the magnitude of change that is considered clinically "important" for an individual child will vary, and will depend on the judgements made by the child, parents, and/or therapist. In the original validation work with the GMFM-88, parents and therapists have identified a gain of about 5 and 7 percentage points respectively, as being a "medium" positive

change. The Gross Motor Function Measure (GMFM-66 and GMFM-88) User's Manual has an appendix of average change scores for children of varying ages and GMFCS levels over six and twelve month intervals receiving intervention at children's rehabilitation centres in Ontario, Canada. For interpretation of change on the GMFM-66 see the FAQs related to the GMFM-66.

**Q. How can I obtain a copy of the GMFM-88 manual and score sheets?**

A. The manual, which contains updated information on the GMFM-88 and GMFM-66 with detailed administration and scoring guidelines and a scoring CD ROM, is published by MacKeith Press and is available for purchase from Cambridge University Press (ordering information available from [Wiley-Blackwell Publishing](#)).

The GMFM-88 and the GMFM-66 are now combined on a single score-sheet, which can be downloaded from the *CanChild* web site at [www.canchild.ca](http://www.canchild.ca) and is also available in the Gross Motor Function Measure (GMFM-66 and GMFM-88) User's Manual.