

## **Quality FM Course - Zoom Based Format**

**Instructed by Virginia Wright, PT, PhD, Bloorview Research Institute, Toronto, Canada**

**Dates: Tuesday May 31, 14:30 PM– 18:30 PM CET**  
**Wednesday June 22, 14:30 PM– 18:30 PM CET**  
**Monday June 27, 14:30 PM– 18:30 PM CET**  
**Wednesday July 6, 14:30 PM– 18:30 PM CET**

**Cost:** 385 Canadian \$ (includes Certification Test post course). Maximum of 20 participants.

**Attendees:** Physical therapists or other health care provider working in the field of pediatric cerebral palsy who use the Gross Motor Function Measure in their clinical practice.

**To sign up, use the following EventBrite link:** <https://www.eventbrite.ca/e/europe-region-quality-fm-training-course-zoom-based-format-in-english-tickets-317381405327>

**Questions?** Please contact the organizer, Dr Virginia Wright, at [vwright@hollandbloorview.ca](mailto:vwright@hollandbloorview.ca)

### **What is the *Quality FM*?**

Gross motor interventions for children/youth who have cerebral palsy (CP) are focused on optimizing the child's functional skills ('what they can do') and their movement quality ('how they do it'). Both are important components of motor skill performance that allow a child to participate in gross motor activities. The **Quality FM** (Wright et al., DMCN 2014) is an observational clinical assessment that captures the quality of movement of the Stand and Walk/Run/Jump skills (items) in the Gross Motor Function Measure (GMFM-66). It was designed by clinical researchers at Holland Bloorview and CanChild for use by **pediatric physical therapists** with children who have cerebral palsy (CP) and are age 5 years and up, able to walk (i.e., in GMFCS Level I, II or III), and can actively follow the GMFM's administration instructions.

### ***Quality FM workshop objectives***

- Acquire background on the measurement of quality of movement in CP
- Develop an awareness of the structure and potential uses of the Quality FM
- Become familiar with the five quality attributes of the Quality FM
- Gain an understanding of the Quality FM's generic and detailed scoring system and psychometric properties (workshop ½ day #1)
- View/discuss videos of the performance style of GMFM skills of typically developing children as frame of reference (spread throughout the training days)
- Use the Quality FM to score videos of children with CP in GMFCS I, II and III (workshop ½ days #2 to #4), with group participation in the scoring using the voting mechanism on Zoom - allows interactive learning style with whole group (open microphones for frequent Q and A sessions and chat box review)

- Learn the process of administering a Quality FM style GMFM assessment through viewing of a GMFM video creation process (workshop ½ day #3)
- Acquire strategies/ideas for implementing the Quality FM in clinical and research practice (workshop ½ day #4)
- Review the next steps of self-training using the Quality FM video materials posted for exclusive use of course participants on the Holland Bloorview Outcomes website in preparation of Quality FM Criterion test (post-course)

**Pre-reading of background materials required** before first session (2 hours) and brief homework manual review/practical assignments (1 to 2 hours) between sessions. Attendance at all 4 sessions is needed to gain a full understanding of the Quality FM.

## The Quality Function Measure: reliability and discriminant validity of a new measure of quality of gross motor movement in ambulatory children with cerebral palsy

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### PUBLICATION DATA

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### ABBREVIATIONS

GMFM	Gross Motor Performance Measure
LoA	Limits of agreement
MDC	Minimal detectable change
QFM	Quality Function Measure

**AIM** Optimizing movement quality is a common rehabilitation goal for children with cerebral palsy (CP). The new Quality Function Measure (QFM) – a revision of the Gross Motor Performance Measure (GMFM) – evaluates five attributes: Alignment, Co-ordination, Dissociated movement, Stability, and Weight-shift, for the Gross Motor Function Measure (GMFM) Stand and Walk/Run/Jump items. This study evaluated the reliability and discriminant validity of the QFM.

**METHOD** Thirty-three children with CP (17 females, 16 males; mean age 8y 11mo, SD 3y 1mo; Gross Motor Function Classification System [GMFCS] levels I [*n*=17], II [*n*=7], III [*n*=9]) participated in reliability testing. Each did a GMFM Stand/Walk assessment, repeated 2 weeks later. Both GMFM assessments were videotaped. A physiotherapist assessor pair independently scored the QFM from an assigned child's GMFM video. GMFM data from 112 children. That is, (GMFCS I [*n*=38], II [*n*=27], III [*n*=47]) were used for discriminant validity evaluation.

**RESULTS** QFM mean scores varied from 45.0% (SD 27.2; Stability) to 56.2% (SD 27.5; Alignment). Reliability was excellent across all attributes: intraclass correlation coefficients (ICCs)  $\geq 0.97$  (95% confidence intervals [CI] 0.95–0.99), interrater ICCs  $\geq 0.89$  (95% CI 0.80–0.98), and test-retest ICCs  $\geq 0.90$  (95% CI 0.79–0.99). QFM discriminated qualitative attributes of motor function among GMFCS levels (maximum *p*<0.05).

**INTERPRETATION** The QFM is reliable and valid, making it possible to assess how well young people with CP move and what areas of function to target to enhance quality of motor control.

Impaired gross motor development and function are defining features of cerebral palsy (CP).<sup>1</sup> Interventions aim to optimize what the child can do (functional skills) and how

they do it (movement quality).<sup>2</sup> Both components are essential. Interventions that optimize movement quality may have missed important changes in this underlying component of motor skill.