

The Gross Motor Function Classification System (GMFCS) and Functional Mobility Scale (FMS)

In the Hugh Williamson Gait Laboratory and Orthopaedic Clinics at The Royal Children's Hospital, the GMFCS (Gross Motor Function Classification System) is routinely used to stratify our entire cerebral palsy patient population into five groups, using the appropriate descriptors for each age level, as described by Palisano et al.

Palisano RJ, Rosenbaum P, Walter S, Russell D, Wood E, Galuppi B. Dev Med Child Neurol. 2003;45:113–120.

We find GMFCS to be the ideal tool to stratify children, establish a long term motor prognosis and to provide us and the family with information regarding the likelihood of musculoskeletal problems such as hip displacement.

Soo B, Howard J, Boyd RN, Reid S, Lanigan A, Wolfe R, Reddihough D, Graham HK. Hip displacement in cerebral palsy: A population based study of incidence in relation to motor type, topographical distribution and gross motor function. Journal of Bone and Joint Surgery(Am) 2006;88:121–129.

The GMFCS is not an outcome measure, it is a classification system. It is the essential and ideal tool for communication about children with cerebral palsy between centres and within centres. For further information see the Can Child website: www.canchild.ca

The FMS (Functional Mobility Scale) was developed in the Hugh Williamson Gait Laboratory by Kerr Graham and Adrienne Harvey. It is a six level ordinal grading system which assigns grades for three different distances, according to the level of support required by children with cerebral palsy to move around in the environment i.e. "functional mobility".

The scale has been described in the Journal of Pediatric Orthopaedics:

Graham HK, Harvey A, Rodda J, Nattrass GR, Pirpiris M. The functional mobility scale (FMS) J Pediatr Orthop. 2004;24(5):514-520.

Following feedback from colleagues in Melbourne and from overseas, a second version is now available with minor modifications from our website.

The FMS was designed as an outcome measure and has been demonstrated to be responsive to change following such interventions as selective dorsal rhizotomy (SDR), intrathecal Baclofen pump (ITB) and Single Event Multilevel Surgery (SEMLS). For further information contact Professor Kerr Graham or Adrienne Harvey.

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