

Wellbeing, health and fitness of children with mobility impairments (Well Mi); Scoping and development of individually tailored child-centred 'keep-fit' interventions

(Short title: WELL Mi Study: Keep fit interventions for children with mobility impairments)

Abstract

Background: Children with mobility impairments (CMI) typically have low activity levels and are more likely to be obese and develop type 2 diabetes and cardiovascular diseases in later life. Consequently, wellbeing is reduced and demand on health and social care services increases. Developing interventions to target health and fitness would significantly improve wellbeing and independence, and imbed healthy life-styles for adulthood. **Aims/Objectives:** To assess the wellbeing, health and fitness of children with mobility impairments. The proposed study will establish children's perspectives and needs to develop individually tailored, child-centred and fun keep fit interventions to improve wellbeing, health and fitness of children with mobility impairments aged 6-18 years. **Methodology:** Three stages of work will be undertaken to develop child-centred keep-fit interventions:

Stage 1: A systematic review into the currently available 'keep fit' interventions for children with mobility impairments will be completed. Interviews will be used to identify important outcomes for children with mobility impairments and their families, develop assessment methods and explore preferences for exercise, e.g. motivation, location, duration, individual/group, music.

Stage 2: Baseline quality of life and wellbeing information will be gathered from children, and physiological data will be collected, including aerobic fitness, body composition and metabolism.

Stage 3: Individual/condition specific cases will be examined to develop fun child-centred activities to form a provisional intervention addressing children's needs identified in Stage 2 and their priorities and preferences identified in Stage 1. Further interviews/focus groups with children with mobility impairments, their parents and carers will evaluate and provide refinement to the intervention. **Prospective results:** The intervention will be in the form of an 'activity box' containing easily adaptable choices of fun 'keep-fit' activities including progressions, which can be tailored for specific children to take count of their individual abilities.

Conclusion: At completion a protocol for a pilot trial to evaluate the effectiveness and cost-effectiveness of the 'keep-fit' intervention will be produced.

Flow Chart of Stages of WELL Mi Study



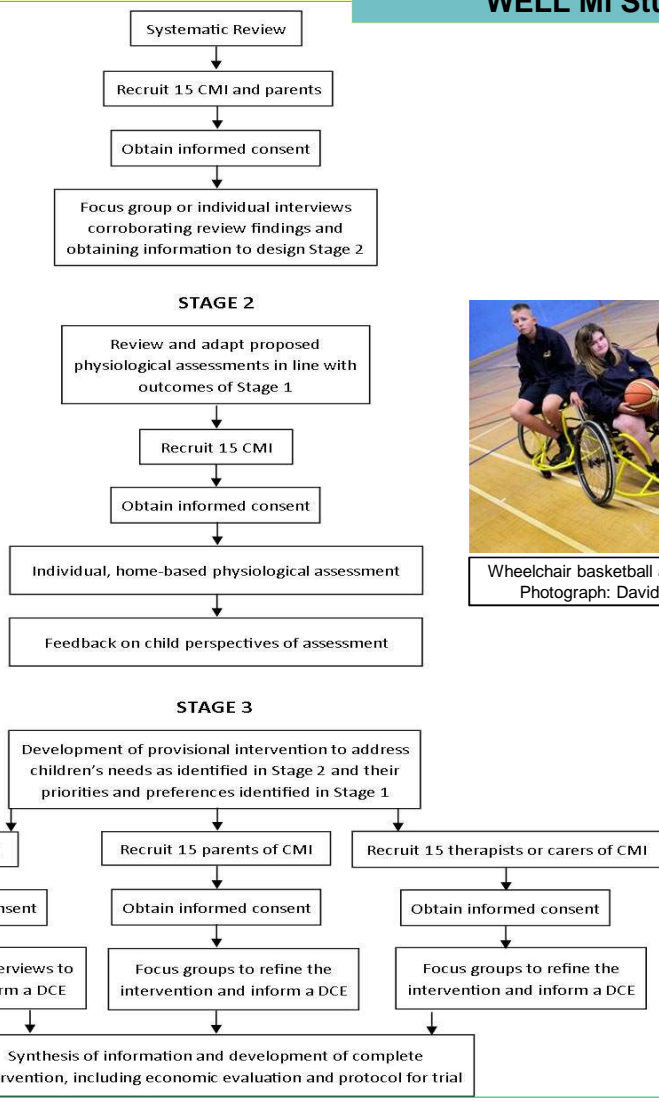
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Photo courtesy of Whizz Kidz



Wheelchair basketball at Ambergate sports college. Photograph: David Sillitoe for the Guardian



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