

Multimorbidity Risk Assessment and Prevention in Clinical Practice: Establishing and Testing a Core Outcome Set for Adolescents and Adults with Cerebral Palsy

¹Department of Pediatrics, McMaster University, Hamilton, Canada; ²CanChild, McMaster University, Hamilton, Canada; ³Rehabilitation Medicine, Erasmus University Medical Center, Rotterdam, The Netherlands; ⁴Rijndam Rehabilitation, Rotterdam, The Netherlands; ⁵Life Sciences, McMaster University, Hamilton, Canada

Background

- Adults with cerebral palsy (CP) have high estimates of multimorbidity, which is the presence of at least two chronic health conditions
- Multimorbidity in CP could be attributed to a number of modifiable behaviours, including physical inactivity, poor diet and inadequate sleep
- Many generic outcome measurement instruments (OMIs) and protocols specific to CP have been developed to assess multimorbidity risk development. However, consistent use of valid measurement tools across studies is lacking, making generalizability of study findings difficult to interpret

Purpose

- To describe the process of developing a core outcome set (COS) of OMIs for multimorbidity risk in adolescents and adults with CP using the Core Outcome Measurement in Effectiveness Trials (COMET) / COnsensus-based Standards for the selection of health Measurement Instruments (COSMIN) guidelines
- This work includes:
- Identifying what outcomes should be measured
- (2) Determining how to best measure these outcomes
- Measuring these outcomes in an international cohort of individuals with CP
- Reaching consensus among all relevant stakeholders

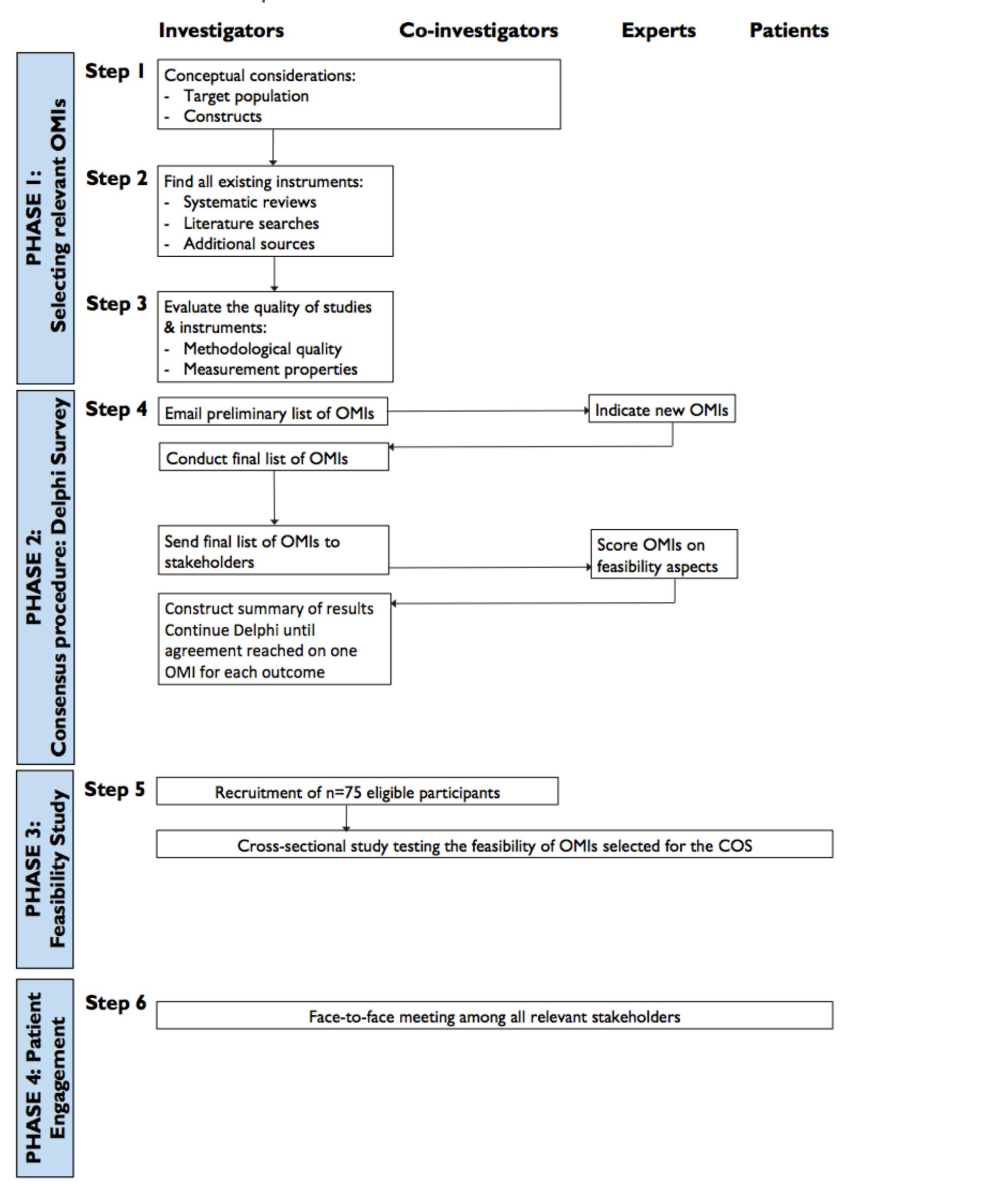
CanChild



Patrick McPhee, PhD^{1,2} Joyce Benner, MSc^{3,4} Suhani Darji, BSc⁵ Marij Roebroeck, PhD³ Jan Willem Gorter, MD, PhD^{1,2}

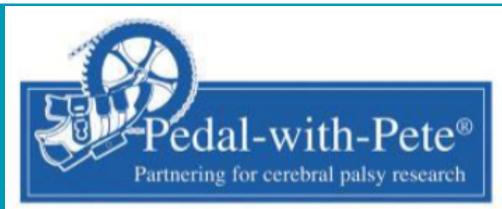
Description

- This study protocol is registered with the COMET Initiative (http://www.comet-initiative.org/studies/ details/1130) and followed guidelines from a collaboration between the COMET and COSMIN initiatives
- 6 steps that will occur over four phases



AACPDM

• The development and testing of a COS for multimorbidity risk in adolescents and adults with CP includes



Significance

This COS could understand, treat and prevent multimorbidity, while being utilized in clinical and research settings

This COS has the potential to generalize to other types of child-onset neurodevelopmental disabilities

Conducting a feasibility study of the COS on an international platform meets a major limitation in multimorbidity risk research in individuals with CP (i.e. studies of small sample sizes that are geographically isolated)

We aim to use this COS to develop a database that will allow for harmonization of data, enhancing our understanding of multimorbidity risk in this population

Future Directions

After completing all four phases, and provided that we are able to successfully agree on a final COS, we will apply for funding to conduct an intervention study incorporating modifiable behaviours (e.g. physical activity, sleep, and nutrition)

Acknowledgements

We acknowledge the scientific and financial support of the American Academy for Cerebral Palsy and Developmental Medicine and Pedal-with-Pete

First author contact information:

zam

Patrick McPhee, PhD Department of Pediatrics CanChild, Centre for Childhood Disability Research McMaster University E-mail: mcpheepg@mcmaster.ca

Erasmus MC

