



**eResearch: the open access repository of the
research output of Queen Margaret University, Edinburgh**

This is an author-formatted version of a poster published as:

Williamson, Julia and Bulley, Catherine and Coutts, Fiona and Macmillan, Fiona (2009) *Classifying Outcome Measures According to the International Classification of Functioning, Disability and Health: a Pilot Study*. In: Graduate School Conference, 25th November 2009, Queen Margaret University, Edinburgh.

Accessed from:

<http://eresearch.qmu.ac.uk/913/>

Repository Use Policy

The full-text may be used and/or reproduced, and given to third parties for personal research or study, educational or not-for-profit purposes providing that:

- The full-text is not changed in any way
- A full bibliographic reference is made
- A hyperlink is given to the original metadata page in eResearch

eResearch policies on access and re-use can be viewed on our Policies page:
<http://eresearch.qmu.ac.uk/policies.html>

**Copyright © and Moral Rights for this article are retained
by the individual authors and/or other copyright owners.**

<http://eresearch.qmu.ac.uk>



Classifying Outcome Measures According to the International Classification of Functioning, Disability and Health: a Pilot Study.

J Williamson, C Bulley, F. Coutts, F. MacMillan School of Health Sciences, Queen Margaret University, Edinburgh

Introduction

This poster will describe a process used to assess at which level of the World Health Organisation International Classification of Functioning, Disability and Health (WHO ICF) (WHO 2001) a selection of low back pain outcome tools measure.

The ICF describes several categories of impact, those on body systems, activity, participation in life roles as well as environmental and personal factors.

These categories can be used to relate an outcome measure to the level of the intervention. The results of a study may be compromised if the outcome measure does not correspond to the level of intervention. For example, a treatment designed to reduce pain should be measured by a tool that measures at a body systems level while an intervention designed to improve return to work needs to measure at the participation level.

In order to conduct a trial examining the effects of rehabilitation strategies after lumbar surgery it has been necessary to examine the qualities of commonly used low back pain outcome measures in light of the ICF.

Confusion exists as to whether the entities of activity and participation are separate (Dahl 2002). Several attempts have been made to distinguish between the two but as yet, no consensus exists (Granlund 2004). It was therefore necessary to define activity and participation and to validate this with a group of qualified health practitioners.

Methods Part 1

Definitions of body systems, activity and participation were written:

Body Systems

Measures of physiological variables such as joint range of motion, pain, muscle strength, numbness, straight leg raise, stiffness, bending, twisting, and balance.

Activity

Was defined as a de-contextualised action. For example, "I cannot drive because of my back" was taken as an activity because the context of the driving was not described in the questionnaire. Also "carry 2 bags of shopping" was classified as an activity whereas "shopping" was classified as participation.

Participation

Was defined as a contextualised action (Granlund 2004). For example "I cannot drive to work because of my back" was taken as participation because the driving is contextualised within a role (employee). It included: walking for pleasure, shopping, socialising indoors or outdoors,

Each individual question in the outcome measures was considered by the researcher and labelled as either; body systems (B) Activity (A) or Participation (P). The outcome measures divided as follows.

Purely Activity

- No outcome measures were purely activity measures

Predominantly Activity

- Low Back Outcome Score
- Quebec Functional Status Questionnaire
- Roland-Morris Disability Questionnaire
- Oswestry Low Back Pain Disability Score

Some questions at participation level

- Functional Rating Index (2 questions)
- Low Back Outcome score (2 questions)
- Perception of disability score (3 questions)
- Resumption of Activities of Daily Living Score (4 questions)
- Pain disability index (5 questions)

Methods Part 2

Those outcome measures with some questions at participation level were taken forward to the next stage of the analysis. 13 qualified healthcare practitioners were asked via a questionnaire to re-rate each individual question according to the definitions of body systems, activity and participation created by the author above.

Results – a work in progress.

There was much more agreement between participants and with the researcher when considering items at the body systems level such as "sleep" and "pain" than activity or participation items.

Items such as "walking" and "mild or general exercise" achieved a good consensus and were rated as an activity by both the researcher and the healthcare practitioners.

Other than "socialising in the house" and "socialising outside the house" there was little consensus when rating items at the participation level. It would seem that consensus with the researcher and between healthcare practitioners is difficult to achieve.

The ultimate aim of this study is to pick outcome measures that will measure changes in participation as a result of an intervention delivered to patients undergoing spinal surgery. A similar study to this pilot is to be undertaken with a larger group of healthcare practitioners and refined definitions before this choice can be made.

References

- Dahl TH 2002, International classification of functioning disability and health: an introduction and discussion of its potential impact on rehabilitation services and research. *Journal of Rehabilitation Medicine*. 34; 201-204
- Granlund M, Eriksson L, & Ylven R 2004. Utility of international classification of functioning, disability and health's participation dimension in assigning ICF codes to items from extant rating instruments. *Journal of Rehabilitation medicine*, 36, 130-137
- World Health Organisation (2001) International Classification of Functioning, Disability and Health, Geneva.