Development of a Core Outcome Set for Work Participation

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INTRODUCTION

PhD research
“Development of a core outcome set for work participation” at the Coronel Institute of Occupational health.
TODAY’S TOPICS

• What is the problem?
• For whom is it a problem?
• A look behind the scenes
• How do core outcome sets help?
• How are core outcome sets made?
• Ongoing work for development of COS for Work
• Research within insurance medicine and occupational health
• Many definitions and types of measurements
• Difficulties to draw conclusions
• How can we reduce complexity?
• What is important to measure (for patients, employers, social security)?

• How can we help increase (work) participation?
DESIGN OF A RANDOMIZED CONTROLLED TRIAL (RCT)

Effectiveness of a Blended Web-Based Intervention or Return to Work for Sick-Listed Employees With Common Mental Disorders: Results of a Cluster Randomized Controlled Trial

From: Volker D et al. J Med Internet Res. 2015
DESIGN OF A SYSTEMATIC REVIEW

What authors DO

Identify the issue and determine the question

Write a plan for the review (protocol)

Search for studies

Sift and select studies

Extract data from the studies

Assess the quality of the studies

Combine outcomes (meta-analysis)

Discuss + conclude

Systematic Review

Dissemination
WHY IS IT HARD TO COMPARE RESULTS?

Big variety in outcomes e.g. of shoulder disorders:

• Pain
• Range of movement
• Physical functioning
• Sleep functioning
• Strength
• Radiographic results
• Dislocation
• Fracture

Measured by 319 different instruments.

WHY IS IT HARD TO COMPARE RESULTS?

Big variety e.g. in work outcomes:

- Employment status
- Return to work
- Sick leave/absenteeism
- Functional status
- Productivity
- Work functioning
- Health related quality of work-life
WHY IS IT HARD TO COMPARE RESULTS?

Heterogeneous definitions for return to work:

- Return to full-time, part-time work
- 100%, 75%, 50% return to work
  - Return to own work
  - Return to adjusted work
- 1 day, 1 week, 1 month, 3 months without any sick leave
- Workers with no RTW
- End of social transfer (financial) receipt
How is information on outcomes collected?

How data on return to work can be obtained:

- Social security registers
  - Telephone calls
  - Clinicians reports
  - Patient’s self-report
- Validated questionnaires
- Self-developed questionnaires
  - ....
HOW IS INFORMATION ON OUTCOMES COLLECTED?

Selection of questionnaires used to measure productivity:

1. The Work Productivity and Activity Impairment (WPAI)
2. Social and Occupational Functioning Assessment Scale (SOFAS)
3. The Work Ability Index (WAI)
4. …
WHAT IS A CORE OUTCOME SET AND HOW DO THEY HELP?

"A core outcome set (COS) is an agreed standardized set of outcomes that should be measured and reported, as a minimum, in all clinical trials in specific areas of health or health care."
**HOW ARE CORE OUTCOME SETS MADE?**

Agreement on ‘what to measure’

Agreement on “how to measure”

Standardization of outcome measurement

Combining, comparing studies on a large scale.

Make better informed conclusions about what works best.
ADVANTAGES OF CORE OUTCOME SETS

✓ Much more likely to measure appropriate outcomes
✓ Major reduction in selective reporting
✓ Contribution for systematic reviews, policy/guideline development
HOW ARE CORE OUTCOME SETS MADE?

Example: Core outcome set for shoulder disorders

1. Establish the extent of the problem:
   - Analysis of 409 studies: 32 outcome domains, 319 instruments

2. Several rounds of international consensus: shoulder trial experts, clinicians and patients

HOW ARE CORE OUTCOME SETS MADE?

- Cognitive dysfunction
- Participation (recreation/work)
- Sleep
- Emotional well-being
- Condition specific pathophysiological manifestations
- Pain
- Physical function
- Global shoulder
- Adverse events including death

Outer circle: Research
Middle circle: Important, but optional
Inner circle: Compulsory

COS FOR WORK COLLABORATIONS

• In collaboration with Cochrane Insurance Medicine, Cochrane Work and UK Centre for Musculoskeletal Health and Work
  • Following the guidelines of COMET initiative
AIM OF COS FOR WORK

• A core outcome set for work participation for any health problem
• For authors of effectiveness studies and systematic reviews
• For workers with a health problem or people aiming to gain paid work
  • For vocational and clinical/medical studies
ONGOING WORK ON COS FOR WORK

1. A framework for work participation outcomes

- How can many different types of outcomes be grouped?

- A conceptual classification which will be used as a frame of reference for further development of the core outcome set.
ONGOING WORK ON COS FOR WORK

2. A systematic review on how work outcomes are measured in medical and vocational RCTs

- How are work participation currently measured?

- Analysis of used work participation outcomes and measurement methods on global scale and across disciplines.
ONGOING WORK ON COS FOR WORK

2. A systematic review on how work outcomes are measured in medical and vocational RCTs

**Inclusion criteria:** RCTs, economic evaluations, vocational or medical aim, any health problem, published between 2014-2019

**Process:** 20,028 RCTs found, 10,022 abstracts screened, 723 full texts screened, 286 used for analysis.

**Outcomes categorization:**

1. Employment status
2. Absence from paid work
3. At work productivity loss
4. Employability
ONGOING WORK ON COS FOR WORK

3. A survey amongst authors or RCTs and Cochrane systematic reviewers

- How do researchers decide which outcomes to use?
- What are their experiences with various measurement methods?
- Which barriers and facilitators do they see for the development and implementation of COS for Work?
THANK YOU FOR YOUR ATTENTION

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www.cosforwork.org
COS UPTAKE

- Assessment of full uptake of Rheumatoid Arthritis core outcome sets from data in ClinicalTrials.gov
- Uptake may be influenced by introduction of regulatory guidance

Kirkham et al, 2017