ICF Core Set for Vocational Rehabilitation: Leading the Way to Disability Evaluation

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... for a man partially incapacitated would probably be unable to find, or might experience much difficulty in finding employment in the open market before his restoration to full working capacity.

John Collie, MD (1916)
Work Disability

- Direct cost
- Indirect cost up to 80%
- Quality of life and functioning
Vocational Rehabilitation

- A multi-professional evidence-based approach that is provided in different settings, services, and activities to working age individuals with health-related impairments, limitations, or restrictions with work functioning, and whose primary aim is to optimize work participation.

Vocational Rehabilitation

- Goal: Return to Work (RTW) and sustain RTW
- New work
Vocational Rehabilitation

- Complex
- Multifactorial
- Multidimensional
- Multi-stakeholder

Where do I start?
Work Disability Model (Feuerstein 1991)

Sherbrooke Model (Loisel 1994)
**Work Disability Model (Loisel 2005)**

**RTW Model (Young 2005)**
ICF

- International Classification of Functioning, Disability and Health
- World Health Organization 2001
- Conceptual framework and classification system
- Impact of health condition on functioning (disability)
Why integrate ICF and Work?

- Work is universal!
- Biopsychosocial perspective
- Biopsychosocioeconomic - emerging!
- Comprehensive classification system

Escorpizo et al. 2011
ICF Application I

- ICF Core Set for Vocational Rehabilitation
- 90 ICF categories (comprehensive version)
- 13 ICF categories (brief version)

Finger et al. 2012

ICF Core Set for Vocational Rehabilitation

- d155 Acquiring skills
- d240 Handling stress and other psychological demands
- d720 Complex interpersonal interactions
- d845 Acquiring, keeping and terminating a job
- d850 Remunerative employment
- d855 Non-remunerative employment
ICF Core Set for Vocational Rehabilitation

- e310 Immediate family
- e330 People in positions of authority
- e580 Health services, system and policies
- e590 Labour and employment services, systems and policies

ICF Core Set for Vocational Rehabilitation

- b130 Energy and drive functions
- b164 Higher-level cognitive functions
- b455 Exercise tolerance functions
ICF Application II

- Questionnaires
- Instruments
- Tools
- Measures

- ICF
- ICF Core Sets

- Item 1... b280
- Item 2... d850
- Item 3... d230
- Item 4... e330

ICF Application III

- Developing ICF-based questionnaire
- ICF Core Set for Vocational Rehabilitation as an example
WORQ
Work Rehabilitation Questionnaire

- Generic patient-reported instrument
- With clinician-reported supplement
- Has two parts: Part I Introduction and Part II Functioning Section
- Available in English and German with multiple interests for translation
- Recall period 7 days
- Preliminary psychometrics
- Free! http://myworq.org

Finger et al. 2013; Escorpizo et al. 2013

WORQ

Selection of ICF categories:
1. ICF Core Set Vocational Rehab
2. Rasch Analysis
3. Clinical considerations

Phrasing of questions for each ICF category

Cross-cultural adaptation from English to German
### WORQ

<table>
<thead>
<tr>
<th>Validity</th>
<th>Reliability</th>
<th>Feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI II = 0.51</td>
<td>Test-retest = 0.79</td>
<td>Time = 25.6 min</td>
</tr>
<tr>
<td>SF-36 Emotion = -0.51</td>
<td>Cronbach's = 0.89</td>
<td>89-92% had no</td>
</tr>
<tr>
<td></td>
<td></td>
<td>difficulty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>understanding</td>
</tr>
</tbody>
</table>

- Continue data collection
- Predictive validity with RTW
- Econometrics translation
- New construct validation
- Translation into other languages!
ICF Core Set for Social Security

- Continuum of disability evaluation
- Mapping exercise with the ICF Core Set for Vocational Rehabilitation
- Many overlaps!

Brage et al. 2008

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ICF Core Set for Social Security

<table>
<thead>
<tr>
<th>ICF Category</th>
<th>Assessment Type</th>
<th>Finding</th>
<th>Equivalent ICF Qualifier</th>
<th>Goal</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>b28013 Back pain</td>
<td>0-10 Numeric Rating Scale</td>
<td>8/10</td>
<td>3</td>
<td>2/10 (ICF = 1)</td>
<td>Lumbar stabilization</td>
</tr>
</tbody>
</table>

Escorpizo & Stucki, 2013
### ICF Core Set for Social Security

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<tr>
<td>b455 Exercise tolerance</td>
<td>Treadmill test</td>
<td>Able to tolerate 5 mins, 5% grade, 1.25 mph</td>
<td>2</td>
<td>No symptoms (ICF = 0)</td>
<td>Treadmill protocol</td>
</tr>
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<tr>
<td>d430 Lifting</td>
<td>Functional Capacity Evaluation</td>
<td>Unable</td>
<td>4</td>
<td>Able (ICF = 0)</td>
<td>Graduated lifting activities</td>
</tr>
</tbody>
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<tbody>
<tr>
<td>d850 Remunerative employment</td>
<td>No. of work hours</td>
<td>Part-time (50%)</td>
<td>2</td>
<td>Full time (ICF = 0)</td>
<td>Functional work exercises</td>
</tr>
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<td>e330 People in positions of authority</td>
<td>Report from patient and HCP</td>
<td>Has full support</td>
<td>+4</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Summary

- Work as a major life area
- Work disability is a great burden!
- Vocational rehabilitation for RTW and sustain RTW
- ICF as a unifying framework in disability evaluation:
  - Core Set for Vocational Rehabilitation
  - Core Set for Social Security Evaluation

Thank you!

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