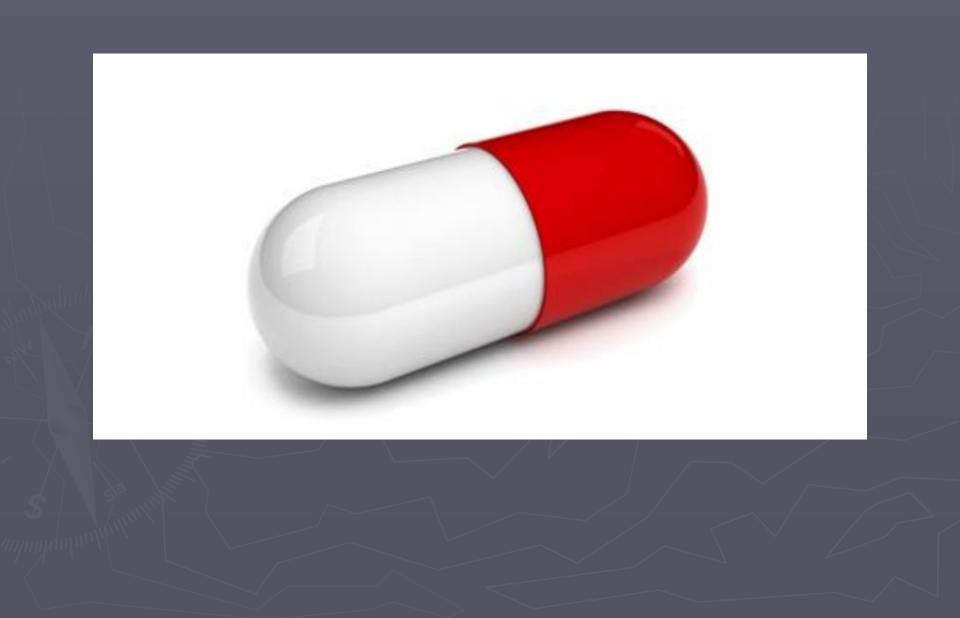
Improving work participation interventions: Doing MORE of the SAME or something DIFFERENT?

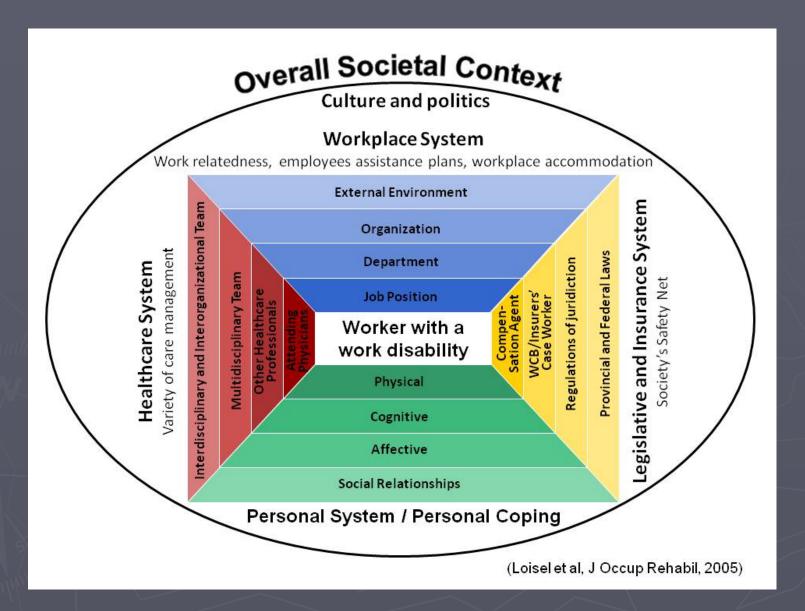
Prof. Ute Bültmann

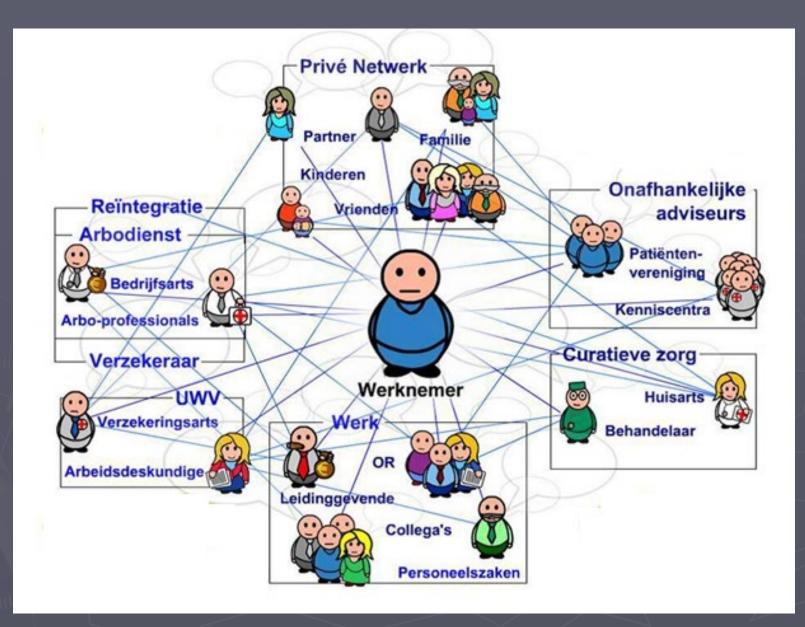
Department of Public Health, Community and Occupational Medicine, University of Groningen, University Medical Center Groningen Amsterdam Satellite of Cochrane Work, Sept 6<sup>th</sup>, 2019

# Improving work participation interventions:

# Observations, reflections and recommendations in three acts

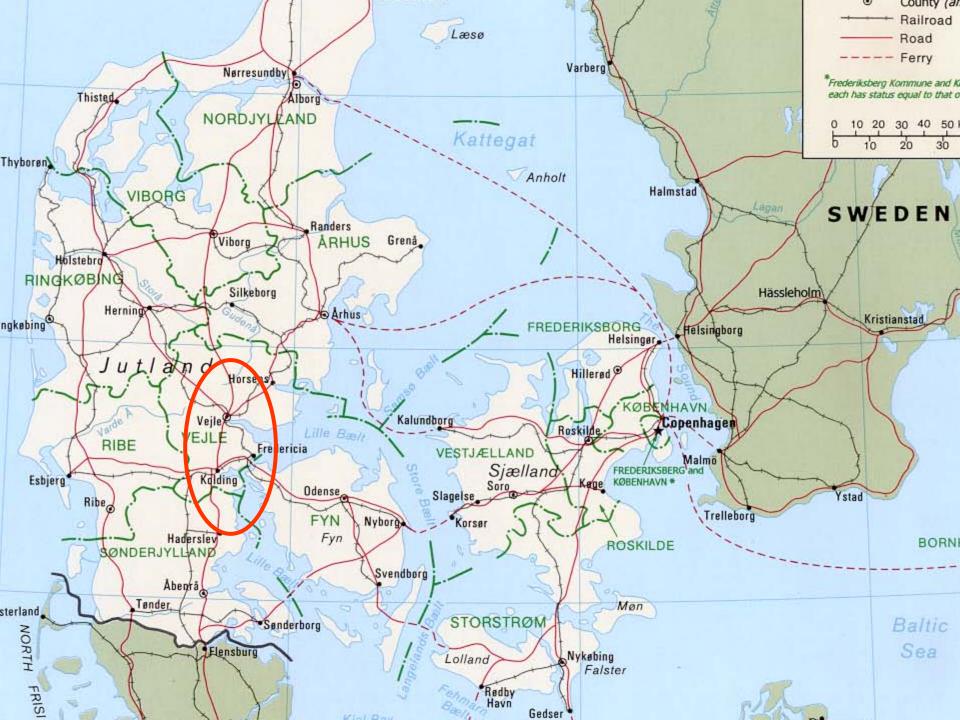






Sterk naar werk - adapted

## Act 1: More of the same Context matters



## First coordinated RTW intervention in Denmark

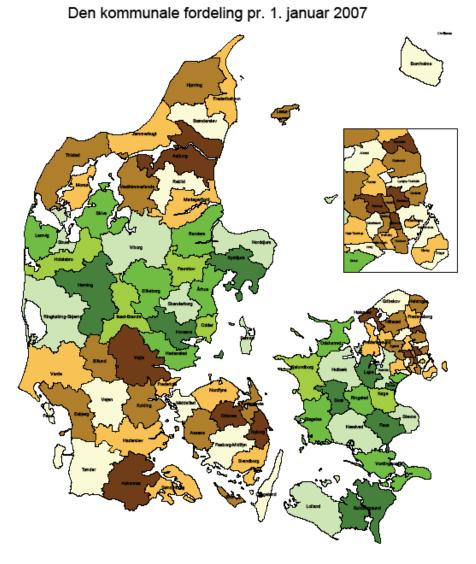


<u>Journal of Occupational Rehabilitation</u> March 2009, Volume 19, <u>Issue 1</u>, pp 81–93 | <u>Cite as</u>

Coordinated and Tailored Work Rehabilitation: A Randomized Controlled Trial with Economic Evaluation Undertaken with Workers on Sick Leave Due to Musculoskeletal Disorders

Authors and affiliations

Ute Bültmann 🖂 , David Sherson, Jens Olsen, Carl Lysbeck Hansen, Thomas Lund, Jørgen Kilsgaard



Anm.: Grænsejusteringer, som følge af lokale folkeafstemninger, er indikeret på kortet (men ikke eksakte)

#### Return to Work Coordination Programmes for Work Disability: A Meta-Analysis of Randomised Controlled Trials

#### Stefan Schandelmaier<sup>1</sup>\*, Shanil Ebrahim<sup>2</sup>, Susan C. A. Burkhardt<sup>1</sup>, Wout E. L. de Boer<sup>1</sup>, Thomas Zumbrunn<sup>3</sup>, Gordon H. Guyatt<sup>2</sup>, Jason W. Busse<sup>2,4</sup>, Regina Kunz<sup>1</sup>

1 Academy of Swiss insurance Medicine, University Hospital Basel, Basel, Switzerland, 2 Department of Clinical Epidemiology and Biostatistics, McMaster University, Hamilton, Ontario, Canada, 3 Clinical Trial Unit, University Hospital Basel, Basel, Switzerland, 4 Department of Anesthesia, McMaster University, Hamilton, Ontario, Canada

#### Abstract

**Background:** The dramatic rise in chronically ill patients on permanent disability benefits threatens the sustainability of social security in high-income countries. Social insurance organizations have started to invest in promising, but costly return to work (RTW) coordination programmes. The benefit, however, remains uncertain. We conducted a systematic review to determine the long-term effectiveness of RTW coordination compared to usual practice in patients at risk for long-term disability.

**Methods and Findings:** Eligible trials enrolled employees on work absence for at least 4 weeks and randomly assigned them to RTW coordination or to usual practice. We searched 5 databases (to April 2, 2012). Two investigators performed standardised eligibility assessment, study appraisal and data extraction independently and in duplicate. The GRADE framework guided our assessment of confidence in the meta-analytic estimates. We identified 9 trials from 7 countries, 8 focusing on musculoskeletal, and 1 on mentai complaints. Most trials followed participants for 12 months or less. No trial assessed permanent disability. Moderate quality evidence suggests a benefit of RTW coordination on proportion at work at end of follow-up (risk ratio = 1.08, 95% Ci = 1.03 to 1.13; absolute effect = 5 in 100 additional individuals returning to work, 95% CI = 2 to 8), overall function (mean difference [MD] on a 0 to 100 scale = 5.2, 95% CI = 2.4 to 8.0; minimai important difference [MID] = 10), physical function (MD = 5.3, 95% CI = 1.4 to 9.1; MID = 8.4), mental function (MD = 3.1, 95% CI = 0.7 to 5.6; MID = 7.3) and pain (MD = 6.1, 95% CI = 3.1 to 9.2; MID = 10).

Conclusions: Moderate quality evidence suggests that RTW coordination results in small relative, but likely important absolute benefits in the likelihood of disabled or sick-listed patients returning to work, and associated small improvements in function and pain. Future research should explore whether the limited effects persist, and whether the programmes are cost effective in the long term.

### **RTW** coordination

#### 9 studies from 7 countries

musculoskeletal problems (8), mental health (1)

#### RTW coordination

- small relative, but likely important absolute benefits regarding (time to) RTW
- small improvements in function and pain

Schandelmaier et al., PLoS ONE, 2012, 7(11): e49760

| 0                                 | RTW coord.        | Usual practice    | MI-1-14 (0/ ) | E#   |  |
|-----------------------------------|-------------------|-------------------|---------------|--|--|
| Study                             | (Events) Patients | (Events) Patients | weight (%)    | Effect (95% CI)<br>Relative risk   | Favours usual practice <b>Favours</b> RTW coord. |
| Proportion at work at en<br>Davey | (3) 33            | (2) 17            | 0.1           | 0.77 (0.14 to 4.19)  |  |
| Lindh                             | (114) 238         | (116) 226         | 7.0           | 0.93 (0.78 to 1.12)  |  |
| Van der Feltz-Cornelis            | (22) 26           | (21) 25           | 4.2           | 1.01 (0.79 to 1.28)  |  |
| Purdon                            | (326) 571         | (244) 458         | 19.1          | 1.07 (0.96 to 1.20)  |  |
| Donceel                           | (320) 371         | (299) 365         | 66.1          | 1.10 (1.03 to 1.16)  |  |
| Bültmann                          |                   |                   | 3.5           | 1.25 (0.97 to 1.62)  |  |
| Total ( $I^2 = 0.0\%$ )           | (51) 66           | (29) 47           | 100.0         | and the second sec |  |
| 10tar(1 = 0.0%)                   | (826) 1279        | (711) 1138        | 100.0         | 1.08 (1.03 to 1.13)  |  |
|                                   |                   |                   |               |  | 0.5 1 2  |
| Time until return to work         | < .               |                   |               | Hazard ratio   |  |
| Feuerstein                        | 59                | 64                | 14.7          | 1.11 (0.75 to 1.62)  |  |
| Rossignol                         | 54                | 56                | 12.0          | 1.16 (0.76 to 1.79)  |  |
| Donceel                           | 345               | 365               | 54.7          | 1.31 (1.11 to 1.53)  | _∎_  |
| Van der Feltz-Cornelis            | 25                | 24                | 6.4           | 1.70 (0.93 to 3.11)  |  |
| Lambeek                           | 63                | 61                | 12.3          | 1.90 (1.24 to 2.90)  |  |
| Total $(I^2 = 13.6\%)$            | 546               | 570               | 100.0         | 1.34 (1.14 to 1.56)  |  |
| Proportion ever returned          | d to work         |                   |               | Relative risk  | 0.5 1 2  |
| Davey                             | (3) 33            | (2) 17            | 0.1           | 0.77 (0.14 to 4.19)  | ← · · · · · · · · · · · · · · · · · · ·          |
| Lindh                             | (147) 238         | (154) 226         | 15.5          | 0.91 (0.79 to 1.04)  |  |
| Van der Feltz-Cornelis            | (22) 26           | (21) 25           | 5.9           | 1.01 (0.79 to 1.28)  |  |
| Rossignol                         | (42) 54           | (41) 56           | 7.1           | 1.06 (0.86 to 1.31)  | · · · · · · · · · · · · · · · · · · ·            |
| Purdon                            | (355) 545         | (272) 458         | 24.0          | 1.10 (0.99 to 1.21)  |  |
| Donceel                           | (310) 345         | (299) 365         | 39.5          | 1.10 (1.03 to 1.16)  |  |
| Lambeek                           | (50) 65           | (44) 69           | 6.6           | 1.21 (0.97 to 1.51)  |  |
| Feuerstein                        | (20) 59           | (17) 64           | 1.2           | 1.28 (0.74 to 2.19)  |  |
| Total (1 <sup>2</sup> = 20.5%)    | (949) 1365        | (850) 1280        | 100.0         | 1.07 (1.00 to 1.13)  | ↓ ◆  |
|                                   |                   |                   |               |  | 0.5 1 2  |
| Sickness absence days             |                   |                   |               | Mean difference  |  |
|                                   | 63                | 61                | 61.8          | 29.9 (5.0 to 54.9)   |  |
| Lambeek                           |                   |                   |               | 10.0 (11.0 1- 77.0)  |  |
| Lambeek<br>Bültmann               | 66                | 47                | 38.2          | 46.0 (14.3 to 77.8)  |  |
|                                   | 66<br>129         | 47<br>108         | 38.2          | 46.0 (14.3 to 77.8)<br>36.1 (16.5 to 55.7)   |  |
| Bültmann                          |                   |                   |               |  | -50 0 50   |

Figure 2. RTW-outcomes. RTW coord. = return to work coordination. doi:10.1371/journal.pone.0049760.g002



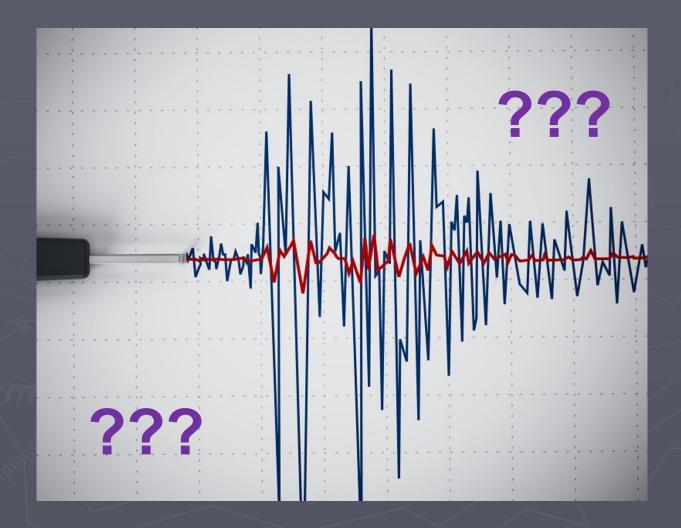
**Cochrane** Database of Systematic Reviews

Return-to-work coordination programmes for improving return to work in workers on sick leave (Review)

Vogel N, Schandelmaier S, Zumbrunn T, Ebrahim S, de Boer WEL, Busse JW, Kunz R

Cochrane Collaboration, 2017

## 2017: NO BENEFITS 14/9



## Act 2: More of the same Implementation matters



**Cochrane** Database of Systematic Reviews

## Interventions to facilitate return to work in adults with adjustment disorders (Review)

Arends I, Bruinvels DJ, Rebergen DS, Nieuwenhuijsen K, Madan I, Neumeyer-Gromen A, Bültmann U, Verbeek JH

Cochrane Collaboration, 2012



**Cochrane** Database of Systematic Reviews

#### Workplace interventions to prevent work disability in workers on sick leave (Review)

van Vilsteren M, van Oostrom SH, de Vet HCW, Franche RL, Boot CRL, Anema JR

Cochrane Collaboration, 2015

#### **Effect and Process**

Social Science & Medicine 100 (2014) 123-132



Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

#### Process evaluation of a problem solving intervention to prevent recurrent sickness absence in workers with common mental disorders



SOCIAL SCIENCE

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<sup>b</sup> National Research Centre for the Working Environment, Lersø Parkallé 105, DK-2100 Copenhagen, Denmark

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### Process: Participant's response

|   | Pre | ocess components                        | SHARP            | CAU              | OR or MD            |
|---|-----|---|------------------|------------------|---------------------|
| И |     |   | ( <i>n</i> = 67) | ( <i>n</i> = 64) | (95% CI)            |
|   | Re  | ach                                     |                  |                  |                     |
|   |     | 0-1 consultations with OP               | 11 (16)          | 24 (38)          | reference           |
|   |     | ≥2 consultations with OP                | 56 (84)          | 39 (61)          | 3.2 (1.2 – 8.8)     |
|   |     | 0 consultations with supervisor         | 4 (6)            | 12 (19)          | reference           |
|   |     | ≥1 consultations with supervisor        | 63 (94)          | 52 (81)          | 3.6 (1.1 – 12.0)    |
|   | Do  | se delivered                            |                  |                  |                     |
|   |     | Assignments received from OP            | 49 (73)          | 5 (8)            | 58.6 (14.7 – 228.6) |
|   |     | OP stimulated being involved, mean (SD) | 3.9 (1.2)        | 3.5 (1.4)        | 0.6(0.1-1.2)        |
|   |     | OP stimulated making own decisions,     | 3.8 (1.1)        | 3.6 (1.3)        | 0.2(-0.3-0.6)       |
|   |     | mean (SD)                               |                  |                  |                     |
|   | Do  | se received                             |                  |                  |                     |
|   |     | Assignments rhade                       | 47 (70)          | 5 (8)            | 33.8 (10.4 – 109.5) |
|   |     | Topics discussed related to RTW         |                  |                  |                     |
|   |     | Problems at work                        | 56 (84)          | 40 (63)          | 2.9 (1.3 – 6.6)     |
|   |     | Possible opportunities at work          | 33 (49)          | 17 (27)          | 3.1 (1.1 – 9.2)     |
|   |     | Solutions for problems                  | 39 (58)          | 22 (34)          | 2.6 (1.2 – 5.4)     |
|   |     | How to ealize opportunities             | 30 (45)          | 23 (36)          | 1.4 (0.6 - 3.0)     |
|   |     | Who can help                            | 37 (55)          | 14 (22)          | 4.3 (2.0 - 9.5)     |
|   |     | How to make an action plan              | 17 (25)          | 16 (25)          | 1.0 (0.5 – 2.2)     |
|   |     | Evaluation of RTW process               | 31 (46)          | 35 (55)          | 0.63 (0.3 – 1.4)    |
|   | Fic | lelity OP                               |                  |                  |                     |
|   |     | ≥2 consultations with OP and first      | 42(63)           | n.a.             |                     |
|   |     | assignment delivered by OP              |                  |                  |                     |
|   | Fic | lelity parti <mark>c</mark> ipant       |                  |                  |                     |
|   |     | ≥2 consultations with OP and first      | 43 (64)          | n.a.             |                     |
|   |     | assignment completed by participant     |                  |                  |                     |
|   |     |   |                  |                  |                     |

N (%) presented unless mentioned otherwise

### Process: Occupational physicians

|   |  | SHARP            | CAU              | OR or MD           |
|---|--|------------------|------------------|--------------------|
| / | Process Components                       | ( <i>n</i> = 48) | ( <i>n</i> = 52) | (95% CI)           |
|   | Reach participant                        |                  |                  |                    |
|   | 0-1 consultations with participant       | 2 (4)            | 17 (33)          | reference          |
|   | ≥2 more consultations with participant   | 46 (96)          | 35 (67)          | 15.5 (1.7 – 141.9) |
|   | Dose delivered                           |                  |                  |                    |
|   | Assignments given to participant         | 48 (100)         | 15 (29)          |                    |
|   | Stimulated participant to be involved    | 4.2 (0.6)        | 3.9 (1.0)        | 0.4 (-0.1 - 1.0)   |
|   | Stimulated participant to make own       | 4.3 (0.6)        | 4.2 (0.8)        | 0.0 (-0.3 – 0.4)   |
|   | decisions                                |                  |                  |                    |
|   | Dose received                            |                  |                  |                    |
|   | Assignments nade by participant          | 43 (90)          | 11 (21)          |                    |
|   | Fidelity OP                              |                  |                  |                    |
|   | ≥2 consultations with OP and first       | 46 (96)          | n.a.             |                    |
|   | assignment celivered by OP               |                  |                  |                    |
|   | Fidelity participant                     |                  |                  |                    |
|   | $\geq$ 2 consultations with OP and first | 38 (79)          | n.a.             |                    |
|   | assignment completed by participant      |                  |                  |                    |
|   |  |                  |                  |                    |

N(%) presented unless mentioned otherwise

Arends et al., 2014

#### **O**riginal article

Scand J Work Environ Health. 2012;38(2):120–133. doi:10.5271/sjweh.3272

The Danish national return-to-work program aims, content, and design of the process and effect evaluation

by Birgit Aust, DrPH,<sup>1</sup> Trine Helverskov, MSc,<sup>1</sup> Mai Britt D Nielsen, PhD,<sup>1</sup> Jakob Bue Bjorner, PhD,<sup>1, 2</sup> Reiner Rugulies, PhD,<sup>1, 2, 9</sup> Karina Nielsen, PhD,<sup>1</sup> Ole H Sørensen, PhD,<sup>1</sup> Gry Grundtvig, MSc,<sup>1</sup> Malene F Andersen, MSc,

MSc,<sup>1</sup> Irene Ana Original article

Ole S Mortenser Ute Bültmann, FScand J Work Environ Health. 2015:41(6):529–541. doi:10.5271/sjweh.3528

Implementation of the Danish return-to-work program: process evaluation of a trial in 21 Danish municipalities

by Birgit Aust, PhD,<sup>1</sup> Maj Britt D Nielsen, PhD,<sup>2</sup> Gry Grundtvig, MSc,<sup>2</sup> Helle L Buchardt, MPH,<sup>1</sup> Linnea Ferm, MSc,<sup>3</sup> Irene Andersen, MSc,<sup>4</sup> Trine L Lund, MSc,<sup>5</sup> Martin Ohmann Claudio Jelle, MSSc,<sup>6</sup> Malene F Andersen, PhD,<sup>1</sup> Jørgen V Hansen, PhD,<sup>1</sup> Torill Tverborgvik, PhD,<sup>7</sup> Trine Helverskov, MSc,<sup>8</sup> Jakob Bue Bjorner, PhD,<sup>1, 10, 11</sup> Reiner Rugulies, PhD,<sup>1, 9, 11</sup> Palle Ørbæk, DrMedSc,<sup>12</sup> Glen Winzor, MSc,<sup>1</sup> Ute Bültmann, PhD,<sup>13</sup> Otto M Poulsen, DrVetSc<sup>1</sup>

| Establishment of<br>multidisciplinary RTW-<br>teams within the<br>municipalities | -    | Increased accessibility of the multidisciplinary RTW-teams   | 7      |    | Faster and broader<br>workability<br>assessments                                   |          | Increased<br>capacity to<br>RTW            |   |  |
|--|------|--|--------|----|--|----------|--|---|--|
| Introduction of a<br>standardised<br>workability assessment                      | -    | Increased skills for conducting<br>broad standardized and/or<br>multidisciplinary workability<br>assessments               | -      |    | Improved quality of<br>workability<br>assessments and<br>RTW-plans                 | <b>→</b> | Increased —<br>knowledge<br>and skills to  | * | Faster and more<br>sustainable RTW<br>Improved |
| tool and<br>multidisciplinary case<br>management<br>procedures                   | •    | Increased communication and<br>cooperation skills for<br>multidisciplinary teamwork  |        | •  | Faster initiation of tailored RTW-activities                                       |          | manage<br>health and<br>work<br>disability |   | workability<br>Improved<br>health              |
| Training course for  | •    | Increased communication and<br>cooperation skills for cooperation<br>with workplaces and sick-listed<br>persons            |        |    | Improved<br>accordance<br>between RTW-<br>plans and activities<br>and the needs of |          |  |   | Î  |
| RTW-teams  | •    | Increased knowledge about bio-<br>psycho-social approach to health<br>and RTW, including barriers and<br>resources for RTW |        |    | the individuals<br>More frequent and<br>better coordination<br>between RTW-team    |          |  |   |  |
|  | •    | Increased knowledge and skills for<br>planning tailored RTW-activities   |        |    | members  |          |  |   |  |
| Core organizational<br>intervention elements                                     |      | Expected<br>organizational changes   |        | or | Expected<br>ganizational outcomes  |          | Expected<br>individual changes             | 5 | Expected<br>individual outcomes                |
| Figure 1. Core program of  | lama | ante and expected pathways to re   | turn t |    | ork (DTM) workshilit   |          | d boolth                                   |   |  |

Figure 1. Core program elements and expected pathways to return to work (RTW), workability, and health.

## Quality assessment of the intervention implementation?

Recruitment
Reach
Dose delivered & Dose received
Fidelity (delivered as planned)
Context

## Act 3: Something different Multilevel and multicontext

#### **Towards sustainable RTW**

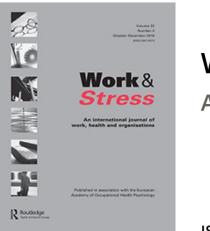
**RTW** activities for CMD suffer from 2 limitations

1. focus on resources during absence period, **ignoring resources** that may facilitate sustainable RTW

2. fail to consider the interaction of resources at the **individual, group, leader and organizational** level, and the **integration of work and non-work domains** 

+ overarching context, societal context, culture and legislation

Nielsen, Yarker, Munir, Bültmann, 2018



Work & Stress An International Journal of Work, Health & Organisations

ISSN: 0267-8373 (Print) 1464-5335 (Online) Journal homepage: https://www.tandfonline.com/loi/twst20

# IGLOO: An integrated framework for sustainable return to work in workers with common mental disorders

Karina Nielsen, Joanna Yarker, Fehmidah Munir & Ute Bültmann

**To cite this article:** Karina Nielsen, Joanna Yarker, Fehmidah Munir & Ute Bültmann (2018) IGLOO: An integrated framework for sustainable return to work in workers with common mental disorders, Work & Stress, 32:4, 400-417, DOI: <u>10.1080/02678373.2018.1438536</u>

To link to this article: <u>https://doi.org/10.1080/02678373.2018.1438536</u>

| Wo |   | Level                        | Non-work context  |
|----|---|------------------------------|---|
| 1. | Work-specific<br>cognitive, affective<br>and behavioural<br>factors, e.g. work-<br>related self-efficacy,<br>job crafting       | Individual                   | <ol> <li>Individual cognitive,<br/>affective, and<br/>behavioural factors,<br/>e.g. life style<br/>behaviours</li> </ol>              |
| 3. | Colleague support,<br>attitudes towards CM<br>and return, work grou<br>climate,   |                              | <ol> <li>Friends, family,<br/>frequency of contact,<br/>support etc.</li> </ol>   |
| 5. | Line managers' KSAs<br>attitudes, behaviour,<br>support   | s, Leader                    | <ol> <li>Healthcare service<br/>providers' KSAs,<br/>attitudes, behaviour,<br/>support</li> </ol>                                     |
| 7. | Human Resource<br>Management practice<br>and policies, job<br>design – espoused and<br>actual. Occupational<br>health services. |                              | <ul> <li>8. Community and voluntary organizations e.g. charities, local networks, telephone helplines and online chat fora</li> </ul> |
| 9. | Country legislation, social welfare policy  | Overarching/socia<br>context | 10. Country legislation,<br>social welfare policy   |

**Figure 1.** IGLOO framework for integrated sustainable return to work. KSAs = knowledge, skills and abilities.

| W  | ork  | Level                      | Non-work context  |
|----|--|----------------------------|---|
| 1. | Work-specific<br>cognitive, affective<br>and behavioural<br>factors, e.g. work-<br>related self-efficacy,<br>job crafting        | Individual                 | 2. Individual cognitive,<br>affective, and<br>behavioural factors,<br>e.g. life style<br>behaviours                                   |
| 3. | Colleague support,<br>attitudes towards CMD<br>and return, work group<br>climate,  | Group                      | 4. Friends, family,<br>frequency of contact,<br>support etc.  |
| 5. | Line managers' KSAs,<br>attitudes, behaviour,<br>support   | Leader                     | 6. Healthcare service<br>providers' KSAs,<br>attitudes, behaviour,<br>support   |
| 7. | Human Resource<br>Management practices<br>and policies, job<br>design – espoused and<br>actual. Occupational<br>health services. | Organization               | <ul> <li>8. Community and voluntary organizations e.g. charities, local networks, telephone helplines and online chat fora</li> </ul> |
| 9. | Country legislation, social welfare policy   | Overarching/social context | 10. Country legislation, social welfare policy  |

**Figure 1.** IGLOO framework for integrated sustainable return to work. KSAs = knowledge, skills and abilities.

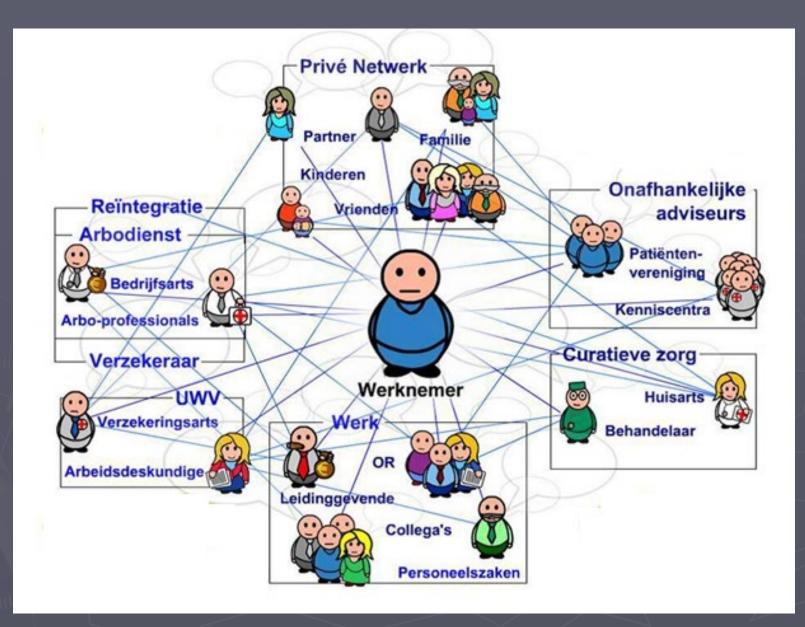
### **10 propositions on IGLOO-levels**

**Employees with CMDs...** 

who experience strong, positive social networks outside work are more likely to achieve sRTW (#4)

who experience inclusive, considerate and individualized line management are more likely to achieve sRTW" (#5)

Nielsen, Yarker, Munir, Bültmann, 2018



Sterk naar werk - adapted

#### Recommendations

More of the same: Key components - dosis, fidelity, context Quality assessment of implementation **Something different:** Shy not away from complexity

### THANK YOU!

u.bultmann@umcg.nl

