STRUCTURED FUNCTIONAL ASSESSMENTS IN GENERAL PRACTICE

- A CLUSTER RANDOMISED CONTROLLED TRIAL

Nina Østerås

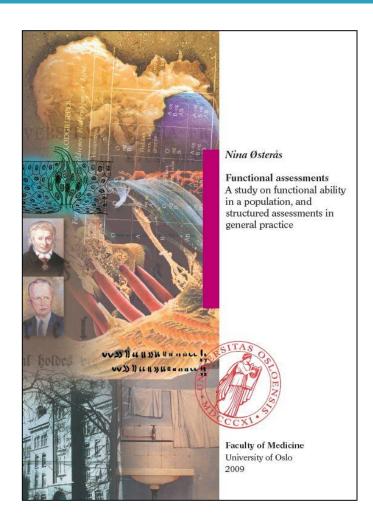
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Research article

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Implementing structured functional assessments in general practice for persons with long-term sick leave: a cluster randomised controlled trial

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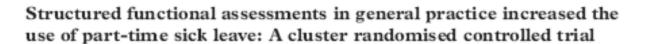
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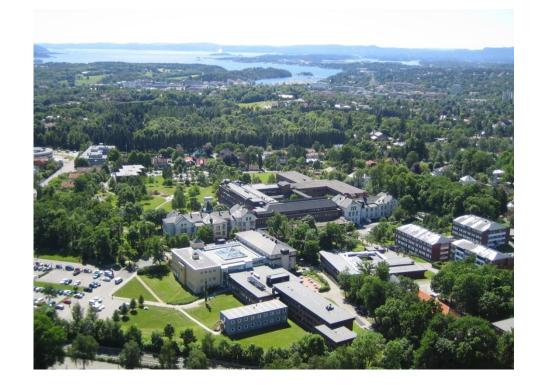
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Current affiliation



The National Resource Centre for Rehabilitation in Rheumatology (NRRK), Diakonhjemmet Hospital, Oslo, Norway





Study background

• Increasing interest in functional ability

• GPs: assess function in social security claims



• Public authorities/insurance companies



Study background cont.

• Represents a focus change for the GPs

symptoms, problems and limitations



patient resources, possibilities and coping

- GPs' functional assessments are often:
 - non-standardized
 - influenced by personal/professional interest
- The GPs report difficulties and are reluctant



Study background cont.

Based on these experiences:

A structured method for functional assessments of persons with long-term sick leave in general practice

- > tailor-made assessment method for GPs in primary care practices
- functional ability information & suggestions for workplace adjustments
- social security officers & employers

Functional assessment

In this work:

A balancing of individual functional abilities against occupational demands and restrictions



Model for functional assessments*

Four elements:

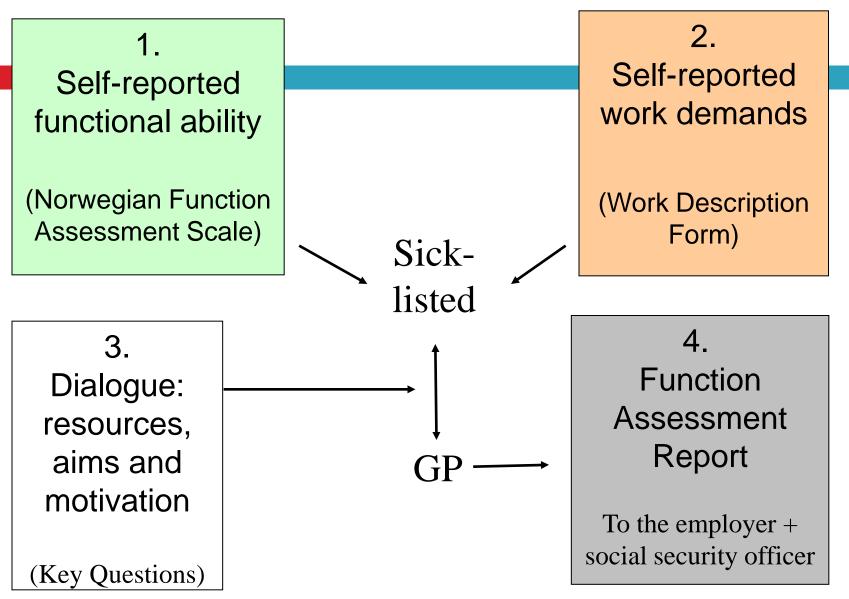
□ The patient's own description of function



- Information about different demands at the workplace
- Discussion of possibilities and limitations
- □ The GP's independent, total evaluation of medical and nonmedical information

(*) Cocchiarella L, Andersson G. Guides to the evaluation of permanent impairment. United States of America: American Medical Association, 2002.

The structured method



Norwegian Function Assessment Scale

When you have filled in the form, please bring it with you to your doctor

During the last week, have you had difficulty doing the following activities because of your health? Please put a cross in the box for the best answer for each question. Even if a question does not seem to fit your circumstances, please try to answer it as best you can. If a question is not relevant for you, for example because you do not drive a car, you can draw a line through the question.

Have you had difficulty doing the following activities during the last week:	No difficulty	Some difficulty	Much difficulty	Could not do it
Walking/standing Standing Walking less than a kilometre on flat ground Walking more than a kilometre on flat ground Walking on different surfaces Going up and down stairs Going shopping for your groceries Putting on your shoes and socks				
Holding /picking up things Picking up a coin from a table with your fingers Holding and turning a steering wheel Driving a car Preparing food Writing Performing everyday tasks on your own Engaging in your leisure activities Putting on and taking off your clothes				
Lifting/carrying Lifting an empty soda bottle crate from the floor Carrying shopping bags in your hands Carrying a little sack/backpack on your shoulders or back				
Pushing and pulling with your arms Cleaning your house Washing your clothes				

Norwegian Function Assessment Scale

When you have filled in the form, please bring it with you to your doctor.

Have you had difficulty doing the following activities during the last week:	No difficulty	Some difficulty	Much difficulty	Could not do it
Sitting Sitting on a kitchen chair Riding as a passenger in a car Riding as a passenger on public transport				
Managing Staying alert and being able to concentrate Working in groups Guiding others in their activities Managing everyday responsibility Managing everyday stress and strains Managing to take criticism Managing to control your anger and aggression				
Cooperation/communication Remembering things Understanding spoken messages Understanding written messages Speaking Participating in a conversation with many people Using the telephone				
Senses Watching television Listening to the radio				

Norwegian Function Assessment Scale

When you have filled in the form, please bring it with you to your doctor

During the last week, have you had difficulty doing the following activities because of your health? Please put a cross in the box for the best answer for each question. Even if a question does not seem to fit your circumstances, please try to answer it as best you can. If a question is not relevant for you, for example because you do not drive a car, you can draw a line through the question.

Have you had difficulty doing the following activities No Some: Much Could not during the last week: difficulty difficulty do it difficulty. Walking/standing Standing Walking less than a kilometre on flat ground Walking more than a kilometre on flat ground Walking on different surfaces Going up and down stairs Going shopping for your groceries

Putting on your shoes and socks

Holding /picking up things Picking up a coin from a table with your fingers Holding and turning a steering wheel Driving a car Preparing food Writing Performing everyday tasks on your own Engaging in your leisure activities Putting on and taking off your clothes		
Lifting/carrying Lifting an empty soda bottle crate from the floor Carrying shopping bags in your hands Carrying a little sack/backpack on your shoulders or back		
Pushing and pulling with your arms Cleaning your house Washing your clothes		

	Have you had difficulty doing the following activities during the last week:	No difficulty	Some difficulty	Much difficulty	Could not do it	
→	Sitting Sitting on a kitchen chair Riding as a passenger in a car Riding as a passenger on public transport					
→	Managing Staying alert and being able to concentrate Working in groups Guiding others in their activities Managing everyday responsibility Managing everyday stress and strains Managing to take criticism Managing to control your anger and aggression					
	Cooperation/communication Remembering things Understanding spoken messages Understanding written messages Speaking Participating in a conversation with many people Using the telephone					
→	Senses Watching television Listening to the radio					

Self-reported work ability

To what degree is your ability to perform your ordinary work reduced today?

- ☐ Hardly reduced at all
- ☐ Not much reduced
- ☐ Moderately reduced
- ☐ Much reduced
- ☐ Very much reduced

Work Description Form

When you have filled in the form, please bring it with you to the doctor

Type of work:	
For how long have you been employed? Employment status: Do you work full- or part-time?	P Less than a year ☐ 1-5 years ☐ More than 5 years ☐ In work/employed☐ Unemployed☐ Rehabilitation ☐ Full-time ☐ Part-time
Name three positive aspects of your wor	rk:
12_	3
Do you feel your work is physically strain	ning? 🔲 No 🗎 Yes
If YES, tick off appropriate box(es) Much sitting Standing still Much walking Kneeling or squatting Working with arms lifted/reached forward Lifting many heavy loads	□ Doing precise movements with hands □ Doing the same movements many times a minute □ Working on/with vibrating surface/tools □ Must hold the same position for long periods □ Heavy work □ Other:
Do you feel your work is mentally straini	ing? 🔲 No 🔲 Yes
If YES, tick off appropriate box(es) Have to be alert and concentrated Have to deal with emotions Have to have good memory Other:	☐ Have to be creative ☐ Working with colleagues on tasks ☐ Direct client/customer/student contact
Do you feel that the work organization is	s straining?
If YES, tick off appropriate box(es) ☐ Have shift work ☐ Working by contract ☐ Have work with high season intensity ☐ Have management responsibilities ☐ Have too much to do ☐ Have too much responsibility ☐ Other:	☐ Unclear what is expected at work ☐ Cannot set work pace myself y ☐ Cannot decide myself when to take breaks ☐ Do not get help with the heaviest tasks ☐ Get little support and help from superiors ☐ Do not feel that my work effort is appreciated

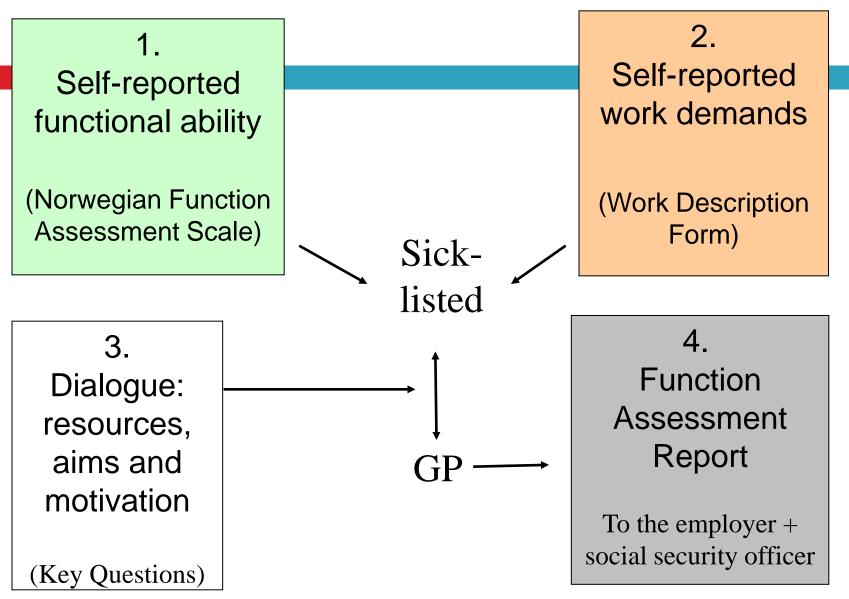
Work Description Form

When you have filled in the form, please bring it with you to the doctor

Type of work:				
For how long have you b Employment status: Do you work full- or part-		☐ Less than a year ☐☐ In work/employed☐☐☐	-	Rehabilitation
Name three positive asp	ects of your work:			
1	2		3	

Do you feel your work is physically strain	ning?	□ No	☐ Yes
If YES, tick off appropriate box(es) Much sitting Standing still Much walking Kneeling or squatting Working with arms lifted/reached forward Lifting many heavy loads	☐ Doing precise r☐ Doing the same ☐ Working on/with ☐ Must hold the s☐ Heavy work ☐ Other:	e movements n vibrating su ame position	many times a minute irface/tools
Do you feel your work is mentally straini	ing?	□No	☐ Yes
If YES, tick off appropriate box(es) ☐ Have to be alert and concentrated ☐ Have to deal with emotions ☐ Have to have good memory ☐ Other:	☐ Have to be crea ☐ Working with co	olleagues on	
Do you feel that the work organization is	s straining?	□ No	□Yes
If YES, tick off appropriate box(es) Have shift work Working by contract Have work with high season intensity Have management responsibilities Have too much to do Have too much responsibility	☐ Do not get help☐ Get little suppo	k pace myse myself when with the hea rt and help fr	lf to take breaks wiest tasks
☐ Other:			

The structured method



Key questions

These questions are to be asked after discussing the Norwegian Function Assessment Scale and the Work Description Form with the patient (see guidelines). Make it clear to the patient that the answers to these questions will not be forwarded

How much longer do you think you will be certified sick?

Are you able to work a little (maybe a few hours a week) in your present job?

If the patient answers yes, part-time sickness certification should be discussed. It might be an advantage for the patient to stay in touch with the workplace.

At the moment, are you considering other jobs?

If the patient answers yes, it should be discussed how he/she pictures the transition to other employment. Is vocational rehabilitation relevant?

All things considered, how important is your present job to you?

If the job is important to the patient, rehabilitation possibilities should be discussed thoroughly.

Has difficult work environment or conflicts at work been a contributing factor to your absence?

Discuss with the patient how this should be addressed. Initiate contact with occupational health service?

How do you experience demands outside work, ie. at home, in the family and during leisure time?

If there are demands outside the work situation that are perceived as straining, the doctor should clarify these.

Nina Østerås, EUPHA Preconference 10. Nov. 2010

Function Assessment Report

Medical functional assessment fined out on request from the Pational Insulance scheme of employer.	3. Physician assessment of functional resources and limitations in relation to patient's work tasks				
This form is to be filled out by treating physician in consultation with the patient, and to be seen in light of the Norwegian Function Assessment Scale, the Work Description Form and Key Questions.	Which are the patient's resources that can be used as means in returning to work?				
Patient name Date of birth	Does the patient have special needs, e.g. for breaks and rest?				
Weeks on sick leave weeks	Can the patient work part-time?				
Physician name: Date of consultation					
Functional ability (from Norwegian Function Assessment Scale) Check the box indicating functional resources or limitations as stated by the patient.	4. Medical treatment Will ongoing or planned medical treatment influence the patient's functional ability? Will treatment interfere with activity? When will treatment be finished?				
FUNCTION DOMAIN Resources Limitations Comments:					
Walking/standing					
Holding/picking up things					
Lifting/carrying	5. Protective needs				
Sitting	State situations or external conditions that the patient should avoid for medical reasons, eg. lifting/carrying, working with				
Managing	elevated arms, or contact with costumers, students or clients.				
Cooperation/communication					
Senses					
Work ability (from Norwegian Function Assessment Scale) Check the box indicating degree of reduced work ability as stated by the patient Hardly reduced at all Not much reduced Moderately reduced Wuch reduced Very much reduced	Will adjustments or supportive aids facilitate the patient's return to work?. Probably yes Do not know Probably no Concrete suggestions for adjustments at place of work. What can facilitate return to work?				
2. Work description (from Work Description Form) Is the patient's work straining? Check the box and explain in the column to the right what is perceived as straining.	7. Comments				
Work description No Yes If yes, what is perceived as straining?					
Physically straining					
Mentally straining					
Straining due to work organization	Date Physician's signature Patient's signature				

Function Assessment Report

Medical functional assessment filled out on request from the National Insurance Scheme or employer.

This form is to be filled out by treating physician in consultation with the patient, and to be seen in light of the Norwegian Function Assessment Scale, the Work Description Form and Key Questions.						
Patient name			Date of birth			
			Weeks on sick leave weeks			
Physician name:			Date of consultation			
Functional ability (from Check the box indicating function						
FUNCTION DOMAIN	Resources	Limitations	Comments:			
Walking/standing						
Holding/picking up things						
Lifting/carrying						
Sitting						
Managing						
Cooperation/communication						
Senses						
Work ability (from Norwegian Function Assessment Scale) Check the box indicating degree of reduced work ability as stated by the patient						
Hardly reduced at all Not mu	ch reduced N	Moderately reduc	ed Much reduced Very much reduced			

Norwegian Function Assessment Scale

When you have filled in the form, please bring it with you to your doctor

During the last week, have you had difficulty doing the following activities because of your health? Please put a cross in the box for the best answer for each question. Even if a question does not seem to fit your circumstances, please try to answer it as best you can. If a question is not relevant for you, for example because you do not drive a car, you can draw a line through the question.

Have you had difficulty doing the following activities during the last week:	No difficulty	Some difficulty	Much difficulty	Could not do it	
Resource Walking/standing Standing Walking less than a kilometre on flat ground Walking more than a kilometre on flat ground Walking on different surfaces Going up and down stairs	S			Lim	itations
Going shopping for your groceries Putting on your shoes and socks Nina Østerås, EUPHA Preconference					10. Nov. 2010

Function Assessment Report

Medical functional assessment filled out on request from the National Insurance Scheme or employer.

			Description Form and Key Questions.
Patient name			Date of birth
			Weeks on sick leave weeks
Physician name:			Date of consultation
Functional ability (from Check the box indicating function FUNCTION DOMAIN			
Walking/standing	Resources	Linitations	Comments.
Holding/picking up things		-	
Lifting/carrying			
Sitting			
Managing			
Cooperation/communication			<u> </u>
Senses			· -
		· · · · · · · · · · · · · · · · · · ·	
Work ability (from Norweg Check the box indicating degree of			
·	ch reduced N	Moderately reduce	ed Much reduced Very much reduced

2.	Work	description	n (from '	Work Desc	ription Form)

Is the patient's work straining? Check the box and explain in the column to the right what is perceived as straining.

Work description	No	Yes	If yes, what is perceived as straining?
Physically straining			
Mentally straining			
Straining due to work organization			

3. Physician assessment of functional resources and limitations in relation to patient's work tasks				
Which are the patient's resources that can be used as means in returning to work?				
Does the patient have special needs, a.g. for breaks and rest?				
Can the patient work part-time?				
4. Medical treatment				
Will ongoing or planned medical treatment influence the patient's functional ability? Will treatment interfere with activity?				
When will treatment be finished?				
<u></u>				
5. Protective needs				
State situations or external conditions that the patient should avoid for medical reasons, eg. lifting/carrying, working with elevated arms, or contact with costumers, students or clients.				

6. suggestions for workplace measures					
Will adjustments or supportive aids facilitate the patient's return to work?.					
☐ Probably yes	☐ Do not know	☐ Probably no			
Concrete suggestions for adjustments at place of work. What can facilitate return to work?					
7. Comments					
Date	Physic	cian's signature	Patient's signature		

A cluster RCT

AIM:

To implement structured functional assessments for persons with long-term sick leave in general practice

and assess intervention effects on

important GP parameters, GP sick-listing practice, and patient sick-leave

Methods

Invited: 360 → Participating: 57 GPs





Randomization

Intervention group

- n=28 (drop out: 5)
- one-day workshop (n=23)
- Include 10 patients each
- Patient inclusion:

Sick-listed between 8-26 weeks + holding good aspects of a return to work

Control group

- n=29
- As usual

Outcome measures

<u>Self-reported</u> (before + after + 6 months after):



- GP **knowledge** functional assessments
- GP attitude functional assessments
- GP self-efficacy functional assessments
- GP knowledge patients' workplace and perceived stressors

→ using a 5-point scale

Outcome measures

Registry data on:



- Duration of certified sick leave episodes (no. of days)
- Prescription of **part-time** sick leave (yes/no)
- Prescription of active sick leave (no. of days)
- Prescription of vocational rehabilitation (no. of days)

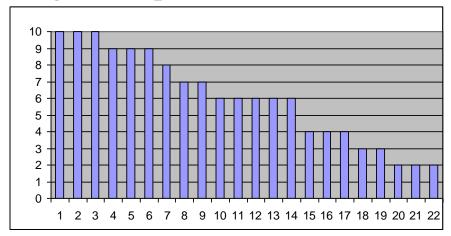
Sample characteristics: GPs

		RCT	Natio	<u>nal no.</u>
Female GP, %:	37	31		
Mean age, yrs:		49 (29-65)	48	
Speciality in Fam.Med., %		77*	59	
Mean working hours/week	, h:	40 (20-65)	48	
Mean daily consultations, 1	n:	22 (15-33)		
Mean list size, n:		1285 * (640-2	2170)	1189

^{*} Representative for all Norwegian GPs, but proportion of specialists and mean list size sign. higher

Implementation and sick-listed persons

Intervention GPs applied the intervention on 133 persons - range 2-10 per GP





Patients:

(National no.:

45 years, 32 % males 42 years, 38% males)



Registry data

Cases

n=5274

Excluded

n=712

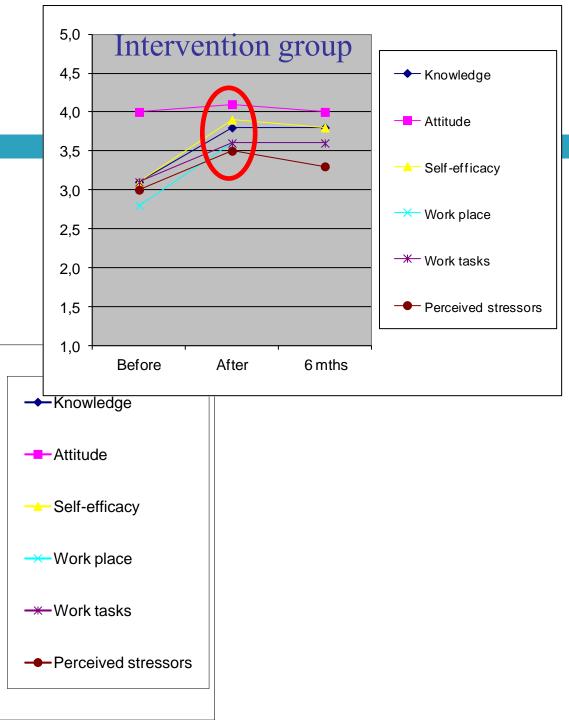
Included

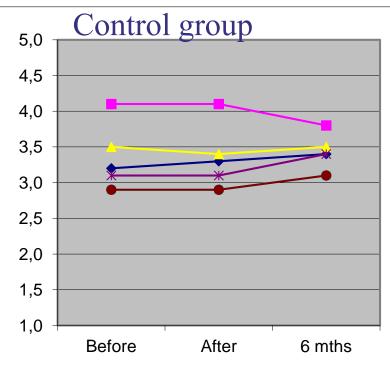
<u>n=4562</u>



No. of cases	Control period	Intervention period
Control group	1361	1231
Intervention group	1031	939

Results





Results

Duration of sick leave

Contr. gr: $195 \rightarrow 190$ days

Interv. gr: $196 \rightarrow 191$ days

Cox regression: **HR: 0.89** (95% CI (0.79, 1.01))

Part-time sick leave

Contr. gr: $47.5 \rightarrow 56.0 \%$

Interv. gr: $48.1 \rightarrow 63.2\%$

Binary regression: **OR: 1.33** (95% CI (1.06, 1.68))

Results

Active sick leave

Contr. gr: $9.8 \rightarrow 7.0\%$

Interv. gr: $8.7 \rightarrow 4.6\%$

Cox regression: **HR: 0.65** (95% CI (0.43, 0.98))

Vocational rehabilitation

Contr. gr: $3.4 \rightarrow 3.3 \%$

Interv. gr: $4.2 \rightarrow 3.5\%$

Cox regression: **HR: 1.04** (95% CI (0.63, 1.70))

Results - summary

Intervention effects:

- ↑ GP knowledge (func.ass. + work factors)
- ↑ GP self-efficacy
- ÷ GP attitude



- ↑ part-time sick leave
- ↓ active sick leave
- ÷ duration
- + vocational rehabilitation



Thank you for your attention!

