

**Facilitating and inhibiting factors
and effect of interventions in
return to work for patients with
neck- and low back pain.**

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Health

Background

- Norway has the highest sickness absence of the Scandinavian countries
- 500 000 receive rehabilitation or disability pension at a cost of 75 milliard kr
- Neck and low back pain comprise the majority of patients
- Political and research actions initiated to improve participation in working life

- Agreement about “including work life” (“IA avtalen”) was introduced in 2001
- A joint effort from the government, the employers’ organisations and the labour organisations.
- Superior aim was to prevent sickness absence and promote the inclusion in the working life despite sickness and disability

- A committee lead by the prime minister granted more than 600 million kr in order to reduce the sickness absence with about 2.5 %.
- The main focus was on the coordinated effort from the health care system and the social security and employment service (the two latter fused into NAV)

Background present project

- Ulleval University Hospital has organized a regional Neck and Back clinic
- Specialists in neurosurgery, neurology, ortophaedics, neuroradiology, physical medicine and rehabilitation
- Serve a population of 2.5 mill for neck surgery and complicated back surgery evaluations
- Serve 1 mill for specialist evaluation and treatment og neck and back pain

- Referral causes
 - Evaluation of surgical treatment
 - Neurological deficits
 - High pain levels
 - Reduced function
 - PROLONGED SICKNESS ABSCENCE

- <5 % receive surgical treatment and with variable outcome
- Multidisciplinary interventions effective regarding reduced pain and improved function for LBP
- Brief interventions equally effective for LBP
- Poorer results for neck pain
- POOR RESULTS regarding return to work

- Population in specialist practice represent the main economical burden to the society
- The **demographic** and **medical risk factors** for failing to return to work in this population are well known

- National Institute of Occupational Health (STAMI)
- Long tradition in research regarding risk factors for sickness absence at the work place

- Characteristics of work places at risk
 - Demand
 - Control
 - Support
 - Effort
 - Rewards
 - Mechanical factors

Elaborated to three dimensions

Demand control support

- The demand-control-support model was developed by R. Karasek and his colleagues during the 1980s. The model operates with three main dimensions: job demands, job decision latitude and job social support.

Effort reward model

- The model defines threatening job conditions as a "mismatch between high workload (high demand) and low control over long-term rewards"

How can we integrate the knowledge from effective integration at the work place to specialist care?

The Previcap model

- Set of interventions
- Developed in occupational health care and primary care
- Focus on return to work (many workplaces)

Loisel P, Durand MJ, Diallo B, Vachon B, Charpentier N, Labelle J: From evidence to community practice in work rehabilitation: the Quebec experience. Clin J Pain 2003; 19(2):105-113

Anema JR, Steenstra IA, Bongers PM, de Vet HC, Knol DL, Loisel P, van MW: Multidisciplinary rehabilitation for subacute low back pain: graded activity or workplace intervention or both? A randomized controlled trial. Spine 2007; 32(3):291-298.

Aims

- Assess the main challenges at work for patients with neck and low back pain referred to Neck and Back Units.
- Determine the work, individual and health related predictors and their interactions with respect to sickness absence and return to work.
- Investigate if an intervention specifically focusing on return to work will reduce sickness absence compared to brief multidisciplinary intervention.

Aims

- Compare neck and low back pain and Norway with other countries with respect to challenges at work, predictors for sickness absence and return to work and effect of interventions.
- Evaluate the interaction between the health care and the employers and employment services
- Evaluate the socioeconomic consequences of the interventions and collaboration between the health care and employers and employment services

Material and methods

SUBJECTS

- Inclusion criteria
 - Age 18-60 years
 - Sicklisted <1 year
 - Neck or low back pain

- Exclusion criteria:

- Infections

- tumours,

- osteoporosis, fracture, severe structural deformity,

- inflammatory disorder

- cauda equina syndrome

- Cervicobrachialgia or ischias waiting for surgery

- Assessments

- Pain intensity neck/arm, low bac/leg (rest and activity rated on numeriv VAS)
- Pain drawing (McGill)
- Health problems last 30 days (Ursin/Stami)

- Functioning (Oswestry/Neck disability index)
- Fear avoidance beliefs (FABQ)
- Anxiety, depression and somatisation (HSCL-10)
- Health related Quality of Life (EQ-5D)
- QPS Nordic
 - Job demands
 - Job control
 - Social support
 - Effort and reward

Interventions

- Evaluation in specialist care within 2 weeks
- Randomization to Brief model and Previcap
- Evaluation of functioning and job challenges

Interventions

Previcap

- 3 weeks
- Group based information
- Individual information
- Individual plan with needs and goals

Brief

- Advices and follow up in primary care

Group session by physician

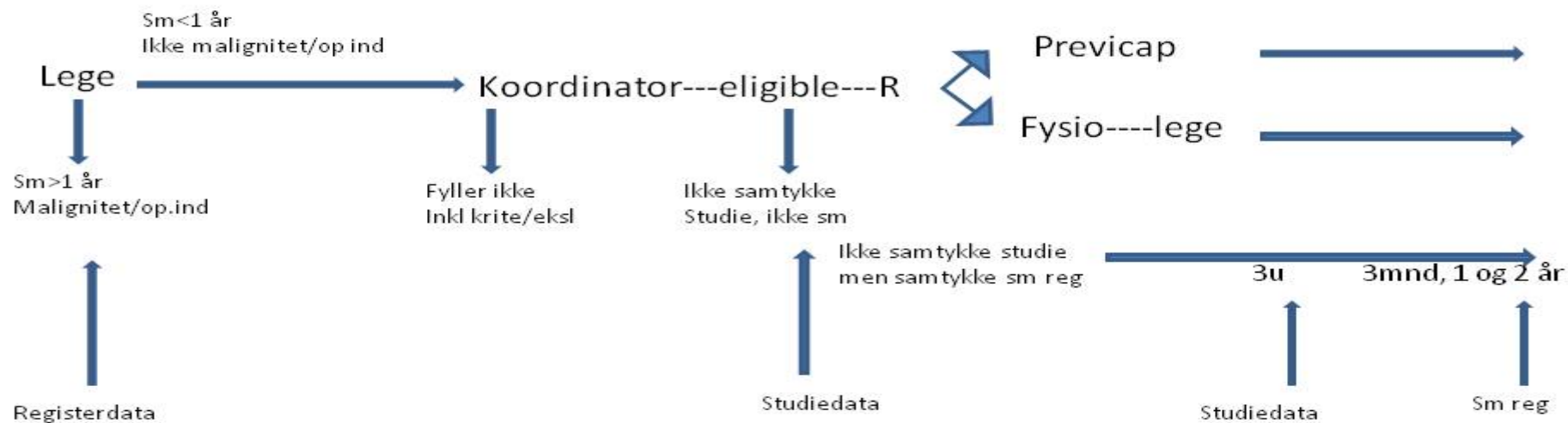
- Provide knowledge of the back and pain mechanisms
- In order to;
 - Reduce fear avoidance
 - Promote physical activity
 - Promote return to work

- **Neuropsychologist**
 - Introduce strategies to handle stressors
 - Relaxation techniques
- **Physiotherapist**
 - Exercise effects
 - Promote activities in daily life and WORK
- **Occupational counsellor**
 - Possibilities in working life
 - Return to work plan

- Adaptation and follow-up at the workplace
- Primary care actions?
- Social security and employment service (NAV)
 - Follow-up of advices from the specialist care

Outcome

- PRIMARY
 - sickness absence
 - return to work
 - Differences in costs (gain in working days-intervention costs)
- Secondary
 - Pain
 - Functioning
 - Health related quality of life



Preliminary experiences

- Late referral from primary care
- Return to work strategies rejected
- Work place intervention "unwanted"
- Advices not followed up by the primary health care or NAV

Societal factors

- Legislation
- Norwegian sickness compensation
- NAV

Perspectives

- Collaboration with stakeholders?
- Develop effective interactions between the primary care, specialist care , workplace and NAV

Conclusions

- Difficult project with many challenges
- Provide new knowledge about effective strategies in specialist care
- Develop knowledge about effective collaborations to stakeholders, work places and social security important