# Return-to-work coordination: Concept, consequences, and challenges

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#### Summary

**Introduction:** RTW coordination has been found to promote a quicker return-to-work for sick-listed workers. Still, there is an ongoing debate on the best practices of RTW coordination, and in Norway, little is known about how RTW coordination is currently practiced. Therefore, the aim was to reveal current concept related coordination, develop some understanding of how coordination is practiced and its challenges and consequences in return-to-work processes, and identify some possibilities for future research and practice.

**Methods:** The thesis includes one cohort study of sick-listed employees participating in Rapid-RTW programmes in Norway, which investigates the associations between personal, intervention, and predictive factors related to being provided with a coordinator in Rapid-RTW programmes (study I) and associations of being provided with a coordinator and length of time until RTW (study II). Two qualitative studies are also included: a group interview study exploring stakeholders' opinions on challenges and needed changes in the follow-up of sick-listed employees in Norway (study III) and an individual interview study with supervisors that investigates their experiences with fostering work integration (study IV).

**Results: Paper I** revealed that being provided with a coordinator is common in Rapid-RTW programmes; however, the coordinator was only responsible for coordinating their own services. Employees with a coordinator had more professionals involved and more contact with other stakeholders. **Paper II** revealed that employees provided with a coordinator experienced their first RTW later than those who were not provided with a coordinator. However, this result did not remain statistically significant in the adjusted analysis. For the first full-RTW, there was no statistically significant difference between those who were and were not provided with a coordinator. **Paper III** details the problems experienced and identifies needed changes in the RTW processes. The experts suggested that the services should be better coordinated, closer cooperation between stakeholders across levels and services and the provision of a local RTW coordinator. **In paper IV**, challenges related to obtaining successful integration were related to maintaining cooperation in different phases of the process between the employee and the manager and between other stakeholders.

**Conclusion:** This thesis revealed that the current concept of RTW coordination in Norway seems to have the consequences of limited impact on RTW. In addition, several challenges of service coordination in RTW processes are identified.

#### Sammendrag (Summary in Norwegian)

**Bakgrunn:** Koordinering har tidligere vist å fremme en raskere tilbakeføring til arbeid for sykemeldte. Imidlertid er det fortsatt en pågående debatt om beste praksis for koordinering av tilbakeføringstilbud, og i Norge er det lite kjent hvordan koordinering i slike prosesser praktiseres. Formålet med denne avhandlingen var derfor å avdekke nåværende koordineringsmodell, utvikle en forståelse for hvordan koordinering praktiseres og utfordringene og konsekvensene praksisen har for tilbakeføringsprosesser, samt å identifisere noen muligheter for fremtidig forskning og praksis.

**Metode:** Avhandlingen består av en kohortstudie av sykemeldte arbeidstakere som deltok i Raskere-tilbake tilbud i Norge, hvor sammenhenger mellom personlige-, intervensjons- og prediktive faktorer knyttet til å bli tildelt en koordinator ble undersøkt (studie I), samt assosiasjoner mellom å ha en koordinator og tid til tilbakeføring (studie II). To kvalitative studier inngår; En gruppeintervjustudie som utforsker eksperter på sykefraværsoppfølging sine meninger om utfordringer og nødvendige endringer i oppfølgingen av sykemeldte i Norge (studie III), og en individuell intervjustudie hvor lederes erfaringer med å fremme inkludering i arbeidslivet ble undersøkt (studie IV).

**Resultater: Artikkel I** viste at å få tildelt en koordinator er vanlig i Raskere-tilbake tilbud; koordinator nadde flere fagfolk involvert og mer kontakt med andre aktører. **Artikkel II** viste at ansatte som fikk en koordinator kom senere tilbake til jobb enn de uten en koordinator. Dette resultatet var imidlertid ikke statistisk signifikant i den justerte analysen. For tid til første tilbakeføring i samme stillingsprosent som før fraværet var det ingen statistisk signifikant forskjell mellom de som hadde og de som ikke hadde en koordinator. **Artikkel III** beskriver erfarte utfordringer i sykefraværsoppfølging, og identifiserte behov for endringer i tilbakeføringsprosessen. Ekspertene foreslo at tjenestene skulle koordineres bedre, et tettere samarbeid mellom aktører på tvers av nivåer og tjenester, samt å tilby en lokal tilbakeføringskoordinator. I **artikkel IV** knyttet ledere utfordringer med å oppnå vellykket integrering i arbeidslivet til å opprettholde samarbeid i ulike faser av tilbakeføringsprosessen, mellom medarbeider og leder, samt med andre aktører.

**Konklusjon:** Denne avhandlingen avdekket at den nåværende modellen for koordinering av tilbakeføring til arbeid i Norge ser ut til å ha begrenset innvirkning på tilbakeføring. I tillegg er flere utfordringer med koordinering av tjenester i tilbakeføringsprosesser identifisert.

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"Work is a person's strongest tie to reality"

Freud (1930)

To my parents who have learned me the value of meaningful activities including work, and encouraged and supported me through education and (working) life.

## List of attachments

Attachment 1: Questionnaire for patients Attachment 2: Questionnaire for providers Attachment 3: STROBE guidelines for reporting cohort studies

# List of papers

 Skarpaas, Lisebet Skeie; Haveraaen, Lise; Småstuen, Milada Cvancarova; Shaw, William S.; Aas, Randi Wågø. (2019). Horizontal return to work coordination was more common in RTW programs than the recommended vertical coordination. The Rapid-RTW cohort study. *BMC Health Serv Res* 19, 759 (2019). Re-use permitted under CC BY 4.0.

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- Skarpaas, Lisebet Skeie; Haveraaen, Lise; Småstuen, Milada Cvancarova; Shaw, William S.; Aas, Randi Wågø. (2019). The association between having a coordinator and return to work. The rapid-return-to-work cohort study. BMJ Open 2019; 9:e024597. Re-use permitted under CC BY-NC 4.0. DOI: <u>http://dx.doi.org/10.1136/bmjopen-2018-024597</u>
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4) Skarpaas, Lisebet Skeie; Ramvi, Ellen; Løvereide, Lise; Aas, Randi Wågø. (2016). Maximizing work integration in job placement of individuals facing mental health problems: Supervisor experiences. WORK: A journal of Prevention, Assessment and rehabilitation. Vol. 53 (1): 87-98. Copyright (2016), with permission from IOS Press. DOI: <u>http://dx.doi.org/10.3233/WOR-152218</u>

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# Abbreviations

GDP	Gross Domestic Product
IA-agreement	Cooperation Agreement for a More Inclusive Working Life
ICF	The International Classification of Functioning, Disability, and Health
IPS	Individual placement and support
LBP	Low-back pain
MSD	Musculoskeletal disorders
NAV	The Norwegian Labour and Welfare Administration
NAV-office	The local social insurance office
NSD	Norwegian Social Science Data Services
OECD	Organization of Economic Cooperation and Development
OHS	Occupational Health Service
REK	Regional Committees for Medical and Health Research Ethics
RHF	Regional Health Authority
RTW	Return-to-work
SIO	Social insurance officer
SE	Supported employment
TBI	Traumatic brain injury

# **1** Introduction

In return-to-work (RTW) and work disability prevention research, coordination between core stakeholders and services has been highlighted as one of the main predictors for how fast employees on sick leave will return-to-work <sup>1-7</sup>. Still, the effectiveness of providing coordination has lately been questioned in individual studies <sup>8-11</sup> and in a newly-published Cochrane systematic review <sup>12</sup>. The coordination of RTW processes is a complex type of practice. One issue is the large number of stakeholders involved <sup>13-17</sup>. Another is that sickness absenteeism concerns a variety of biopsychosocial aspects of a persons' life <sup>18</sup> that might affect work participation <sup>18-20</sup>. Thus, stakeholders involved in RTW processes are from three large and separated systems: the workplace, social security (NAV), and the healthcare sector <sup>13 15 21</sup>.

In this thesis, an underlying occupational perspective will be held, with the focus of transition into work activities <sup>22</sup>. Employment not only provides us with an opportunity to earn a living but also encompasses significant latent consequences <sup>23 24</sup>, structures the day, gives regular contact with people outside the family, links us to goals and purposes transcending our own, defines status and identity, and provides predictable activity <sup>24</sup>. In western countries, work is considered the most important factor influencing social status and acceptance <sup>25</sup>. However, work participation is not only an individual concern. A fast and sustainable return-to-work process has been a political and societal discussion and a priority in recent decades. Several initiatives designed to reduce sickness absence and disability pensions have been promoted <sup>26-28</sup>. How and when such services are delivered to sick-listed workers are affected by the focus on service integration <sup>29</sup>, which is an international concern that incorporates the concept of coordination. Providing a coordinator is one strategy used to promote integration <sup>29</sup>.

It has been suggested that successful programmes intended to prevent work disability should include coordination between all stakeholders involved in the rehabilitation process <sup>30</sup>. Still, there is inconclusive evidence regarding the effectiveness of such RTW programmes <sup>12</sup>. There is a need to explore the concept of coordinating RTW processes in Norway, thus it has only been studied to a limited degree. The effectiveness and consequences of the current concept of coordination should also be investigated, and there is an evident need for more knowledge and understanding of current challenges in RTW practices to avoid work disability <sup>12</sup>. This study has investigated the concept, consequences, and challenges of integrating services by focusing on coordination between multiple levels and stakeholders in RTW processes.

# 2 Background

## 2.1 The context of return-to-work coordination

#### 2.1.1 Sickness absence and RTW – The individual level

In Norway, as well as in the Western world, the most common diagnoses associated with sickness absence are musculoskeletal disorders (MSD) and common mental disorders<sup>31-34</sup>, which constituted 36.5% and 19.5% of the total number of lost sick leave days in the first quarter of 2018, respectively <sup>35</sup>. However, in Norway, the proportion outside the labour market due to health problems is twice as high as in OECD (Organization of Economic Cooperation and Development) countries <sup>31</sup>, and long-term sick leave can pose a risk of expulsion from working life on a more permanent basis <sup>31 36-38</sup>. Earlier research has revealed that sickness absence is a complex phenomenon, and medical causes only explain to a limited degree why employees are excluded from working life <sup>15 26</sup>. There are no sharp lines between the most common diagnoses; thus, comorbidity across MSD and mental health diagnoses are common <sup>19 32</sup>. Approximately half of the patients with depression have a comorbid somatic disease <sup>39</sup>, and among patients with somatic diseases, the prevalence of affective disorders is high <sup>40</sup>. Physical illness and pain are associated with psychological factors, and comorbid mental disorders and physical illness are associated with poorer prognosis for return-to-work <sup>32</sup>. Participating in work activities is thought to be equally financially, socially, and medically beneficial for people facing mental health problems as for employees facing other health problems <sup>41-45</sup>. Still, roughly 70–80 percent of individuals with severe mental health problems do not participate in ordinary working life, although a large proportion wishes to work <sup>46 47</sup>. Even though Norway spends more of the total disability related spending (approximately 13.5% of the 3.5% of GDP spent on benefits) on efforts to promote work participation than other OECD countries, most of this spending is still on sheltered employment <sup>31</sup>.

In recent decades, there has been a paradigm shift in the understanding of sickness absence and disability. Traditionally, a biomedical understanding of health and disease <sup>48</sup> posed for absence from work and treatment until symptoms disappeared and the employee was ready to resume work. However, to recover may not lead to RTW <sup>26</sup>, thus disease and disability are poorly related and work disability is multifactorial <sup>49</sup>. Acknowledging this, the biomedical perspective has evolved into a biopsychosocial understanding <sup>15 50 51</sup>, in line with the ICF; WHO's model of functioning, disability, and health <sup>18 51 52</sup>. In this model, the socio-political interpretations of disability, which are often referred to as the social models of disability, are integrated <sup>51</sup>. This social model focuses on economic, political, and cultural barriers to participation. Disability is hence understood as a situation that is socially shaped <sup>53</sup>. Losing the possibility of work participation may lead to activity deprivation and can adversely affect health and quality of life <sup>23 53</sup>. The risk of activity deprivation is a public health problem, and the contextual factors in order to enhance participation are important to be aware <sup>54</sup>.

How to define RTW is unclear in the field of work disability <sup>52 55</sup>. WHO defines RTW as "The process by which a worker is supported in resuming work after an absence due to injury or illness" <sup>56</sup>. The concept of RTW is operationalised as both a process and an outcome <sup>52</sup>. The process concerns "returning an injured worker back into the workforce" <sup>52</sup>, while the outcome may seem final and measurable due to the possible answer of yes/no to if the employee has returned <sup>18 55</sup>. However, RTW outcomes are multifaceted and have several possible pathways and results, such as returning to the workplace employee had before the sickness absence or begin a new job, new tasks, or reduced work-position <sup>52 55</sup>. In recent years there have also been increasingly focus on lasting and sustainable RTW as recurrence of sickness absence is common <sup>57-60</sup>.

There has been an increasing focus on which prognostic factors are associated with RTW the last years. For instance, reviews have identified psychological factors like higher self-efficacy and optimistic expectations of recovery and RTW<sup>7</sup>, gaining control over one's own condition, believing in RTW and work-related factors such as occupational training<sup>1</sup>, and factors related to own personality <sup>61</sup> to be factors promoting RTW. Whereas, high distress and depression<sup>17</sup> are psychological risk factors that hinder RTW. Furthermore, personal or *individual factors* like work ability <sup>62</sup>, higher education and socioeconomic status <sup>7 62</sup> facilitate RTW, and higher age <sup>1762</sup> in addition to female gender <sup>763</sup> are revealed as obstacles for RTW. Lower severity of illness or injury <sup>7</sup> and functional disability <sup>1</sup> are *medical factors* that promote RTW. On the other hand, higher pain and disability levels and pain-related factors such as fear <sup>17</sup>, comorbidity <sup>62</sup>, previous sick leave, unemployment, activity limitations and avoidance <sup>1763</sup>, and described health problems <sup>63</sup> all are risk factors for not returning to work. Work-related factors that enhances RTW are significant support and social support in the workplace <sup>64 61 65</sup>, and job control <sup>62</sup>; however, job strain <sup>62</sup>, higher physical work demands <sup>7</sup> and heavy physical work <sup>63</sup> hinders RTW. Intervention characteristics like RTW coordination <sup>17</sup> and multidisciplinary interventions that include stakeholders and the workplace <sup>7</sup> promotes RTW, and the social and rehabilitation systems are generally important <sup>61</sup>. These studies show that a number of factors affecting disability and RTW are similar across different diagnoses and causes of sick leave. This makes it possible to detect groups at high risk for

work disability and develop disability management interventions across i.e. chronic diseases, to overcome health-related limitations at work <sup>63</sup>.

Furthermore, the strategies and interventions to promote RTW and prevent disability seem to approach regardless of diagnoses <sup>32 62 66 67</sup>. Even so, some research seems to point to certain challenges specific to some diagnostic groups or other specific characteristics (i.e., in the work environment) and argues for tailoring interventions according to these <sup>68 69</sup>. On the other hand, some argue that absence from work or participation challenges in the working life is to be seen as the main "diagnosis" itself <sup>70 71</sup>. To view the "absence from work" as the diagnosis does not require a total detachment from a medical mindset, hence includes psychological, social and contextual factors as central in our understanding of absenteeism and presenteeism, disease and health. Social and participatory concepts are included in the understanding of health and disease, in line with the WHO definition based on a biopsychosocial understanding <sup>51</sup>. Today it seems that we as a society are in a process where we are constructing and reconstructing the concepts of sick leave and the absentee <sup>72</sup>. Disability management, vocational/occupational rehabilitation and return-to-work have, although named differently and quite separated as research fields, much in common. Accordingly, efforts to unify and learn across the several fields of research and practice in order to obtain more comprehensive and innovative solutions for the future has earlier been proposed <sup>66 67</sup>. Consequently, the perspectives on sickness absence and prevention of disability are also changing policies and the welfare system.

#### 2.1.2 Sickness absence and the welfare system – The policy level

A welfare state may be defined as 'complex responsibilities taken on by public authorities to secure income maintenance through the transfer of money and to guarantee the delivery of services for instance within health, care and education' <sup>73</sup>. This responsibility taken by the government to secure its inhabitants are considered a common good and lowers social differences in health <sup>74</sup>. The Norwegian system for providing health- and social services related to sickness absence and disability are characterized as a social democratic policy model according to OECD, and alike the Nordic countries Finland and Sweden, as well as Germany <sup>31</sup>. These countries are the most generous of the OECD countries with full population coverage of disability benefits, low entry thresholds, high benefits, generous benefit suspension, comprehensive employment and vocational rehabilitation programmes, but also has the strongest employer obligations of all models <sup>31</sup>. Within the social democratic policy model is also Denmark, Switzerland and the Netherlands. These countries disability

benefits are less generous on benefits and employment supports are less accessible, but they provides better work incentives. It also has the strongest sickness absence monitoring and payment eligibility control focus of all models <sup>31</sup>. The policy in Australia, New Zealand and United Kingdom is a part of the liberal policy model, and has well organised and coordinated accessible services but lower benefit levels. Canada, United States, Korea and Japan have the most stringent eligibility criteria for disability benefit and the shortest benefit payment duration compared to countries in other policy types, although also included in the liberalist model. Other continental European countries are according to OECD placed in the corporatist policy model, were benefits are relatively accessible and generous, but not at the level of the Nordic countries. Furthermore, focus on vocational rehabilitation and supported employment are not as strong as in the Nordic countries, even though employment programmes are quite developed <sup>31</sup>.

However, the welfare state is under pressure due to factors like economic changes and an eldering population, among others <sup>31 75</sup>. An extensive focus on how to solve the challenge of work participation for a larger proportion of the population is therefore outlined in several policy documents from welfare, health services, public health, and working life perspectives <sup>75-78</sup>. Moreover is a number of initiatives implemented in Norway in order to reduce sickness absence and prevent long-term disability <sup>13 75</sup>. An example is the establishment of Working Life Centres in NAV with responsibility for guiding companies in how to reduce sick leave <sup>13</sup> <sup>17</sup>. Furthermore, the 2001 Cooperation Agreement on a More Inclusive Working Life (IA-agreement) marked a shift in the workplace, and its actors became the main arena for follow-up of sick-listed employees. Through this agreement, there are opportunities for graded sick leave and focus on the workplace's duty to facilitate work participation despite health problems <sup>13 27</sup>. This integration focus raises across all OECD countries, and in this manner the different policies are more alike than before <sup>31</sup>.

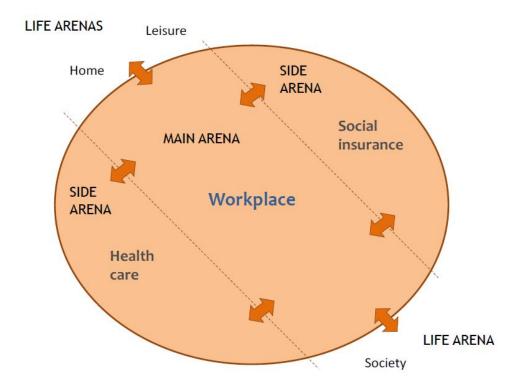
Related to the IA-agreement, the largest initiative aimed at sick-listed employees was launched in 2007. This was a grant scheme for health and rehabilitation services, also known as the Rapid-RTW programme <sup>79</sup>. The programme was aimed at reducing time to RTW for sick-listed employees or persons at risk of becoming sick-listed, and to reduce the wait times for the assessment and treatment of employees on sick leave <sup>76</sup>. Governmental funding of the programme has been NOK 700 million (approximately \$82 million) per year <sup>65</sup>. The national programme included more than 200 different public and private RTW services and was organised by Regional health services and NAV. From 2018 the government decided to

implement the Rapid-RTW programme in the Regional health services' ordinary annual appropriations <sup>80</sup>. The purpose of this reorganization of the scheme was a more equal offer for all patient groups, based on the same principles of prioritization.

A number of studies have evaluated the national Rapid-RTW programme. The main patient groups in the services are employees who have been sick-listed between eight weeks and one year with musculoskeletal disorders or common mental disorders <sup>79</sup>. Studies have shown great support for the Rapid-RTW programme among employees <sup>81</sup>. In spite of that, the referral, distribution, and organization of the programme are reportedly challenging <sup>79 81-83</sup>. Among other results, the studies have shown that the programme was poorly coordinated <sup>79 83</sup> and included little interaction with external stakeholders, like at the workplace <sup>79</sup>. The biopsychosocial paradigm calls for integrating services and stakeholders, employing multiple interventions, setting goals, and working as part of the rehabilitation, not just an outcome. Structural elements in RTW processes may enable as well as constrain occupation<sup>84</sup>, and such processes are also shaped by elements at the macro level <sup>22</sup>. The possibility of work participation after illness or injury is dependent on the individual's circumstances and choices, environmental factors in the workplace, and the impact of policies and structures within society <sup>85-89</sup>. Earlier research has for instance revealed that the cross-country differences in applied work interventions explained large cross-country differences in sustainable RTW after chronic Low-Back-Pain (LBP)<sup>90</sup>.

#### 2.1.4 Stakeholders and RTW programmes – The intervention level

According to Young and colleagues (2005), return-to-work stakeholders are commonly classified into five groups: workers, employers, payers, healthcare providers, and the government/society <sup>55</sup>. These groups may include workplace sector players, such as union representatives or OHS (Occupational Health Service), the worker's family, healthcare professionals (e.g., medical doctors, occupational and physical therapists, or psychologists), and social insurance workers, such as social workers or social service providers <sup>91</sup>. The stakeholders enable workers to return-to-work after illness-related absences and are involved in critical aspects of the trajectory across the various work, health, and social sectors and systems <sup>92</sup>. Aas (2009) has developed an arena model to understand the complexity involved in helping a sick-listed employee return to work (see Figure 1) <sup>13 17</sup>. The main arena is described as the workplace, with social insurance (NAV) and healthcare as side arenas. Society, the home environment, and leisure life arenas are related to main and side arenas <sup>17</sup>.



#### Figure 1: Overview of the main arena and side arenas involved in RTW processes

Arenas for preventing unnecessary sickness absence and promoting RTW. Aas (2009, 2011)<sup>17</sup>. Reprinted with permission from the author.

In a Norwegian context, examples of stakeholders from main and side arenas <sup>13</sup> are provided in Figure 2. This figure list stakeholder examples from different levels in the main and side arenas, from macro to micro. One way to categorise the several types of RTW programmes might be based on who delivers the service. Healthcare typically provides treatment and occupational rehabilitation services, social insurance often provides case management or vocational or employment services, and the workplace may offer absence management or workplace adaptations. Regardless of where the programme is placed in the system, it often involves multiple intervention components and stakeholders <sup>93</sup>. The research literature operates with a variety of time periods of sickness absence before employees should be offered occupational rehabilitation. However, after four weeks seems to be a common timeframe <sup>94</sup>. Time spans of four to eight <sup>8</sup> and four to twelve weeks <sup>68 95 96</sup> are common. Others say it should be earlier, from between two and six to eight weeks <sup>97 98</sup>. Absences of more than eight weeks are also defined as long-term <sup>10</sup>. It is recently suggested that there is no limited time window for starting a RTW intervention, and that the focus should move to what type of intervention is needed at what time <sup>99</sup>. In Norway, it is common to initiate contact between the immediate supervisor and the employee on sick leave on the first day of an absence. This type of early contact has been found to have a positive impact on return-to-work <sup>100</sup>.



#### Figure 2: Examples of stakeholders on different levels at main and side arenas

Historically, the main arena for work reintegration was focused on services that are currently included in NAV. In Norway, NAV are also the "payers" for sickness absence and disability schemes expanding the sixteen first calendar days of sickness absence paid by the employer. Numerous initiatives and various strategies and interventions have been developed and implemented, such as traineeships in ordinary companies <sup>101</sup>. The initiatives have had various levels of success in work reintegration, and the proportion of the population receiving healthrelated benefits has increased in the last 20 years <sup>31 102</sup>. The reorganization of social insurance and public employment services into the same organization with local social offices, also called the NAV reform, was an attempt to address some of the challenges related to divided sectors being involved in work integration and rehabilitation <sup>103</sup>. This effort is implemented in similar versions across OECD countries, called one-stop-shop service provision <sup>31</sup>. However, the focus on work rehabilitation and its effect on RTW in NAV have been questioned <sup>103</sup> <sup>104</sup>. The reform has actually been found to have a negative impact on RTW<sup>104</sup>. This failure to achieve the goal of putting more people to work seems to be rooted in structural challenges in NAV <sup>103</sup>, and the lack of success for one-stop-shop services are evident also in other countries <sup>31</sup>. The health services have traditionally offered treatment and rehabilitation to employees with sickness absence without a specific focus on work reintegration. It was more or less

assumed that the workers returned to work when treatment was completed <sup>19</sup>. Nevertheless, there are exceptions to the rule. For instance, private institutions have offered occupational rehabilitation from specialist healthcare providers, often to workers with complex life situations and health problems in long-term sickness absence <sup>105 106</sup>. Such occupational rehabilitation services are often perceived by participants as contributing to helping them cope with health complaints <sup>107</sup>. Still, the results regarding return-to-work are unclear <sup>106 107</sup>.

Current RTW programmes are characterised by their aim to solve both health and life problems; they include several intervention components and multiple professionals and can be classified as complex interventions <sup>50 108 109</sup>. Complex interventions can be briefly defined as interventions containing several interacting components <sup>108</sup>. However, there is no sharp distinction between simple and complex interventions, and interventions may be complex in several different ways, such as in the number of components, the various effect targets or stakeholders involved <sup>108</sup>. Focusing on interactions between people, the environment, and social systems that provide a framework for opportunities for participation in society and in working life are important. Reasonable accommodation is one strategy; it involves the modification of physical, social, or emotional environments to enable occupational involvement in paid work <sup>25</sup>. According to Friesen et al. (2001), an RTW process will most likely succeed if the involved stakeholders coordinate their efforts and agree that several factors affect return-to-work <sup>110</sup>.

#### 2.1.4.1 Intervention components affecting RTW

Several studies have investigated how various intervention components affect RTW. In general, there is evidence for the effectiveness of job modifications, RTW coordination, and organizational support, but the evidence is still reportedly lacking on a more granular level <sup>2</sup>. Some of the literature focuses on the workplace, and it seems the facilitation and active involvement of the workplace is an important factor in RTW <sup>6</sup><sup>111-114</sup>. A systematic review found generally evidence for effectiveness of workplace-based RTW interventions <sup>3</sup>. The intervention involved at least the employee and supervisors, and included adjustments and accommodations at equipment, employment or environments <sup>3</sup>. In subgroup analysis based on diagnosis it was revealed that workplace interventions were effective for employees with MSD. However, there was not enough evidence to conclude that such interventions were effective for a reduction in disability when there is early contact between worker and workplace, ergonomic visits in the workplace, and an RTW coordinator <sup>6</sup>. Another review

found employer participation, a work climate that is supportive, and cooperation between labour and management as essential in the facilitation of RTW <sup>115</sup>. A review of the effectiveness of workplace disability management programmes concludes there is insufficient evidence since it was not possible to determine if specific programme components or sets of components drove the effectiveness <sup>93</sup>.

Other reviews have focused on diagnoses and investigated the intervention components from this angle <sup>4 116-119</sup>. A review conducted by Briand et al. (2008) revealed the essential components needed to facilitate RTW for workers with MSD: centralised coordination of the workers' RTW, formal individual psychological and occupational interventions, workplacebased interventions, work accommodations, contact between various stakeholders, and interventions to foster concerted action<sup>4</sup>. Other studies of MSD have concluded that early return-to-work is a goal for most cases, facilitated by transitional arrangements when necessary by incorporating medical, social, and occupational perspectives. To ensure proper coordination between actors, engaged workers and employers are important <sup>116 117</sup>. Furthermore, healthcare components such as interdisciplinary teams <sup>6 112 120</sup>, tailoring interventions <sup>96 121</sup>, and coordination <sup>95 96 122 123</sup> appear to have a positive impact on RTW. A review of early multidisciplinary interventions to promote work participation for people with MSD concluded that a stepped care approach is more effective than usual care in facilitating RTW, although there exists uncertainty of the effectiveness due to heterogeneity in interventions and settings <sup>124</sup>. For employees with non-acute non-specific LBP, exercise interventions seems to have an effect on work disability prevention in the long term <sup>125</sup>. An integrated care intervention including workplace intervention and graded activity with exercise programme based on cognitive behavioural principles is so far the best documented successful intervention for LBP<sup>111</sup>.

Additionally, when the goal is to involve individuals with severe mental health problems in paid work activities, integrated approaches at an ordinary workplace are more effective than sheltered work <sup>126-130</sup>. Close cooperation among all stakeholders has been shown to be one of the crucial components of successful work rehabilitation for mental health service users <sup>131</sup>. Several studies of intervention components affecting RTW, from either a workplace, diagnosis or healthcare perspective, have revealed coordination and provision of a coordinator as part of the RTW programme as important intervention components.

#### 2.1.4.2 Rapid-RTW services

Some of the rapid-RTW services have had their interventions systematically evaluated and published research results. A study of sick-listed employees with long-term LBP found reduced sickness absence and improvements in clinical status one year after a multiprofessional rapid-RTW intervention <sup>132</sup>. Another study of the effect of work-focused rehabilitation among employees with back and neck pain found that adding a work focus to the intervention in specialist healthcare did not alter the RTW rate when compared to standard multidisciplinary intervention<sup>11</sup>. A cohort study of employees with MSD and common mental health problems receiving brief intervention found participation in work to be doubled in the treatment-as-usual group compared to the intervention group <sup>133</sup>. A cohort study of employees receiving rapid-RTW services found that psychosocial factors in the workplace, employees' perceptions of job demands and decision control, and social support predicted RTW 65 134. A study of rapid-RTW services' development over time <sup>135</sup>, found that that the services for employees with TBI (Traumatic Brain Injury) changed during the first six years of implementation. When both the intensity and duration of the intervention were reduced, more employees returned to work <sup>135</sup>. Another study found that women and those without comorbidity in addition to TBI seem to return-to-work more rapidly <sup>136</sup>. Furthermore, there seems to be an association between intense and long-lasting participation in the rapid-RTW programme and prolonged time-to first-RTW<sup>136</sup>. A study of female cancer patients found those who did not improve their work status (more than 1 out of 3) lived in paired relations and had more fatigue at baseline, as well as less improvement in health-related quality of life during the intervention <sup>137</sup>. These studies generally reveal that some interventions seem to promote RTW, while others seem to prolong or not add to a more rapid RTW. Psychosocial factors in the workplace seem to be associated with RTW, and the services may develop over time. However, all studies except one <sup>11</sup> are cohort studies that may reveal associations, but are not able to test the effect of the interventions. Several of these studies have limitations, like small sample <sup>132 137</sup>, lack of relevant comparison group <sup>137</sup>, challenges in recruitment of participants <sup>133</sup>, and variables like RTW based on self-report <sup>132</sup>. The RCT-study have several strengths <sup>11</sup>, but also limitations regarding the work-focused intervention like differences in implementation at the two intervention localizations. The work-focused intervention was added to the multidisciplinary intervention and that may have limited the possibility to reveal an additional effect of this focus. In addition, one may question if the work-focused intervention was comprehensive enough in order to facilitate RTW with only a telephone contact between case manager and the supervisor, and the need for the employee to request it

if the case manager should attend a meeting at the workplace. It is furthermore unclear in these studies if those receiving the most comprehensive interventions are those with the most complex and long-lasting complaints, which also have the lowest RTW-rates. Or if comprehensive interventions in themselves reduces the possibilities for RTW. Accordingly, there is still a need for well designed, good quality studies regarding associations with and effects of rapid-RTW-services.

As outlined above, several medical, social, psychological, and contextual factors influence employees' work participation at the individual level. Several initiatives have been implemented at the policy level to enhance participation in work despite health problems. This policy has resulted in a variety of complex interventions and programmes involving several stakeholders, which lead us to perspectives that may enlighten coordination of RTW.

### 2.2 Perspectives used to enlighten RTW coordination

Several relevant perspectives can be used to enlighten such a multifaceted field as coordination of RTW processes. In this thesis, the chosen perspectives elaborate on systems theory and the complex interplay between interventions within various arenas and levels provided to enhance the employee with health complaints' participation in work.

#### 2.2.1 Integration of services and the concept of coordination

The international focus on integration is an overall trend towards building more integrated care-enclosing coordination. The concept of integration is described as superior to coordination, collaboration, and cooperation; thus, several actors and activities are brought together. Several authors have discussed the related concepts of collaboration, cooperation, and coordination, and their definitions and theoretical connections may be both contradictory and unclear <sup>14 73 138</sup>. An organization is integrated if its members or parts 'act in concert, as if they had a common or overall purpose' <sup>73 139</sup>. Integration may be studied hierarchically through levels of integration, as well as through degrees of horizontal and vertical integration <sup>73</sup>. Although the aim of integration is to improve the coordination and integration of services, the scope of what is to be integrated varies across types of services and participation or health problems <sup>29</sup>. Coordination is defined in numerous ways in organizational literature and literature on integration and coordination says it is "a structural term referring to the elaboration of systems which promote different organizations' goals for the best i.e.

organising e.g. finance, administrative management and functional support to increase efficiency" <sup>14 139</sup>.

A general definition of integration is "the act of making a whole out of parts; the coordination of different activities to ensure harmonious functioning" <sup>29</sup>. This conception of wholeness or holism is only meaningful when related to some unit or entity <sup>73</sup>, such as in this thesis where the interventions are provided to an employee in an RTW process. Integration is focusing on improving the linkages between functions, institutions, and professions in the health and social services <sup>29</sup>. Such integration is described as vertical, referring to coordination across various levels and institutions <sup>73 139</sup>, and differs from horizontal integration, which refers to coordination within one level or service <sup>29</sup>. The conditions for horizontal integration as described by Hvinden (1994) are [1] mutual awareness, [2] compatibility of perceptions and goals, and [3] interdependence or complementary action involving joint action or exchange of resources <sup>73</sup>. Furthermore, he defines coordination as vertical and horizontal integration, while Kärrholm (2007) describes coordination across vertical levels <sup>139</sup>. Coordination, cooperation, and collaboration may be viewed as degrees of integration; however, choosing which concept to apply is defined by context as well as whose perspective one wishes to take <sup>73</sup>.

Although what may be characterised as the vertical integration of services has been outlined in several policy documents in Norway, as the Coordination reform exemplifies <sup>142</sup>, the practice, responsibilities, and organizational frames of coordination are still reportedly inadequate <sup>26 79 143</sup>. The Norwegian health directorate states that coordination must take place at several levels and that the services must be considered together to achieve unity and coherence between the services <sup>144</sup>.

#### 2.2.2 Frameworks on service coordination

Several frameworks and models are applied in order to understand and develop quality in healthcare, as well as organizational and service coordination. A brief presentation of some especially relevant for this thesis will be provided below.

#### 2.2.2.1 Donabedian's quality framework

Donabedian developed a framework for assessing the quality of care that is flexible enough to apply to various situations <sup>138</sup>. This framework consist of the three elements structure, process and outcome for evaluating healthcare <sup>145</sup>. Structure is defined as settings, qualifications of providers and administrative systems: this is where the healthcare takes place. Process is

defined as the components included in healthcare delivered, and outcome as recovery, restoration of function or survival <sup>146</sup>. Coordination of care is placed as an element of the process, expecting to be affected by setting and other structural elements, and influence the health outcomes <sup>138</sup>. Complex organizations needs systems for internal and external coordination in order to reach its objectives. Donabedian (1966) outlined a list of criteria for evaluation of healthcare. Two criteria had focus on coordination: "The criterion of internal coordination and continuity, with maximum stability, focalization and personalization of the coordinating mechanism, within a formally organized system of records, referrals and communication" and "The criterion of linkage to relevant external social functions and instrumentalities" (p.120)<sup>145</sup>.

#### 2.2.2.2 Organizational design framework

Organizations may be viewed as information processing systems where different types of information require different organizational strategies <sup>138</sup>. In the organizational design framework, the organization is characterised as an information processing system. More widely, different external conditions and organizational characteristics form various behaviour patterns and help identify various ways to design organizations <sup>147</sup>. Organizational theory has helped develop several theoretical concepts and frameworks for care coordination when applied to the healthcare field <sup>138 148</sup>. Choosing an organizational design is, according to organizational design framework, related to the concepts of information requirements, information processing capacity, and the match or fit between these concepts <sup>138</sup>. Coordination is believed to be critical to organizational performance and produces higherquality outcomes more efficiently when performed well <sup>140</sup>. Specialization in the healthcare system leads to enhanced complexity in organizations; thus, interdependencies between service providers and the need for coordination increase <sup>141</sup>. The management of uncertainty and complexity in care coordination affect the level of interdependencies among organizations. Increasing levels of complexity and uncertainty elevate the stakeholders' interdependencies, and consequently, the need for integration <sup>138</sup>.

Lawrence and Lorch (1967) defined integration as "the quality of the state of collaboration that exists among departments that are required to achieve unity of effort by the demands of the environment" <sup>147</sup>. They use the term of differentiation to describe the difference among managers in different functions related to cognitive and emotional orientation. Three different types of differentiation are elaborated: orientation towards particular goals, time orientation, and interpersonal orientation <sup>147</sup>. The behaviour of the organizations' members is not only

shaped by individuals' personality and needs or motives but also by interaction with others. These relationships are also interrelated regarding the nature of tasks, formal relationships, rewards and controls, and the existing ideas within an organization <sup>147</sup>.

#### 2.2.2.3 Relational coordination theory

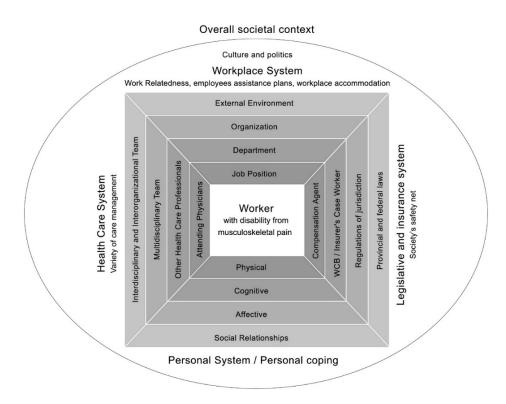
The relational coordination framework was developed in to better understand dynamics in teamwork or collaboration <sup>138</sup>. In a review of theoretical frameworks <sup>148</sup>, the relational coordination theory <sup>140</sup> with the multilevel framework <sup>141</sup> was claimed to be the most comprehensive framework for studying coordination within and between organizations. In line with the organizational design framework <sup>147</sup>, the coordinating mechanisms of routines, boundary spanners, and team meetings are included in the relational coordination theory. However, beyond these design elements lies interactional and relational aspects of coordination <sup>140</sup>. This spontaneous form of coordination reflects the role of frequent, timely, and accurate problem-solving communication among stakeholders in the coordination process <sup>140</sup>. In the multilevel framework, it is proposed that organizational design and network perspectives from intra-organizational coordination may be leveraged by the development of inter-organizational coordination <sup>141</sup>.

#### 2.2.3 Ecological models

The bioecological model developed by Bronfenbrenner (1979, 2005) is a theoretical model of human development within ecological systems theory and considered a comprehensive and well-developed model <sup>149 150</sup>. Although the bioecological model was initially a developmental model focused on the child, it has evolved through different paths and fields of research <sup>151</sup>, including adult development <sup>152 153</sup>. Contemporary concepts define adult learning and development as "systematic, qualitative changes in human abilities and behaviours as a result of interactions between internal and external environments"  $(p. 8)^{152}$ . The bioecological model includes concepts used to analyse, describe, and explain processes of individuals in context <sup>154</sup> and may expand our understanding of how various systems and different levels of systems are interdependent<sup>149</sup>. The microsystem refers to settings directly experienced by the employee <sup>149</sup>, like the workplace. The mesosystem consists of overlapping and interrelation of two or more microsystems <sup>149</sup>, such as workplace and RTW programme interaction. In Bronfenbrenner's model, the term exosystem refers to settings that do not directly involve the person but still affect or are affected by what happens in settings where the person is involved <sup>149</sup>. An example in present studies would be the Norwegian Rapid-RTW programme. The macrosystem refers to consistencies in cultures, beliefs, and ideologies underlying the other

systems <sup>149</sup>, such as a welfare state. A change in one subsystem or level may affect the whole system. In the field of occupational health, the bioecological model was developed and described for use "as a systems approach framework to address workplace wellbeing in a holistic, meaningful and practical way" <sup>151</sup>. The nested structures of systems in the bioecological model have inspired individual-oriented research in occupational health to complement system-focused research <sup>52</sup>. Furthermore, in RTW research, the bioecological model is used to elaborate on the need for holistic perspectives to understand and intervene with the complexity of individual work disability that is attached and intervenes with the contexts <sup>155 156</sup>.

To understand challenges with sickness absence and work disability, the Case-management ecological model of work disability prevention (WDP) developed by Loisel et al. (2001) has gained international attention. This model builds on the Sherbrooke model, where service integration was a central concept in the RTW programme <sup>157 158</sup>. The model places the employee in the centre and includes the personal system, the workplace, and health and social services surrounded by the societal context associated with cultural and political frameworks <sup>15 50</sup> (Figure 3). Here, the interaction between different systems is seen as crucial to the outcome of an RTW process <sup>18</sup>. The WDP model focuses on the involvement of the workplace and the prevention of long-term sick leave and disability <sup>18</sup>. Although developed to orient the case management of LBP, the model has been largely applied to various conditions where work disability prevention is desired <sup>159</sup>.



#### Figure 3: The WDP-model: A case-management ecological model

The arena in work disability prevention. Loisel et al. <sup>50</sup>. Copyright (2005), with permission from Springer.

Several studies have indicated that understanding cooperation in the field of rehabilitation from an ecological perspective could be expedited by using the following three levels: micro, meso, and macro <sup>18 110 156 160 161</sup>. In health service research the micro level are defined as individual, meso level as institutional and macro level as system level <sup>162</sup>. Health service research in EU policy describes the levels micro-meso-macro as contrasting yet interconnected. They state, "it is only by considering the challenges healthcare systems face at each of these levels that their complexity will be understood" <sup>160 162</sup>. Solvang et al. (2017) developed a matrix which illustrates "the complexity of understanding rehabilitation as a holistic biopsychosocial framework for improving functioning, wellbeing and participation" (p.1988)<sup>160</sup>. The matrix describes how rehabilitation-related questions and research are often complex, and studies that address several cells and overlap between cells in their matrix has the potential to expand our knowledge in the field <sup>160</sup>.

### 2.3 Coordination of RTW processes

The complexity of programmes and intervention components affecting employees on sick leave and RTW processes requires involvement from several stakeholders and arenas across various levels of the health and welfare system. A solution to this challenge has been to coordinate services by, for example, providing a coordinator to help the employee navigate the process and provide timely and effective services.

#### 2.3.1 Return-to-work coordination

Several relatively similar words and phrases are used to describe the concept of coordination and the coordinator used in RTW processes in the scientific literature. In a systematic search of the English-language research literature dealing with coordination, we found a couple of different concepts. As shown in Table 1, the most common terms describing the process of integrating services in the RTW field are case management, coordination (or coordinate), and disability management. Furthermore, the terms coordinator and RTW coordinator are most commonly applied to the person responsible for integrating services, followed by the term case manager.

Concept	Words used for the concept	n
The process of integrating services	Case Management	85
	Coordination/Coordinate	84
	Disability Management	54
	RTW Coordination	15
	Care Management	6
	Return to Work Coordination	1
	Coordinator	98
The person responsible for integrating services	RTW Coordinator	56
	Case Manager	39
	Return to Work Coordinator	4
	Disability Manager	1

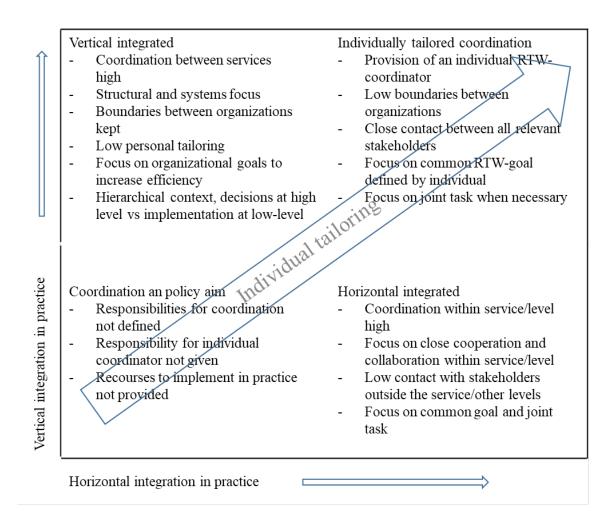
#### Table 1: Concepts and terms related to the coordination of services\*

Note: \*Hits on concepts and terms (title + abstract) in included reviews and single studies (n=145) in the systematic search for literature related to the thesis.

Sandvin (2008) discussed three perspectives that are necessary to address the inclusion of more employees with health complaints in the workforce: coordination, holistic, and individual <sup>155</sup>. The reasoning behind the coordination perspective is the need for a holistic approach that perceives the worker as a whole person with complex health and life problems that are inseparably linked to and in constant interaction with their contexts. Thus, he sees human development from an ecological perspective. This holistic view of the employee calls for the individual perspective, which is not reasoned based on problems necessarily having individual causes, although solutions to the problems have to be based on the individuals' viewpoint <sup>155</sup>. On this foundation, the need for a coordination perspective is elaborated. It is argued that to recover from complex life problems, the employee needs multiple compound

interventions and support that is tailored to the individual's needs. This requires, in the dilemma between complex life situations and formal organization of RTW processes, the system to "designate a person who can represent the services as a whole in the face of the person in need of support" (my translation) who is named the personal coordinator <sup>163</sup>. According to Sandvin, coordination is the main focus rather than cooperation and collaboration because it points directly towards what one wishes to achieve, focuses on the individual rather than takes a detour around organizational collaboration, and the content of what is to be coordinated in an individually-tailored and holistic intervention varies to a large degree; thus, coordination will be more flexible and adaptable to individual situations <sup>155</sup>.

The coordination of services following the trend of integration is a policy aim reflected in several documents and pinpointed in the coordination reforms <sup>142</sup>. Hvinden (1994) described vertical and horizontal integration as across or within service level integration in hierarchical structures <sup>73</sup>, which Kärrholm (2007) adapts based on Axelsson and Axelssons (2007) model related to the concepts of coordination, cooperation, and collaboration<sup>14 139</sup>. Kärrholm describes coordination as structural and hierarchical and claims that the coordination of activities does not require in-person meetings <sup>139</sup>. Hvinden and Kärrholm's perspectives are similar in their focus on collaboration as the main aim for the integration of services, although they state that different forms of integration may be important for different purposes <sup>73 139</sup>. Sandvin (2008), however, proposed the personal tailoring of RTW services and the need for the provision of an individual coordinator to meet the complex situations of the employees experiencing work disruption so their needs can be met in a holistic manner <sup>26</sup>. These policies and theoretical descriptions and models are incorporated into a model of interpretation; see Figure 4. Coordination as a policy aim does not necessarily enhance the practice of coordinating services; thus, implementation strategies are required <sup>73</sup>. In the complex field of coordinating RTW processes, few concrete responsibilities are defined and given in Norway, and few guidelines or resources exist that could provide such a complex praxis. Vertical and horizontal integration, coordination, collaboration, and cooperation, are not an either/or proposition, but degrees of such kinds of practices, as explained by Kärrholm<sup>139</sup>. This approach is also in line with other researchers' perspectives <sup>1473164</sup>.



#### Figure 4: Interpretation model from the literature on service integration

On the other hand, none of these dimensions solves the need for simultaneous individual tailoring and the integration of services. Such an approach is best described by Sandvin (2008), who states the provision of an individual coordinator and lowering of organizational boundaries, as well as close contact between stakeholders that might require joint tasks whenever needed; still, coordination should always be based on a common goal defined by the employee <sup>26</sup>.

#### 2.3.2 Coordination elements and the RTW coordinator role

No uniform definition of coordinated RTW programmes exists; however, a recent review <sup>12</sup> of such programmes defined them as follows: the objective is to promote return-to-work; the return-to-work coordinator(s) and the affected worker have at least one face-to-face contact; the process starts with an assessment of the worker's needs and leads to an individually-tailored return-to-work plan; and the implementation of the return-to-work plan is managed by the return-to-work coordinator(s) <sup>12</sup>. The RTW coordinator is recognised by some to be the most important person related to the success of the interventions <sup>165 166</sup>. The activities of RTW

coordinators as one of several intervention components in workplace trials have been reviewed previously <sup>122</sup>. Coordinators have different professional backgrounds, such as occupational therapists, nurses, physiotherapists, vocational consultants, ergonomists, case managers, and psychologists <sup>122</sup>. The role of RTW coordinators was described as a "lawyer" for the employees, mediator, facilitator, case manager, and counsellor or supervisor. The most common coordinator activities that emerged in this study were assessing workplace factors, making plans for the transition to work, and to facilitating communication and agreement between the stakeholders involved. The authors identified six competency domains: ergonomic and workplace assessment, clinical interviewing, social problem solving, workplace mediation, knowledge of business and legal aspects, and knowledge of medical conditions. It is suggested that successful RTW coordination relies more on competencies in job accommodation, communication, and conflict resolution than on medical training <sup>122</sup>.

Pransky et al. (2010) investigated the competence required to succeed in the role of an RTW coordinator and found eight different groups of competence areas: administration, individual personal attributes, information gathering, communication, professional credibility, evaluation, problem-solving, and conflict management <sup>167</sup>. The areas considered to be most important were personal characteristics and specific skills in coordinating between all actors involved in the RTW process <sup>167</sup>. Organization and planning skills are highly recommended. Furthermore, studies have shown that personal characteristics such as trustworthiness, as well as communication and problem solver skills, are important <sup>166-168</sup>. The competencies highlighted are closely linked to interpersonal skills <sup>122</sup>. Being able to cooperate and handle conflicts of interest are important to performing well as a coordinator <sup>169</sup>. Thus, the RTW coordinator role is reported to be challenging emotional labour <sup>170</sup>. Following this list of needed competencies, the RTW coordinators require training and support in their role to deliver timely and appropriate services to all stakeholders involved in the RTW process <sup>171 172</sup>.

A study of the provision of a designated coordinator in RTW processes in Sweden <sup>173</sup> sums up the requirements for the coordinator role in a Scandinavian perspective. The coordinators must have skills in building personal relationships, be curious, use their life experience, listen to the employee, support the employees' personal decisions, be emphatic and show compassion, and view the situation from a wider perspective. Furthermore, to let the employee recover and develop even though it may take some time; with complex problems a wide time horizon is experienced to be important <sup>173</sup>. Additionally, the coordinator must have legitimacy in the systems and know these systems, as well as the framework of the health and welfare systems, be creative, and motivate the employee. The importance of creating realistic future perspectives and developing strategies to reach the aims was also elaborated <sup>173</sup>.

### 2.3.3 Supervisors and other stakeholders' experiences with coordination and RTW processes

Supervisors generally have concerns about employing people with mental health problems <sup>174-</sup> <sup>176</sup>, but prior experience seems to be an important factor in determining supervisors' attitudes towards such employment <sup>177</sup>. Deepening their knowledge of mental health challenges has been found to be an effective strategy to use in gaining supervisors' cooperation <sup>175 178</sup>. Studies from the supervisors' perspective reveal that they are open to facilitate the RTW process but feel that both their perspective and workplace constraints should be considered when planning the integration <sup>179 180</sup>. Supervisors also call attention to the coordination of public services and state that the provision of services is essential to successful RTW programmes <sup>181</sup>. According to supervisors, training and support are needed, and the competencies required to facilitate employment for individuals with both mental health problems and MSD are certain personal attributes, knowledge of the RTW process, and empathetic support of the worker <sup>182</sup>. Supervisors and employees on sick leave may give priority to different leadership qualities, such as being a protector and contact-maker and having problem-solving skills to find suitable tasks in the return-to-work process <sup>17 183</sup>. For employers, there are also considerable costs associated with mental health problems arising from both absenteeism and presenteeism, as well as the interaction with co-workers' responsibilities <sup>32</sup>. Supervisors struggle to balance their considerations for the employee in the RTW process with those of their teams <sup>184 185</sup>. Their perspective also inevitably has a major influence on whether an employee may return to the workplace  $^{186}$ .

When employees with mental health problems are asked about their work environment, they generally report positive experiences of supervisors and co-workers in the social network <sup>187</sup>. They face specific challenges, including the consequences of deciding whether to disclose their condition. Additionally, since the workplace plays a crucial role in the mental health of employees, their stigma and fears are particularly critical <sup>32</sup>. Employees report an individual approach and a high-quality relationship with the RTW professionals are necessary and say it is a challenge when the RTW professionals are both facilitators and controllers in the process <sup>188</sup>. The need to involve the employees themselves in the RTW process in addition to coordination between professionals was revealed in a study of sick-listed workers with

chronic heart failure <sup>189</sup>. However, some employees report that although they want to be involved, the responsibilities following their involvement sometimes felt impossible to complete <sup>190</sup>. Having a coordinator has been reported to provide support in the RTW process, and the employees have highlighted straightforward, open, and recurring communication as facilitating elements <sup>191</sup>.

Social insurance officers (SIOs) are responsible for applying measures to reduce sickness absence and promote RTW, and studies focusing on this responsibility revealed that the SIOs felt unsure in their role of handling the contacts with clients and other stakeholders <sup>192</sup>. The studies of the SIOs investigated a limited perspective on the individual level and the sickness insurance; and this complex field needs to be elucidated in an interactional perspective between actors in local spheres and in different professional disciplines, as well as between welfare staff and individual citizens <sup>192</sup>. SIOs additionally claim that the RTW process could be improved by focusing on the early identification of problems, needs, and interventions and using a variety of interventions, setting clear goals, and recognising psychosocial factors <sup>193</sup>.

General practitioners and case managers reported in a Danish study <sup>194</sup> that several conditions framing cooperation in the RTW process were challenging. They called for policymakers to increase the stakeholders' abilities to cooperate and improve conditions to enhance trust and willingness to cooperate <sup>194</sup>. To succeed with early intervention and promote RTW following spinal cord injuries, flexibility, coordinators working on the ward, and good communication among staff were highlighted as necessary by professionals <sup>195</sup>.

Stakeholders state that there is a need to expand the expertise in managing work disability <sup>196</sup>. Also there are challenges when stakeholders differ in their perception of what should receive special consideration in the RTW process <sup>164 184 197 198</sup>. For instance, it has been claimed that health professionals have a more holistic view of workability, while SIOs have a reductionist view in which workability is reduced to medical status <sup>199</sup>. There are also structural barriers to cooperation across organizations that should be targeted at the system level <sup>200</sup>. Franche et al. (2005) reviewed how the role of stakeholders could be optimised in the implementation of RTW interventions and research. The different paradigms the stakeholders come from will inevitably cause friction and challenges. However, focusing on calibrating stakeholders' involvement, the roles of supervisors and insurance case managers, and procedural aspects of the RTW intervention may resolve some of the problems <sup>5</sup>.

#### 2.3.4 Effects of coordination on RTW

The use of RTW coordinators has received increasing attention. Still, there is inconclusive evidence of the effects of providing coordinators for RTW. Several studies have found that RTW coordination and provision of an RTW coordinator is positively associated with time-to-RTW, and there is increasing evidence stating that these components are important in interventions <sup>6</sup> <sup>122</sup> <sup>201-203</sup>.

The long-term effects of RTW coordination compared to usual practices was examined in a systematic review of patients who had been absent from work for at least four weeks and were at risk for long-term absences <sup>95</sup>. Those who received coordination in a follow-up period of approximately 12 months had better outcomes than those who received regular follow-up without coordination. The studies were of moderate quality overall, and the effect was considered relatively small (proportion at work at end of follow-up: risk ratio = 1.08, 95% CI = 1.03 to 1.13), but the authors still believed that the difference was important  $^{95}$ . However, this review was recently updated to a Cochrane systematic review conducted by Vogel and colleagues (2017). The researchers concluded that there is no evidence that coordinated RTW programmes facilitate RTW more effectively than usual care for employees at risk for longterm disability <sup>12</sup>. The evidence is reported to be of low quality, and therefore, more comprehensive studies focused on sustainable RTW and the workplace are recommended and could likely change this result <sup>12</sup>. In contrast, another recent review concluded there is strong evidence for recommending the service coordination of multiple-components of RTW models together, along with health-focused and work modification components <sup>204</sup>. Following this discussion, a brief presentation of reviews and single studies showing the effects of coordination elements in RTW programmes will be provided, as well as studies showing no effect.

In a review of older workers, work participation improved when the interventions were multicomponent and encompassed at least two out of three effective components: health service delivery, the coordination of services, and work modifications <sup>205</sup>. A review showed moderate evidence that coordination was an effective component of workplace-based RTW for people on sick leave with pain-related conditions <sup>6</sup>. The other effective components were workplace facilitation, contact between healthcare providers and the workplace, early contact between employees and the workplace, and ergonomic workplace visits <sup>6</sup>. Another systematic review found that workplace-based RTW coordination programmes for people with neck pain and upper-extremity disorders was more effective than clinic-based programmes in work disability prevention <sup>203</sup>. Furthermore, a review showed that job placement coordinated by a case manager increased the likelihood of return-to-work for people with physical and cognitive impairment after a traumatic brain injury (TBI). The services incorporating case management were compared to regular follow-up; however, the quality of the evidence was considered to be low <sup>202</sup>. Furthermore, several studies have shown that adding a coordination element in multicomponent interventions can be cost-effective <sup>95 96 100 206-209</sup>. For example, a Danish study showed that an interdisciplinary rehabilitation service was effective and reduced the cost of sick leave considerably compared to regular follow-up. By six months, the intervention saved approximately 11.000 NOK (US \$ 1.366) per person who received the service, and at 12 months, it was 87.500 NOK (US \$ 10.666) per person <sup>96</sup>.

Furthermore, several single studies have investigated the effect of coordination on RTW <sup>96 97</sup> <sup>210-215</sup>. Systematic multi-professional coordinated rehabilitation was more effective than conventional rehabilitation for sick listed employees in Sweden<sup>215</sup>. Those with more previous sickness absence had the greatest effect, while those with less sickness absence before the intervention had no effect <sup>215</sup>. Offering a case manager who followed the employees closely increased work participation for people with different types of occupational injuries when compared to regular follow-up <sup>214</sup>, and similar results are also found for MSD <sup>216</sup>. The implementation of a continuum of care model for following-up with people on sick leave for MSD proved to be effective in reducing sickness payments, as well as increasing the RTW rate <sup>213</sup>. For employees with MSD who had been on sick leave for 4–12 weeks and received a coordinated interdisciplinary rehabilitation programme, the total number of sick leave days was reduced when compared to ordinary case management services available in the municipality <sup>96</sup>. A coordinated workplace-oriented intervention have also had a positive effect on RTW for employees with MSD 97, and telephone-based interventions in combination with service coordination were found to reduce sickness absence for middle-aged and elderly workers with depression <sup>212</sup> and patients who had received an organ transplant <sup>211</sup>. However, after a three-year follow-up, a case management programme aimed at increasing labour participation among disabled people with various health problems found that the increased work participation lasted only while the programme was active <sup>210</sup>.

A coordinated RTW programme organised through the RTW team in municipalities for employees on long-term sick leave (over 8 weeks) showed significant differences in effect between the different municipalities but could not conclude that the RTW programme was more effective than regular follow-up <sup>10</sup>. Another coordinated rehabilitation programme with multi-professional cooperation only showed positive results for employees with long-term absence from work <sup>215</sup>. Furthermore, several other studies have found no statistically significant difference between the RTW outcomes of those provided with coordinated services compared to those who received regular follow-up; an intervention to strengthen the coordination between stakeholders in combination with consultations with psychologists and social workers for sick listed employees with stress related disorders <sup>9</sup> and a programme implementing clinical guidelines for employees with LBP in coordinated services in the municipality <sup>8</sup>; a couple of studies focused on including case managers in the occupational rehabilitation of women who had undergone breast cancer surgery <sup>217</sup> and employment-focused case management in addition to regular follow-up for unemployed with alcohol dependence issues <sup>218</sup>.

Although there is inconclusive evidence of RTW coordination's effectiveness, few studies show a negative effect <sup>219</sup>; also, several studies found positive results that were not statistically significant <sup>8 10 68</sup>. The lack of study or report quality is claimed to be one reason for lack of positive results, in addition to factors such as implementation issues  $^{10}$ . Furthermore, several studies report that the intervention and control group were too alike in order to reveal differences; the participants were relatively well <sup>217</sup> or already had a strong work connection<sup>9</sup>, the outcome measure were not sensitive enough to reveal differences<sup>9</sup>. Also, the interventions were possibly not work directed or comprehensive enough to facilitate RTW <sup>217</sup>, and usual care seems to be well-functioning limiting the possibility to add by implementing additional RTW coordination 9218. Factors in society such as increase in unemployment and sick-listed employees being afraid of losing their job may affect the results <sup>9 218</sup>. In addition, several limitations of the studies are reported, like self-report on sickness absence <sup>217 218</sup>. It seems the interventions that are able to show effect of RTW coordination have a strong workplace focus <sup>96 97 214</sup>, as well as most of these interventions was directed to employees with MSD 96 97 213, and that those with most complex situation 68 or more sickness absence <sup>215</sup> respond best. Three reviews that included studies of various designs concluded that service coordination in addition to health services and work modification components are recommended <sup>6 204 205</sup>. However, the most recent review of effect studies of RTW coordination and RTW concludes there is moderate evidence for no effect of RTW coordination<sup>12</sup>, that usual care seems to be well functioning in many cases, and that focus on the workplace seems to be important in the future.

## 2.4 Recap of knowledge gap

In RTW processes several stakeholders at different levels and arenas are involved in complex interventions to facilitate participation in work. Even though several trials of coordinated programmes have been conducted, there is still uncertainty of their effectiveness <sup>12</sup>. Reviews of qualitative and quantitative research studies have reported challenges with coordination and called for an enhanced integration of services across levels and stakeholders. Also, comprehensive research on coordination as intervention components and implementation processes, is sought <sup>12 61 95 204 220</sup>. There is to our knowledge few studies that have investigated RTW coordination in a real setting recent years, although one study of chronic pain patients found early access to intervention and presence of a RTW coordinator was associated with RTW<sup>221</sup>. Other observational studies have pointed at a consistent lack of stakeholder coordination; the social insurance agency did not take medical recommendations for rehabilitation into account <sup>222</sup>, and RTW coordinators in companies focused on employee and supervisor without including other stakeholders <sup>223</sup>. Accordingly, if and how RTW interventions are integrated to promote RTW in real settings are unclear. In the case of Norway, we do not know if recent years' policies and programmes implemented to promote RTW have led to enhanced focus on integration and stakeholder coordination in practice. Therefore, it will be necessary to establish a status quo for RTW coordination, to further develop interventions and test RTW coordination in a Norwegian setting. In order to reveal current RTW coordination practices, it is imperative to investigate both experiences and associations across stakeholders, arenas and levels.

# 3 Aim

The aim was to reveal current concept related coordination, develop some understanding of how coordination is practiced and its challenges and consequences in return-to-work processes, and identify some possibilities for future research and practice.

# 3.1 Objectives

The objective of this PhD-project was to accomplish the following:

- [1] Explore and describe coordination practices and challenges in RTW processes
- [2] Reveal if current coordinating model increase the possibility for work participation for sick-listed employees.

The purpose was to reveal coordination practices and challenges in RTW processes to inform practitioners, researchers, and policymakers if and how RTW coordination should be further developed and strengthened within the field of occupational rehabilitation.

# 3.2 Research questions and hypotheses

**Study I:** To what extent was a coordinator provided in RTW programmes in Norway, how was the coordination conducted, and was the provision of a coordinator associated with and predicted by certain personal or intervention characteristics?

**Study II:** Was the provision of a coordinator associated with time to first- and full-RTW in a cohort of employees participating in different public and private Rapid-RTW programmes in Norway?

**Hypothesis I:** There is an association between being provided with a coordinator and time to first-RTW.

**Hypothesis II:** There is an association between being provided with a coordinator and time to first full-RTW.

**Study III:** To what extent and in what manner is coordination perceived as a problem among a variety of RTW experts in present practices for follow-up of sick-listed employees in Norway, and what do they suggest are the needed changes for practice improvements?

**Study IV:** What are supervisors' perspectives on the challenges involved in fostering work integration to support individuals facing mental health problems who are on job placements in ordinary companies?

# **4 Material and Methods**

# 4.1 Ontological, epistemological, and methodological perspectives

In pragmatism, the focus is on the research problem and using pluralistic approaches to derive knowledge about the problem <sup>224</sup>. Evidence-based inquiry is one fundamental approach, and another involves focusing on mixed methods; the aim is to reveal "what works" <sup>225</sup>. In pragmatism the focus is on the practical consequences <sup>226</sup>, and both qualitative and quantitative methods are used in order to reveal the consequences and possible solutions <sup>225</sup>. Present research focuses on interventions in healthcare aimed at improving RTW and reducing sickness-related absenteeism. A pragmatic perspective concentrating on actions, situations, and consequences is closely related to the project as a whole <sup>224</sup>. In this thesis, inductive and deductive approaches are applied to elucidate the concept of RTW coordination for sick-listed workers. In pragmatism, the ability to study a societal problem opens the possibility of abduction, which is an approach that moves back and forth between induction and deduction <sup>227</sup>.

According to occupational science, "understanding occupation in a different context and at different levels (micro through macro) actually requires a conscious adoption of methodological pluralism" (p. 303)<sup>84</sup>. Triangulation can be seen as a necessity to accommodate the complexity of health and health service research <sup>228</sup>. The studies that build this thesis are designed, performed, and disseminated in multi-professional collaboration, as recommended when researching health services <sup>229</sup>. The objectives will be explored by studying RTW coordination from the micro to macro level, from the individual employee on sick leave to the national organization of RTW programmes. Furthermore, the exploration will involve method triangulation, studying experiences through interviews to outcome measures on RTW in cohorts and by using multilevel and multimethod approaches. Research teams with various backgrounds and a pluralistic approach use the strengths of both qualitative and quantitative methods to increase the breadth and understanding of a concept such as coordination and seek to obtain a more comprehensive picture than can be achieved using only one of the approaches <sup>229</sup>.

## 4.2 Overview of the studies

An overview of the aims, materials, and methods of studies I-IV are provided in Table 2.

	Study I	Study II	Study III	Study IV
Aim	To investigate the provision of coordinators in Rapid-RTW programmes in Norway	To investigate the correlation between the provision of a coordinator and RTW in Rapid-RTW programmes in Norway	To identify problems in present practice in RTW processes and suggest changes	To elucidate supervisors' perspectives on the challenges involved in fostering work integration
Design	Cohort study	Cohort study	Expert study using the Delphi technique	Qualitative interview study
Study population	Clients and their professional helpers (n=494) from Rapid Return to Work programmes (n=39)	Clients and their professional helpers (n=326) from Rapid Return to Work programmes (n=39)	Experts on RTW and the Rapid-RTW programme (phase I, n=32)*	Supervisors with experience with work placements (n=15)
Data	Questionnaire data, register data from the Norwegian Patient Registry	Questionnaire data, register data from the FD-trygd database, and the Norwegian Patient Registry	Transcribed data from focus group interview (n=1)	Transcribed data from individual interviews (n=15)
Analyses	Statistical analysis (association test, logistic regression models) in SPSS	Statistical survival analysis (Kaplan-Meier estimator, log-rank test, Cox proportional hazards model) in SPSS	Qualitative and quantitative content analysis	Qualitative content analysis
Level	Micro and Meso	Micro	Meso and Macro	Micro and Meso

Table 2: Overview of the studies' aims, materials, and methods

Note: \*phase II, n=608 – not included in thesis

# 4.3 Studies I and II

## 4.3.1 Design

Studies I and II are based on data from the Rapid-RTW cohort study. This study followed a cohort of sick-listed employees participating in a variety of Rapid-RTW programmes (n=39) in Norway. Cohort studies are observational studies of what happens in natural settings with a cohort, a sample with common characteristics <sup>228</sup>; in our case, it included employees on sick leave who had participated in a Rapid-RTW programme. In the Rapid-RTW cohort study, a retrospective cross-sectional survey was combined with prospective longitudinal data on sickness absence <sup>228</sup>.

## 4.3.2 Setting

The main target group for the Rapid-RTW programmes is employees who have been on sick leave for between eight weeks and one year and have musculoskeletal disorders or common mental health disorders <sup>79</sup>, which is in line with the major groups of sickness absentees. The

national programme includes eight different types of programmes identified in one of the evaluation studies <sup>79</sup>. Based on their characteristics, the eight types of RTW programmes were re-grouped into three main types of programmes in this thesis: occupational rehabilitation; medical or psychological treatment, including assessment, surgery, and follow-up and work clarification services. Table 3 provides an overview of the types of programmes included and the re-grouping performed in this thesis.

	#	Type of programme	Definition	Type of programme when re-grouped*
	Ι	Medical and surgical treatment in clinics	Public hospitals and private hospitals/clinics. Orthopaedic/neurological treatment and to some extent, radiographic services. All services provide surgical treatment.	Medical or psychological treatment, including assessment, and surgery
Financed by RHF	Π	Rehabilitation in hospitals (somatic)	Various forms of rehabilitation services in hospitals, mainly polyclinic. Most of the employees have back, neck, and shoulder pain, and others have acquired brain injuries, stress, rheumatic diseases and cancer. Typical components are diagnostics, function assessment, physical training, and patient education and training. The focus is on individual coping.	Medical or psychological treatment, including assessment, and surgery
	III	Psychiatric treatment and rehabilitation	Includes services in public hospital wards, clinics, and psychiatric centres. Involves treatment and multidisciplinary rehabilitation programmes. Provided to employees with mental health and/or addiction problems. Usually provided to employees with anxiety and depression.	Medical or psychological treatment, including assessment, and surgery
	IV	Occupational training and rehabilitation in institutions	Private rehabilitation institutions. Provided for employees on long-term sick leave with complex musculoskeletal problems. Multidisciplinary programmes, often inpatient. Rehabilitation, cognitive approach and dialog with NAV and workplace.	Occupational rehabilitation
Financed by NAV	V	Follow up	Private services. For employees who need more comprehensive follow-up than NAV is able to provide. The service intends to adapt to the individuals needs based on occupational capacity. Follow-up includes; finding suitable work tasks or workplace not earlier tested, facilitation of work situation, and guidance.	Follow-up and Work clarification services
	VI	Clarification of workability	Private services. For employees who need more comprehensive clarifications than NAV is able to provide. Assesses whether the work can be performed if the work situation and tasks are accommodated and focuses on competencies/opportunities. Max 12 weeks.	Follow-up and Work clarification services
	VII	Occupational training and rehabilitation in institutions	Private services. Both inpatient and outpatient. Includes work preparatory training and testing, work experience, contact with the workplace, rehabilitation, training, education, motivation,	Occupational rehabilitation

Table 3: Types of programmes in the national Rapid-RTW programme

	training in social skills, and lifestyle counselling. Max 12 weeks.	
VIII Treatment	Private services. Treatment by professionals. For employees with common mental and/or complex disorders. Max 18 weeks, and for those returned to work until 18 weeks in addition.	Medical or psychological treatment, including assessment, and surgery

Note: The eight types of programmes identified in rapid-RTW services (n=120) by Aas et al. (2011) (reprinted and adapted with permission from the authors). \*As re-grouped for thesis and re-coded as variables in studies I and II

These programmes vary regarding who they are provided to and the programmes' content. An overview of main characteristics is provided in Table 4.

#### Table 4: Characteristics of programme types

Type of programme	Treatment	Medical assessment	Workplace orientation
Follow-up and work clarification services			х
Occupational rehabilitation	х		x
Medical or psychological treatment, including assessment and surgery	Х	x	

The Rapid-RTW cohort study was conducted on rapid-RTW services in institutions geographically spread across Norway. Each institution recruited an average of 11 participants (min.-max. 1–44) to the study. The organization, content, and intervention components, such as the provision of a coordinator, were decided in each of the rapid-RTW services.

## 4.3.3 Participants

In total, 679 employees filled out the questionnaire in the main study (attachment 1). Employees who replied yes or no to "Did the programme provide a person that coordinated your services?" were included in studies I and II. Employees who answered "do not know" (n=120) or had missing data (n=185) were excluded from studies I and II, resulting in a sample of 494 participants, which constituted the sample for study I. In study II, only participants on full-time sick leave at the time their RTW services began were included (n=326). Hence, participants on part-time sick leave (n=105) and those not on sick leave (n=65) were excluded.

Variable	Category	Study I (n=494)	Study II (n=326)	
Gender n (%)	Women	360 (73)	232 (71)	
	Men	134 (27)	94 (29)	
Age median (min-max)		46 (21–70)	46 (21–67)	
Social status n (%)	Live alone	112 (23)	105 (32)	
	Live with others	371 (77)	219 (68)	
Educational level n (%)	Elementary school (up to 9 years)	49 (10)	38 (12)	
	Upper secondary school (12 years)	211 (43)	154 (48)	
	University degree (up to 4 years)	153 (32)	93 (29)	
	University degree (>4 years)	73 (15)	35 (11)	
Diagnosis n (%)	MSD	270 (55)	185 (57)	
	Mental disorders	80 (16)	45 (14)	
	Cancer	43 (9)	35 (11)	
	Other disorders incl. neuro- and heart diseases	52 (11)	32 (10)	
	Common or unspecific disorders	21 (4)	16 (5)	
	No or missing diagnosis	27 (6)	13 (4)	
Type of RTW programme	Occupational rehabilitation	275 (57)	206 (64)	
n (%)	Medical or psychological treatment, including assessment, surgery and emergency	172 (36)	73 (26)	
	Follow-up and Work clarification services	38 (8)	32 (10)	
Provided with a coordinator n (%)	Yes	335 (68)	237 (73)	
Sector n (%)	Public	227 (48)	148 (48)	
	Private	243 (52)	158 (52)	
History of sickness absence n (%)	Yes	473 (96)	314 (96)	
Sick-leave baseline n (%)	Full-time (100%)	326 (66)	326 (100)	
	Part-time (20–90%)	105 (21)	0	
	Not on sick leave	65 (13)	0	

Table 5: Participant characteristics in studies I d	and .	Ш
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In study I, a total of 134 males and 360 females (total n=494) were included. The participants' median age was 46 years (with a range of 21–70), and the majority had a history of sickness absence (96%). The most common diagnoses were musculoskeletal problems (55%) and mental health problems (16%). As shown in Table 5, occupational rehabilitation was the most common type of Rapid-RTW programme, and 57% of the informants received such services (see Tables 3 and 4 for the programmes' characteristics)<sup>79</sup>. Furthermore, 15% of the participants received assessment services, which was the second most common type of RTW programme provided.

In study II, a total of 94 males and 232 females (total n=326) on full-time sick leave were

included. The employees' median age was 46 years (with a range of 21–67), and the majority had been sick-listed previously (96%). The most common diagnoses were musculoskeletal problems (57%) and mental health problems (14%). Furthermore, the most common type of RTW programme provided was occupational rehabilitation (63%), see Tables 3 and 4 for the programmes' characteristics <sup>79</sup>.

## 4.3.4 Data collection and processing

Each programme, clinic, or institution, approximately 200 in total, offering a rapid-RTW service was contacted with an invitation to participate in the study. Services that agreed to participate entailed a local study coordinator, who recruited participants to the study in the period between February and December 2012.

Employees and their providers answered self-administered questionnaires about the employees' health situation and the service they received (attachment 1 and 2), including the question, "Did the programme provide a person who tailored or coordinated your services"? Data on sickness absence was retrieved from the FD-trygd database (The Norwegian Social Insurance Register). Data on the types of services employees received were retrieved from the Norwegian Patient Registry. The register data was linked to the self-reported data using eleven-digit personal identification numbers.

#### 4.3.5 Data analysis

All analyses were performed using IBM SPSS Statistics 24.

In study I, logistic regression analyses were performed. The variable involving the provision of a coordinator was used as the dependent variable in the analysis. The control variables were gender, age (years), marital status (live alone/ with partner), sickness absence before receiving RTW service (days), diagnosis (MSD/ mental disorders/ cancer/ other diagnosis), self-reported symptoms of pain at rest/pain in activity/depressive mood/anxiety (yes/no) at the start of their RTW services, and educational level (elementary or upper secondary school (up to 12 years)/ university degree).

Continuous variables were described using the median (range), while categorical variables were described using numbers and percentages. Unadjusted associations were assessed using Mann-Whitney-Wilcoxon and Chi-square tests for continuous and categorical variables, respectively. Multiple logistic regression models were fitted to identify adjusted associations between the dependent variable and the different independent variables. Two-sided P values <0.05 were considered statistically significant. Predictors with a P value =/<0.2 in the

univariate analyses were entered into a multiple logistic regression model, and odds ratio (OR), 95% CI, and P values are presented.

In study II, Kaplan-Meier and Cox regression analyses were performed. The outcome was defined as time to first-RTW and first full-RTW. Time was measured as days from the baseline, which was when the employee started treatment at the RTW programme, until the first day back at work, either partially or fully (first-RTW), and until the employee returned to work in the same job they had before for the first time (first- or full-RTW). Hence, these measures overlapped and were not mutually-exclusive time frames. Sustainable RTW was defined as being at back at work for continuously four weeks as common in literature <sup>58</sup>, and additionally RTW for continuously six months. This use of the outcome measures is in line with previous research studies on time-to RTW <sup>57 134 230 231</sup>. The employees were followed for 360 days <sup>6 57</sup>, and those who did not return within the follow-up time were censored in the analyses.

Diagnoses were registered as ICPC or ICD codes by the physician in the medical records and retrieved through the provider questionnaire. The diagnoses were categorised into the largest diagnostic groups. For the regression analysis, the categories common/unspecific, other diagnoses, and missing/no diagnosis were collapsed. Time to first-RTW and full-RTW were calculated using the Kaplan-Meier method, and crude differences between those who did and did not have a coordinator were assessed with log-rank tests. Cox regression models were used to calculate the probability of returning to work (first- and full-RTW) for employees who had a coordinator versus those who did not. Potential confounders were entered into the multiple models. The confounders were identified in the literature <sup>176265134232</sup>, and included variables such as age, gender, educational level, marital status, diagnosis, pain, depressive mood, anxiety, sick leave history, household income, and type of programme. The results were expressed as hazard ratios (HR) with 95 % confidence intervals (CI). P values of <0.05 were considered statistically significant, and all tests were two-sided.

## 4.4 Content analysis

In the qualitative studies included in this thesis, a content analysis was performed. Content analysis was developed in the 1940s <sup>233</sup> when the quantitative version was established <sup>233</sup>. Since then, the methodology has developed into several different approaches including the qualitative content analysis currently widely applied in the health sciences <sup>234 235</sup>. The common characteristics of the approaches are that they all involve the reduction of data, are

systematic, and allow for flexible qualitative content analysis <sup>236</sup>. This analysis is often used when the existing theory or research literature on a phenomenon or concept is limited or when the knowledge is fragmented <sup>237 238</sup>. Hsieh and Shannon (2005) define qualitative content analysis as a "research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (p.1278) <sup>237</sup>. The advantages of using content analysis in the studies in the present thesis were the method's content-sensitivity and the possibility of identifying critical processes, as well as the method's concern with intentions and context <sup>238</sup>. In addition, the flexibility of content analysis was an advantage <sup>237</sup>. Both studies III and IV had an inductive, or conventional content analysis approach <sup>237</sup>; thus, the categories were derived from the data <sup>239</sup>. Study III also used the possibility of combining qualitative and quantitative approaches to content analysis <sup>236</sup>. The good descriptions available for the steps in content analysis <sup>236</sup>, made this analysis fit when several researchers from different fields and with different levels of experience was going to work together with the analysis.

In present studies, the description of methodologies in qualitative content analysis offered by Graneheim and Lundman (2004) is applied <sup>234</sup>. This approach focuses on the subject and context and the variation in the text, including similarities within and differences between parts of the text <sup>234 235</sup>. Furthermore, this method affords opportunities to analyse both the manifest and descriptive content and the latent and interpretive content <sup>234-236</sup>. Some will argue that there is a lack of focus on higher-level analysis and interpretation of the results in content analysis <sup>240</sup>. This might be due to content analysis' roots in quantitative reductionist research. However, the development of the method into a combination of qualitative and quantitative approaches, as well as qualitative content analysis, has resulted in various possibilities for degrees of descriptions to interpretations and concrete to abstraction levels <sup>235</sup>. Thus, others will argue that the qualitative content analysis is an analytical model in its own right <sup>235-237</sup>.

## 4.5 Study III

#### 4.4.1 Design

The study was designed as a Delphi study <sup>241</sup>. Experts on the follow-up and rehabilitation process of employees on sick leave participated in the qualitative study of round I. In the next phase, to what degree there was consensus among relevant stakeholders was assessed <sup>71 241</sup>. Round II is not included in this thesis but is described elsewhere <sup>71</sup>.

#### 4.4.2 Setting

The Rapid-RTW expert study was one of several studies in the national evaluation of the Rapid-RTW programme <sup>71 79</sup>. Consequently, participants who had experience with Rapid-RTW programmes at all levels, from providing services to organising and being responsible for the policy, were recruited. However, in this study, we widened the focus beyond the Rapid-RTW programme and invited an expert discussion of the even greater overarching theme of managing employees on sick leave. Hence, participants without direct experiences with the Rapid-RTW programme or rapid-RTW services were also included. The organization of sickness absence in Norway and the Rapid-RTW programme are elaborated above (see Chapter 2.1).

#### 4.4.3 Participants

In Delphi studies, experts are defined as informed individuals or specialists who have knowledge in a specific field <sup>241</sup>. Specialists refer to formal knowledge, while informed individuals refer to informal knowledge in the field. Knowledge includes experience in this context. In this study, the experts are individuals who are experienced in managing sick leave directly, are responsible for organising or research on RTW processes, or have experience with sick-listed workers through a user organization.

A strategic selection strategy was used, wherein the goal was to obtain a heterogeneous sample that included experts in working with sickness absence <sup>55</sup>. The selection criteria were that the different stakeholders involved in managing sickness absence should be included <sup>13</sup> and that the sample should be geographically spread with representatives from different regions in Norway, as well as include both large and small RTW services <sup>79</sup> to cover the widest possible range of experiences. The sample was recruited by e-mail.

The experts were user organizations representatives (n=2), employers from private and public sectors (n=2), consultants making referrals to RTW programmes from the NAV office (n=1), general practitioner (n=1), RTW programme providers from NAV and regional specialists in healthcare (n=4), NAV's work-life centre representative (n=1), coordinators and project leaders from the Rapid-RTW programme (NAV: n=2, health services: n=4), occupational health services (n=1), ministry and directorate (n=7), employer and labour organizations (n=3), and occupational health researchers (n=4). Participants had an average of 11.4 years of experience in working with employees on sick leave (range 1–37 years, SD 12 years) and represented the following professions: medicine/health science (n=8), social workers (n=2),

pedagogy (n=2), social studies (n=3), administrative (n=2), and for one participant, the profession was unknown (n=1).

#### 4.4.4 Data collection

The experts (n=32) participated in an exploratory inductive group interview held in April 2012. The purpose of round one in this research approach is to identify experts' perceptions based on their knowledge and experiences on a topic <sup>242</sup>. Data collection was two-fold and took place in an academic setting. First, everyone present was asked to write down three important practices most in need of change in the present RTW processes. This text was then collected by the researchers. Next, a group interview was conducted; this phase was audiotaped. The experts were divided into three groups based on the roles they were given during the interview. Observers (n=10), consisting of representatives from government agencies, employee and employer organizations, and researchers (n=4), could ask questions and comment when allowed. Participants (n=18) actively participated in the interview regarding their experiences and opinions. The interview was initiated as follows: "We are interested in the experience you have with managing employees on sick leave and rapid-RTW services. The question is, "Do we provide the right services with the right skills for the right people at the right time?". A researcher, who moderated the discussion and asked follow-up questions to verify the statements that emerged, led the group interview. The audiotaped interview was transcribed verbatim.

#### 4.4.5 Data analysis

To identify the problems and suggested changes, both forms of textual material were analysed using a combination of qualitative and quantitative content analysis <sup>234</sup> <sup>241</sup>. First, the text was divided into meaningful units and given a code based on what the text was about <sup>234</sup>. Two researchers (LSS and RWAA) conducted the analysis to increase the reliability of the coding, and discussed the codes in order to agree on the final set of codes. After the whole material was coded, preliminary thematic main categories were identified, and the material was resorted based on what it was about. For example the theme "Coordination and cooperation" was identified based on the codes "coordination", "interact" and "cooperation". Based on this thematic sorted material we re-read the material in order to see if the codes and themes was meaningful ordered and represented the whole text and to strengthened internal validity <sup>234</sup>. In this process we also checked for overlap between themes <sup>234</sup>. In line with quantitative content analysis, an overview of the number of meaning units within each main category was calculated to provide a picture of which themes dominated <sup>233</sup>. Also, we kept track of the

source of the text, in order to see if the different textual material was focused more in written or in verbal data collection. The meaningful units were then condensed to a brief summary regarding to what they referred <sup>234</sup>.

Each main theme received a definition based on a further condensation. Problems and suggested changes were defined by subcategories in the form of quotes and statements. See table 1 in paper III for example of the process from meaning unit to problem or suggested change within a theme. At this time, the third and fourth researchers (ER and LAH) contributed with comments, including suggestions for changes in the naming of categories, to clarify the content and what it expressed and make the categories' meaning accessible to readers. However, in the whole analysis we kept close to the manifest content, and kept abstraction level low <sup>235</sup>. All researchers agreed via discussion on the final grouping of items by focusing on the study's purpose <sup>243</sup>. Relevant quotes that appeared to provide the most accurate description were eventually selected from the interview text for presentation of results. We made sure the chosen quotes represented a breadth of the experts regarding background and role in the interview. The analysis led to themes with descriptions and quotes, as well as problems and suggested changes. These problems and suggested changes was furthermore developed for the quantitative round II of the Delphi study.

## 4.6 Study IV

#### 4.5.1 Design

In this study, we used an explorative, qualitative design inspired by a phenomenological lifeworld approach to data collection <sup>244</sup> <sup>245</sup>. The design was chosen because the research question was suitable for a qualitative approach, as the aim was to explore supervisors' experiences <sup>228</sup>. The lifeworld approach is one direction building on phenomenological philosophy <sup>244</sup>. Unlike the classical phenomenological approaches which focus was philosophical, the lifeworld approach offers a ground for social sciences to explore human experiences <sup>244</sup>.

#### 4.5.2 Setting

In study IV, the supervisors had experience with the inclusion of employees through a traineeship in regular companies. This was an employment scheme provided by NAV for those who needed to test their employability, gain work experience, and enhance their ability to participate in ordinary working life or return-to-work <sup>101</sup>. The trainee (i.e., employee) received work training as part of a job placement in a company. In cooperation between the

NAV contact person, the supervisor, and the trainee, a training plan including goals and work tasks was developed. The supervisor had to provide a contact person who was primarily responsible for following up with the trainee during the traineeship. This employment scheme was replaced in 2016 by, to some degree, an overlapping scheme called work training. However, this new scheme has more focus on vocational rehabilitation than returning to work <sup>246</sup>.

#### 4.5.3 Participants

In this study, the goal of the data collection was to obtain a rich description of the phenomenon or concept of challenges related to work integration from a supervisory perspective. Therefore, a strategic recruitment strategy was used to include those who would be able to illuminate these challenges well <sup>245</sup>. Informants were recruited through a NAV county office. First, the companies that had provided job placements for at least three persons were identified. Then, the companies were contacted through their manager to recruit a group of supervisors (n=15) that would give us a heterogeneous sample: men and women of varying ages working in various types of sectors and companies and with a variety of experiences as supervisors and with trainees. Inclusion criteria for supervisors were that they had direct contact with trainees facing mental health problems through job placements and coordinated directly with the county NAV office. An initial letter of invitation approved by NSD (Norwegian Social Science Data Services) was used to recruit informants <sup>243 247</sup>. To increase validity by offering knowledge of the study sample <sup>248</sup>, data were collected about the number of trainee(s), the workplace, and the informant's role there.

The informants were from public (n=5) and private (n=10) work sectors. Some informants had a university degree (n=5), while other informants had completed either elementary school or upper secondary school (n=10). The study's sample contained some informants who had similar titles: manager (n=4), department manager (n=4), and head of the company (n=3). The informant group also included a deputy chairman, a maintenance supervisor, a personnel manager, and a coordinator. As a group, they averaged 10 years of experience at their workplace (range 0.5-44, SD 11.6) and had been in contact with a mean of seven trainees in placements (range 1-30, SD 8).

#### 4.5.4 Data collection

The interviews took place at the supervisors' workplace in the period between December 2012 and February 2013. Each interview lasted between one and two hours, depending on the

amount of time the supervisors could spare and how much they wished to divulge to the interviewer. Three researchers conducted the interviews (n= 2 [ER], 5 [LLS], and 8 [LSS]). A semi-structured interview guide was developed as a framework for the interviews so rich material that highlighted the integration process and challenges could be obtained <sup>245</sup>. Designing research questions as open as possible is important for gaining insight into the participants' views on and experience of their lifeworld <sup>224 244</sup>. In this way, researchers sought to put theory aside and focus on discussion and reflection, go inductively into the material to identify patterns of meaning <sup>224</sup>.

Based on what Kvale and Brinkmann (2009) describe as short story narratives, we started with the initial question: "So, can you tell me about your experience with people with mental health problems in job placements? Tell me about the events and experiences you think were important". Such open questioning with narrations are inspired of the lifeworld approach <sup>244</sup>. We continued with asking open-ended questions concerning the challenges the supervisor had experienced in concrete job placement(s) by inviting him or her add further details; "You told me about the first meeting you have with the trainee together with the contact person from NAV. Could you tell me some more about what happens before that meeting"? The semistructured guide provided an opportunity to formulate individual follow-up questions, for instance, to encourage the supervisors to verify earlier statements: "So, the contact between you and the trainee is established at first when the trainee comes to the workplace"? To ensure consistency with the study purpose and a common approach to interviews, the framework of the interviews was thoroughly discussed by researchers <sup>234</sup>. Within this broad framework, the informants were encouraged to speak as freely as possible to ensure their perspective was revealed <sup>245</sup> <sup>249</sup>. At the same time the researchers asked for concrete descriptions and examples to illustrate their experiences to keep close to the context of their lifeworld <sup>244</sup>. The interviews were recorded and subsequently transcribed verbatim so the oral interview could be transformed into text that would be analysed later <sup>245</sup>.

#### 4.5.5 Data analysis

The interviews were analysed using qualitative content analysis <sup>234</sup> <sup>237</sup>. The lifeworld approach inspired the data collection opens up for diverse analytical methods, depending on the research aim <sup>244</sup>. At the same time, qualitative content analysis give opportunities for various scientific positions depending on the aim <sup>235</sup>. The qualitative content analysis approach gave opportunities for analysis of both manifest and latent content <sup>234</sup>. As is common in content analysis, we started with the manifest content close to the text, and this may be seen as

emanating from a phenomenological approach <sup>235</sup>. To familiarise the researchers with the data material, the interviews were first heard on tape, and the transcribed text was later read several times before the coding began <sup>224</sup>. The process of developing codes from the data material <sup>239</sup> was a circular process of going from the raw data to code development and to coding the full transcriptions <sup>239</sup>. The researchers continuously alternated between individual work and discussions in the group. The inductive process used for analysis in study IV may be divided into four steps.

In the first step, we used open coding <sup>238</sup>. Three researchers (ER, LLS, and LSS) read transcriptions of all the interviews to achieve immersion and obtain general impressions independently <sup>237</sup>. Preliminary ideas were written individually in brief interview summaries. The transcripts of four interviews were read through again individually by two of the researchers (ER and LSS), and notes and headings were written in the text while reading it to describe all aspects of the content <sup>237 238</sup>. Internal validity was strengthened by altering between full-text transcriptions and coding <sup>234</sup>. In the second step, three researchers (ER, LLS, and LSS) came together to discuss the preliminary codes they developed in the first step. Through several rounds of reading, coding, and re-reading the interviews, the researchers agreed on a set of categories. This process increased the reliability of the analysis, and thus, the findings <sup>228</sup>. The coding was conducted both individually and together to synchronise our orientation to the process and discuss examples and non-examples of the codes <sup>239</sup>. The researchers coded five interviews each using the NVivo software programme to have easy access to each other's codes and notes by sharing the files. Twice, when the researchers encountered data that did not fit into an existing code, new codes were added.

In the third step, the researchers (ER, LLS, and LSS) examined and condensed all data within a particular code. Some codes were then combined, whereas others were split into subcategories <sup>237</sup>. In the fourth step, all codes from the entire material were then collected and categories were generated. The researchers worked together in linking matching codes to form named categories. In this process the level of abstraction raised <sup>235</sup>. An example to illustrate this process is when initial codes such as "knowledge of trainee in advance", "disclosure of problems to supervisor" and "disclosure in the co-worker community" led to the category "disclosure and knowledge of the problems". Discussions of both consensus and minority reflections discerned in the material occurred <sup>245</sup>. A short summary of each interview was also examined to search for unfinished business and ensure internal validity <sup>234</sup>. In the process of taking this meta-perspective of the material, overall latent themes emerged <sup>234</sup>. The latent content was hereby analysed, and hermeneutic interpretations of the material were described <sup>235</sup>. Abstraction level raised, however, the descriptions of the latent content, the dilemmas and the supervisors' orientation, are still close to the interview text consisting of the informants' descriptions. By collapsing categories that were similar or dissimilar into broad higher-order categories, the total number was reduced <sup>237 238</sup>. Furthermore, the fourth researcher (RWA) made suggestions for changes in the naming of the main categories to respond more directly to the study's research questions, clarifying their expression of the same concept and making their meaning accessible to readers. Researchers (ER, LLS, LSS, and RWA) agreed through discussion on the final selection and grouping of categories by focusing on the study's purpose <sup>243</sup>. The final structure of categories is used to describe the results.

#### 4.6 Ethics

Studies I, II, and IV have been independently approved by The Norwegian Centre for Research Data (NSD), which ensures that personal data is handled confidentially. In the Rapid-RTW project (study I, II and IV), REK (Regional Committees for Medical and Health Research Ethics) gave feedback that the project did not fall within their area of responsibility.

In study III, the Rapid-RTW Delphi study did not require an approval from NSD. In verbal contact with NSD, they stated that the study did not require approval because no personal data was registered <sup>250</sup>. In the written invitation to the interview, ethical guidelines were followed by stating the purpose of the study, how the interview would be recorded, and that participation was voluntary and described the study as the first round of a Delphi process. Registration for the interview was considered informed consent <sup>245</sup>. Participants were also verbally informed that data would be processed anonymously and about how the results would be used. As the theme of the interview was about services and not individuals, it is not considered confidential and personally sensitive data. Contributing their experiences in this setting should not have any negative consequences for the informants <sup>245</sup>.

Informed and voluntary consent was given in all studies that constitute this thesis <sup>251</sup>. All participants were adult employees, managers, and other stakeholders in the health and welfare system and the workplace. Although none of these participant groups are considered especially vulnerable, someone could still more vulnerable beyond what is obvious <sup>245</sup>. Employees on sick leave who are participants in studies I and II may be in a vulnerable situation where it is especially important to ensure that the consent is informed. Furthermore, in study III, the focus group interview included different actors, and representatives of sick-

listed workers from user organisations were present; they may be in a more vulnerable position than the other participants who are included based on their professional role <sup>228</sup>. It is important to be conscious of such vulnerability. Even so, it is a strength and a necessity of the study to include voices of persons on sick leave in the research. That some are willing to take on this role to help increase knowledge is important so a larger group of employees can benefit from the research <sup>251</sup>.

# 5 Summary of results

# 5.1 Overview of the results

An overview of results from studies I–IV is available in Table 6. The concept of coordinating RTW processes in Rapid-RTW programmes are elaborated in study I. Furthermore, consequences of the coordinating model described in study I are investigated in study II. Current challenges concerning the concept and consequences of the coordinating model in RTW processes are further elaborated in study III and IV as shown in Table 6. Studies I, II and IV include results related to consequences and challenges of RTW coordination on the micro-level, while studies I, III, and IV include meso-level results related to the concepts and challenges involved in coordinating the RTW process. Concept and challenges of RTW coordination are described at the macro level in study III.

	Research question	Results	Main focus and level
Study I	To what extent was a coordinator provided in	Sixty-nine percent of the employees reported having a coordinator. The coordinators were mainly responsible	Concept
	RTW programmes in Norway, how was the coordination conducted, and was the provision of a coordinator associated with and predicted by certain personal or intervention characteristics?	for coordinating treatment within their own services (68%). The frequency of coordinators was higher for younger employees (OR 1.03) and employees with MSD (OR 1.75). Occupational rehabilitation programmes provided a coordinator more often than other types of programmes (OR 2.68). More professions were involved in the programmes that provided coordinators, there was more contact with other stakeholders such as leaders and social security services, and more often, the service provided adaptations in the workplace for the individual employee.	Micro and Meso
Study II	Was the provision of a coordinator associated with	Employees provided with a coordinator returned to work later than employees who did not have a	Consequences
	time to first- and full-RTW in a cohort of employees participating in different public and private Rapid- RTW programmes in Norway?	coordinator; the median (95% CI) was 128 (80–176) days versus 61 (43–79) days for first-RTW, respectively. This difference did not remain statistically significant in the adjusted regression analysis. For full-RTW, there was no statistically significant difference between employees provided with a coordinator versus those who were not.	Micro
Study III	To what extent and in what manner are coordination	Two hundred and eighteen identified meaning units were condensed into 23 unique problems and 34	Challenges
	perceived as a problem among a variety of RTW experts in the present practice for follow-up of sick-listed in Norway, and what do they suggest as solutions for practice improvements?	suggested changes. The experts focused on the overall organization of RTW programmes and suggested that the services should be better coordinated. They suggested closer cooperation between stakeholders across levels and services, and the provision of a local RTW coordinator. They stated there is an insufficient focus on the employees' workplace.	Meso and Macro

## Table 6: Overview of results from studies I–IV

Study	What is supervisors'	Challenges to obtaining successful integration were	Challenges
IV	perspectives on the	motivationally related to establishing the placement	
	challenges involved in	and engaging in an open and honest relationship	Micro and
	fostering work integration	where it was possible to set realistic goals, continuity	Meso
	to support individuals	challenges related to maintaining cooperation in	
	facing mental health	different phases of the process, and between the	
	problems who are on job	employee and the manager, as well as between other	
	placements in ordinary	stakeholders.	
	companies?		

## 5.2 Paper I

In study I, approximately two-thirds (68%) of the participants (n=335) reported that they were provided with a coordinator. The coordinator role was managed by one of the professionals involved in the RTW programme in most cases (69%, n=156). Furthermore, the coordinators were responsible for coordinating their own services (68%, n=186) and, to some extent, other services or stakeholders.

For the personal predictive factors of being provided with a coordinator, there were no statistically significant differences regarding gender, marital status, educational level, or history of sickness absence. The median age was lower for those provided with a coordinator (OR 0.97 95% CI 0.95-1.00). The most common diagnosis for being referred to an RTW programme was MSD (55%). The odds of being provided with a coordinator was 1.76 (OR) for those with MSD compared to other diagnoses. However, this difference did not remain statistically significant in the adjusted analysis. Regarding symptoms, the odds for reporting pain in rest (OR 2.26 95% CI 1.36-3.75) and activity (OR 2.01 95% CI 1.12-3.6) was doubled for those being provided with a coordinator. Although these results were also not statistically significant in adjusted analysis. A history of sickness absence was common (96%) among the employees during the three years prior to participating in the programme. Those provided with a coordinator had been on sick leave for a median of 40 more days before the RTW service started, compared to those were not provided with a coordinator (159 versus 119 days), and this difference remained statistically significant in the adjusted analysis. The difference between employees on full-time sick leave (100%) compared to those not on sick leave or on graded sick leave, the provision of a coordinator did not remain statistically significant in the adjusted analysis.

Concerning service-related predictive factors for being provided with a coordinator, there was a statistically significant difference between employees provided with a coordinator versus those who were not for the type of RTW programme provided. Those receiving the programmes "occupational rehabilitation" and "follow-up and work clarification through NAV" were more often provided with a coordinator. The elevated odds (OR 3.8795% CI 2.41-6.24) of being provided with a coordinator when receiving "occupational rehabilitation" compared to the other types of RTW programmes remained statistically significant in the adjusted analysis. The services that provided coordinators had more contact with other stakeholders (e.g. general practitioners, NAV, and leaders/supervisors) when compared to services that did not provide a coordinator. Although the only statistically significant difference was "contact with a supervisor", this association did not remain statistically significant in the adjusted analysis. Services providing a coordinator were more likely to make adaptations in their interventions. Being provided with a coordinator reduced the odds for answering "no adaptations were performed" (OR 0.08 95% CI 0.01-0.60) on the question "Did this service provide one of the following types of adaptations?" compared to not being provided with a coordinator. This difference remained statistically significant in the adjusted analysis. In general, employees provided with a coordinator met more professionals in the RTW programmes. The difference compared to those who were not provided with a coordinator was statistically significant for medical doctors, vocational consultants, occupational therapists, nutritionists, physical therapist, and pedagogue variables in the unadjusted analysis. The odds of being provided with a coordinator when having a physical therapist in the programme (OR 4.75 95% CI 1.82-12.41) remained statistically significant in the adjusted analysis.

## 5.3 Paper II

In study II, having a coordinator was associated with a delayed time to first-RTW. Employees who were provided with a coordinator experienced a first-RTW after a median of 128 days (95% CI 80–176), compared to 61 days (95% CI 43–79) for those who were not. In the unadjusted analyses, this difference of 67 days delayed RTW for employees with a coordinator was statistically significant. The unadjusted results for first full-RTW revealed that employees who had a coordinator returned to work after a median of 185 days (95% CI 137–233) versus 128 days (95% CI 72–184) for employees who did not have a coordinator. This represents a median of 57 days delayed RTW for those provided with a coordinator; however, this difference was not statistically significant (p=0.24).

Age, gender, educational level, marital status, diagnosis, symptoms (e.g., pain at rest, pain in activity, depressive mood, and anxiety), sick leave history, household income, and type of programme were controlled for in the adjusted analysis. Neither time to first-RTW nor first

full-RTW was statistically significant in the adjusted analysis. The hazard ratio for first-RTW was 0.75 (95% CI 0.51–1.10), with a P value of 0.14. For first full-RTW, the hazard ratio was 0.82 (95% CI 0.55–1.22) and the P value was 0.32. These results reveal that in this study, the provision of a coordinator was not associated with time to RTW for neither first-RTW nor first full-RTW. These results does not support the hypothesis I and II (see chapter 3.2): that there is an association between providing a coordinator and time to RTW. Therefore, there is no reason to reject the null hypothesis (no association) and approve the alternative hypothesis I and II based on present study.

Within the first year, 88 % (n=74) of employees participated in Medical or psychological treatment, including assessment, and surgery, had returned to work (first RTW). The RTW-rates within a year for employees participated in Occupational rehabilitation were 63 %. Table 7 shows sustainable RTW, defined as being at work continuous for at least four weeks or at least six months, for the three programme types and for employees provided with and not provided with a coordinator. The rates for being at work for at least four weeks at work corresponds well with the first RTW rates for the programme types, however the rates drops with 11-24% for being at work for at least six months, were the highest drop-rate is for the programme type Medical or psychological treatment. In total 69 % (n=226) of the employees had a period at work for at least four weeks during the first year after the rapid-RTW programme, whereas 55% was at work for at least six months within the first year. There was no statistically significant differences in RTW rates between those with and without a coordinator for neither the four weeks sustainable RTW nor the six months sustainable RTW.

Variable	RTW for at least 4 weeks n (%)*	RTW for at least 6 months n (%)*	
Occupational rehabilitation	129 (63)	108 (52)	
Medical or psychological treatment	73 (87)	53 (63)	
Follow-up and Work clarification services	21 (66)	16 (50)	
Coordinator	156 (66)	127 (54)	
No coordinator	70 (81)	53 (62)	
Total	226 (69)	180 (55)	

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Note: \*Missing from variable programme types n=4, % of employees have returned to work of those receiving this intervention (component)

In the adjusted analysis, the type of RTW programme was the only confounding factor for RTW. Time to first-RTW remained statistically significant (p=0.05) when the other control variables were added to a stepwise adjusted analysis model, except for the type of programme (HR 0.72, CI 0.52–0.99). To understand differences between the provision of a coordinator and type of programme in the model, time to first-RTW for the different programme types was assessed. The difference in time to first-RTW was statistically significant when comparing the programme types. Employees receiving "occupational rehabilitation" had a median of 109 days before RTW (95% CI 52-166), while those receiving "assessment and follow-up programmes through NAV" had a median of 238 days (95% CI 192-284), and employees receiving "medical or psychological treatment, including assessment, and surgery" had a median of 55 days (95% CI 37-73) before RTW. Also the provision of a coordinator varied between the types of RTW-programmes. For Occupational rehabilitation and Assessment and follow-up programmes through NAV, 72.4 % and 76% respectively were provided with a coordinator. For Medical or psychological treatment, including assessment, and surgery 50% of the sick-listed employees were provided with a coordinator. Being provided with a coordinator were almost three times more likely in Occupational rehabilitation and Assessment and follow-up programmes through NAV compared to Medical or psychological treatment (OR 2.7, 95% CI 1.3-5.5). This indicates that the type of programme the employee received and the underlying reasons for being referred to a certain programme might be the reason for the delay in RTW for those provided with a coordinator.

## 5.4 Paper III

In study III, 218 meaning units were identified through the analysis and condensed into 23 unique problems and 34 suggested changes. These were sorted into the seven themes that emerged in the material: [1] national organization of RTW, [2] receivers of RTW services, [3] competencies of professionals, [4] the programmes' focus and approach, [5] coordination and cooperation, [6] the duration of services to employees on sick leave, and [7] referral to RTW programmes. Every third unit involved the overall organization of RTW programmes. Here, theme 5 will be presented, as well as some issues relevant to RTW coordination processes that emerged and were categorised in other themes.

Regarding the theme of coordination and cooperation, it was argued that it increasingly takes longer to initiate measures from NAV. One expert who had worked with RTW for a number of years said the most important factor is that several interventions need take place at the same time. Other suggestions were to develop both models for closer cooperation between health services and NAV and outpatient clinics with competencies across traditional medical specialties that assess employees on sick leave. A suggestion was also made that employees on sick leave should be provided with a local coordinator to integrate services across the workplace, health services, and NAV. The Rapid-RTW programme was said to have given more integrated services across traditional divisions in the hospitals and increased the focus on work. Requirements for all stakeholders to coordinate and cooperate with the workplace when proving RTW services was also suggested. Another proposed change involves cooperation between the general practitioner and OHS in the RTW programme referral process.

Also, issues categorised in other themes were related to challenges encountered in the coordination of RTW processes. The experts described several challenges in the organization and wished for the development of clearer requirements for RTW programmes. Furthermore, research-based knowledge about risk groups for long-term absences and disability should be used more actively in programme streamline in the future, and cost-effectiveness measurements of the programmes was needed. The organizational issue of possibilities for both general practitioner and NAV to make referrals were criticised, and a danger of over treatment due to parallel services was pointed out as one consequence of this type of organization. It was stated that RTW programmes like the national Rapid-RTW programme should be common to both NAV and the health services. It emerged that the RTW programmes' focus and approach are characterised by the diagnosis and treatment of symptoms and medicalization. Furthermore, it was claimed that the services are insufficiently focused on being able to work despite health problems. The services for employees on sick leave were otherwise described as too fragmented, lacked coherence, and at the same time, insufficiently user-oriented, individualised, and tailored. It was said that there is a need for a change in RTW programme design and that this new focus should be based on the diagnosis of "sickness absence".

### 5.5 Paper IV

In study IV, supervisors' experiences related to challenges were addressed to obtain successful integration and categorised into the main themes of motivational and continuity challenges, with three categories under each theme (see table 3 in paper IV). Here the results will be presented through the main themes.

Motivational challenges concerned the motivation to establish the internship, for both the individual employee and the involved actors, and the motivation to engage in an open and honest relationship wherein it was possible to set realistic goals. The study revealed that the initial contact for the job placement was established at a personal level, between NAV and the employer, and depended on the supervisor's personal interest. The supervisors emphasised the importance of meeting with the employee (i.e., trainee) and NAV prior to the work placement. The need for a realistic picture of the match between job requirements and the employee's skills and competencies was evident for both supervisors and employees. This match was emphasised as an important responsibility of NAV; however, this required cooperation with the workplace and employee. Supervisors would like employees to provide some degree of disclosure regarding challenges they may face due to health problems, either from themselves or possibly from NAV if permitted by the employee. However, findings show some ambivalence regarding how much prior information they wanted; hence, supervisors wanted employees to have a fresh start and not be judged based on their diagnosis. Even so, most of the supervisors felt that they were provided with insufficient information to facilitate successful inclusion in the workplace.

Continuity challenges were related to maintaining cooperation in different phases of the process and placement period, between the employee and the manager, and between other stakeholders. The supervisors elaborated on the importance of beginning the placement with a plan formulated by the employee, the supervisor, and NAV. Supervisors emphasised they should be able to assign employees tasks with varying degrees of difficulty during the process. Furthermore, assessing employees' capabilities and interests during the job placement process was important to plan enduring work participation while NAV was involved. Supervisors spoke of the significance of motivation and regular personal contact with employees. Close follow-up was emphasised as particularly important when an employee experienced mental difficulties. Even so, the relationship should be balanced between not close enough and too close to keep it professional. Supervisors had experienced positive cooperation with NAV concerning job placement. Still, they would have liked to see the contact person from NAV at the workplace more frequently rather than just at meetings convened for specific issues. Several supervisors claimed the employee had complained to them of being "abandoned" at the workplace by NAV. To have a good relationship with NAV, including confidence that they could get in touch if necessary with an easily accessible contact person, was important to supervisors. Most supervisors had never collaborated with

health services regarding job placement and initially did not want to do so. They claimed that health services had a problem orientation that hinders job entry for people with mental health problems and wanted them to focus more on the resources that the employees can draw on. One supervisor suggested a solution for closer cooperation between stakeholders, that professionals from health services could contribute their knowledge of mental health problems and help with, for example, adapting an employee's tasks.

## 5.6 Summary of results

The main findings concerning the concept, consequences, and challenges of coordination in RTW processes are presented in Table 7 and are related to the micro, meso, and macro levels (see page 23 for descriptions and definitions). These findings contributes to the knowledge gap concerning how coordination of RTW processes are practiced in Norway (concept), how the current concept of RTW coordination affects time to RTW (consequences) and what problems and possible solutions there is to coordination of RTW processes (challenges).

	Micro-individual	Meso-interventional	Macro-societal
Concept	It is common to be provided with a coordinator in Rapid- RTW programmes.	The coordination provided was internal horizontal coordination between stakeholders within their own rapid-RTW service. Generally low levels of contact between RTW programme, workplace, and NAV. However, there were higher levels of contact between stakeholders when a coordinator was provided.	Lack of guidelines for the development of RTW programmes.
Consequences	The coordinating model provided in Rapid-RTW programmes did not add to a more rapid RTW.	Lack of vertical coordination across levels and institutions creates gaps in RTW process. Lack of work(place) focus in healthcare leads to risk of medicalization and over treatment.	Discussions regarding whether the Rapid-RTW programme will be continued.
Challenges	Lack of employee-job match due to weak contact between stakeholders is a challenge to motivation. Sustaining cooperation and a good relationship during the integration process is challenging.	RTW programmes lack important components revealed in research. Competencies and access to research needs to be developed. Individual tailoring of services and focus on relationships, coherence, and individual life situations in the RTW process need to be developed.	Organization of coordination in RTW processes needs to be focused and improved.

Table $8^{\circ}$	Concept	consequences,	and	challenges	related	to micro	meso	and macro	levels
<i>Tuble</i> 0.	Concepi,	consequences,	unu	chuichges	retuteu t	io micro,	meso,	una macro i	evers

Note: The five overall themes that organise the discussion builds on findings in bold font.

# **6** Discussion

The overall objectives of this thesis have been to [1] explore and describe coordination practices and challenges in RTW processes and [2] reveal whether current coordinating model increase the possibility for work participation among sick-listed employees. The results will be discussed using five overall themes, followed by methodological considerations and methods discussion.

## 6.1 Discussion of the results

Studies I–IV will be discussed here using five overall themes: [1] internal horizontal coordination within services; [2] low levels of contact between RTW programmes, workplaces, and NAV; [3] consequences of the current coordination model; [4] lack of a coordination component in RTW services; and [5] challenges in the individual tailoring of RTW coordination.

## 6.1.1 The concept of RTW coordination in Norway

#### 6.1.1.1 Internal horizontal coordination within services

At the micro-level, this thesis reveals that participants in Rapid-RTW programmes are commonly provided with a coordinator. The distribution of coordinators in RTW programmes in Norway was not previously known. The type of programme that most often provided a coordinator was "follow-up and assessment through NAV", followed by "occupational rehabilitation". Unsurprisingly, coordinators were least common in the "medical and psychological treatment including surgery" type. According to the organizational design framework, this distribution is in line with the need for tailoring as the complexity and uncertainty increases <sup>138</sup>. The three programme types may be viewed as three levels of complexity and uncertainty; thus, the employees' involvement in these programmes matches such a levelling. Those referred to treatment and assessment often have less complex diagnoses and situations <sup>79</sup> and shorter pre-involvement sickness absence <sup>252</sup>. Hence, comprehensive coordination and the provision of a coordinator may not be as necessary as in more complex cases <sup>253</sup>. Those referred to "occupational rehabilitation" and "follow-up and assessment services in NAV" often have according to results from study I longer duration of sickness absence before the RTW intervention. One could assume that these employees have more complex and long-lasting problems that elevates their need of service coordination in the RTW process. To meet the need of service integration, providing a RTW coordinator has been commonly reported in the international literature <sup>122 167-169 171</sup>. As such, the Norwegian RTW programmes are in line with international research. In spite of that, one could question

whether the coordinator provided in the rapid-RTW services can realistically be characterised as a RTW coordinator. The focus on within-service coordination is a sign that coordinators in the Rapid-RTW programmes lack the characteristic focus on return-to-work. However, these results needs to be replicated in to verify their significance.

As seen in study I, the coordination in RTW processes in Rapid-RTW programmes at the meso level could be defined as collaboration <sup>139</sup>. Such an integration would have a higher degree of horizontal integration than the vertical integration that characterises coordination <sup>139</sup>. The rapid-RTW services reportedly coordinate their own services and, to a limited degree, across organizational borders with arenas such as workplaces or NAV. According to the Bioecological model, this horizontal integration is focused within the microsystems separately, and the interrelations between the settings, the mesosystem in Bronfenbrenner's model <sup>149</sup>, are in their simplest form where only the employee is the connection between microsystems <sup>149 151</sup>. Although the services are reportedly horizontally integrated, this model of integration is internal, and as such, it lacks both high degrees of horizontal coordination across services at the same level and vertical coordination across levels <sup>73</sup>. Figure 5 illustrates two different types of horizontal integration, the internal as revealed in study I: where the coordinator have the responsibility to coordinate within their own services, such as the small horizontal arrow illustrates. The large horizontal arrow illustrates integration across organizations at the same level. This will be the collaboration elaborated by Kärrholm (2007), which seems to be little developed in the RTW programmes included in this study <sup>139</sup>.

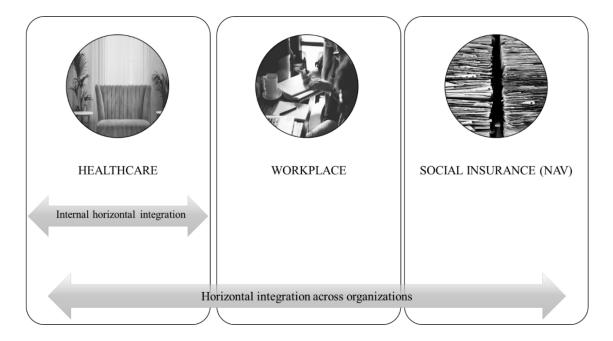


Figure 5: Horizontal integration of services

One could assume that the conditions for horizontal integration described by Hvinden (1994) are evident in the internal horizontal integration with mutual awareness, compatibility of perceptions and goals, and joint action and exchange of resources <sup>73</sup>. However, the degree of internal horizontal integration has not been studied further in the present thesis as the focus has been on service coordination across levels and organizations. According to policies related to service integration <sup>142</sup> and international literature on RTW coordination <sup>30 204</sup>, the focus of RTW processes should be on the vertical integration across levels and settings. In the bioecological model, such integration requires that various microsystems in the employees' life overlap and create a chain-of-influence effect <sup>151</sup>. In a process of ecological transfer between microsystems, like the process of transferring from being on sick leave in an RTW programme to returning to work, such a chain-of-influence in the mesosystem will facilitate RTW. Overlapping microsystems may come from developing services where stakeholders cooperate in a joint programme. Alternatively, an RTW coordinator may function as the overlapping element that keeps information and communication flowing and services coordinated <sup>122 168</sup>. An earlier study revealed that healthcare providers providing competencies to the workplace may support RTW<sup>6</sup>.

#### 6.1.1.2 Low levels of contact between RTW programmes, workplaces, and NAV

Generally, this thesis has revealed that stakeholders experience insufficient service coordination in the follow-up of employees on sick leave. Studies I–IV all call for an elevated focus on the vertical integration of services across levels and sectors. The lack of guidelines for how the rapid-RTW services should develop might be one explanation, and the experts in study III requested more evidence-based guidelines <sup>143</sup>. For instance, stakeholders expressed a desire for more requirements of the RTW services, focus on workplace participation, and coordination.



#### Figure 6: Vertical integration of services.

Study I did show signs of vertical integration. Employees who were provided with a coordinator had more stakeholders involved in their service and more contact with other stakeholders, such as NAV and the workplace <sup>252</sup>. Although having more stakeholders involved may be a requirement for horizontal integration in cases where the stakeholders are, for instance, placed in a joint multi-professional service, which is not necessarily vertical integration. Even so, coordination with stakeholders outside the service increased when the service provided a coordinator. Figure 6 illustrates how vertical service integration may be of internal or external character. The typical vertical integration referred to in the literature is internal and hierarchical, like the small vertical arrow in the social insurance box illustrates <sup>139</sup>. Nevertheless, the integration that policy documents calls for will be vertical and external integration <sup>142</sup>, across organizations and levels, as seen in the large vertical diagonally arrow. Cooperation among stakeholders is, as seen above, a key requirement in job placement processes <sup>254</sup> and crucial to successful return-to-work processes <sup>61 255</sup>. However, the prevalence of such vertical integration is limited to a few of the included employees in study I. Nevertheless, the experts participating in study III expressed that the Rapid-RTW programme had contributed to an enhanced focus on work in the various RTW services <sup>71 143</sup>. This was one of the positive outcomes of this large national effort according to these stakeholders.

According to the Case-management model of work disability prevention <sup>15</sup>, all systems involved in the RTW process are required to facilitate RTW and prevent work disability. The recognition of coordination across all systems and levels are not evident in current practices as seen in study I, even though stakeholders in study III and IV called for such integration. Pransky and colleagues stated in 2005 that the biomedical paradigm has considerable influence in practice, although recent studies have supported implementing a broader biopsychosocial understanding of work disability <sup>256</sup>. However, three years later, Briand et al. (2008) claimed that a global perspective that explains the multi-causality of work disability has been adopted in RTW interventions for MSD<sup>4</sup>. They state that in this perspective, interventions should address individual psychological, environmental, and stakeholder involvement factors. Work disability is a result of interactions between healthcare, the work environment, the social security system, and of course, the worker <sup>4</sup>. Despite an ongoing shift from medical models to biopsychosocial understandings of disability and RTW, Schultz et al. (2007, 2016) claim there is still a need for a truly transdisciplinary model that addresses temporal and multidimensional aspects of occupational disability <sup>18 52</sup>. The supervisors in study IV consistently asserted that input from all stakeholders is essential in planning the return-to-work process <sup>179 180 257 258</sup>. Hence, they expressed a desire for mutual updates on progress and challenges as outlined in previous studies <sup>121 255</sup>. The employers regarded the social security system contact person as a coordinator <sup>252 259</sup> and expressed an expectation for them to facilitate work participation.

#### 6.1.2 Consequences of the current coordination model

Some possible consequences of the lack of vertical coordination have been revealed in this thesis. As shown in study II, it appears providing a coordinator in the Rapid-RTW programmes do not contribute to a more rapid RTW. It seems the model of coordination provided in rapid-RTW services enhanced neither vertical integration nor RTW <sup>260</sup>. Based on the literature's focus on services coordination as one of the main predictors of RTW <sup>6 122 201-203</sup>, the result of delayed RTW among those provided with a coordinator was surprising. However, several studies conducted in Norway <sup>11</sup>, Sweden <sup>261</sup> and Denmark <sup>68 96 219</sup> included in the review by Vogel et al. (2017) reported no evidence in favour of RTW coordination. This indicates that this field has several contradictory results <sup>12</sup>. The programmes described in the review are comparable to the Rapid-RTW programme in Norway regarding their complexity and the aim to promote RTW <sup>12 108 252</sup>. Moreover, knowing that the coordination provided may be characterised as internal horizontal integration <sup>252</sup>, which differs from the

vertical across levels and sectors model recommended for sick-listed employees with complex life and health problems <sup>15 26 49</sup>, these results are no longer surprising.

Furthermore, the association between the provision of a coordinator and time to RTW was confounded by the type of RTW programme provided. Furthermore the delay in RTW was probably related to the severity or complexity of the health complaints that caused the sickness absence and need for occupational treatment or rehabilitation as discussed in study II. By including the type of RTW programme in the regression model, the difference in length until RTW between those who were provided with a coordinator and those who were not was no longer statistically significant. This indicated that type of programme, and most likely the underlying factors for being assigned to a certain RTW programme, were confounding factors for the prolonged sickness absence for those provided with a coordinator <sup>260</sup>. As discussed previously and related to the concept of RTW coordination, the complexity and uncertainty of the worker's situation may be viewed as preconditions for the need for integration <sup>138 147</sup>. In total, this means that it was not the coordination element itself that prolonged the return-towork. Rather, it was the complexity of the situation that has been allowed to endure through long-term sickness absence. When the programmes provided a coordinator, but in a horizontal manner and with limited coordination or contact with external stakeholders, the coordination was not associated with a more rapid RTW. This is most likely true, although the coordination was not provided in line with best evidence research on RTW coordination. That said, studies I and II in this thesis are focused on the overarching Rapid-RTW programme and several different services was included. It may well be that some of the included services had welldeveloped RTW coordination that we have not been able to reveal.

The ecological model that is based on systems theory states that a change in one level or system influences other levels and systems <sup>151</sup>. When applied to RTW processes, this theory would predict that symptom reduction and the enhancement of quality of life and satisfaction with an RTW programme in one microsystem could strengthen the worker to such a degree that returning to work in another microsystem would happen. However, research has proven this type of prediction is not accurate in several cases <sup>19 26 49</sup>. A change in work participation seems to require a focus on work participation and facilitation in the workplace <sup>19 26</sup>. Despite that, such a focus seems to be lacking in RTW programmes encountered in studies I and III, and supervisors in study IV even stated that health services may be a bottleneck slowing access to work participation. To discuss how the systems or levels interfere with and affect each other, the bioecological model offers concepts of explanatory value <sup>154</sup>. The degree of

service coordination may be viewed as degrees of the chain-of-influence effect <sup>151</sup>. The chainof-influence in the mesosystem will be strengthened if the various microsystems, such as the workplace, RTW service, and NAV, overlap either by close collaboration in a horizontally integrated manner or an RTW coordinator involved in all relevant microsystems. This thesis reveals gaps in such overlapping and the chain-of-influence. The developmental possibilities of ecological transitions, which refers to shifts in roles or settings and occurs during the whole lifespan, are affected by social relationships and interconnectedness between settings <sup>149</sup>. The present concept of coordination does not seem to strengthen the ecological transitions of work participation.

Furthermore, the process of RTW seems to be incoherent at the meso level. Study II showed that providing a coordinator in Rapid-RTW programmes was not associated with RTW and one possible explanation is that the coordination provided was horizontal within the service, as revealed in study I<sup>252</sup>. In study III, the experts on sickness absence and RTW argued there is another consequence, which is over treatment with possible parallel and uncoordinated overlapping services <sup>143</sup>. A consequence of delayed RTW when provided several services in an uncoordinated manner was earlier revealed in a Swedish study <sup>262</sup>. Focusing too narrowly on health interventions and multi-professional involvement may also keep the employee absent from work <sup>19</sup>, which is quite the opposite of the main aim and intention of RTW services. This may have several explanations. One explanation is that common health problems, such as MSD and mental health problems, often have psychosocial explanations that may benefit from focusing on ways to maintain normal activity and work rather than on treatment <sup>19</sup>. An early return-to-work may even improve pain and function as revealed in a recent study of LBP <sup>263</sup>. For some employees who are absent from work, multi-professional interventions have shown to be no more effective than brief or less comprehensive interventions at enhancing RTW <sup>219 264</sup>. Having said that, it seems the need for comprehensive interventions differs among employees and groups of employees. For instance, employees with uncertain work conditions have been revealed to take better advantage of a multiprofessional intervention <sup>68</sup>. Also, for employees with mental health problems, adding cognitive behavioural therapy to the workplace intervention facilitated return-to-work <sup>265</sup>. Recommendations for multicomponent interventions including both clinics and the workplace was also made clear in recent reviews of RTW interventions <sup>119 204</sup>. It seems that complex situations and the uncertainty of, for instance, the prognosis or path to recovery, may require higher specification in services provided <sup>26 138</sup>. The need for a coordination component in the

RTW programme will additionally grow when specification and the number of involved stakeholders and services rise <sup>138 141</sup>. To personalize and keep involved stakeholders at a lowest possible number are claimed to improve integration <sup>145</sup>. In study III, establishing outpatient clinics with competencies across traditional medical specialties that assess employees on sick leave as a solution to challenges with integration was suggested. Such an approach could possibly reduce involved stakeholders and personalize the services.

In study IV, the few supervisors with experience cooperating with healthcare providers, as well as some supervisors without such experiences, expressed a critical attitude towards the healthcare system's focus on disease. The healthcare services were also reported as a possible bottleneck in RTW processes in earlier research <sup>41 266-271</sup>. Even so, cooperation between services and support from people competent in mental health in the workplace may be important factors in the level of satisfaction and successful work integration <sup>268 272</sup>. On the other hand, a focus on illness could undermine the workplace emphasis on resources and equality. According to Donabedian's quality framework, the objective in health care are health outcomes, like recovery <sup>145</sup>. Health outcomes may be defined in narrow or wide, and to what degree work participation is included as an outcome in healthcare may vary and possibly explain why some services will define work outside their scope. The stakeholders in study III reported that participation problems are medicalised in healthcare, which moves the focus away from work participation. That said, study IV indicated that supervisors see a need for some degree of "problem orientation" that is focused on how the health problems affect work participation and functioning in the workplace. Successful work rehabilitation likely requires some knowledge of symptoms and vulnerability, as well as the framework issues involved and the challenges and strains that supervisors must deal with <sup>273</sup>. In study III, the experts representing the stakeholders in RTW processes discussed whether the Rapid-RTW programme will be continued. Without clear results in favour of improved work participation and reduced sickness absence, the stakeholders are divided in their opinions on whether the scheme should continue. One could expect results of such a comprehensive programme also had consequences on a macro level. In this case, the Rapid-RTW programme was implemented in the ordinary budget of specialist health services in 2018; hence, it was integrated into the regular provision of health services in Norway 80. Regarding coordination, it is important to bear in mind that coordination is only a component in the process of care among several others <sup>138</sup>. Other concepts, according to Donabedian's quality framework, also influences the outcome of healthcare, such as setting characteristics and how the interventions

are delivered <sup>138</sup>.

### 6.1.3 Challenges encountered in RTW coordination 6.1.3.1 Lack of a coordination component in RTW services

This thesis reveals that the national Rapid-RTW programme, as well as RTW services and more general follow-up of sick-listed employees, lack important components that have been identified as critical in the international literature <sup>3 12 204</sup>. One of these components is stakeholder coordination <sup>204</sup>. The authorities at a policy (macro) level has formulated strategies of integration in policy documents <sup>27 28 142 144</sup>, as well as extensive initiative on RTW programmes <sup>79</sup>. Experts in study III recommended the authorities comply their integration strategies and initiative on RTW programmes with best evidence guidelines and requirements according to research knowledge. The national Rapid-RTW programme provided few guidelines for how the different services that were to be supported through the programme should be designed <sup>79</sup>. The integration of services across levels and systems and a clear focus on the workplace, including contact between the RTW programme, the workplace, and NAV, are not described in requirements <sup>71 274</sup>. Hence, the services vary to a large degree on their integration initiatives and processes <sup>79</sup>. The implementation of the Rapid-RTW programme is the largest effort that promotes RTW in Norway<sup>79</sup>. As described earlier, more than 200 rapid-RTW services were developed across Norway, offering interventions to reduce sickness absence and enhance work participation. Still, whether the aims of the Rapid-RTW programme were reached has not been documented so far. To what extent the individual services created in the Rapid-RTW programme are evidence-based has largely been up to the service itself to develop and provide quality assurance. Furthermore, stronger quality assurance guidelines and tools to ensure implementation based on local context could strengthen the programme as a whole <sup>109</sup>. Many of the RTW services have included one or more of the evidence-based components like contact with the workplace in their interventions <sup>204</sup>. However, there are also central components missing like external coordination between healthcare and workplace reported by stakeholders who are experts in the field of RTW processes 71 204.

As discussed above, the current models for RTW coordination revealed in this study are both experienced as challenging and do not promote a more rapid RTW. In study III, the experts focused on challenges encountered in service coordination. One important factor they emphasised was ensuring several interventions can take place at the same time. A suggestion was to develop models for closer cooperation between health services and NAV. In study IV,

supervisors expressed the desire for prolonged follow-up from NAV and possibly more contact with healthcare providers in relevant cases. The challenges encountered when coordinating between NAV and health services and health services and the workplace are also evident in previous research and policy documents, as well as in studies I, III, and IV. An expert group that has undergone work and welfare management in Norway states that "there are challenges related to unclear accountability, lack of coordination and cooperation between the labour and welfare administration and the health sector"<sup>75</sup>. They believe that the work and welfare management must ensure simultaneous use of treatment and work-oriented measures to a greater degree <sup>75</sup>. Coordination mechanisms elaborated in theory <sup>147</sup> could inform development in the health- and welfare sector. However, the meso-level network of the welfare sector consists of agencies and autonomous practitioners <sup>73</sup>. According to organization theory intra-organizational relations may be looser in their structure than hierarchical coordination within organizations<sup>14</sup>. This means coordination and collaboration in such settings may be spontaneous and also rely on relations and interactions in order to provide frequent, timely with accurate problem-solving <sup>140</sup>. In study III such relations is described to be random, and one may wonder if such voluntary network based coordination <sup>14</sup> is enough in order to provide integrated services.

To foster work participation and promote health, the various systems and stakeholders involved in RTW processes need to cooperate and coordinate their services. For stakeholders to be able to take on this effort, they need competencies as well as resources. A study of Norwegian healthcare and NAV professionals with the potential to take on the coordinator role revealed a lack of both competencies and resources <sup>275</sup>. The potential coordinators also requested guidelines and mandatory collaboration <sup>275</sup>. RTW coordination relies more on competencies in job accommodation, communication, and conflict resolution <sup>166 167 171</sup> than on medical training <sup>122</sup>. As such, the competencies needed to fill this role possibly go beyond a basic education in health and social sciences. Additionally this role is reported to be challenging emotionally <sup>170</sup>. This may explain the refusal to take on this responsibility <sup>275</sup>. According to Lawrence and Lorch (1967), the road to achieving integration without sacrificing the needed differentiation in services are not by the "chain of command" <sup>147</sup> like some suggest. Factors that promote integration in their perspective is the use of integration teams or integrators (coordinators), routines, or procedures and individual managers that carry out integration activities outside official channels <sup>147</sup>. Hence, integration is seen as relational and contextual. Consequently, interpersonal skills are necessary to achieve integration <sup>147</sup>. The interactional and relational aspects of coordination are also highlighted in the Relational Coordination theory <sup>140</sup>. This more spontaneous view on coordination reflects the role of frequent, timely, accurate, problem-solving communication among stakeholders in the coordination process <sup>140</sup>. This is in line with research on competencies required for RTW coordinators <sup>167 168</sup>.

It is possible that social security system contact personnel, as described in study IV and also argued by other researchers <sup>192 276</sup>, do not have the expertise necessary to provide supervisors with the support they need. Stakeholders would furthermore like easy access to researchbased evidence to develop and provide evidence-based interventions. This requires processes of knowledge translation and implementation at both the service level and the policy level. It seems stakeholders involved in RTW processes in Norway have a biopsychosocial understanding of the role of the workplace in theory <sup>143 275</sup>, although in praxis, the integration of services is not implemented <sup>252 275</sup>. A research-to-practice gap is evident in RTW processes internationally <sup>5 277</sup> and in Norway <sup>71 143</sup>. In identifying system barriers to RTW, the need for greater access to information and enhanced communications across all stakeholders has been revealed <sup>278</sup>. Burton et al. (2009), for example, argued that disseminating research-based evidence is a step forward in a needed cultural shift towards the implementation of interventions, including psychosocial factors in cases of upper limb disorders <sup>117</sup>. However, a recent chronicle from a newspaper discussed a RTW programme that was closed down, even though they was able to provide research based documentation of its effectiveness <sup>279</sup>. This programme was planned reimbursed with a new programme without evidence base. Hence, policymakers are encouraged to make decisions based on best-evidence.

At the service level and for the individual health worker, as seen in studies I and III, access to research-based knowledge and knowledge of best practices may be inadequate <sup>71</sup>. Research on how health professionals use research-based knowledge shows that having access is far from knowing how to actually change how they work in their own practice <sup>109</sup>. This may threaten "safety, effectiveness, efficiency, acceptability/patient-centeredness, timeliness and equitability/accessibility" (p.262) <sup>109</sup>. Young et al. have examined stakeholders perspectives in RTW processes and identified that failures in research to measure outcomes in a way that particular stakeholders find meaningful may reduce the possibilities for results to influence change <sup>21</sup>. Furthermore, the complexity of the stakeholders' viewpoints is further identified through their priorities, and their knowledge needs concerning RTW may change over time <sup>55</sup>.

Even if the evidence-based components documented internationally were integrated into RTW programmes in Norway, there would be a need for adaptation to the local context <sup>109</sup>. There are major challenges in implementing evidence-based complex intervention programmes for sick-listed employees in new contexts <sup>10 255 280 281</sup>. The challenges may, for instance, be that the stakeholders involved have different perspectives and aims <sup>5 282 283</sup> or that the intervention was not implemented as intended due to poor adaptation to the local context <sup>255</sup>. In Denmark, a thorough evidence-based RTW programme was developed <sup>284</sup>. Regardless of this effort challenges encountered in the implementation of the programme resulted in a lack of desired effects <sup>10 283</sup>. Several articles have examined the implementation of this programme. It is still uncertain whether the lack of desired effects is due to the RTW programme itself or an unsuccessful implementation. Some believe that an increased focus on the workplace and cooperation with social services would yield better results <sup>283 285 286</sup>. Coordination seemed especially challenging as only 50% of the meetings with RTW coordinators were conducted on time, and among those who were employed at the beginning of the intervention, only 9% had at least one meeting in the workplace <sup>287</sup>. This low level of contact with the workplace corresponds well with the results from study I. Focusing on translational issues was revealed as an important priority for further developing the RTW field of practice and research as the implementation of evidence in practice is lacking despite considerable multidisciplinary research in RTW<sup>256</sup>.

Current challenges in developing, translating, disseminating, and sustaining evidence-based interventions in clinical practice might also be explained by the lack of involvement of the consumers (p.31)<sup>288</sup>. A literature review by Williams-Whitt et al. (2016) concludes that there is a gap between risk factors identified in the literature and the focus of the employer-directed grey literature. They suggest developing more participatory intervention and research designs by tying interventions to positive workplace influences and organizational change <sup>2</sup>.

#### 6.1.3.2 Challenges in the individual tailoring of RTW coordination

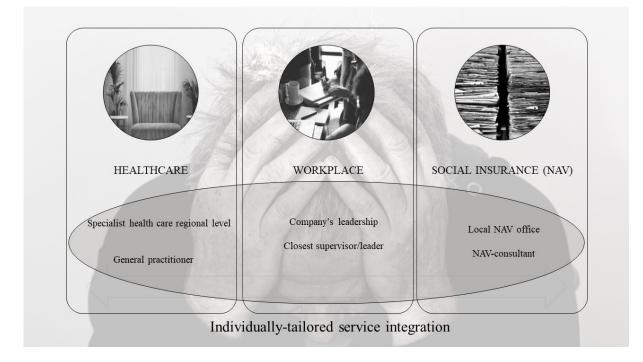
It is evident in studies III and IV that the individual tailoring of services is a challenge in RTW services. In study IV, a shortage of stakeholder coordination and cooperation in the process increased the motivational challenges of the RTW process, such as the absence of assessments needed to match the employees' wishes and needs with the workplaces'. The supervisors were concerned about the motivation of employees when it seemed NAV did not coordinate well with the workplace to assess employee and employer needs and be aware of the requirements set in the workplace <sup>259</sup>. This was also evident in a study in which

stakeholders observed that being pressured for early placement can result in a failure to match an individual with an appropriate job and fully explore possibilities for work development <sup>289</sup>.

Stakeholders in studies III and IV reported challenges encountered in the continuity of coordination and cooperation in the process of integration. One of the quality criteria in the Donabedian quality framework express stability, focalization and personalization as mechanisms for continuity <sup>145</sup>. The stakeholders report such coordinating mechanisms to be insufficient. The process of integration in working life may be challenging or even fail due to employees being "abandoned" at the workplace without follow-up from NAV during the process <sup>259</sup>. Contrary to the evolving Individual Placement and Support (IPS) and Supported Employment (SE) approaches to work inclusion, such work placements are referred to as "place then pray"<sup>290</sup>. Some have argued that given the right environment, almost all people with disabilities could be productive in various types of work <sup>56</sup>. Occupational transitions <sup>291</sup> seem to require support and follow-up when the transition into work is complex and longterm sickness absence are involved <sup>15 68 253</sup>. The need for continuous and coherent return-towork processes is also evident in the literature <sup>61 292</sup>. Supervisors need competencies related to personal attributes, knowledge of RTW processes, and empathetic support of the worker <sup>182</sup>. Also, it may be important to give supervisors autonomy, training and support in order to for instance be able to modify work <sup>172</sup>.

People confronting mental health problems while in a recovery-process environment such as a workplace find support from professionals especially helpful <sup>44</sup>. Supervisors in study IV stated that their employees expressed a need for support throughout the process of obtaining and maintaining a job; nevertheless, they had been left on their own too soon. Without follow-up, the workers felt abandoned as earlier reported by individuals who became disabled at a young age <sup>293</sup>. Donabedian (1966) argued that a personalized relation between the client (i.e., employee in this setting) and sources of care, in addition to smaller numbers of persons involved in this interaction, enhances the likelihood to achieve continuous and coordinated care <sup>145</sup>. An individually-tailored RTW progression requires a good relationship and consciousness among all involved stakeholders in the RTW process. This may be solved through the provision of an RTW coordinator <sup>165 166</sup>. However, to take on and solve such a role in satisfactorily manner may require focus on developing competencies and skills <sup>165 167</sup>.

There is a high degree of policy focus on coordination; still, we lack clear guidelines regarding the coordination of RTW processes. The only legal right to a coordinator in Norway is attached to the individual plan (IP), which is to the authors' knowledge not commonly provided for employees on sick leave. Few of the employees in studies I and II were provided with an IP in preliminary analysis performed. Sandvin (2008) argues that IP is a tool that could be used to individually tailor the RTW coordination <sup>26 163</sup>. Several others have claimed an underuse of IPs <sup>294-296</sup>, despite IP is reportedly a good tool to enhance user involvement <sup>294</sup> <sup>295</sup>. It may be that IP enhances and structures a common goal; at the same time real service coordination requires more than the instrumental use of an IP. In Norway, SE or IPS may be the closest examples of the model of coordination that Sandvin proposes, which is an employment specialist that individually tailors the follow-up in the workplace in addition to other services. SE and IPS represent a change of focus from treatment and training in shielded units prior to ordinary work to early work life placement with training and workplace adaptation <sup>30 297-301</sup>, which is referred to as a transition from "train-then-place" to "place-thentrain" <sup>298</sup>. Depending on whether the employee has a job history, this process may take the form of job-entry or a return-to-work approach, and either of these would involve occupational habilitation or rehabilitation processes <sup>302</sup>. Some studies have concluded that the success of the "place then train" approach with individuals experiencing mental health issues would be enhanced by more communication among the core stakeholders: employees (trainees), supervisors (employers), the social security system representative, and health personnel <sup>61 121 255</sup>. Although the evidence of SE and IPS are best documented for persons with mental health problems, studies are currently investigating the model's effect on, for example, pain rehabilitation <sup>303</sup>. In the SE and IPS tradition, the employment specialist builds a relationship with the employee and engages in close follow-up at the workplace site. This is in line with the role of an RTW coordinator form the disability management tradition <sup>122</sup> <sup>166</sup> <sup>304</sup>. In recent years, research articles have argued in support of unifying these earlier separated fields of practice and research <sup>67 305</sup>. Unifying knowledge in the fields of vocational rehabilitation and occupational rehabilitation seems promising. It underlines the possibilities of learning and knowledge translation across diagnosis groups, which has turned out to be closer than previously predicted regarding the overlap and consequences for work participation, as well as in prognostic factors and effective intervention components.



#### Figure 7: Individually-tailored service integration.

Figure 7 illustrates an example of individually-tailored service integration in a RTW process. The oval shape overlapping the main and side arenas in RTW processes <sup>13 17</sup> encloses stakeholders at different levels across the arenas. In this illustration the employee is pictured to be involved in all arenas and at all levels. However, the degree of employee involvement at different levels as well as coordination as a role or a process should be further discussed and developed. Anyhow, coordination across agencies and stakeholders is most effective when the employees' goals and values shape the process <sup>292 306</sup>. Although some initiatives integrate and provide a coordinator that facilitates RTW in Norway, it seems the individual tailoring of RTW coordination is generally lacking for workers on sick leave. In study III, a suggestion for employees on sick leave to be provided with a local coordinator to integrate services across the workplace, health services, and NAV was raised. Such a coordinator role has been developed in Norway to a limited degree, even though several other countries have developed educational programmes for RTW coordinators <sup>167 171</sup> and a more widespread use of such competencies <sup>122</sup>. This may be a way forward to close the gap of service integration.

# 6.2 Methodological considerations and methods discussion

In this thesis, multiple methods have been used to investigate the concept, consequences and challenges of coordination in RTW processes. Validity could be increased by using multiple methods since different methods complement each other and provide various approaches for

collecting data and investigating social actions <sup>307</sup>. Although guidelines are necessary for planning studies, the researcher should place a high value on being open to new ideas and test his or her own ideas regarding new information and observe continuously to minimise bias <sup>308</sup>. The quantitative cohort design in studies I and II has a clear post-positivistic perspective; we measured and tested single variables <sup>224</sup>. Conversely, studies III and IV may be defined as constructivist <sup>224</sup>. According to previous paradigms, these widely differing perspectives could be a major problem for this project as a whole. Despite that, the pragmatic perspective goes beyond such either-or-thinking and aims at reflecting on how to merge findings from studies with different approaches to make a change <sup>227</sup>. The qualitative studies (studies III and IV) used an inductive approach. Inductive research is used when studying concepts that are difficult to identify, understand, or quantify and when there is a need to understand and explore experiences with a phenomenon or concept <sup>224 227 235</sup>. Deductive approaches are built on theory or on more explored empirical fields and are usually a natural choice when the aim is to test a hypothesis or quantify a phenomenon or concept <sup>224</sup> <sup>227</sup>. In this thesis, the quantitative studies (studies I and II) used such approaches to some degree related to use of knowledge from research. However, the theorization of RTW-coordination is still limited, and therefore study I and II are also explorative. Although the single studies could be described as either inductive or deductive at a superior level, this thesis aims at abduction. This is conducted by searching for useful points of connection between knowledge produced through the different approaches in the discussion <sup>227</sup>.

The collected data is both qualitative and quantitative. Still, this is not a mixed methods project because the different methods have not been integrated within the same study <sup>229</sup>. Nevertheless, it is a strength that the project illustrates the concept of coordinating RTW processes from different perspectives by triangulating methods. As such, this thesis has the potential for a comprehensive synthesis that produces a richer picture of the concept than each individual study can provide and each bit of material does alone <sup>229</sup>. This potential is also outlined as an opportunity for the pragmatic worldview <sup>227</sup>. It is crucial for keeping quality and flexibility high in qualitative, quantitative, and mixed methods research to report the research process and keep the publications transparent and at a satisfactory level of detail <sup>229</sup>. Hence, it will be possible for other researchers to assess the quality of the study. Some important strengths and limitations of the studies will be discussed below.

#### 6.2.1 Discussion of methods in studies I and II

In quantitative research, threats to internal validity are procedures, treatments, or experiences that threaten the researcher's ability to extract conclusions from the data and apply them to the population <sup>224</sup>. In present study, the questionnaires was built on standard demographics, earlier research with special attention to earlier studies on the rapid-RTW-services <sup>71 79 81 309</sup>, researchers' experience within the field in combination with some validated questionnaires, like the Job Content Questionnaire. The full questionnaires are attached (see attachments 1 and 2). In study I and II, no variables from validated questionnaires were used. Validated measures are preferable to use if possible. In present studies, we did not have such validated measures available, and one could discuss how relevant it could be related to the research questions. Validated measures are often used in order to make ex. sum scores, which was not the aim of this study. On the other hand, one could argue that such measure could be relevant in order to evaluate for instance degree of integration of services. This would be a possible area for further development, although outside the scope of this thesis. The outcome measure in study II was chosen to be first and full RTW with a follow-up period of 360 days based on usual practice <sup>6 57</sup>. However, the ultimate outcome measure would have been sustainable return to work, and as this is possible with register data, we will consider to do further analysis on current material as well as plan new studies with sustainable return to work as outcome measure. In current study, the additional results with rates of sustainable return to work provided in this thesis revealed that there were no differences between those been provided with a coordinator and not regards sustainable RTW, either four weeks of continuous RTW nor six months of continuous RTW (see table 7).

For some of the variables in presents studies, the amount of missing data was high, and this might lower the quality of the results for these variables. There is always a risk for biased non-responses to questions <sup>228</sup>, and in this case we do not know why few have responded on these variables. Still some variables are analysed with descriptive statistics and therefore these results must be interpreted with caution. Consequently, some variables were not included in statistical testing due to a small sample size, for example, the different types of adaptations, the provision of a coordinator from other services, and some of the categories of contact with other stakeholders. Hence, this needs to be further explored and tested in future studies. More knowledge of the coordinator would enlighten the study (i.e., what background the coordinator has is previously reported to be associated with the intensity of engagement and activities in which the coordinator is involved) <sup>223</sup>. Although the variable of the provision of a

coordinator is based on self-report from employees in the present study, the results from the analyses on association between provision of a coordinator and time to RTW have been verified when tested with providers' responses to the same variable ("Did your service provide a coordinator for this patient?"). The coordinator's competencies and activities (i.e., contact with workplace representatives) in RTW programmes in Norway should be further explored in future research.

One of the strengths of the cohort studies was the relatively high number of participants and the use of register data, which was both detailed and precise regarding sickness absence and diagnoses, as it was connected to the public social security benefits system. Unfortunately, there was no available register data on provision of a coordinator. This variable, as well as variables on other demographic, personal and intervention variables, was collected through the self-administered questionnaires in this cohort study. The use of register data on sickness absence and diagnosis strengthens the reliability related to consistency and stability in measurements; thus, all these data was collected in the same manner across employees <sup>228</sup>. However, in the questionnaire, some questions may have been understood differently by individual participants, which is a possible threat to reliability in self-managed questionnaires <sup>228</sup>. The question of the provision of a coordinator is central here, did the employees report having a coordinator without the services actually providing one? There was unfortunately not total consistency between providers and employees' answers to this question. Through discussion in the research team the choice on which variable to use was taken, and the employees' answer were chosen based on the importance of employees' experience of coordinated and integrated services. Nevertheless, when analysing the providers' answers to the question whether the programme provided a coordinator, the results of study II remain the same, indicating consistency of no associations between the provision of a coordinator and time to RTW.

Approximately two-thirds of the employees in studies I and II were provided with a coordinator. Ideally, the groups with and without a coordinator should be of equal size. Often in cohort studies, there might be challenges regarding exposure of the variable one wishes to investigate in order to have enough power for the analysis <sup>310</sup>. In present cohort study we were surprised by the high number of employees that were provided with a coordinator. Furthermore, there was an association between having a coordinator and the type of RTW programme. This make it difficult to generalize the findings to all sick listed employees participating in the Rapid-RTW-programmes as we were not able to distinguish between the

effect of having a coordinator and a given program. <sup>224</sup>. Both frequencies of being provided with a coordinator and time until RTW varied based on type of rapid-RTW-program. This suggested type of programme to be a confounding variable in the analysis of association between time to RTW and provision of a coordinator (study II). Type of programme seems to explain more of the variation in RTW-rates than being provided with a coordinator, although it might be the underlying cause of being referred to a specific RTW-programme that explains even more of this variation. In study II we lack information on comorbidity, and possibly have not been able to detect the complexity of the participants' situation well enough. Even though we do control for several variables associated with complexity of health situation, like pain, mental symptoms, previous sickness absence and so further. This information is important when interpreting the results and in communication of these, and should inform additional studies of RTW-programs.

Approximately one fourth of the rapid-RTW-services in Norway participated in this study. All of the rapid-RTW-services were invited, and about one third initially wanted to participate. One may reason on why not all services wanted to participate. One obvious reason would be the additional work for the services in order to recruit participants to the study, and for their professionals to participate as well. In our opinion, there was enough information and contact with rapid-RTW-services in order to serve them well in their participation. Even so, multicentre studies in a natural setting are complex to drift, and it might be that the project team was not able to follow up all the services well enough in order to facilitate their participation. Some services that initially wanted to participate were lost during data collection. There was several reasons for this drop-out; challenges with recruiting personnel in the services, challenges with participant recruitment, lack of use of the digital questionnaire and so further. Ideally more services should have completed their participation to strengthen the external validity of the results. However, the included services represent a relatively good spread of types of services and employees, and the material was therefore in our opinion suitable to answer the research questions in study I and II. That said, this is important to bear in mind; that the analysis encompass several different services and most likely different coordination practices that have not been differentiated in current study. Therefore, we may only describe the overarching concept and practices in this programme. The sample in this study was exclusively from Rapid-RTW programmes, and other RTW programmes might differ in their RTW and coordination of RTW models. On the other hand, the Rapid-RTW programme is the largest effort to promote RTW in Norway, and therefore, the sample

represents RTW services to a large proportion of the sick-listed employees in this country. Additionally, the proportion of employees sick-listed due to MSD is higher than in the national statistics of Norway. That said, since employees with MSD is the best-documented group of sick-listed individuals benefiting from RTW coordination, this should be more of an advantage regarding the possibility of revealing a difference between those who were provided with a coordinator and those who were not.

In observational studies like the Rapid-RTW cohort study, there is always a risk of a potential confounds in group comparisons <sup>228</sup>. Accordingly, in studies I and II, there is a potential confound in the comparison of RTW outcomes if those employees who were provided with an RTW coordinator are very different from those who were not provided with an RTW coordinator. This is addressed through the description of demographic variables, as well as diagnoses, self-reported pain, depressed mood, and anxiety at the beginning of the RTW service to rule out this possible source of a confounding bias <sup>228</sup>. Consequently, by including self-report on issues like pain, depressed mood, and anxiety at the beginning of the RTW service in a questionnaire at the end of the service, there is a possibility of recall bias <sup>228</sup>. The respondents may remember having higher or lower symptoms at the beginning of the service than they actually did. However, this will most likely be evenly spread between the respondents, and therefore, it will not significantly affect the results. Observational studies are sometimes referred to as natural experiments, having the advantage of a natural setting in which the sample is naturally divided into cases and controls, and events can be observed <sup>228</sup>. Nevertheless, there is always a risk of potential confounders not being controlled by the researchers, and one should be careful when claiming possible causal factors <sup>228</sup>. In this study, the number of events (first and full RTW) is relatively high through the follow-up period, and this strengthens the power of the analysis <sup>310</sup>. An experimental setting of a RCT-study would be better in order to investigate the effect of RTW-coordination. However, in current study we have been able to investigate the association between RTW and provision of a coordinator in a natural setting without special training of professionals or frames for the intervention and experiment. This is an advantage in order to understand what is practised in the current RTWinterventions provided. Furthermore, seeing results from study I and II together reveal that there most likely should be further development of RTW-coordination in Norway before testing the effect of such intervention component will be worthwhile.

There is also a possibility of selection bias in the study as the percentage of employees sicklisted with psychiatric issues and receiving psychological treatment are higher among the nonrespondents. Fewer employees with psychiatric issues were provided with a coordinator <sup>252</sup>, meaning the power might have been enhanced if more of these employees responded. Even so, employees with psychiatric diagnoses represent a small proportion of the total number of included participants. Therefore, the inclusion of these employees would most likely not affect the results decisively. An analysis of the full material of employees on full-time sick leave (n=546) shows some statistically significant differences between respondents and non-respondents on the question of the provision of a coordinator. Non-respondents' median age was slightly lower (44 years), and more of them had a mental health diagnosis (20%). Additionally, fewer received occupational rehabilitation in the non-respondents (43%).

In paper II the journal required using a checklist in order to report the research transparent, therefore the STROBE guidelines for reporting cohort studies are applied in reporting of this study <sup>311 312</sup> (see attachment 3).

#### 6.2.2 Discussion of methods in studies III and IV

Interviews like those performed in studies III and IV are a good way to gather knowledge about personal experiences and investigate their importance <sup>313</sup>. However, study III has some limitations in this regard. Ideally, we wanted to conduct more group interviews with fewer and more homogeneous participants, which is often recommended for group interviews <sup>245</sup>. This was unfortunately impossible within the project's framework. To increase the results' relevance, we recruited a heterogeneous selection of informants consisting of different actors and different services with a geographic spread <sup>314</sup> in line with recommendations for Delphistudies <sup>241</sup>. Consequently, despite the limitation, data from the group interview produced rich material with numerous meaningful units.

In study IV, lifeworld phenomenology inspired the opening question wherein the supervisors' own experiences and narrations regarding the process of job placement were explored <sup>244</sup>. The researchers focused on facilitate informants' reflections upon their experiences of their lifeworld as supervisors with responsibility of work integration. In order to keep focus of the context which we were exploring, and keep close to the informants' lifeworld, we asked for examples to enrich and deepen descriptions during the study <sup>244</sup>. The lifeworld approach was not further elaborated in the analysis of our study. Due to our pragmatic approach <sup>224</sup>, the aim was to reveal how placements work out, and the challenges and success factors supervisors experienced. For this research problem the qualitative content analysis was well suited due to the method's flexibility <sup>237</sup> and the possibility of identifying critical processes <sup>238</sup>. Some will

argue that with a phenomenological inspired approach, one should keep to this track through the whole process of the study. On the other hand, some recent writers have also discussed how the research question should guide the choices made during the research process, and argued for the possibility of taking different tracks according to this <sup>235</sup>. Lifeworld phenomenology may be viewed as a ground for qualitative research, which may be used regardless of the intent to use the philosophy of phenomenology actively in the project <sup>244</sup>. Additionally, the actual differences between methods for analysis in qualitative research are also questioned <sup>249</sup>. We may only speculate in how the results may have changed if the lifeworld approach had been followed through the analysis and presentation of results. However, the lifeworld approach may have added some theoretically grounded concepts in order to describe and present the results that may have been useful <sup>244</sup>. It might be that a phenomenological hermeneutic method <sup>315</sup> would also have fitted the material and the research question. At the same time, some will state that researchers need additional philosophical training in order to discuss well from such phenomenological hermeneutical approach <sup>243</sup>. In our case, the involved researchers had various levels of experience and philosophical training, and quantitative content analysis therefore was a good choice <sup>236</sup>.

In study III, we used a combination of qualitative and quantitative analysis, and included the count of frequency of the themes in presentation of the results <sup>228</sup> <sup>249</sup>. Frequent occurrence of a theme may indicate greater importance, and will easily be interpreted as so. But it might also be a reflection of what the informants have willingness or ability to speak of <sup>249</sup>, or also which informants get the most speak time. The context of the interview <sup>228</sup>, where stakeholders from all levels of RTW-processes were represented, may for instance have contributed to the high focus on organization of the follow-up of sick listed employees. The speak time was regulated <sup>228</sup>, and the moderator assured all informants to came forth with their experiences and viewpoints on needed changes, however the results should be interpreted with this limitation in mind.

Study III was designed as a Delphi study, which is suitable for investigating challenges and the need for changes in a field  $^{241}$ . In present thesis only data and results from round I are presented, and this might be a limitation, as the first round might we viewed as a weak qualitative study when seen alone. The discussion is meant to compensate for this limitation, as the results from the quantitative round II with a large sample (n=609) is included. Even though round I have limitations, we still argue that the material was rich, and that the challenges and needed changes revealed were meaningful to the setting and what other

researchers have found. The need for better coordination and cooperation between stakeholders and levels were confirmed in round I. Furthermore, several of the statements did reach consensus in round II even though there were different levels of agreement to some of the needed changes in some sub-groups of respondents <sup>71</sup>. The analysis of the material was inductive, even so when looking back it also had a deductive phase as we chose to use challenges and needed changes in presentation of results. This deduction was built on the research question, and in line with Delphi methodology <sup>241</sup>, however, it might be that data not fit for these concepts may have been neglected. This issue were tried solved by involving several researchers to confirm the analysis <sup>234</sup>. Regarding current study, the whole material was used for the analysis, and the description of results based on the themes and the revealed issues and need for changes therefore represents the text as a whole.

To strengthen the credibility of the studies, we made sure we had knowledgeable informants who have first-hand knowledge of the concept being studied <sup>243</sup>. Their experience and knowledge is the most important source of rich data material that can create credibility to obtain the essence of the concept <sup>228</sup>. Although we strived for a uniform distribution of different actors in study III, more participants from the health service agreed to participate than from NAV, and this may have influenced what opinions emerged during the group interview regarding the representatives being larger in number and generating more information during the interviews and the likelihood of different or conflicting opinions that could be difficult to claim in such a setting. This challenge was addressed by conducting written data collection before the group interview, as well as regulating the talk time during the interview itself. Furthermore, we wanted to recruit sick-listed employees to ensure that the views of the RTW service users were represented, but failed in this attempt. This is a limitation of the study. That said, representatives from user organizations were invited and participated in the study, and their contributions may be viewed as accounting for this limitation to some degree.

Work integration requires cooperation in a reciprocal process; however, in study IV, only the supervisors' perspective was explored. This may be viewed as a limitation, especially since supervisors' perspectives are reportedly underrepresented in RTW process research; hence, such an approach would have added knowledge to a research gap. In accordance with a decision by NSD, we did not ask any questions about specific employees (i.e., trainees) currently in placement, so all researchers posed person-neutral questions exclusively in our interviews to avoid confidentiality conflicts. Furthermore, the severity of the employees'

health problems was not disclosed to their supervisors or the researchers. This may limit the external validity of our results, as it is unclear to what extent the employees that the supervisors have had in job placement are representative of employees facing mental health issues. On the other hand, as elaborated previously, the diagnosis' importance is being questioned in research elsewhere <sup>32</sup>, as well as by our informants <sup>259</sup>. Although we sought diversity in our group of informants, all informants were from one region in Norway, and their experiences may not be representative of those encountered by all supervisors in Norwegian job placements. Still, several of the findings in our study are consistent with those reported elsewhere in the literature <sup>41 61 121 131 180 255 257 266-270 293 300</sup>. Referring to generalisability is uncommon in qualitative research since describing peculiarities is the goal rather than being able to generalise the findings to a larger population <sup>224</sup>. Nevertheless, terms such as transferability are used.

Malterud (2001) argued that results from qualitative research can be transferred to a wider population to some extent if it is systematically conducted with a high degree of reflexivity <sup>316</sup>. Reflexivity means a reflection on how the researcher's background forms the way the study is understood <sup>224</sup>. Through reflection and dialogue throughout the research process, the quality of the study and presentation of results can be strengthened <sup>234 248</sup>, and such an approach was strived for in studies II and IV. In qualitative research, knowledge is developed through experience. To show systematics in the descriptions of how knowledge was generated in studies III and IV, we provided examples to visualise the procedures and processes and tried to present them in such a way that others can follow them <sup>317</sup>.

Being aware own pre-understanding and the researchers own role in the production of knowledge in the qualitative research situation is important <sup>234 235</sup>. We, as researchers, had to balance the contradictories of being open in the interview setting as well as in the analysis, with the equal prerequisite of having knowledge of the research topic in order to ask relevant questions. The researchers may have had slightly different approaches when reflecting on their professional backgrounds and experience. This might have affected the results due to follow-up questions asked in study IV and what the researchers sought in the analysis <sup>245</sup>. However, multi-professionalism and various experiences could be considered an asset, particularly since we strived to include a diversity of experiences in the material as long as the presumptions are acknowledged <sup>245 314</sup>. It might be a risk in research to confirm the pre-understanding. It is therefore important that researchers clarify their understanding and demonstrate how the analysis was performed <sup>234 313</sup>, thus showing reflexivity concerning the

point of view and process <sup>248</sup>. A team of researchers with various backgrounds discussing the data, such as in studies III and IV, might contribute to widening understanding and avoid bias due to pre-understanding. Furthermore, we discussed methods throughout the study in an effort to achieve a common understanding of the data and ensure its internal validity <sup>234 245</sup>.

The reliability of studies III and IV was increased by involving more researchers who read the same material and created meaningful units and themes individually <sup>228</sup> before the research team came together and discussed what each researcher had found. In such discussions, reliability was enhanced through quality assurance of the analysis at several levels: by examining whether all the material had a place, by exerting more control of our individual understanding, and by conducting a thorough discussion of the thematization of the material itself. If more researchers individually find themes that are identical or to some extent overlapping, it is more likely that they have managed to capture the essence of the concept being studied. The reliability of studies III and IV was further strengthened by the inclusion of additional researchers who have experience with content analysis in the analysis and description of results. Reliability in a qualitative study cannot be distinguished from being situated as people in a physical, social, and ethical world <sup>248</sup>. The researcher must be aware of the conditions under which he or she develops the knowledge and provides comprehensive research findings that are capable of promoting change <sup>248</sup>.

In qualitative research, it may also be important to show how the new knowledge is understood and implemented to enhance credibility <sup>245</sup>. Referring to the informants' voices through extensive use of quotes in the presentation of results is another way to increase the credibility of so-called rich descriptions <sup>224</sup>. Although contributing personal experiences in this setting should not have negative consequences for the informants <sup>245</sup>, service providers are dependent on the distribution of resources, either as a living or in relation to wishing the best for the patients <sup>314</sup>. It was important that the presentation of the results was anonymised; therefore, quotes were not attached to descriptions of the role each individual represented in study III since there were few who represented each role. However, in round II of the Delphi study, which was a quantitative survey with many respondents, it was important to find out how widely the perceptions that emerge in the first part of the Delphi study was in different groups with different roles related to the follow-up of sick-listed employees <sup>71</sup>.

#### 6.2.3 Ethical considerations

Confidentiality is an important principle of research and means that we will maintain the anonymity of the informants so that they feel free to open up without fearing that they will be disclosed as informants <sup>251</sup>. What can be easily recognizable depends on the amount of data and how specific events, people, and surroundings are described, as well as how common or rare something is <sup>251</sup>. In study III, we interviewed supervisors who have had young people with mental health problems in practice and negotiated with NSD on how we could ask about their experience so that it did not become too transparent. We agreed not to ask if they could tell one story about a particular person in practice but tell about a "typical course" on a more general basis. Furthermore, this study emphasised the recruitment of the sample. We made sure the recruitment strategy targeted leaders who had experience with service coordination for least three people in work practices to ensure confidentiality in the dataset. Still, when conducting the interviews, one of the supervisors reported having had experience with only one employee. The general confidentiality was otherwise safeguarded, and this supervisor was not excluded from the study.

In the studies that constitute this thesis, no one was at risk of physical injuries or discomfort. Even so, asking participants about themes relevant to them and their health and working lives will always affect them to some degree. For instance, they will become conscious of elements of themselves, the environment, or the services they have received <sup>245</sup>. There may also be an expectation that something will change <sup>251</sup>, for example, in the organization of the Rapid-RTW programme, when participants described challenges in the current organization. To meet such expectations, it was important to be honest about realistic possibilities for change while striving to disseminate research well and use the data generated to benefit society <sup>251</sup>. Research is based on values such as honesty, justice, collegiality, and openness, and when these are practiced, there is outstanding applicability, productivity, and creativity in the research <sup>308</sup>.

## 7 Conclusion and implications

The purpose of this study was to reveal coordination practices in RTW processes to inform practice, researchers, and policymakers regarding if and how RTW coordination should develop to provide the best outcomes for the employees, the workplace, and society.

## 7.1 Conclusion

This study revealed that employees on sick leave receiving RTW services in the Rapid-RTW programme are commonly provided with a coordinator. However, this coordinator seems to coordinate within services and to a very limited degree across the services, stakeholders, and levels involved in fostering return-to-work. This study shows that horizontal on-the-samelevel model of coordination in RTW services does not enhance a more rapid RTW. The unadjusted result of prolonged first-RTW is however confounded by the type of RTW programme provided and most likely the severity or complexity of the health complaints that caused the sickness absence and need for occupational treatment or rehabilitation. This study reveals that the national Rapid-RTW programme, as well as services and more general follow-up of sick-listed employees, from stakeholders' perspectives, lack important components identified in the international literature. One of these components is stakeholder coordination. The attention to workplace accommodation and work as a part of rehabilitation seems to be growing. In this study, supervisors reported encountering challenges in the continuity of coordination and cooperation in the process of integration. Supervisors would like a prolonged follow-up from NAV and more contact with healthcare providers in some cases. This shortage of stakeholder coordination and cooperation in the process also influenced the motivational challenges of the RTW process by, for example, the absence of assessments used to match the employees' wishes and needs with the workplaces'.

In research, biopsychosocial, system, and ecological models of return-to-work are currently guiding research. This theoretical foundation is implemented in practice to some degree; although, the biomedical understanding of health and focus on treatment and work as an outcome rather than an integral aspect of rehabilitation still seems evident. Consequently, there is a limited focus on cooperation with the workplace and a lack of stakeholder coordination between services and levels; thus, vertical service integration is not present. This lack of vertical integration affects the individual employee's possibilities for support in his or her RTW transitional process. To foster work participation and promote health, the various

systems and stakeholders involved in RTW processes need to cooperate and coordinate their services. For stakeholders to be able to take on this effort, they need competencies and resources. Hence, access to research results, strategies for knowledge translation, and models for the implementation of best evidence interventions are necessary. Authorities at the policy level are encouraged to comply with their strategies of integration, as well as their extensive initiative on RTW programmes with best evidence guidelines, and requirements according to research knowledge.

## 7.2 Implications

This study revealed that current coordination model do not contribute to a more rapid RTW, and stakeholders involved in RTW processes call for coordination in a vertical between-levels integrational manner in line with national policy, as well as evidence from research. Strategies for knowledge translation and implementation of best practice need to be developed. One way forward in the enhancement of coordination issues is to reinforce coordinator competencies and define coordinator roles and responsibilities in a Norwegian context.

Still, there is a need to investigate the competencies and activities of coordinators in RTW processes in Norway and further elucidate how this role may differ in various types of RTW programmes for employees with different challenges to work participation. The development of RTW services should be evidence-based to a larger degree, and the implementation piloted and followed by research from the start. Studies of whether some employees will benefit more from coordinated services or being provided with an RTW coordinator are also required. Models for coordination across various stakeholders and levels in the complex field of RTW are needed, and workplace stakeholders should play a central role in such model development. The supervisors are central to bringing work forth as an important rehabilitation component, and policy and stakeholders in the health and welfare system should meet their requirements to foster work integration.

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## **Attachments**

Attachment 1: Questionnaire for patients

#### "Raskere tilbake" - Fase II (spørreskjema for pasient)

Bakgrunn
----------

Fødsels- og personnummer


#### Bekreft ditt fødsels- og personnummer

-	 -	 		 	 

## Jeg er født: (kun ett kryss)

	•	
-		
_	•	

I samme by eller område som jeg jobber i

	l en annen del av	Norge
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I et annet land (spesifiser hvilket)

Kjønn:

- Kvinne
- Mann

Nåværende sivilstand: (sett kun ett kryss)

Ugift
Samboer
Gift/reg. partner
Separert

Skilt (spesifiser årstall)





Antall barn:



Antall hjemmeboende barn:



Jeg bor:



Sammen med andre (antall personer du bor sammen med foruten deg selv)

Har du omsorgsansvar for personer med spesielle behov: (sett ett eller flere kryss)

Syke/funksjonshemmede barn/stebarn

- Foreldre/svigerforeldre
- Andre familiemedlemmer

Venner/bekjente

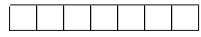
Nei

På en skala fra 1-10, hvordan vil du beskrive ditt forhold til din familie og dine venner den siste tiden? (sett ett kryss per linje)

	1 Veldig dårlig	2	3	4	5	6	7	8	9	10 Veldig bra	lkke aktu- elt
Ektefelle/partner											
Barn											
Stebarn											
Foreldre											
Svigerforeldre											
Venner											

Hva er postnummeret der du bor?

Husstandens årlige bruttoinntekt (cirka inntekt i norske kroner før skatt)



Hvilke andre former for tiltak, behandling og terapi har du mottatt det siste halve året? Nevn alle (eks. tilrettelegging av arbeidsplassen, operasjon, medikamenter, kiropraktorbehandling, soneterapi, homeopati etc.)

Om din jobb og jobbsituasjon

H	Iva er ditt yrke?																				
ĺ																					

## Hva er din stillingsbetegnelse?

1					 						
1											
ц											
ц											
J											
ц											
1											

Hvor stor stillingsstørrelse har du (i prosent der 100% er full stilling)?

Jobber du mer enn din ordinære stillingsstørrelse? (sett ett kryss)

Som oftest
Ofte
Av og til
Sjeldent

Aldri

I cirka hvor mange år har du vært yrkesaktiv?



Hva er ditt høyeste utdanningsnivå? (sett ett kryss)

- Grunnskolenivå (cirka 9 års skolegang)
- Videregående skolenivå (cirka 12 års skolegang)
  - Høyskole-/universitetsnivå til og med 4 år
- Høyskole-/universitetsnivå i mer enn 4 år

Hvor ligger din arbeidsplass (der du møter opp)? Oppgi enten postnummer, poststed eller kommunenavn.

Hvor mange mil er det cirka fra dine jobblokaler og til det Raskere tilbake tilbudet du nå har deltatt på?



Hvilken sektor jobber du i? (sett kun ett kryss)

Privat
Statlig
Offentl

Offentlig

Privat sektor/ offentlig næringsvirksomhet

Selvstendig næringsdrivende

Hvilken type bransje jobber du innenfor? (sett kun ett kryss)

	Undervisning							
	Helse- og sosialtjenester							
	Offentlig administrasjon og forsvar, sosialforsikring							
	Overnattings- og serveringsvirksomhet							
	Industri							
	Olje- og gassutvinning							
	Bygge- og anleggsvirksomhet							
	Informasjon og kommunikasjon							
	Finansierings- og forsikringsvirksomhet							
	Jordbruk, skogbruk og fiske							
	Transport og lagring							
	Bergverksdrift og utvinning							
	Elektrisitet, vann, avløp, renovasjon							
	Varehandel, reparasjon av motorvogner							
	Eiendomsdrift, teknisk tjenesteyting							
	Forretningsmessig tjenesteyting							
	Annet (spesifiser)							
Har du	I lederansvar som involverer personalansvar? (sett kun ett kryss)							
	Ja (spesifiser hvor mange du leder)							
	Nei							

I ditt ordinære arbeid, jobber du ...:

Overtid regnes ikke med: (sett kun ett kryss)

Ordinært dagarbeid, uten	helgejobbing

Ordinart degerheid	mod	holgoiobh	ina
Ordinært dagarbeid,	mea	neigejobb	ng

Ordinært kveldsarbeid, uten helgejobbing

Ordinært kveldsarbeid, med helgejobbing

- Ordinært nattarbeid, uten helgejobbing
- Ordinært nattarbeid, med helgejobbing

Skift-/turnus dag/kveld, uten helgejobbing

Skift/turnus dag/kveld, med helgejobbing

Skift/turnus dag/kveld/natt, uten helgejobbing

Skift/turnus dag/kveld/natt, med helgejobbing

Annen type arbeidstidsordning (spesifiser):

Ē							

#### Hvor mange ansatte er det i den virksomheten du jobber i?


Hvor mange	år har d	u jobbet i	i denne	virksom	heten?
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#### Har du tilgang til bedriftshelsetjeneste på din arbeidsplass? (sett kun ett kryss)

	Ja, vi har vår egen interne bedriftshelsetjeneste
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Innebærer ugunstige arbeidsstillinger for kroppen

Innebærer ugunstige arbeidsstillinger for armene

+

- Ja, vi er med i en felles bedriftshelsetjeneste som også andre bruker
- Nei

Vet ikke

Beskriv de fem arbeidsoppgavene som du utfører oftest på jobben din:

Ta stilling til følgende utsagn: Jobben min (set	t ett kryss per linje):	:		
	Svært uenig	Uenig	Enig	Svært enig
Krever at jeg lærer meg nye ting				
Innebærer at jeg må gjenta arbeidsoperasjoner med få minutters mellomrom (repetetivt arbeid)				
Stiller høye krav til kreativitet				
Stiller høye krav til ferdigheter				
Innebærer varierte arbeidsoppgaver				
Gir gode muligheter for å utvikle egne spesifikke evner				
Gir gode muligheter for å ta egne valg				
Gir begrenset frihet til å ta valg				
Er slik at jeg har mye jeg skulle ha sagt om det som skjer				
Er slik at det kreves at jeg jobber veldig fort				
Er slik at det kreves at jeg jobber hardt				
Innbærer en urimelig stor arbeidsmengde				
Er slik at jeg har tilstrekkelig tid til å få arbeidet gjort				
Er fri fra krav som står i motsetning til hverandre				
Krever intens konsentrasjon				
Er slik at jeg ofte blir avbrudd i arbeidet mitt				
Er hektisk				
Er slik at jeg ofte må vente på andre for å få gjort jobben				
Er fysisk krevende				
Innebærer tunge løft				
Innebærer fysisk arbeid i høyt tempo				

+

Er kravene i ditt arbeid hovedsakelig: (sett kun ett kryss)

Psykiske

Fysiske

Både psykiske og fysiske

## Ta stilling til følgende utsagn: (sett ett kryss per linje)

	Svært uenig	Uenig	Enig	Svært enig
De jeg jobber med er kompetente i jobben sin				
De jeg jobber med er interessert i meg				
De jeg jobber med er fientlige innstilt overfor meg				
De jeg jobber med er vennlige overfor meg				
Vi jobber sammen				
De jeg jobber med er hjelpsomme				
Min leder er interessert i de han/hun leder				
Min leder er oppmerksom overfor det jeg formidler				
Min leder er fiendtlig innstilt				
Min leder er hjelpsom				
Min leder er en god organisator				

## Når du har vært sykmeldt, i hvilken grad har din nærmeste leder: (sett ett kryss per linje)

	Aldri	Sjelden	Av og til	Ofte	Svært ofte	Ikke aktuelt
Vært beskyttende overfor deg						
Bidratt til å løse problemstillinger knyttet til fraværet						
Vært god til å skape og holde kontakt						
Vært en tillitskaper						
Vært annerkjennende						
Vært oppmuntrende						
Påpekt tydelig hvilket ansvar du har						
Tatt kontakt med deg på et tidlig stadium						
Hatt regelmessig kontakt med deg mens du har vært sykmeldt						
Tilrettelagt dine arbeidsoppgaver						
Tilrettelagt ditt arbeidsmiljø						
Tilrettelagt din arbeidstid						
Jeg har ikke vært sykmeldt						

## Hva opplever du er årsaken til at du er/har vært sykmeldt fra arbeidet?

+

#### Fordel 100 poeng ved å oppgi hvor viktig følgende områder er i livet ditt nå for tiden. Det skal tilsammen bli 100.



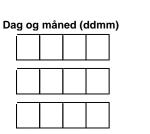
#### Om tilbudet du har mottatt

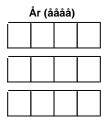
Hva heter Raskere tilbake tilbudet du har deltatt i? Skriv institusjonens navn og evt. hva dette tilbudet heter.

Beskriv følgende tidspunkt:

Når du ble henvist til tilbudet:

Når Raskere tilbake tilbudet startet:





Når Raskere tilbake tilbudet sluttet:

Hvor ligger dette Raskere tilbake tilbudet i forhold til hvor du bor? (sett ett eller flere kryss)

Samme kommune

Samme fylke

- Samme helseregion (nord, midt, vest, øst/sør)
- Annen helseregion

## Hvordan vil du vurdere dette Raskere tilbake tilbudet, når det gjelder... (sett ett kryss per linje)

	Veldig dårlig	Under gjennomsnittet	Gjennomsnittlig	Over gjennomsnittet	Veldig bra	lkke relevant
Faglig kvalitet på tilbudet						
Organisering av tilbudet						
Samhandling overfor arbeidsplassen						
Samhandling overfor fastlegen						
Samhandling overfor NAV						
Brukermedvirkning						
Hva tilbudet omhandler av tiltak						

På en skala fra 1-10, hvordan vil du beskrive det forholdet du har fått til de som har gitt deg dette Raskere tilbake tilbudet. Bruk oppdiktede navn til venstre og ta med de du har blitt kjent med ved dette tilbudet. Eksempel: Legen du har fått tilbud av kaller du Per, og så fyller du ut hvordan du opplever at din relasjon til han er. Du syntes at dere utviklet en positiv relasjon, så du krysser av ved 9.

1									10
Veldig dårlig	2	3	4	5	6	7	8	9	Veldig bra

Om helse, funksjon og arbeidsevne

Beskriv dine helseplager og beskriv hvilke diagnoser du har:

Beskriv hvor lenge du har hatt dine helseplager. Hvis du har flere typer helseplager er det fint hvis du beskriver varigheten av de ulike plagene hver for seg.

I hvilken grad har du opplevd en frykt for at de helseplagene du har kan skyldes alvorlig sykdom? (sett ett kryss per linje)

	Aldri	Sjeldent	Svært sjeldent	Av og til	Ofte	Svært ofte	Hele tiden
Før du fikk Raskere tilbake tilbudet							
Mens du fikk Raskere tilbake tilbudet							

Gi en vurdering av ulike symptomer ved oppstart av Raskere tilbudet og nå når tilbudet avsluttes: (sett ett kryss per linje)

	0- Ingen	1	2	3	4	5	6	7	8	9	10- Maks
Smerter ved hvile, ved oppstart											
Smerter ved hvile nå											
Smerter i aktivitet, ved oppstart											
Smerter ved aktivitet nå											
Angst ved oppstart											
Angst nå											
Nedstemthet ved oppstart											
Nedstemthet nå											
Søvnproblemer ved oppstart											
Søvnproblemer nå											

Har du lese og/eller skrivevansker? (sett ett kryss)



## Røyker du?

Ja, ca antall sigaretter per uke



Hvor mange alkoholenheter drikker du cirka i løpet av en vanlig uke? Eksempler på 1 alkoholenhet er en flaske pils (33 cl), et glass vin (15 cl) (oppgi antall).



Hvor mange timer per uke er du fysisk aktiv (trening eller rask gange av minst 10 minutters varighet)?



Vurder din arbeidsevne sammenlignet når den var på sitt beste. Vi går ut fra at din arbeidsevne på sitt beste verdsettes med 10 poeng. Hvor mange poeng vil du gi din nåværende arbeidsevne? 0 betyr at du ikke er i stand til å arbeide for øyeblikket. Hvordan oppleves:

	0- Helt uten evne til å arbeide	1	2	3	4	5	6	7	8	9	10- Arbeid sevne på sitt beste
Din arbeidsevne ved oppstart av tilbudet Din arbeidsevne nå											

+

Hvordan vurderer du din egen arbeidsevne i forhold til fysiske krav ved jobben? (sett ett kryss)

- Meget godGanske godModerat
- Ganske dårlig
- Meget dårlig

#### Beskriv din motivasjon VED OPPSTART av tilbudet du har deltatt på: (sett ett kryss per linje)

	0- Ikke moti- vert	1	2	3	4	5	6	7	8	9	10- Topp moti- vert
Motivasjon for å delta i tilbudet											
Motivasjon for å gå tilbake til egen jobb											
Motivasjon for å begynne i en annen jobb											
Beskriv din motivasjon N	lÅ: (sett e	ett kryss	per linje)								
	0- Ikke moti- vert	1	2	3	4	5	6	7	8	9	10- Topp moti- vert
Motivasjon for å delta i tilbudet											
Motivasjon for å gå tilbake til egen jobb											
Motivasjon for å begynne i en annen jobb											

I tilfelle du er/har vært lite motivert for å gå tilbake til din nåværende jobb, hva er/var årsaken til dette?

Hvordan vurderer du din egen arbeidsevne i forhold til psykiske krav ved jobben? (sett ett kryss)

- Meget god
- Ganske god
- Moderat
- Ganske dårlig
- Meget dårlig

Anslå grad av hemming i arbeidet på grunn av sykdom. Er din sykdom eller skade til hinder for ditt nåværende arbeid? (Sett flere kryss hvis nødvendig.)

- Ingen hemming/ingen sykdom
- Jeg kan utføre jobben min, men det fremkaller symptomer
- Noen ganger må jeg sette ned farten eller forandre arbeidsmåte
- På grunn av sykdom, føler jeg at jeg bare er i stand til å gjøre deltidsarbeide
- Etter egen vurdering er jeg helt ute av stand til å arbeide

Sett ut fra din helse, tror du at du vil være i stand til å utføre ditt nåværende arbeid om to år? (sett ett kryss)

<ul> <li>Neppe</li> <li>Usikker på det</li> <li>Ganske sikker</li> </ul>					
Har du i det siste: (sett	ett kryss per linje)				
	Hele tiden/Ofte	Ganske ofte	Noen ganger	Ganske sjelden	Aldri
Vært istand til å glede deg over dine vanlige, daglige gjøremål?					
Vært aktiv og vital?					
Følt at du er full av håp for fremtiden?					
Om kompetanse i tilbudet					

+

Hvilke profesjoner har du mottatt tilbud fra her på dette Raskere tilbake tilbudet? Sett kryss ved alle de du har vært i kontakt med.

Lege							
Arbeidsinstruktør							
Attføringskonsulent							
Ergoterapeut							
Ernæringsfysiolog/kostholdsveileder							
Fysioterapeut							
Pedagog							
Psykolog							
Sosionom							
Sykepleier							
Andre (spesifiser)							

## Om mål og målsetting

Hva har vært målet med det Raskere tilbake tilbudet du har fått her?

I hvilken grad deltok du i å sette mål for ditt tilbud? (sett kun ett kryss)

Deltok ikke
Lite
Noe
En del
Муе
Veldig mye

+

I hvilken grad opplever du at målet med tilbudet er eller vil bli oppnådd? (sett ett kryss per linje)

	1 lkke nådd	2	3	4	5	6	7	8	9	10 Nådd	Vet ikke	lkke rele- vant
Nå												
Om 3 måneder												
Om 6 måneder												
Om 12 måneder												
Om selve tilbudet												

+

+

Har du i dette tilbudet mottatt informasjon/ undervisning/ veiledning/ rådgivning om følgende tema: (sett ett kryss per linje)

	Nei	Muntlig informasjon	Skriftlig informasjon	Undervisning	Veiledning/ rådgivning
Heving av min jobbkompetanse					
Karriere-/ yrkes-/ jobbveiledning					
Anatomi/fysiologi (hvordan kroppen fungerer)					
Ergonomi (forhold ved arbeidsplassen)					
Fysisk trening					
Mosjon/fysisk aktivitet					
Kosthold					
Røyking					
Alkohol-/medikamentbruk					
Stressmestring					
Aktivitetsregulering					
NAV-systemet					
Motivasjon					
Trygderettigheter og plikter					
Arbeidstakerrettigheter og plikter					
NAV-systemet					
Veien videre					

Har tilbudet omfattet tilrettelegging av: (sett ett eller flere kryss)

Nei, ingen tilrettelegging/ Ikke aktuelt
Hjemmet ditt
Dine fritidsaktiviteter
Ditt fysiske arbeidsmiljø
Ditt psykososiale arbeidsmiljø
Dine arbeidsoppgaver
Din arbeidstid

Har du mottatt GRUPPETILBUD? Hvis ja, skriv hva tilbudet omhandlet.

Beskriv hvilke andre tilbud du har mottatt i dette Raskere tilbake tilbudet

I hvilken grad opplever du at følgende har vært involvert i tilbudet du har mottatt: (sett kun ett kryss per linje)

	lkke aktuelt/ relevant	lkke involvert	Litt involvert	Noe involvert	En del involvert	Mye involvert	Svært mye involvert
Du selv							
Din arbeidsgiver/leder							
Bedriftshelsetjenesten							
Din fastlege							
NAV							
Din familie							

Har det vært oppnevnt en person som har sydd sammen eller koordinert tilbudet du har fått? (sett kun ett kryss)

+

[	
[	
[	

Ja, jeg har hatt en koordinator

Nei, jeg har ikke hatt en koordinator

Jeg vet ikke om jeg har hatt en koordinator

Har det vært utarbeidet en plan for tilbudet du har fått? (sett ett kryss)

Ja
Nei
Vet ikke

Beskriv hva som har vært det beste og det mest mangelfulle ved dette tilbudet, ut fra ditt behov og din situasjon.

+

Har du andre kommentarer eller tilføyelser?

TUSEN TAKK FOR DITT BIDRAG

Attachment 2: Questionnaire for providers

#### "RASKERE TILBAKE" Fase II (Skjema for behandler)

Vi har valgt å benevne pasienten/brukeren/klienten for pasienten for å unngå for mange ord i spørsmålene. Dette er valgt fordi de fleste av tilbudene som deltar i undersøkelsen bruker denne betegnelsen.

Hvem fyller ut skjemaet for denne pasienten. Jeg/vi er (sett ett eller flere kryss):

Medisinsk ansvarlige lege													
Faglig	Faglig ansvarlig psykiater/psykolog												
Koord	linato	or for	pasie	enter	ı								
Annen fagperson (spesifiser hvem/profesjon)													
Flere fra pasientens team (spesifiser hvem/profesjo													

Bakgrunnsspørsmål

Pasienten fødsels- og personnummer



Bekreft fødsels- og personnummeret

		 	 	-			-
1	1						1

#### Navn på dette Raskere tilbake tilbudet, samt institusjonens navn

Beskriv omfanget av det tilbudet som denne pasienten har fått.

Antall måneder tilbudet har vart

Antall uker tilbudet har vart

Cirka antall dager med aktivt tilbud

Cirka antall timer med aktivt tilbud

	Ant	all

Har tidsbruken for denne pasienten vært (sett kun ett kryss):

Fleksibel og individuelt tilpasset ut fra pasientens behov

Tilpasset vårt opplegg for alle pasienter
---

Definert av oppdragsgiver (NAV/RHF)

Hvem henviste denne pasienten? (sett kun ett kryss)

	Fastl	egen																
	NAV																	
	Andre (spesifiser)																	
Beskri	v kva	litete	n på	hen	visni	nger	n(sett	kun	ett ki	ryss):	:							
	Ekstr	emt	dårlig	I														
	Unde	er gje	nnom	nsnitt	et													
	Gjen	noms	nitlig	l														
	Over	gjen	noms	snitte	t													
	Ekstr	emt l	ora															
Var pa	siente	en mo	edisi	nsk	utred	let vo	ed op	opsta	irt av	der	es til	buď	? (se	tt kur	n ett l	kryss	)	
	lkke	utred	et															

Delvis utredetGodt utredet

+

Om helse, funksjon, arbeidsevne og motivasjon

Hvilke diagnoser har denne pasienten ved avslutning av tilbudet? Nevn først primærdiagnosen, så alle andre kjente diagnoser pasienten har. Bruk gjerne ICD/ICPC-koder

Gi en subjektiv vurdering av pasientens funksjon ved oppstart av tilbudet og nå: (sett ett kryss pr. linje)

	0- Uten evne	1	2	3	4	5	6	7	8	9	10- Evne på sitt beste
Fysisk funksjonsevne ved oppstart											
Psykisk funksjonevne ved oppstart											
Sosial funksjonsevne ved oppstart											
Fysisk funksjonsevne nå											
Psykisk funksjonsevne nå											
Sosial funksjonsevne nå											

+

Gi en subjektiv vurdering av pasientens arbeidsevne uavhengig av sykemeldingsgrad. Hvis vi angir at arbeidsevnen på sitt beste er 10 poeng (0 poeng betyr ikke er i stand til å arbeide for øyeblikket). Hvordan oppleves hennes/hans nåværende arbeidsevne: (sett ett kryss pr. line)

	0- Helt uten evne til å arbeide	1	2	3	4	5	6	7	8	9	10- arbeid sevne på sitt beste
Arbeidsevne ved oppstart											
Arbeidsevne nå											

Gi en subjektiv vurdering av pasientens motivasjon ved oppstart av tilbudet og nå: (sett kun ett kryss pr. linje)

	0- Ikke moti vert	1	2	3	4	5	6	7	8	9	10- Topp moti vert	Vet ikke	lkke relev ant
Motivasjon for å delta i tilbudet ved oppstart													
Motivasjon for å gå tilbake til egen jobb ved oppstart Motivasjon for å begynne													
Motivasjon for a begynne i en annen jobb ved oppstart Motivasjon for å delta i tilbudet nå Motivasjon for å gå tilbake til egen jobb nå Motivasjon for å begynne i en annen jobb nå													

## Om kompetanse i tilbudet

I hvilket omfang har følgende fagpersoner ytt tilbud til denne pasienten? (sett kun ett kryss pr. linje)

	Ingenting / Ikke aktuelt	Lite	Noe	En del	Муе	Veldig mye
Lege(r)						
Arbeidsinstruktører						
Attføringskonsulenter						
Ergoterapeuter						
Ernæringsfysiologer / kostholdsveiledere						
Fysioterapeuter						
Pedagoger						
Psykologer						
Sosionomer						
Sykepleiere						
Andre						

## Hvilke type leger har bidratt overfor denne pasienten? (sett minst ett kryss)

+

+

	Lege uten spesialistgodkjenning
	Allmennlege
	Arbeidsmedisiner
	Fysikalsk medisiner (Fys.med og rehab.)
	Kardiolog
	Kirurg
	Nevrolog
	Ortoped
	Psykiater
	Revmatolog
	Andre spesialiteter (spesifiser)
	Ingen lege
Er fag	personene i denne saken organisert som et tverrfaglig team? (sett kun ett kryss)
	Ja, de er organisert som faste team og jobber som oftest sammen
	Ja, de er tilfeldige sammensatte team for hver enkelt pasient
	Nei
	Vet ikke
Vil du	beskrive deres tilbud til denne pasienten som: (sett kun ett kryss)
_	
	Monofaglighet (en profesjons tilbud)
	Flerfaglighet (flere profesjoner som gir tilbud hver for seg)
	Tverrfaglighet (flere profesjorer som samordner sitt tilbud gjennom møter/utveksling)
	Integrert faglighet (alle har felles forståelse som kommuniseres overfor pasient og andre)
	pasient og andre)
Har de	re i forbindelse med denne pasienten formidlet noe av deres kompetanse til: (sett ett eller flere kryss)
	Nærmeste leder/ arbeidsgiver
	Fastlegen
	Kommunehelsetjenesten (minus fastlege)
	Bedriftshelsetjenesten
	Spesialisthelsetjenesten
	NAV-saksbehandler
	NAV-levrandører
	NAV-Arbeidslivssenter

+

Ingen utenfor tilbudet

+

Hva er hovedmålet med det Raskere tilbake tilbudet som er gitt til denne pasienten/brukeren? Skriv utfyllende.

I hvilken grad er disse målene relevante for denne pasienten ut fra det tilbudet dere har ytt? (sett kun ett kryss pr. linje)

	0-										10-
	lkke	1	2	3	4	5	6	7	8	9	Svært
	relevant										relevant
Kurere sykdom/skade/lyte											
Forebygge ytterligere funksjonssvikt											
Bedre fysisk funksjon											
Bedre psykisk funksjon											
Øke aktivitetsnivå											
Forebygge (ytterligere) sykefravær											
Øke jobbrelatert kompetanse											
Øke arbeidsferdigheter											
Bidra til tilbakeføring til arbeidslivet											
Redusere barrierer i omgivelsene											
Øke livskvaliteten											

Hvor ble målet med Raskere tilbake tilbudet til denne pasienten formulert og besluttet? Definer type sted/forum/type møte etc.

I hvilken grad deltok følgende i målsettingsprosessen for denne pasienten: (sett kun ett kryss pr. linje)

	Deltok ikke	Lite	Noe	En del	Муе	Veldig mye	Vet ikke	lkke aktuelt
Pasient/bruker								
Nærmeste leder/arbeidsgiver								
Fastlegen								
Spesialisthelsetjenesten								
Kommunehelsetjenesten (minus fastlegen)								
Bedriftshelsetjenesten								
NAV-saksbehandler								
NAV-arbeidslivssenter								

I hvilken grad opplever du at målet med tilbudet for denne pasienten er nådd... (sett kun ett kryss pr. linje)

	1- Ikke nådd	2	3	4	5	6	7	8	9	10- Nådd	Vet ikke	lkke releva nt
Nå												
Om 3 måneder												
Om 6 måneder												
Om 12 måneder												
Om utredning av pasient												

Hvilke områder eller funksjoner har vurderingen/kartleggingen/undersøkelsene av denne pasienten omfattet: (sett ett eller flere kryss)



Psykiske/mentale/kognitive

Sosiale i forhold til hjem/fritid

Sosiale i forhold til arbeid

Beskriv hvilke former for utredning/ kartlegging/ undersøkelser som har vært utført overfor denne pasienten: (sett ett eller flere kryss)



Vi har ikke gjort noen utredning/kartlegging

Gi mer ufyllende beskrivelser av den utredningen/ kartleggingen/ vurderingen dere har gjennomført overfor denne pasienten? Nevn gjerne hvilke standardiserte undersøkelser og tester som eventuelt er utført.

Om	tiltakene
----	-----------

Hvilke områder eller funksjoner har Raskere tilbake tiltakene for denne pasienten vært rettet mot: (sett fra 0 til 4 kryss)

- Biologiske/fysiske
- Psykisk/mentale/kognitive
- Sosiale, i forhold til hjem/fritid
- Sosiale, i forhold til arbeid

Har pasienten mottatt følgende INDIVIDUELLE tilbud? (sett ett eller flere kryss)

	Kirurgisk behandling
	Medikamentell behandling
	Annnen medisinsk behandling
	Fysikalsk behandling
	Opptrening
	ADL-trening
	Ortoser
	Hjelpemidler
	Kostholdstiltak
	Røykeslutt tiltak
	Søvntiltak
	Avrusningstiltak
	Andre tilbud (spesifiser)
	Nei, ingen av disse tilbudene
Har pa	sienten mottatt følgende INDIVIDUELLE tilbud? (sett ett eller flere kryss)
	Kognitiv terapi

- PsykoterapiGenerell samtaleterapi
- Forsikring om at plagene ikke er farlige (reassurance)
- Mestringstrening
- Motivasjonstrening
- Andre slike tilbud (spesifiser)


Nei, ingen av disse tilbudene

Har tilbudet til denne pasienten omfattet følgende former for tilrettelegging: (sett ett eller flere kryss)

Det har ikke vært gjort noe tilrettelegging

- Tilrettelegging av hjemmet
- Tilrettelegging av fritidsaktiviteter
- Tilrettelegging av fysisk arbeidsmiljø
- Tilrettelegging av psykososialt arbeidsmiljø
- Tilrettelegging av arbeidsoppgavene
- Tilrettelegging av arbeidstiden

Har pasienten mottatt følgende informasjon/ undervisning/ veiledning/ rådgivningstilbud hos dere: (sett ett kryss pr. linje)

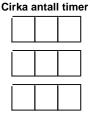
	Nei	Muntlig info. Individ.	Muntlig info. i gruppe	Skriftlig info.	Undervis ning individuel t	Undervis ning i gruppe	Veil./rådg. individuel	Veil./rådg. gruppe
Jobbkompetanseheving								
Karriereveiledning								
Anatomi/fysiologi								
Ergonomi								
Fysisk trening								
Mosjon/fysisk aktivitet								
Kosthold								
Røyking								
Alkohol-/medikamentbruk								
Stressmestring								
Aktivitetsregulering								
NAV-systemet								
Motivasjon								
Trygderettigheter og plikter								
Arbeidstakers rettigheter og plikter								
Veien videre								

Beskriv omfanget av informasjon/ undervisning/ veiledning/ rådgivning under hele perioden som pasienten har mottatt Rasere tilbake tilbud fra dere. Spesifiser eller skriv cirka totalt antall timer.

Informasjon/veiledning/rådgivning

Undervisning

Totalt antall timer



Gi eventuelt en mer ufyllende beskrivelse av det tilbudet dere har gjennomført overfor denne pasienten?

Organisering, samhandling og koordinering

Oppgi cirka antall møter som har vært avholdt om denne pasienten totalt.

Har noen fra deres tilbud deltatt på dialogmøte som arbeidsgiver/NAV arrangerer rundt den sykmeldte? (sett ett eller flere kryss)

Ja, dialogmøte II

Ja, dialogmøte I

Nei Vet ikke

Har det vært oppnevnt en koordinator for denne pasienten? (sett kun ett kryss)

Ja
Nei
Vet ikke

Hvilke av tilbudene som pasienten har fått har vedkommende koordinert eller sydd sammen? (sett ett kryss pr. linje)

	Ja	Nei	Vet ikke
Deres tilbud			
Spesialisthelsetjenestens tilbud (evt. forøvrig)			
Fastlegens tilbud			
Kommunehelsetjenestens tilbud (minus fastlegen)			
Arbeidsplassens tilbud			
NAVs tilbud (evt. forøvrig)			
Bedriftshelsetjenestens tilbud			
Andre tilbud			

\_

Hvem har oppnevnt denne koordinatoren? (sett kun ett kryss pr. linje)

	Ja	Nei	Vet ikke
Deres tilbud			
Spesialisthelsetjenestens tilbud (evt. forøvrig)			
Fastlegens tilbud			
Kommunehelsetjenestens tilbud (minus fastlegen)			
Arbeidsplassens tilbud			
NAVs tilbud			
Bedriftshelsetjenestens tilbud			
Andre tilbud			

I hvilket omfang har det vært kontakt/utveksling mellom Raskere tilbake tilbudet og andre aktører i forhold til denne pasienten (antall ganger)?

Nærmeste	Telefon	Skriftlig	Møte hos RT-tilbudet	Møte på arbeidsplass	Kartlegging på arbeidsplass
leder/arbeidsgiver					
Fastlegen					
Kommunehelsetjenesten (minus fastlegen)					
Bedriftshelsetjenesten					
NAV-saksbehandler					
NAV-Arbeidslivssenter					
Spesialisthelsetjenesten (evt. forøvrig)					
Familien					
Andre					

Vet ikke

Finnes det andre instanser som dere kjenner til som har oppnevnt en koordinator for pasienten? (sett kun ett kryss pr. linje)

	Ja	Nei
Spesialisthelsetjenestens tilbud (evt. forøvrig)		
Fastlegens tilbud		
Kommunehelsetjenestens tilbud (minus fastlegen)		
Arbeidsplassens tilbud		
Bedriftshelsetjenestens tilbud		
NAVs tilbud (evt. forøvrig)		
Andre tilbud		

Har det vært utarbeidet en eller annen form for tiltaksplan som omfatter tilbudet for denne pasienten? (sett kun ett kryss)

	Ja (be	skriv h	vilker	n type	plan)								
_													
	Nei												
	Vet ikk	æ											
Hvilke	e tilbud	omfat	tes av	v den	ne pla	anen?	e (sett	t kun e	ett kry	ss pr.	linje)		
											Ja	Nei	Vet ikke
Deres	tilbud												
Spesia	alisthelse	etjene	stens	tilbud	(evt.	forøvi	rig)						
Fastle	gens tilb	oud											
Komm	nunehels	etjene	estens	tilbud	d (min	us fas	stlege	n)					
Arbeic	dsplasse	ns tilb	ud										
NAVs	tilbud (e	vt. for	øvrig)										
Bedrif	tshelsetj	eneste	ens till	bud									
Andre	tilbud												

+

Etter endt tilbud og i tillfelle behov for oppfølging, hvordan og på hvilke tidspunkter skal dere mest sannsynlig ha oppfølging av pasienten? (sett gjerne flere kryss pr. linje)

	Etter 1-3 måneder	Etter 4-6 måneder	Etter 7-12 måneder	Etter 12 måneder	Ingen
Kontakt med pasient					
Kontakt med fastlege					
Telefonsamtale med arbeidsplassen					
Arbeidsplassbesøk					
Kontakt med NAV					

Har du andre kommentarer som du ønsker å tilføye vedrørende tilbudet til denne pasienten, evt. om undersøkelsen?

## TUSEN TAKK!

Attachment 3: STROBE guidelines for reporting cohort studies

	Item No	Recommendation
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the
		abstract Page 1
		(b) Provide in the abstract an informative and balanced summary of what was
		done and what was found Page 2
Introduction		~
Background/rationale	2	Explain the scientific background and rationale for the investigation being
0		reported Page 6
Objectives	3	State specific objectives, including any prespecified hypotheses Page 6
Methods		
Study design	4	Present key elements of study design early in the paper Page 6
Setting	5	Describe the setting, locations, and relevant dates, including periods of
		recruitment, exposure, follow-up, and data collection Page 7
Participants	6	(a) Cohort study—Give the eligibility criteria, and the sources and methods of
-		selection of participants. Describe methods of follow-up Page 7-8
		Case-control study—Give the eligibility criteria, and the sources and methods of
		case ascertainment and control selection. Give the rationale for the choice of
		cases and controls
		Cross-sectional study—Give the eligibility criteria, and the sources and methods
		of selection of participants
		(b) Cohort study—For matched studies, give matching criteria and number of
		exposed and unexposed Not matched. Exposed/unexposed page 9-10
		Case-control study-For matched studies, give matching criteria and the number
		of controls per case
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and
		effect modifiers. Give diagnostic criteria, if applicable Page 8
Data sources/	8*	For each variable of interest, give sources of data and details of methods of
measurement		assessment (measurement). Describe comparability of assessment methods if
		there is more than one group Page 8
Bias	9	Describe any efforts to address potential sources of bias Page 15-16
Study size	10	Explain how the study size was arrived at Page 8
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable,
		describe which groupings were chosen and why Page 10
Statistical methods	12	(a) Describe all statistical methods, including those used to control for
		confounding Page 10
		(b) Describe any methods used to examine subgroups and interactions Page 12
		(c) Explain how missing data were addressed Page 8
		(d) Cohort study—If applicable, explain how loss to follow-up was addressed Not
		applicable
		Case-control study—If applicable, explain how matching of cases and controls
		was addressed
		Cross-sectional study—If applicable, describe analytical methods taking account
		of sampling strategy
		( <u>e</u> ) Describe any sensitivity analyses <i>Not applicable</i>

STROBE Statement-checklist of items that should be included in reports of observational studies

Results		
Participants	13*	(a) Report numbers of individuals at each stage of study-eg numbers potentially eligible,
		examined for eligibility, confirmed eligible, included in the study, completing follow-up,
		and analysed Page 8
		(b) Give reasons for non-participation at each stage Page 8
		(c) Consider use of a flow diagram Not applicable
Descriptive	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and
data		information on exposures and potential confounders Page 9
		(b) Indicate number of participants with missing data for each variable of interest Page 10
		(c) Cohort study—Summarise follow-up time (eg, average and total amount) Page 8
Outcome data	15*	Cohort study-Report numbers of outcome events or summary measures over time Page 11
		Case-control study-Report numbers in each exposure category, or summary measures of
		exposure
		Cross-sectional study—Report numbers of outcome events or summary measures
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their
		precision (eg, 95% confidence interval). Make clear which confounders were adjusted for
		and why they were included Page 11-12
		(b) Report category boundaries when continuous variables were categorized Page 9
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a
		meaningful time period Not relevant
Other analyses	17	Report other analyses done-eg analyses of subgroups and interactions, and sensitivity
		analyses Page 12
Discussion		
Key results	18	Summarise key results with reference to study objectives Page 12
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision.
		Discuss both direction and magnitude of any potential bias Page 15-16
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations,
		multiplicity of analyses, results from similar studies, and other relevant evidence Page 17
Generalisability	21	Discuss the generalisability (external validity) of the study results Page 16
Other information	on	
Funding	22	Give the source of funding and the role of the funders for the present study and, if
		applicable, for the original study on which the present article is based Page 17

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.

# Papers in full-text

# Paper I

Skarpaas, Lisebet Skeie; Haveraaen, Lise; Småstuen, Milada Cvancarova; Shaw, William S.; Aas, Randi Wågø. (2019). Horizontal return to work coordination was more common in RTW programs than the recommended vertical coordination. The Rapid-RTW cohort study. *BMC Health Serv Res* **19**, 759 (2019). Re-use permitted under CC BY 4.0. DOI: http://dx.doi.org/10.1186/s12913-019-4607-y (2019) 19:759

# **RESEARCH ARTICLE**



# Horizontal return to work coordination was more common in RTW programs than the recommended vertical coordination. The Rapid-RTW cohort study



Lisebet Skeie Skarpaas<sup>1,2\*</sup>, Lise Aasen Haveraaen<sup>1</sup>, Milada Cvancarova Småstuen<sup>3</sup>, William S. Shaw<sup>4</sup> and Randi Wågø Aas<sup>1,2,5</sup>

# Abstract

**Background:** In return-to-work (RTW) programs, coordinators are often provided in order to integrate services. However, models of coordinating services vary widely internationally, and across different programs, where one distinction is between vertical and horizontal integration (i.e. between levels/institutions, or within one service/level). The aim of this study was therefore to explore and describe if and how a coordinator was provided in RTW-programs, and whether the provision of a coordinator was associated with certain personal or intervention characteristics.

**Methods:** The study was designed as a cohort study following employees participating in a variety of Rapid-RTWprograms in Norway (n = 39). Employees (n = 494) answered a self-administered questionnaire, which was linked to register-data on diagnoses and sickness-absence. Employees who replied yes/no to the question "Did the program provide a person who tailored or coordinated your services?" were included in this analysis. Associations for being provided with a coordinator were tested in adjusted logistic regression models.

**Results:** Sixty-nine percent of the employees reported having a coordinator. These coordinators were mainly responsible for coordinating treatment within own programs (i.e. horizontal coordination, 68%). As expected, rehabilitation programs more often provided a coordinator compared to treatment programs (OR 3.87 95% CI 2.42–6.24). The odds for being provided with a coordinator were reduced for each additional year of age of the employee (OR 0.97, 95% CI 0.96–0.99). More professions were involved in programs that provided coordinators, also more contact with other stakeholders like leaders and social insurance services (NAV), but only contact with supervisor remained statistically significant in adjusted analysis (OR 1.69 95% CI 0.31–9.27). The programs with a coordinator more often provided adaptations at the workplace for the individual employee (OR 0.08 95% CI 0.01–0.60). However, these signs of vertical integration were only evident for a limited number of employees.

**Conclusion:** In this study, seven of ten employees reported to have a coordinator, which was associated with more professions and stakeholder involvement in the RTW-process. Most of these coordinators did not coordinate vertically between the service levels and types of intervention arenas for sick listed employees (i.e. workplace, social security, and health care services), as recommended in earlier research.

**Keywords:** Return to work, Occupational rehabilitation, RTW intervention, RTW coordination, Rapid RTW- project, Service integration, Sick leave

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<sup>&</sup>lt;sup>1</sup>Presenter – Making Sense of Science, Stavanger, Norway

#### Background

Internationally there is a trend towards building more integrated health care, focusing on improving the linkages between functions, institutions and professions in the health and social services [1]. This type of integration of services is described as vertical, referring to coordination across various levels and institutions [2, 3]. Another type of organization of services is horizontal integration, which refers to coordination across one level or service [1]. Hvinden (1994) defines coordination as vertical integration [2, 3], while Kärrholm (2007) describes coordination as including both vertical and horizontal integration, with the focus on vertical across levels coordination [2]. Although the aim of integration is to improve coordination and integration of services, the scope of what is to be integrated varies across different services [1]. Today best practice of RTW-programs include social and contextual factors as well as workplace interventions, in a biopsychosocial framework [4–7]. RTW-interventions require cooperation between several stakeholders and across arenas and levels at the workplace, the health care services and the welfare system [6, 8, 9]. Ideally, interventions from these three arenas should be vertically integrated and experienced as one seamless RTW-process for each individual [1, 10].

Several intervention components are found to be essential for facilitating RTW, including centralized coordination of the employees RTW, formal individual psychological and occupational interventions, workplace-based interventions, work accommodations, contact between various stakeholders and interventions to foster concerted action [8, 11, 12]. Facilitation of RTW is hence a complex practice facing several obstacles. One strategy to overcome challenges with integrated care has been to provide a coordinator [1]. Provision of a coordinator has been positively associated with time to RTW in occupational rehabilitation [11, 13–16], and is described as one of the core components for successful return to work [16]. However, a recent review concluded that evidence does not support that RTW-coordination programs that provide a RTWcoordinator promote RTW [17]. The evidence in the review is reported to be of low quality, and more comprehensive studies focusing on sustainable RTW and the workplace are therefore recommended [17]. In contrast, another review concluded that there is strong evidence for recommending service coordination (ex. RTW plans, case management) in multiple component RTW-models together with health-focused and work modification components [18]. RTW is not only an aim for the individual due to health, social and economic reasons, but also for society. The costs of sickness absence and disability are considerable, and RTW-coordination is reported among costeffective RTW-intervention components [19–21]. Even though there is an ongoing debate on the effect of RTWcoordination and provision of a RTW-coordinator, there is still a continuing need for integration of services and workplace focus in the return to work processes.

Internationally, integration of services is often solved by RTW-coordinators employed by insurers, employers, or governmental agencies [22], with RTW-coordinators being a well-established part of the RTW-process [16]. Reviews of RTW-coordinators revealed the activities of workplace assessment, planning transitions and facilitating stakeholder cooperation with focus on communication and problem solving [16, 22]. Still, a recently published Canadian paper concludes that the integration of services is far below recommendation [23]. Instead, the RTW-coordinators in large companies mostly focused on the employee-supervisor dyad, a horizontal integration, and did not coordinate towards health and welfare services or other stakeholders [23].

In Scandinavia, coordination between stakeholders in RTW-processes is lacking [2, 24–27]. The coordinating agent in RTW is in most cases the social insurance agency, a service separated from health care. However, the responsibility for providing a coordinator is not designated to a specific organization or authority [2]. Although vertical integration of services has been outlined in several policy documents, as the Coordination reform in Norway exemplifies [28], the practice, responsibilities and organizational structures of coordination are still reported to be inadequate [9, 27, 29]. Studies of coordination and provision of a coordinator are often performed in trials where the coordination is provided as a component in RTW-programs [15, 16, 30]. However, few have examined the coordination and cooperation between stakeholders in a real setting with observational design. A Swedish study of Social Insurance agency actions towards employees on long-term sick leave concluded with limited use of both vocational rehabilitation suggestions from the medical assessments, and active rehabilitation measures. Furthermore, of the activities undertaken by the social insurance agency, few actually enhanced RTW [31]. The focus on work rehabilitation and effect on RTW in the Norwegian Social Insurance agencies (NAV) have similarly been questioned [32, 33]. The reform in NAV has actually been found to have a negative impact on RTW [33], and failure to achieve the goal of more people in work seems to be rooted in structural challenges in NAV [32].

As shown above, coordination of services are reported to be inadequate, at the same time coordination and provision of a RTW-coordinator are emphasised as important intervention components in research as well as in policy documents. Accordingly, there is still a need for more comprehensive research in the field of coordination and provision of a coordinator in RTW-processes [17, 34]. Studies on the prevalence of coordinators in RTW-programs, and on predictors for being provided with a coordinator, have to the best of the authors' knowledge not been published. In Norway, the limited number of guidelines for how RTW-programs should evolve also made it imperative to describe the current model in two levels; the provision or not of a coordinator, and the vertical versus horizontal integration in coordination. We do not know how frequent and to whom a coordinator is provided in RTW-programs, what the coordinator coordinates, or which personal or intervention characteristics impact the provision of a coordinator. Which factors may be associated with some employees being assigned a coordinator but not others? In order to develop RTW-programs in line with best available evidence, it was therefore imperative to explore the prevalence of coordinators, and investigate if there were any patterns in the rapid-RTW-programs' provision of coordinators.

#### Aim

The aim of this study was therefore to explore and describe if and how a coordinator was provided in RTWprograms in Norway, and whether the provision of a coordinator was associated with certain employee, program or intervention characteristics.

#### Methods

The study was designed as a longitudinal cohort study of 494 employees participating in Rapid-RTW-programs in Norway.

#### Setting

The present cohort-study was one of several studies in the Rapid-RTW-project, an evaluation of the national Rapid-RTW-program in Norway [27], called "Raskere tilbake". The Rapid-RTW-program is a national program aimed at reducing time to return to work for sick-listed employees or persons at risk of becoming sick listed, and to reduce the waiting-time for specialist assessment and treatment for employees on sick leave. To date, the program is the largest effort for promoting RTW in Norway [27]. Since the program was implemented in 2007, it has had an annual budget of NOK 700 million (approximately \$ 85 million USD). The program is organised by the regional specialist health care hospitals and the Norwegian Social Insurance agencies (NAV), and includes more than 200 different public and private RTW-programs. This national program allowed services to respond to tenders in order to get funding to develop and drift RTW-programs, and prioritize patients in a work relation for assessment, treatment and rehabilitation. From 2018 the funding of rapid-RTW-programs was implemented in the hospitals' annual budgets of funding from the authorities [35]. Each of the rapid-RTW-programs decided the organization, content and intervention components, like the provision of a coordinator. Thus, the local rapid-RTWprograms was not given any instructions from the funding authorities as to whether a coordinator should be assigned. However, only four programs (which gave services to a total of seven participants) have reported, either by the employee or the service provider, not to provide a coordinator to any of its participants. There were generally few requirements for how to implement RTW-programs through the Rapid-RTW-programme resulting in diverse program development [27, 29]. In order to evaluate and develop the program as a whole, it was critical to understand how earlier revealed effective intervention components was implemented in the local rapid-RTW-programmes. This study therefore had the purpose of investigating how the intervention component of coordinator assignment had developed in the RTWprograms.

#### Data collection

Each program, clinic or institution offering a rapid-RTWprogram was contacted with an invitation to participate in the study. Programs that agreed to participate (n = 50) provided a local study coordinator, who recruited participants to the study in the period February to December 2012. Some programs did not manage to recruit personnel to manage the study, and some did not manage to recruit participants, or collect data appropriate, resulting in a total of 46 programs included in this study. Both employees (patients) and their providers answered self-administered questionnaires, including questions about the provision of a coordinator. The questionnaire was developed for this project (Additional file 1), and consisted of both questions developed for this study as well as validated assessments and questionnaires. A total of 679 employees completed the questionnaire. Data on type of service and diagnosis was retrieved from the Norwegian Social Insurance Register (FDtrygd). Data on sickness absence was retrieved from the Norwegian Social Insurance Register. The register data was linked to the self-reported data using an eleven-digit personal identification number. Participants who replied yes/ no to the question "Did the program provide a person who tailored or coordinated your services?" were included in this analysis. Those who answered "I do not know" (n = 120) or did not answer this question (n = 65) were excluded.

#### Participants

See Table 2 for participants' characteristics. In total, 134 males and 360 females (total n = 494) from 46 different institutions were included in the present study. The participants' median age was 46 years (min-max. 21–70), and the majority had a history of sickness absence i.e. been on sick leave on at least one earlier occasion (96%). The most common diagnoses were musculoskeletal problems (55%) and mental health problems (16%). Occupational rehabilitation was the most common type of Rapid-RTW-programs, and 57% of the informants received such programs. These programs included rehabilitation in hospitals and institutions, both inpatient and outpatient [27]. Furthermore, 36% of the

participants received medical or psychological treatment, including assessment counselling, and surgery (exp. to shorten waiting time for employees on sick leave in need for surgery was a part of the rapid-RTW-program, but are not very common) which were the second most common type of RTW-program provided.

#### Statistical analyses

Continuous variables were described using median (range), categorical variables with counts and percentages. Unadjusted associations were assessed using Mann-Whitney-Wilcoxon and Chi-square tests for continuous and categorical variables, respectively. Multiple logistic regression models were fitted to identify adjusted associations between the dependent variable (provision of a coordinator vs no provision) and the independent variables (gender, age (years), marital status (live alone/ with partner), sickness absence before receiving RTWprogram (days), diagnosis (MSD/ mental disorders/ cancer/ other diagnosis), self-reported symptoms as experienced at start of program (pain at rest, pain in activity, depressive mood, and anxiety), and educational level (elementary or upper secondary school (up to 12 years)/ university degree). Variables with a *p*-value =/<0.2 in the univariate analyses were entered into a multiple logistic regression model, and the results are presented as odds ratio (OR), with 95% confidence intervals (CI).

*P*-values < 0.05 were considered statistically significant. All tests were two-sided. All analyses were performed using IBM SPSS Statistics 24.

#### Results

In total, 68% of the participants (n = 335) reported that they were provided with a coordinator. As shown in Table 1, the coordinators were most often provided by the RTW-program (69%, n = 156), meaning the coordinator's role was managed by one of the professionals involved in the RTW-program. Furthermore, the coordinators were mostly responsible for coordinating their own programs (68%, n = 186), and to a lesser extent other services or stakeholders (see Table 1).

## Personal characteristics associated with being provided with a coordinator

There were no statistical significant differences between those who were provided with a coordinator, compared to those who were not, concerning gender, social status, educational level, or history of sickness absence except for age. See Table 2 for an overview of personal characteristics and provision of a coordinator. The employee's age was associated with provision of a coordinator. The median age was lower for those provided with a coordinator compared to those not provided with a coordinator, 45 versus 47 years respectively (p = 0.01). In the adjusted

Table 1 Frequencies of which services provided the
coordinator and which services the coordinator did coordinate

Type of service or stakeholder	Yes: this service provided a coordinator n (%)	Yes: this service was included in the coordinators' coordination n (%)	
The Rapid-RTW program	156 (69)	186 (68)	
Specialist health care	7 (4)	15 (6)	
General practitioner	1 (0.5)	15 (6)	
Community health care	1 (0.5)	2 (1)	
Workplace	4 (2)	21 (8)	
Social Insurance (NAV)	10 (5)	23 (9)	
Occupational Health Services	1 (0.5)	8 (3)	
Other service	4 (2)	9 (4)	

Note: n (%) = number of participants (percentage of participants) that was provided with a coordinator from the different services, and n (%) got the different services or stakeholders included in the coordination by the coordinator

analysis, the odds for being provided with a coordinator were reduced for each additional year of age of the employee (OR 0.97, 95% CI 0.96–0.99).

Almost half (43%) of the employees reported upper secondary school (12 years of schooling) as their highest educational level. There was no statistical difference between those provided with and those not provided with a coordinator (neither unadjusted nor adjusted results) when comparing low and high educational levels. See Table 3 for employee-related factors associated with having a coordinator.

Diagnosis was statistically significant associated with the provision of a coordinator, compared to not being provided with a coordinator. The highest proportion of employees who were referred to a RTW-program were those diagnosed with Musculoskeletal disorders (MSD) (55%). Employees with MSD were 1.8 times more likely to be provided with a coordinator compared to employees with other diagnoses in the unadjusted analysis (OR 1.76, 95% CI 1.20-2.58). However, this association did not remain statistically significant in the adjusted analysis. Regarding symptoms, both depressive mood and anxiety were not associated with higher odds for being provided with a coordinator, compared to not being provided with a coordinator. Employees who reported having pain were twice as likely to be provided with a coordinator compared to those who did not report pain, OR 2.26 (95% CI 1.36-3.75) and 2.01 (95% CI 1.12-3.60) for those with pain at rest and pain in activity, respectively. However, neither pain at rest nor pain in activity remained statistically significant in the adjusted analyses.

Nearly all participants (96%) had a history of sickness absence during the last three years prior to participation in the program. There was statistically significant differences between those provided with and those not

Variable	Category	Total n (%)	With coordinator n (%)	Without coordinator n (%)	<i>p</i> -value
Gender n (%)	Women	360 (72.9)	248 (74.0)	112 (70.4)	0.42
	Men	134 (27.1)	87 (26.0)	47 (29.6)	
Age median (min-max)		46 (21–70)	45 (21–66)	47 (21–70)	0.01*
Social status n (%)	Live alone	112 (23.2)	78 (23.9)	34 (21.7)	0.58
	Live with others	371 (76.8)	248 (76.1)	123 (78.3)	
Educational level n (%)	Elementary school (up to 9 years)	49 (10.1)	31 (9.5)	18 (11.4)	<0.01**
	Upper secondary school (12 years)	211 (43.4)	149 (45.4)	62 (39.2)	
	University degree (up to 4 years)	153 (31.5)	111 (33.8)	42 (26.6)	
	University degree (> 4 years)	73 (15)	37 (11.3)	36 (22.8)	
Diagnosis n (%)	MSD	270 (54.8)	198 (59.3)	72 (45.3)	< 0.01**
	Mental disorders	80 (16.2)	46 (13.8)	34 (21.4)	
	Cancer	43 (8.7)	22 (6.6)	21 (13.2)	
	Other disorders incl. Neuro- and heart diseases	52 (10.5)	40 (12.0)	12 (7.5)	
	Common or unspecific disorders	21 (4.3)	13 (3.9)	8 (5.0)	
	No or missing diagnosis	27 (5.5)	15 (4.5)	12 (7.5)	
Symptoms	Pain at rest	397 (84.5)	282 (88.1)	115 (76.7)	<0.01**
	Pain in activity	414 (88.8)	290 (91.2)	124 (83.8)	0.02*
	Depressive mood	373 (78.9)	252 (79.0)	121 (78.6)	0.92
	Anxiety	285 (60.1)	193 (59.6)	92 (61.3)	0.72
History of sickness absence	Yes	473 (95.7)	324 (96.7)	149 (93.7)	0.12
Sickness absence before RTW-program <i>N</i> = 433 median days (range)		147 (0–935)	159 (0–802)	119 (0–935)	0.04*
Sick-leave baseline n (%)					<0.01**
	Full-time (100%)	326 (66.1)	237 (71.0)	89 (56.0)	
	Part-time (20–90%)	105 (21.3)	72 (21.6)	33 (20.8)	
	Not on sick-leave	65 (12.6)	25 (7.5)	37 (23.3)	

Table 2 Personal characteristics associated with being provided with a coordinator

Notes: Significance level: \* < .05. \*\* < .01

provided with a coordinator related to days of sickness absence before the RTW-program started, and related to being on sick leave at baseline (RTW-program start). Those provided with a coordinator had been on sick leave for more days (median 159 days) before the RTWprogram compared to those not provided with a coordinator (median 119 days), and this association remained statistically significant in the adjusted analysis. The odds for having a coordinator for employees on sick leave (100%) compared to those not on sick leave or on graded sick leave did not remain statistically significant in adjusted analysis (OR 1.06 95% CI 0.63–1.79).

# Program predictive factors for being provided with a coordinator

There was a statistically significant difference between those provided with a coordinator versus those who were not regarding the type of RTW-program provided. See Table 4 for program characteristics and provision of a coordinator. Employees who received "Occupational rehabilitation" and "Follow-up and Work clarification" were more often provided with a coordinator, compared to those not provided with a coordinator. The odds for being provided with a coordinator when receiving "Occupational rehabilitation" were almost four times higher compared to such odds for

	Unadjusted	Unadjusted results			sults	
Variable	OR	95% CI	<i>p</i> -value	OR	95% CI	<i>p</i> -value
Age	0.97	0.96–0.99	<0.01*	0.97	0.95-1.00	0.03*
Gender						
Women	1.20	0.79–1.82	0.40	1.030	0.62-1.71	0.91
Men (ref)						
Educational level						
Elementary or Upper secondary school (up to 12 years)	1.19	0.81–1.73	0.38	1.27	0.80-2.02	0.32
University degree (ref)						
Diagnoses						
MSD	1.76	1.20-2.58	<0.01*	1.51	0.92-2.47	0.11
Other diagnoses (ref)						
Pain at rest	2.26	1.36-3.75	<0.01*	2.01	0.77-5.23	0.15
Pain in activity	2.01	1.12-3.60	0.02*	0.96	0.32-2.89	0.94
Sickness absence days before RTW-program	1.00	1.00-1.00	0.05*	1.00	1.00-1.00	0.03*
Sick-leave at baseline						
Full-time (100%)	1.91	1.30–2.85	<0.01*	1.06	0.63-1.79	0.82
Part-time (0–90%) (ref)						

Table 3 Employee-related factors associated with having a coordinator

Notes: \*Statistical significant at level =/< 0.05

"Treatment inclusive assessment and surgery" (OR 3.87 95% CI 2.42–6.24). This association remained statistical significant in the adjusted analysis.

The RTW-programs provided the coordinator in most cases. However, a few participants were provided with a coordinator from other programs, where NAV was the second largest provider of coordinators (7%).

In the programs that provided coordinators, more contact with other stakeholders (i.e. general practitioner, NAV and leader/supervisor) was reported, compared to the programs that did not provide a coordinator. However, only having "contact with supervisor" was statistically significant for those provided with a coordinator compared to those not provided with a coordinator, but this association did not remain statistically significant in the adjusted analysis (OR 1.69 95% CI 0.31–9.27). See Table 5 for program characteristics associated with being provided with a coordinator.

Furthermore, the employees with a coordinator received more adaptations at the workplace. Programs providing a coordinator were more likely to make adaptations in their intervention: It was about 90% less likely that the answer to the question "Did this program provide one of the following types of adaptations?" were "No adaptations were performed" for employees provided with a coordinator, compared to those not provided with a coordinator (OR 0.08 95% CI 0.01–0.60). This association remained statistically significant in the adjusted analysis.

In general, employees provided with a coordinator met more professions in the RTW-programs. The association between those provided with, compared to those not provided with a coordinator was statistically significant related to medical doctor, vocational consultant, occupational therapist, nutritionist, physical therapist and pedagogue. Meeting a psychologist was more common in the group without a coordinator compared to those with a coordinator, however, this association was not statistically significant. In this study, the odds for being provided with a coordinator when having a physical therapist in the program were more than four and a half times higher compared to not having a physical therapist in the program (OR 4.75, 95% CI 1.82-12.41). This association remained statistically significant in the adjusted analysis.

### Discussion

The aim of this study was to explore and describe if and how a coordinator was provided in RTW-programs in Norway, and whether the provision of a coordinator was associated with certain personal or intervention characteristics. Our main findings were; (1) about two-thirds of the employees were provided with a coordinator by the RTWprogram, most often coordinating their own programs, (2) younger age and length of sickness absence were predictors for being provided with a coordinator, (3) occupational rehabilitation programs provided a coordinator more often than the other types of RTW-programs, (4)

# Table 4 Program characteristics and provision of a coordinator (employees, n and %)

Variable		Total	With coordinator n (%)	Without coordinator n (%)	<i>p</i> -value
Type of intervention n (%)					<0.01*
	Occupational rehabilitation	275 (56.7)	221 (67.0)	54 (34.8)	
	Medical or psychological treatment, including assessment, and surgery	172 (35.6)	77 (23.3)	95 (61.3)	
	Follow-up and Work clarification programs through NAV	38 (7.8)	32 (9.7)	6 (3.9)	
Professionals	Medical doctor	301 (85.0)	216 (88.5)	85 (77.3)	<0.01*
involved n (%)	Physical therapist	299 (83.3)	226 (90.8)	73 (66.4)	<0.01*
	Nurse	177 (56.9)	128 (58.4)	49 (53.3)	0.40
	Nutritionist	171 (54.1)	132 (58.9)	39 (42.4)	<0.01*
	Others	164 (50.6)	121 (52.8)	43 (45.3)	0.21
	Psychologist	141 (42.5)	91 (39.2)	50 (50.0)	0.07
	Vocational consultant	139 (42.4)	109 (47.6)	30 (30.3)	<0.01*
	Social worker	127 (39.0)	91 (40.1)	36 (36.4)	0.53
	Occupational therapist	91 (28.5)	72 (31.7)	19 (20.7)	0.05*
	Pedagogue	88 (31.4)	77 (37.7)	11 (14.5)	<0.01*
	Work instructor	42 (13.2)	30 (13.5)	12 (12.5)	0.84
Provision of a coordinator from other services n (%)	Social Insurance (NAV)^	24 (7.1)	20 (8.5)	4 (3.9)	
	Workplace^	3 (0.9)	3 (1.3)	0 (.0)	
	Occupational Health Services ^	3 (0.9)	3 (1.3)	0 (.0)	
	Others^	3 (0.9)	3 (1.3)	0 (.0)	
	General Practitioner^	2 (0.6)	2 (0.9)	0 (.0)	
	Specialized health care^	1 (0.3)	0 (.0)	1 (1.0)	
	Community based health care^	0 (.0)	0 (.0)	0 (.0)	
Contact with other	General Practitioner	191 (90.5)	149 (92.0)	42 (85.7)	0.19
instances n (%)	Social Insurance consultant (NAV)	116 (81.7)	96 (84.2)	20 (71.4)	0.12
	Leader/supervisor	76 (71.0)	63 (75.9)	13 (54.2)	0.04*
	Specialized health care^	19 (33.9)	15 (36.6)	4 (26.7)	
	Others^	14 (26.9)	10 (27.0)	4 (26.7)	
	Occupational Health Services ^	8 (16.7)	7 (19.4)	1 (8.3)	
	Family^	8 (17.0)	4 (12.1)	4 (28.6)	
	Community based health care^	7 (14.9)	2 (6.5)	5 (31.3)	
	Work-life center (NAV arbeidslivssenter) ^	6 (13.6)	3 (9.7)	3 (23.1)	
Adaptions n (%)	No adaptations were performed	234 (84.5)	149 (78.4)	85 (97.7)	<0.01*
	Work time^	49 (48.5)	48 (58.5)	1 (5.3)	
	Work tasks^	30 (33.0)	27 (38.6)	3 (14.3)	
	Leisure activities^	23 (28.0)	19 (30.6)	4 (20.0)	
	Physical work environment^	17 (20.2)	16 (24.6)	1 (5.3)	
	Psychosocial work environment^	6 (7.6)	6 (9.8)	0 (0.0)	
	Home^	4 (5.1)	3 (5.0)	1 (5.3)	

Notes: All variables except type of RTW-program does not sum to 100% in total and each group with/without a coordinator since employees may have been provided with several or none. ANo statistical tests performed due to insufficient n of individuals. \*Statistical significance set at level =/< 0.05

	Unadjuste	d results		Adjusted i	results	
Variable	OR	95% CI	<i>p</i> -value	OR	95%CI	<i>p</i> -value
Age	0.97	0.96-0.99	<0.01*	0.97	0.95–0.99	0.01*
Gender						
Women	1.20	0.79–1.82	0.40			
Men (ref)						
Type of program						
Occupational rehabilitation	5.05	3.31-7.71	<0.01*	3.87	2.41-6.24	< 0.01*
Follow-up and Work clarification programs (NAV)	6.58	2.62-16.55	<0.01*	4.77	1.83–12.44	<0.01*
Treatment incl. Assessment and surgery (ref)			<0.01*			<0.01*
Professionals involved						
Medical doctor	2.27	1.25-4.11	<0.01*	1.81	0.84-3.89	0.13
Vocational consultant	2.09	1.27-3.45	<0.01*	1.61	0.78-3.34	0.20
Nutritionist	1.95	1.19–3.19	<0.01*	1.52	0.79–2.93	0.21
Physical therapist	4.98	2.78-8.93	<0.01*	4.75	1.82-12.41	< 0.01*
Occupational therapist	1.79	1.00-3.18	0.05*	2.58	1.21-5.50	0.02*
Psychologist	0.65	0.40-1.04	0.07			
Pedagogue	3.58	1.78–7.21	<0.01*	2.02	0.85-4.81	0.11
Adaptations						
No adaptations	0.09	0.20-0.36	<0.01*	0.08	0.01-0.60	0.01*
Contact with other instances						
Leader/supervisor	2.67	1.03-6.88	0.04*	1.69	0.31-9.27	0.54

Table 5 Program characteristics\* associated with being provided with a coordinator

Notes: Statistical significance set at level =/< 0.05. \*p-level < 0.2 in association testing, see Table 4. \*\*Controlled for age, gender, diagnosis, sickness absence days before RTW-program, and type of program

more professions were involved, and there was more contact with other stakeholders and instances outside their program when the employee had a coordinator, and (5) adaptations to the workplace were more common for those provided with a coordinator. These findings will be discussed below.

# Current coordinator practices is mainly horizontal integration

Two out of three employees who received services from the Rapid-RTW-programs were provided with a coordinator offered by the program. The coordinators were mainly responsible for coordinating their own program. Such linking of programs at the same level is referred to as horizontal integration [1]. Thus, the coordinator model revealed in the present study was based on horizontal integration. This is despite the government's effort for implementing a coordination reform focused on offering comprehensive and continuous services [28], so-called vertical integration. In this perspective, the government expects RTW-programs to cooperate and coordinate their services across stakeholders and arenas. If such practices were evident in the RTW-programs, one could expect the coordinators to be a part of this. However, a study of RTW-coordinators in large companies in Canada also revealed that the coordinators mainly focused on the employee-supervisor dyad, in other words, horizontal integration within the same company [23]. In the present study, the coordinators were most often employed by the RTW-programs, and they coordinated their own services. Even though the literature on RTW and coordination repeatedly calls for more vertical integration [17, 18, 29, 30, 36], this seems to not be implemented in practice.

Being young was a predictor for being provided with a coordinator. One reason for this association might be that younger employees with sickness absence at risk for disability pension have more complex health problems or diagnosis, such as severe mental health problems [37], indicating a need for coordination of services. Furthermore, young people might be prioritized in these services and by society, as they will contribute to society if they return to work with i.e. paying taxes throughout their working life in contrast to becoming a disability pension receiver throughout their lifetime [9]. The finding that older age was associated with reduced odds for being provided with a coordinator is in line with earlier

studies [11, 38, 39]. Older age is a strong predictor for delayed return to work [40, 41]. Taking into account the global challenge of an aging work force, interventions aimed at RTW and keeping employees in their job despite health problems is an important field of practice and research [9, 39, 41]. RTW-programs should therefore ensure that they meet the needs of different age groups [38] and provide enough resources and attention in order to support older employees in their RTWprocess [39].

Employees with MSD constituted the majority of this study's participants, and provision of a coordinator was most frequent for employees with MSD in the unadjusted analysis. The effect of provision of a coordinator is also best documented for this group of sick-listed employees [17, 34], although the effects are debated [17]. Employees with a MSD diagnosis will often recover without interventions. Wynne-Jones et al. (2014), for example, found that approximately 70% of employees on sick leave with back pain returned to work within a month [42]. However, those referred to a RTW-program in the present study had an average of more than 5 months of sickness absence, although early intervention to support RTW is recommended [43]. Hence, some will argue it takes too long to be referred to RTW-programs [29]. The timing of when to refer to a RTW-program and provide a RTW-coordinator is highly relevant to discuss. Length of sickness absence before starting the RTW-program was associated with provision of a coordinator in the present study. Delayed return to work is a risk factor for permanent work disability [44], and provision of RTW-coordinators is one intervention component provided in order to enhance timing of programs and planning of the RTW-transition [16]. In addition, an explanation for being provided with a coordinator may be the complex situation associated with long-term sickness absence due to pain and musculoskeletal health problems [45]. Comorbidity is one issue [45], as well as the fact that long-term absence may be a barrier for RTW in itself [9]. In the present study, pain was associated with being provided with a coordinator in the unadjusted analysis. Pain is not only associated with MSD, but also depression and anxiety, and has been revealed to be a strong predictor for disability pension [46]. These factors may call for multiple interventions with several involved stakeholders, and provision of a coordinator will facilitate such an integrated RTW-process.

Employees provided with a coordinator often received occupational rehabilitation programs and had been on sick leave for a longer period before the RTW-intervention. It seems reasonable that those with long-lasting problems are offered more comprehensive interventions with more professionals involved. However, provision of such comprehensive interventions versus brief interventions is debated [47]. It seems some groups benefit more from multiprofessional interventions with several components [43, 48], and some will return to work more rapidly when provided a single brief intervention [47]. In programs with several professionals, it is likely that internal, horizontal coordination or collaboration is necessary, as revealed in present study.

#### Signs of vertical integration

Although the coordinator model revealed in Rapid-RTWprograms builds mainly on horizontal integration, some signs of vertical integration in the coordinator practices were found. Some of the intervention components offered in the RTW-programs with a coordinator were associated with factors reflecting vertical integration. More professionals were involved in RTW-programs that provided a coordinator. Multiprofessional involvement is a characteristic of the occupational rehabilitation program [27], and is a predictor for RTW for some employees on sick leave as discussed above [43, 48]. Furthermore, one might reason that comprehensive interventions would require more coordination with stakeholders, both horizontal and vertical. The results show that the aim of coordination to integrate programs across levels and institutions in a vertical manner was met for some of the employees in the present study. Those provided with a coordinator reported more contact with other stakeholders and instances, like leaders and NAV. This may be viewed as signs of vertical integration, which is considered a predictor for RTW in previous studies [8, 15, 18, 43]. However, the coordinator in the Rapid-RTW-programs was reported to mainly coordinate their own programs, and it seems the vertical integration as such was lacking in most cases.

The odds of being offered adaptations was improved for those provided with a coordinator in the present study. Employees who had a coordinator were generally offered more adaptations, including adaptations in the work environment, work time and work tasks. Accommodations at and contact with the workplace has earlier been revealed as success factors for RTW [11, 12, 18]. Furthermore, closer contact with the workplace are described as a way forward in development of intervention components in RTW-programs [17]. Such contact and facilitation of accommodations at the workplace are described as typical activities for RTW-coordinators [16]. Still, only approximately 10% of the employees in the present study were offered adaptations at the workplace, and one might wonder if adaptations to facilitate RTW were an underused intervention component.

#### Limitations

For some of the variables the proportion of missing data was high, and this of course lowers the quality of the results for these variables. Consequently, some variables were not included in statistical testing due to low n, for instance the different types of adaptations, provision of a

coordinator from other instances, and some of the categories of contact with other instances. Hence, this needs to be further explored and tested in future studies. Even though the difference between having a physical therapist versus not in the program remained statistical significant in adjusted analysis, the confidence intervals were wide, and therefore these results should be replicated to validate their significance. Additional knowledge of the coordinator like their education, profession etc. and how they were distributed would provide valuable insight to the study, as the background of the coordinator has previously been reported to be associated with intensity of engagement and activities the coordinator is involved in [23]. In this study there was no information available on why some employees were provided with a coordinator and some not. In addition, a relatively large number of employees (n = 185) were excluded based on missing or unreliable information on the provision of a coordinator, and this could be a weakness. It might be that a large proportion of those excluded did not have a coordinator, however it might also be that the provision of a coordinator was not well communicated when the coordination was internally oriented. The main focus in the current study has been on the provision of a coordinator, and additional information on coordination provided without involvement of a coordinator could have made the total picture of the coordination practices richer. However, the question of contact with other stakeholders etc. was not limited to the coordinator, but involved the whole programs' practice. Although the analyses show that it might be that severity or complexity (i.e. pain and length of sickness absence) explains some of coordinator distribution on the individual level, the relationship does not remain statistically significant in the adjusted analysis. Studies with more information on complexity or severity of injury, as well as on the individual programs' criteria for provision of a coordinator should be performed. In addition, the coordinator's competencies and activities, i.e. contact with the workplace should be further explored in future research. Furthermore, the sample in this study was exclusively from Rapid-RTW-programs, and it might be that other RTWprograms differ in their RTW- and coordination of RTW-models. On the other hand, the Rapid-RTWprogram is the largest effort to promote RTW in Norway and therefore the sample is generally representative of RTW-programs provided to sick listed employees in this country.

#### Conclusions

Our results revealed that it is common to provide a coordinator in the Rapid RTW-programs in Norway. However, the coordinators for the most part coordinate their own programs, and to a limited degree integrate services vertically across stakeholders, levels and providers. Employees in occupational rehabilitation programs are, in this study, those most likely to be provided with a coordinator. Provision of a coordinator is associated with more involvement of different professions in the program, more contact with other services and more adaptations in regard to the program and the workplace. However, only few experience vertical integration of services in Rapid-RTW-programs. The model of RTWcoordination and provision of a coordinator should be further developed. To distinguish between internal and single level horizontal integration and vertical across levels and stakeholders integration could be one way to test different models' effects on RTW when providing a coordinator in RTW-programs in the future.

#### Supplementary information

**Supplementary information** accompanies this paper at https://doi.org/10. 1186/s12913-019-4607-y.

Additional file 1: Questionnaire for patient and providers in Rapid-RTWprograms. The questions used in analysis to explore and describe if and how a coordinator was provided in RTW-programs in Norway, and whether the provision of a coordinator was associated with certain employee, program or intervention characteristics included in the file.

#### Abbreviations

MSD: Musculoskeletal disorders; NAV: Norwegian Social Insurance agencies; NSD: Norwegian Centre for Research Data; RTW: Return to Work

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#### Authors' contributions

LSS has been involved in data collection, performed the analysis of the material, and has been the main author of all parts of the drafted article. LAH has been involved in data collection, contributed to the discussion, and has commented critically on the drafts. MCS has been involved in the analysis and commented critically on the drafts. WSS has contributed to the interpretation of results and commented critically on the drafts. WSS has contributed to the principal investigator and project manager of the Rapid-RTW project. She designed the cohort study, and managed and took part in all phases of this project. She planned the statistical analysis, and commented critically on the drafts. All authors have read and approved the manuscript.

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#### Availability of data and materials

The datasets analysed during the current study are not publicly available due to research ethical considerations, but are available from the corresponding author on reasonable request.

#### Ethics approval and consent to participate

The Norwegian Centre for Research Data (NSD) were notified about and approved the project (reference number: 28988), and the Norwegian Data Protection Authority (Datatilsynet) gave consent to handle person-identified information, reference number: 13/00141–5/KEL. Written informed consent for participation in the study was obtained from the patients before the study was conducted.

#### Consent for publication

Not applicable.

#### **Competing interests**

The authors declare that they have no competing interests.

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# **Paper II**

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# **BMJ Open** The association between having a coordinator and return to work: the rapid-return-to-work cohort study

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### ABSTRACT

**Objectives** The aim of this study was to assess if the reported provision of a coordinator was associated with time to first return to work (RTW) and first full RTW among sick-listed employees who participated in different rapid-RTW programmes in Norway.

**Design** The study was designed as a cohort study. **Setting** Rapid-RTW programmes financed by the regional health authority in hospitals and Norwegian Labour and Welfare Administration in Norway.

**Participants** The sample included employees on fulltime sick leave (n=326) who participated in rapid-RTW programmes (n=43), who provided information about the coordination of the services they received. The median age was 46 years (minimum–maximum 21–67) and 71% were female. The most common reported diagnoses were musculoskeletal (57%) and mental health disorders (14%). **Interventions** The employees received different types of individually tailored RTW programmes all aimed at a rapid RTW; occupational rehabilitation (64%), treatment for medical or psychological issues, including assessment, and surgery (26%), and follow-up and work clarification services (10%). It was common to be provided with a coordinator (73%).

Primary and secondary outcome measures Outcomes were measured as time to first RTW (graded and 100%) and first full RTW (100%).

**Results** Employees provided with a coordinator returned to work later than employees who did not have a coordinator; a median (95% Cl) of 128 (80 to 176) days vs 61 (43 to 79) days for first RTW, respectively. This difference did not remain statistically significant in the adjusted regression analysis. For full RTW, there was no statistically significant difference between employees provided with a coordinator versus those who were not. **Conclusions** The model of coordination, provided in the Norwegian rapid-RTW programmes was not associated with a more rapid RTW for sick-listed employees. Rethinking how RTW coordination should be organised could be wise in future programme development.

## **INTRODUCTION**

Prolonged sick leave can lead to permanent work disability. Work disability gives health, social and economic consequences for the worker, employer, as well as for society.<sup>1</sup> Therefore, interventions facilitating a rapid return

# Strengths and limitations of this study

- This study is strengthened by use of register data on sickness absence.
- This study is strengthened by the number of included employees.
- The study could be strengthened with a smaller difference in numbers between employees with/without a coordinator.

to work (RTW) are of importance both at an individual and at a socioeconomic level.<sup>1</sup> The most common diagnostic groupings that cause sick leave in Norway are musculoskeletal disorders (MSDs) and mental disorders, which constitute approximately 40% and 20% of the total number of lost sick leave days, respectively.<sup>2</sup> This is in line with other Western countries.<sup>13</sup>

To prevent permanent work disability, there has been increasing focus on the role of coordination of RTW processes and RTW programmes. RTW coordinators are well established as a part of RTW programmes in many Western countries.<sup>4</sup> Insurers, employers or governmental agencies often employ the coordinators.<sup>5</sup> In Norway, however, there are no formal guidelines or requirements for RTW coordinators. Still, persons in need for long-lasting and coordinated services within healthcare and social services have a statutory right for an Individual plan, a management tool for holistic coordination, administered by a coordinator.<sup>67</sup> Furthermore, the government has implemented a coordination reform seeking to offer service users more comprehensive and continuous services.<sup>8</sup> This reflects the government's expectation that RTW programmes cooperate and coordinate their services across stakeholders and arenas. In addition, several initiatives to promote rapid RTW have been implemented both in the workplace arena and towards RTW programmes.<sup>9–11</sup> Our recent study of

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the rapid-RTW programme, the largest RTW programme in Norway, revealed that approximately two-thirds of the employees in the programme had a coordinator. However, these coordinators mainly coordinated services within their own programmes, not between the intervention arenas (ie, workplace, social insurance and healthcare), referred to as horizontal integration.<sup>12 13</sup> Furthermore, most of the employees with a coordinator received occupational rehabilitation services and were sick listed with MSD.<sup>12</sup>

Environmental interventions, such as adjustments and accommodation at the workplace have been found to be important for work reintegration among persons on sick leave due to MSD.<sup>14–16</sup> Recent reviews have further documented the workplace as an important arena for RTW programmes directed at employees with mental health problems.<sup>17 18</sup> Inclusion of the workplace in RTW programmes requires cooperation between several stakeholders across different arenas and levels of the health and welfare system.<sup>9 19 20</sup> To enhance such cooperation, provision of RTW coordinators has been tested in several countries using various models for different groups of patients.<sup>21–26</sup>

Although the use of RTW coordinators has received increasing attention, there is some debate about the effect of the coordinators for RTW. A recent review conducted by Vogel et al concludes that there is no evidence that coordinated RTW programmes facilitate RTW compared with usual care.<sup>27</sup> The coordinated RTW programmes in the review were defined as those identifying barriers to RTW and providing a designated coordinator to overcome these barriers through multiprofessional interventions, with several stakeholders involved and a face-to-face contact between employee and the coordinator.<sup>27</sup> However, the included programmes were of various content, set-up and duration. Several of the studies included in the review were carried out in Norway,<sup>28</sup> Sweden<sup>29</sup> and Denmark,<sup>23 30 31</sup> indicating the review's<sup>27</sup> relevance for the Scandinavian welfare states. The programmes described in the review are comparable to the rapid-RTW programme in Norway in regard to their complexity and the aim to promote RTW,<sup>12 27 32</sup> but might differ in their focus on barriers to RTW and stakeholder cooperation that are reported lacking in the rapid-RTW programmes.<sup>12</sup>

In contrast, several studies have found that RTW coordination and provision of an RTW coordinator is positively association with time to RTW, and there is increasing evidence stating that these components are important in occupational rehabilitation.<sup>4 24 33–35</sup> Furthermore, lack of coordination is associated with prolonged RTW, and some studies have reported that lack of coordination can complicate the RTW process.<sup>36</sup> Reviews have documented RTW coordination as an important intervention predictor for RTW,<sup>15 34 37–41</sup> and interventions including stakeholders at both rehabilitation programme and the workplace have been found to be successful for RTW.<sup>34374142</sup> A recent review recommend implementation

of RTW programmes towards sick-listed employees consisting of multiple components, where service coordination was one of three in addition to health-focused and work modification components.<sup>43</sup>

In light of these contradictions, the aim of this study was to assess if the reported provision of a coordinator was associated with a more rapid time to first RTW and first full RTW among sick-listed employees who participated in different public and private rapid-RTW programmes in Norway.

# **METHODS**

# Design

The study was designed as a longitudinal cohort study of 326 employees on full-time sick leave, from 43 different rapid-RTW programmes in Norway.

# Setting

The present study is one of several studies in an evaluation of the national RTW programme in Norway, the rapid-RTW project. The rapid-RTW programme is a national programme for patients on sick leave or at risk for sickness absence, aimed at reducing time to RTW and shorting the waiting time for treatment. To this date, the programme is the largest effort for promoting a fast and safe RTW in Norway.<sup>10</sup> The national programme was implemented in 2007 and has an annual budget of Kr700 million (approximately \$82 million). This initiative allowed for services to respond to tenders in order to get funding to develop and drift RTW programmes, and prioritise patients in a work relation for assessment, treatment and rehabilitation. The funding of the national programme will from 2018 be implemented in the health and welfare services' ordinary budgets.44 The national programme includes approximately 200 different public and private RTW programmes, and is organised by the regional health authorities and the Norwegian Labour and Welfare Administration (NAV). The main types of programmes are (1) occupational rehabilitation, both inpatient and outpatient, (2) assessment and follow-up services by the social security system (NAV) and (3) medical or psychological treatment, including assessment and surgery.<sup>10</sup> The organisation, content and intervention components, like the provision of a coordinator, were decided in each of the rapid-RTW programmes.

# **Data collection**

All of the approximately 200 clinics or institutions offering rapid-RTW services were invited to participate in the study. Programmes that agreed to participate provided a local study coordinator, who recruited employees to the study in the period from February to December 2012. Both employees and their providers answered self-administered questionnaires about the employees' health situation and the service they received, including the question 'Did the program provide a person who tailored or coordinated your services?'. They could choose to answer on paper, or digitally. Data on sickness absence were retrieved from the Norwegian Social Insurance Register. Data on type of services employees received were retrieved from the Norwegian Patient Registry. The register data were linked to the self-reported data using 11-digit personal identification numbers. Each individual living in Norway is provided with a unique ID number that enables data from different registries to be linked.

# **Outcome measures**

The outcome was defined as time to first RTW and first full RTW. Time was measured as days from when the employee started treatment at the RTW programme until the first day back at work, either partial or full job size (first RTW), and until the employee for the first time returned to work in the same job size they had before (first RTW or full RTW). These were therefore overlapping, and not mutually exclusive time frames. This way of measuring RTW is in line with previous research studies on time to RTW.<sup>45–47</sup> The employees were followed for 360 days, and those who did not return within the follow-up time were censored in the analyses.

# Patient and public involvement

Patients were not involved in development of research question and outcome measure, nor design, recruitment or conduction of the study. The results will be made available through plain language synopsis and communicated to the public once published scientifically.

## **Participants**

In total, 679 employees completed the questionnaire in the main cohort study. In the present study, 326 sick-listed employees who (1) answered the question regarding having a coordinator or not, (2) replied yes/no to the question of provision of a coordinator, (3) were on fulltime sick leave at start of the RTW programme were included in the analyses. Reasons for exclusion were accordingly: (1) employees did not answer (n=185), (2) employees answered 'do not know' (n=120) and (3) employees were on graded sick leave (n=168). Some contributed to more than one reason.

The samples' characteristics are presented in table 1. The employees' median age was 46 years (minimum-maximum 21–67), and the majority had been sick listed before (96%). The most common diagnoses were MSD (57%) and mental health problems (14%). The most common type of RTW programme provided was occupational rehabilitation (63%), which included rehabilitation in hospitals and institutions, both inpatient and outpatient. These types of services are explained in earlier publications.<sup>10</sup> <sup>12</sup> Of the included participants, 73% were provided with a coordinator.

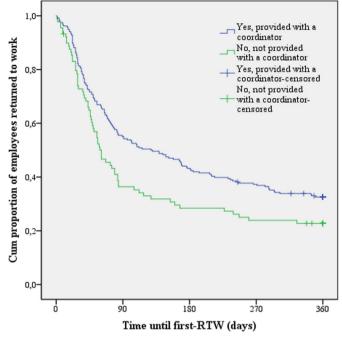
## **Statistical analyses**

Diagnoses were registered as International Classification of Primary Care (ICPC) or International Classification of Diseases and related health problems

Table 1         Participan	its				
Variable	Category	n	%		
Gender	Female	232	71		
	Male	94	29		
Age*	Up to 30 years	27	8		
	31-49 years	175	54		
	50 years +	123	38		
Marital status*	Living with partner	219	68		
	Not living with partner	105	32		
Educational	Elementary school (up to 9 years)	38	12		
Level*	Upper secondary school (12 years)	154	48		
	University degree (up to 4 years)	93	29		
	University degree (>4 years)	35	11		
Diagnosis	Musculoskeletal	185	57		
	Psychiatric	45	14		
	Others incl. cardiovascular	35	11		
	Cancer	32	10		
	No diagnosis	16	5		
	Unspecific	13	4		
Symptoms*	Pain at rest (yes)	267	85		
	Pain in activity (yes)	277	89		
	Depressive mood (yes)	244	78		
	Anxiety (yes)	191	60		
Type of RTW programme*	Occupational rehabilitation	206	64		
	Medical or psychological treatment, including assessment and surgery	84	26		
	Follow-up and work clarification services	32	10		
Provided with a coordinator	Yes	237	73		
Sector*	Public	148	48		
	Private	158	52		
History of sickness absence	Yes	314	96		

Data on all participants except \*missing; age n=1, marital status n=2, educational level n=6, symptoms (pain at rest, n=10; pain in activity, n=15; depressive mood, n=11; anxiety, n=10), type of RTW programme n=4, sector n=20. RTW, return to work.

(ICD) codes by the physician in the medical records, and categorised into the largest diagnostic groups 'MSD', 'psychiatric disorders', 'cancer' and 'common/



**Figure 1** Kaplan-Meier survival plot of time until first RTW (days). RTW, return to work.

unspecific disorders', other diagnosis (including neurological and heart disorders) or missing/no diagnosis, for the descriptive analysis. For the regression analysis, the categories common/unspecific, other diagnoses and missing/no diagnosis were collapsed. Time to first RTW and full RTW were calculated using the Kaplan-Meier method, and crude differences between those who had and did not have a coordinator were assessed with log-rank tests. Stepwise Cox regression models were used to calculate the probability for returning to work (first RTW and first full RTW) for employees with a coordinator versus those who had not. Potential confounders for RTW were entered into the models. The confounders were identified in earlier studies in the literature,<sup>45 48-50</sup> and included variables such as age, gender, educational level, marital status, diagnosis, self-reported symptoms (pain at rest, pain in activity, depressive mood and anxiety), sick leave history, household income and type of service. The results were expressed as HRs with 95% CIs. P values of <0.05 were considered statistically significant and all tests were two sided. The analyses were conducted in IBM SPSS Statistics V.24.

### RESULTS

## **Unadjusted results**

Having a coordinator was associated with delayed time to first RTW (figure 1). In the unadjusted analyses, employees who had a coordinator experienced a first RTW after 128 days (median; 95% CI 80 to 176) compared with 61 days (95% CI 43 to 79) for those who did not. This difference was statistically significant.

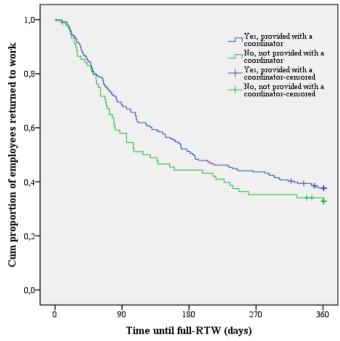


Figure 2 Kaplan-Meier survival plot of time until first full RTW (days). RTW, return to work.

The unadjusted results for first full RTW showed that patients who had a coordinator returned to work a median of 57 days later than employees who did not have a coordinator; a median of 185 days (95% CI 137 to 233) vs 128 days (95% CI 72 to 184), respectively (figure 2). However, this difference did not reach the level of statistical significance (p=0.24).

# **Adjusted results**

In the adjusted analysis, we controlled for age, gender, educational level, marital status, diagnosis, sick leave history, symptoms, household income and type of programme. Neither time to first RTW nor first full RTW was statistically significant in the adjusted analysis, with an HR of 0.75 (95% CI 0.51 to 1.10) for first RTW, and 0.82 (95% CI 0.55 to 1.22) for first full RTW (table 2).

Type of RTW programme was a confounding factor between having a coordinator and RTW. In a stepwise adjusted analysis, time to first RTW remained statistically significant associated with having a coordinator when the other control variables were added to the model except type of programme (HR 0.72, 95% CI 0.52 to 0.99). In order to understand differences between coordinator and type of programme in the model, time to first RTW for the different programme types was assessed. The difference in time to first RTW was statistically significant when comparing the programme types. Occupational rehabilitation had a median of 109 days before RTW (95% CI 52 to 166) and differed from assessment and follow-up programmes through NAV which had a median of 238 days (95% CI 192 to 284). Medical or psychological treatment including assessment and surgery had a median of 55 days (95% CI

6

Table 2         The probability of experiencing a first RTW and full RTW						
	Unadjust	ed		Adjusted	*	
	HR	95% CI	P value	HR	95% CI	P value
First RTW having a coordinator†	0.70	0.53 to 0.94	0.02	0.75	0.51 to 1.10	0.14
Full RTW having a coordinator†	0.83	0.62 to 1.13	0.24	0.82	0.55 to 1.22	0.32

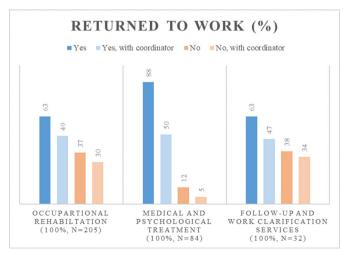
\*Adjusted for age, gender, marital status, educational level, household income, diagnosis, type of RTW programme, symptoms (pain at rest, pain in activity, depressive mood and anxiety) and history of sickness absence.

†Ref not having a coordinator.

RTW, return to work.

37 to 73) and also differed from assessment and follow-up programmes through NAV. Figure 3 shows RTW rates (first RTW within 360 days yes/no) by type of programme. Of employees participated in medical or psychological treatment including assessment and surgery, 88% (n=74) had returned to work within the first year. The RTW rates for employees that participated in occupational rehabilitation or assessment and follow-up programmes through NAV were approximately 63%.

Furthermore, the provision of a coordinator varied between different types of RTW programmes. For the programme types occupational rehabilitation and assessment and follow-up programmes through NAV, 72.4% and 76%, respectively, were provided with a coordinator. For medical or psychological treatment, including assessment and surgery, 50% of the sick-listed employees were provided with a coordinator. Being provided with a coordinator were almost three times more likely in occupational rehabilitation and assessment and follow-up programmes through NAV than in medical or psychological treatment including assessment and surgery (OR 2.7, 95% CI 1.3 to 5.5).



**Figure 3** Return to work (RTW) rates (first RTW within 360 days yes/no) by type of programme.

# DISCUSSIONS

This study assessed whether provision of a coordinator was associated with time to first RTW and first full RTW in a cohort of sick-listed employees who participated in the rapid-RTW programme in Norway. The results show that having a coordinator seem to not enhance a more rapid RTW. Even though participants provided with a coordinator had a delayed first RTW compared with those who did not have a coordinator, the adjusted analyses revealed that the type of programme the sick-listed employee received might be the confounding factor for this delay. These two findings are discussed below.

First, the present study revealed that provision of a coordinator was not associated with a more rapid RTW for sick-listed employees who participated in the rapid-RTW programme in Norway. This result was somewhat unexpected. Even though there is some debate on the effect of coordination, having a coordinator has been found to increase the probability of returning to work in several previous studies.<sup>24 34 35 51</sup> The results may have several explanations. One explanation might be that the coordinators in the present study were provided by the healthcare services,<sup>12</sup> and they mostly coordinated their own services. Internationally, however, the coordinator is often provided by the insurers, employers or governmental agencies,<sup>5</sup> making the coordinator more directly linked to the workplace. The workplace is one of the most important arenas for RTW programmes,<sup>15 16</sup> since early contact with the workplace, as well as adaptations and support at the workplace, all are predictors for RTW.<sup>15 34 39–42</sup> As such, the coordinators in the present study might differ from the RTW coordinators in other contexts, both in regard to who provides them and which of the intervention arenas they coordinate. A recent study from Norway found that adding a workplace focus in a multidisciplinary RTW programme in the specialist healthcare did not enhance RTW rates.<sup>28</sup> The coordination provided in the study resulted in a weak connection between the RTW programme and the workplace.<sup>28</sup> Hence, it might be possible that the model of coordination where the coordinator is placed in the specialist healthcare service, without real possibilities to coordinate and accommodate at the workplace, does not facilitate RTW.

Second, although an association between having a coordinator and delayed RTW was found in the univariate analysis, the delayed first RTW did not reach statistical significance when controlling for type of programme. The results furthermore shows that both frequencies of being provided with a coordinator and time to RTW varies based on type of RTW programme. This suggests type of programme as a confounding factor for the delay in RTW, and that the programme type explains more of the variation in RTW than being provided with a coordinator. Alternatively, the underlying cause for being referred to a specific type of RTW programme may explain even more of the variation found in this study. The distribution of coordinators varies across the different types of RTW programmes, and is most likely provided in assessment or follow-up services through NAV and occupational rehabilitation.<sup>12</sup> Furthermore, treatment programmes are often provided to employees with specific MSD or mental disorders, whereas employees referred to occupational rehabilitation services often have more complex problems or situations.<sup>10</sup> This study shows, regardless of whether the employees are provided with a coordinator, that the time to RTW doubles for employees receiving occupational rehabilitation compared with those receiving treatment, and furthermore quadruples for those receiving assessment and follow-up services through NAV. Therefore, one explanation for the delayed RTW for those provided with a coordinator may be that it is an expression of the complexity of the employees' situation. A more complex situation for the sick-listed employee, in terms of, for example, comorbid diagnoses<sup>52,53</sup> or difficulties in regard to psychosocial factors at work<sup>45 48</sup> may work as barriers for RTW. Severity of health problems may as well complicate the RTW process, as shown in previous studies.<sup>37 38</sup> Pain may indicate higher experienced severity, however, even though pain at rest is associated with provision of a coordinator in rapid-RTW programmes,<sup>12</sup> pain is neither revealed as a predictor for provision of a coordinator,<sup>12</sup> nor a significant explanatory factor for first or full RTW in this study. Another possible explanation is connected to the complexity of the RTW programmes.<sup>19</sup> Some of the services include several interventions and components,<sup>10</sup> and it is possible that the provision of a coordinator only adds to an already full schedule of interventions. For some groups, 'brief interventions' have been found to be just as effective as multidisciplinary rehabilitation services with several intervention components.<sup>30 54–56</sup> Otherwise, if the services do not make room for enhancing contact with workplace and other stakeholders,<sup>12</sup> the evidence-based active elements of coordination may be absent, leading to delayed RTW or no effect.

Nevertheless, the findings in this study are in line with a recent systematic review,<sup>27</sup> as well as other studies on coordination from Scandinavia,<sup>28 30</sup> supporting the finding that coordination might not facilitate RTW. Could this be due to the coordinator model used in the Scandinavian welfare system? This seems at least to have something to do with the type of coordination, where integration of

services across levels and arenas are lacking.<sup>12</sup> Furthermore, it might be that the groups receiving coordination is not well targeted. Still, we need to know more about who might benefit from having a coordinator. Coordination of RTW processes for employees with mental health problems has, for example, been studied to a small extent,<sup>27</sup> and we do not know how coordination affects this group of sick-listed employees. Furthermore, there is a need to investigate and develop the roles, tasks and competencies of the RTW coordinator, within a Norwegian context. The Norwegian model for coordination where the link between the coordinator and the workplace is diffuse and not formalised in the RTW programmes<sup>10 12 57 58</sup> should be further examined. Implications for practice and research, both in Norway and internationally, will be to develop new coordination models and implement such models in line with evidence, where a closer workplace connection seems to be a way forward.<sup>27 28</sup>

One of the strengths of this study is the high number of participants and the use of register data, which are both detailed and precise regarding sickness absence and diagnoses, as it is connected to the public social security benefit system. Approximately two-thirds of the patients in the study were provided with a coordinator, limiting the power to estimate the effect of not having a coordinator. Although the variable of provision of a coordinator is based on self-report from employees in present study, the time-to-first-RTW results from the analyses have been verified (median 102 days vs 79 days for those provided with coordinator vs not, respectively, with p=0.25) when compared with providers' responses to the same variable ('Did your service provide a coordinator for this patient?'). Furthermore, there was an association between having a coordinator and type of RTW programme. This makes it difficult to generalise the findings to all sick-listed employees participating in the rapid-RTW programmes as we were not able to distinguish between the effect of having a coordinator and a given programme. Additionally, the proportions of sick-listed employees due to MSD are higher than in the national statistics of Norway. However, since employees with MSD are the best-documented group of sick-listed benefiting from RTW coordination, this should be more an advantage regarding possibilities of revealing a difference between those provided with and those not provided with a coordinator. There is a possibility of selection bias in the study as the percentage of sick-listed employees with psychiatric issues and receiving psychological treatment is higher among the non-respondents. Fewer of employees with psychiatric issues is provided with a coordinator,<sup>12</sup> meaning the power of analysis of this diagnose group might have been enhanced if more of these employees responded. However, employees with this diagnosis represent a small proportion of the total number of included participants. Therefore, inclusion of those employees would most likely not affect the main results decisively. Analysis of the full material of employees on full-time sick leave (n=546) shows some statistically significant differences between

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respondents and non-respondents on the question of provision of a coordinator. Non-respondents' median age was slightly lower (44 years), and more had mental diagnosis (20%). In addition, fewer received occupational rehabilitation of the non-respondents (43%). If these were included, the proportion of employees with mental health disorders receiving treatment would most likely be larger, and this would most likely strengthen the present results.

# **CONCLUSION**

This study revealed that employees participating in RTW programmes and who were provided with a coordinator had delayed time until they returned to work compared with those who did not have a coordinator. However, there was no association between provision of a coordinator and RTW when controlling for known confounders. As expected, type of programme seems to be a confounding factor, which explains more of the variation in RTW than being provided with a coordinator. The model of coordination provided in the Norwegian rapid-RTW programmes, mainly as part of occupational rehabilitation programmes in the healthcare, did not add to a more rapid RTW in this study. Hence, based on research literature as well as present study, RTW coordination where all three intervention arenas; the workplace, social services and healthcare are targeted should be further developed, before tested in rigorous studies with a design fitted for effect evaluation.

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**Contributors** LSS has been involved in data collection, performed the analysis of the material and has been the main author of all parts of the drafted article. LAH has been involved in data collection, contributed to the discussion and has commented critically on the drafts. MCS has been involved in the analysis and commented critically on the drafts. WSS has contributed to the interpretation of data and commented critically on the drafts. RWA is the principal investigator and project manager of the rapid-RTW project. She designed the cohort study and managed and took part in all phases of this project. She planned the statistical analysis and commented critically on the drafts.

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#### Competing interests None declared.

Patient consent Participants in the study gave informed consent before inclusion. The data is handled anonymously and it is not possible to trace any personal information to individuals.

Ethics approval The Norwegian Centre for Research Data (NSD) approved this study with the reference number: 28988. Furthermore, the Norwegian Data Protection Authority gave consent to handle person- identified information, reference number: 13/00141-5/KEL.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement The datasets analysed during the current study are not publicly available due to research ethical considerations, but are available from the corresponding author on reasonable request.

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# **Paper III**

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# Eksperters synspunkter på tilbudet til sykmeldte i Norge. Første runde av en delphi-studie

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# EXPERTS' OPINIONS ON RETURN TO WORK SERVICES FOR PERSONS ON SICK LEAVE IN NORWAY. FIRST ROUND OF A DELPHI STUDY

# Abstract

**Background**: Return-to-work (RTW) programmes have undergone large changes in recent years. The aim of this study was to identify problems and needed changes in RTW programmes for sick-listed employees in Norway.

**Material and methods**: The study was designed as a Delphi study, where 32 experts on RTW interventions participated in a group interview, with both written and oral data collection. The data was analysed by qualitative and quantitative content analysis.

**Results**: 218 identified meaning units were condensed into 23 unique problems and 34 suggested changes. Every third unit involved the overall organization of RTW programmes. The experts expressed an experienced overlap between interventions offered by the public welfare service (NAV) and by the health services, and suggested that the services should be better coordinated. Furthermore, they argued that there is an insufficient focus on the employees' workplace, that it takes too long before sick-listed employees are referred to a RTW service, and that the employees are often misdiagnosed, pathologized, and medicalized. Additionally, they experienced that access to research is lacking, and that there is a need for more available documentation on the effectiveness of RTW interventions.

**Conclusion**: According to experts in this study, interventions offered to sick-listed employees have core issues that should be addressed. The overall organization of the programmes seems to be the greatest concern.

**Key-words**: Rapid RTW Delphi study, Sick leave, Occupational Rehabilitation, Work Disability Prevention and Integration, Return to work, RTW programmes

# Bakgrunn

Både i Norge og internasjonalt brukes det mye ressurser for å sikre en rask og varig tilbakeføring av sykmeldte til arbeidslivet (1-4). En av årsakene til dette er at langtidssykmelding kan utgjøre en risiko for utstøting fra arbeidslivet på permanent basis (4-7). Å miste muligheten for arbeidsdeltakelse kan føre til aktivitetsdeprivasjon, som kan ha negativ innvirkning på livskvalitet og helse (8, 9). I Norge er andelen sykmeldte dobbel så høy som gjennomsnittet i OECD-landene (4). De vanligste diagnosene knyttet til sykefravær er muskel- og skjelettplager og psykiske lidelser, som utgjør henholdsvis omtrent 40 og 20 prosent av totalt antall sykefraværsdager (10-12).

En rekke studier og oppsummeringer har avdekket hva tilbakeføringsprogrammer må omhandle for å kunne gi den ønskede effekt (3-27). En slik tiltakskomponent er rettet mot tilrettelegging på og aktiv involvering av arbeidsplassen (3, 13-17). Videre ser tverrfaglig team (13, 14, 18, 19), skreddersøm (19, 20), koordinering (19, 21-23), samt at helsekompetanse overføres til arbeidsplassen (14, 24) ut til å ha en positiv betydning for tilbakeføring. Nyere studier har også vist at enkelte grupper sykmeldte har like god eller bedre effekt av såkalte «Brief Interventions» med fokus på normalisering av bevegelser og at plagene ikke er farlige, enn av tiltakstunge tverrfaglige tilbakeføringsprogram (25-27).

Imidlertid er det utfordrende å skulle implementere slike ofte komplekse tiltaksprogrammer for sykmeldte i nye kontekster, som i andre land enn der studien er gjort (28-30). En utfordring kan være at slike tiltaksprogrammer innebærer bidrag fra svært ulike aktørgrupper; fra arbeidsplassen, helsetjenesten og fra NAV (31, 32). Utfordringer kan også handle om at de involverte aktørene har ulike perspektiver og mål (24, 33, 34), eller for eksempel at intervensjonen ikke ble gjennomført slik den var planlagt på grunn av for dårlig tilpassing til lokal kontekst (29).

I Norge er det iverksatt en rekke nye tiltak, gjort endringer i sykmeldingspraksis og opprettet arbeidslivssentre, som har ført til at behandling og rehabilitering av sykmeldte skjer på andre måter i dag enn for ti år siden (35-37). Tiltak rettet mot å redusere sykefravær finnes både innenfor NAV, på ulike nivå i helsetjenesten og på arbeidsplassen. Avtalen om Inkluderende arbeidsliv fra 2001 markerte et skifte der arbeidsplassen ble hovedarenaen for oppfølging av sykmeldte (36, 38). Også innen ar-

beidsrettet rehabilitering er det skjedd et fokusskifte fra behandling og trening i skjermede enheter før ordinært arbeid, til tidlig plassering i ordinært arbeidsliv med trening og tilrettelegging på arbeidsplassen (23, 39, 40), det som omtales som «fra Train-then-Place til Place-then-Train» (39). Dette skiftet kom først innen psykisk rehabilitering. Dette preger nå fagfeltet internasjonalt uavhengig av diagnose. Samtidig har man innen rehabiliteringsfeltet gått fra en biomedisinsk forståelse og tilnærming til sykdom, til et biopsykososialt perspektiv og mer systemisk tenkning (41-43). Samspillet mellom de ulike arenaene er avgjørende for utfallet i en tilbakeføringsprosess, og man har fokus på involvering av arbeidsplassen og forebygging av langtidsfravær og uførhet (44). Også innen aktivitetsvitenskap ser vi en slik utvidet forståelse av rehabilitering, der muligheten for arbeidsdeltakelse etter sykdom eller skade avgjøres både av individuelle forutsetninger og valg, og av omgivelsesmessige forhold på arbeidsplassen, samt som utslag av føringer og strukturer i samfunnet forøvrig (45, 46).

Den største satsningen rettet mot sykmeldte i Norge kan hevdes å være Tilskuddsordning for helse- og rehabiliteringstjenester, som også er kjent som Raskere tilbake. Programmet ble iverksatt i 2007 og har to ulike mål: å redusere ventetiden for behandling, og å bidra til en raskere tilbakeføring av sykmeldte. Helseforetakene og NAV organiserer tilbudene som ytes i programmet, og bevilgningen har årlig vært på rundt 700 millioner kroner (47). Pasientgruppene som dominerer i tilbudene er personer som har vært sykmeldt mellom åtte uker og ett år, som har muskel- og skjelettplager eller lettere psykiske lidelser (48). Studier har vist stor oppslutning om programmet Raskere tilbake blant pasientene (49), at programmet ble raskere implementert i helseforetakene enn i NAV (50), at helseforetakene er mer fornøyde med administreringen av programmet enn NAV (48), og at det er betydelige variasjoner mellom de enkelte tilbudene, tilbudstypene og tilbudenes geografiske plassering innen programmet (48). Videre viser studier at informasjon til NAV og fastlegene om programmet ikke var god nok (48, 50), og at fastlegene brukte programmet lite (49). En studie viste at det å opprette en fast koordinator som syr tilbudene sammen, samt å samhandle med eksterne aktører som arbeidsplassen, var mangelfullt utviklet i mange Raskere tilbake-tilbud (48). På tross av at noen studier har sett på tilbudet til sykmeldte fra aktørperspektiv (30, 32, 33, 51), har vi

Meningsbærende enhet (direkte fra transkribert tekst)	Kondensert meningsbærende enhet	Problemstilling	Endringsforslag	Tema
«Samtidighet til tiltak foregår i dag ut fra litt for mye tilfeldig- heter, det er laget dialogmøter og struktur på sykefraværsar- beid [], som til dels fungerer. Når de kommer opp på spesi- alisthelsetjenestenivå, der jeg jobber, så er det egentlig basert mye på bekjentskaper og kunn- skaper om NAV og systemene, at du får tak i dem. Sånn bør det ikke være.»	Samarbeid mellom ulike instanser rundt sykemeldte foregår ut fra tilfeldigheter, strukturen rundt fungerer bare delvis. I spesialisthel- setjenesten er det basert på bekjentskap og kunnskap om NAV, og det bør ikke være slik.	Samhandlin- gen mellom helsetjenesten og NAV er ofte basert på til- feldigheter og bekjentskap.	(ikke relevant her)	Koordinering og samhand- ling

Tabell 1: Eksempel på analyseprosess fra transkribert intervju til tema hentet fra Tema V: Koordinering og samhandling.

fortsatt for liten innsikt i hvilke konkrete utfordringer ulike aktører opplever i et slikt kompetansekrevende aktørtungt tiltaksfelt (30, 32). Målet med denne studien var derfor å identifisere problemstillinger og endringsbehov i dagens behandling og rehabilitering av sykmeldte, med særlig fokus på tilbakeføringsprogrammet Raskere tilbake, blant et utvalg av eksperter på oppfølging av sykmeldte. Hensikten med studien var å sikre åpenhet om utfordringene, slik at tilbudet til sykmeldte kan videreutvikles og forbedres.

# Materiale og metode

Studien ble designet som en delphi-studie (52), hvor eksperter på oppfølging av sykmeldte (n=32) deltok i et eksplorerende induktivt gruppeintervju som ble avholdt i april 2012. Formålet med denne forskningstilnærmingen er å identifisere eksperters oppfatninger, basert på deres kunnskap og erfaringer om et tema. I neste fase vurderes det i hvilken grad det eksisterer konsensus blant aktører om det som kommer fram (52). Denne artikkelen beskriver resultatene fra det kvalitative materialet i runde 1.

# Utvalg

I delphi-studier er eksperter definert som informerte individer eller spesialister som har kunnskap om et spesifikt felt (52). Spesialister refererer til formell kunnskap, mens informerte individer refererer til uformell kunnskap innen feltet. Kunnskap inkluderer i denne sammenhengen erfaringskunnskap. I denne studien er ekspertene individer som har erfaring

med å følge opp sykmeldte direkte, som har ansvar for å organisere eller forske innen sykefraværsoppfølging, eller som har erfaring med sykmeldte gjennom en brukerorganisasjon. En strategisk utvalgsstrategi ble benyttet, der målet var å få et heterogent utvalg som dekket eksperter på sykefraværsarbeid best mulig (32). Utvalgskriteriene var at de ulike rollene i sykefraværsarbeid skulle dekkes (53), og at det skulle være en geografisk spredning med representanter fra ulike steder i Norge, samt inkludere både store og små Raskere tilbake-tilbud (48) for å dekke størst mulig bredde av erfaringer. Utvalget ble rekruttert ved mailkontakt. Ekspertene kom fra brukerorganisasjoner (n=2), arbeidsgivere fra privat og offentlig sektor (n=2), henvisere fra NAV-kontor (n=1) og fastlegetjenesten (n=1), tilbudsytere fra NAV og helseforetak (n=4), NAVs Arbeidslivssenter (n=1), koordinatorer/prosjektledere for Raskere tilbake-ordningen (NAV: n=2, helsetjenesten: n=4), bedriftshelsetjenestepersonell (n=1), departement og direktorat (n=7), arbeidsgiver-/arbeidstakerorganisasjoner (n=3) og forskere (n=4).

# Datainnsamling

De 32 ekspertene var delt inn i tre grupper, ut fra roller de ble tildelt under intervjuet. *Observatører* (n=10), som bestod av representanter fra myndighetsorganer, arbeidstaker- og arbeidsgiverorganisasjoner, og *forskere* (n=4) kunne stille spørsmål og bidra med kommentarer. *Deltakerne* (n=18) deltok aktivt med sine erfaringer og meninger. Deltakerne hadde i gjennomsnitt 11,4 års erfaring med å jobbe

	Skriftlig	Intervju	Totalt
Hovedtemaer	Ν	Ν	Ν
Nasjonal organisering	31	43	74
Mottakerne	9	30	39
Kompetanse	13	18	31
Programmenes fokus og tilnærmingsmåte	12	16	28
Koordinering og samhand- ling	12	12	24
Varighet av program	5	7	12
Henvisning til tilbud	2	8	10
Totalt	84	134	218

Tabell 2: Oversikt over temaer som informantene på gruppeintervjuet tok opp (antall meningsenheter). Note: Antall (n) refererer her til meningsbærende enheter som ble identifisert i skriftlige data og fra det transkriberte intervjuet.

med sykmeldte (min.-maks. 1-37 år, SD 12 år), og representerte følgende profesjonsgrupper: medisin/ helsefag (n=8), sosialfag (n=2), pedagogikk (n=2), samfunnsfag (n=3), administrative fag (n=2) og for én var profesjonen ukjent (n=1).

Datainnsamlingen var todelt og foregikk i akademia. Først ble alle som var til stede bedt om å skrive ned de tre viktigste endringsbehovene ved dagens praksis overfor sykmeldte. Denne teksten ble så samlet inn. Deretter ble det gjennomført et gruppeintervju som ble tatt opp på lydbånd og transkribert. Intervjuet ble innledet slik: «Vi er interessert i erfaringer dere har gjort dere med oppfølging av sykmeldte og Raskere tilbake-ordningen. Spørsmålet er: Gir vi riktig tiltak med riktig kompetanse til riktige personer til riktig tid?». Gruppeintervjuet ble ledet av en forsker som modererte diskusjonen og stilte oppfølgingsspørsmål for å verifisere utsagnene som kom fram.

# Analyse

For å identifisere problemstillingene og endringsbehovene ble begge former for tekstlig materiale analysert ved hjelp av en kombinasjon av kvalitativ og kvantitativ innholdsanalyse (52). Først ble teksten delt inn i meningsbærende enheter og gitt en kode ut fra hva teksten handlet om (54). To forskere (LSS og RWAA) gjennomførte analysen for å øke reliabiliteten i kodingen. Foreløpige tematiske hovedkategorier ble identifisert, og materialet ble re-sortert ut fra hva det handlet om. Det ble holdt oversikt over antallet meningsenheter innen hver hovedkategori for å kunne gi et visst bilde av hvilke temaer som dominerte. De meningsbærende enhetene ble deretter innholdsmessig kondensert til en kort oppsummering av hva de omhandlet (54).

Hver hovedkategori fikk en definisjon basert på en ytterligere kondensering. Problemstillinger og endringsforslag ble definert ut fra sub-kategoriene i form av sitater og utsagn. Relevante sitater som beskrev det som kom fram mest mulig presist, ble til slutt valgt ut fra intervjuteksten.

# **Etikk**

Studien var ikke fremleggingspliktig for REK. Ved muntlig kontakt med NSD vurderte de studien til å ikke være meldepliktig, ettersom vi ikke skulle registrere personopplysninger (55). I den skriftlige invitasjonen til intervjuet ble det opplyst hva som var formålet med intervjuet, at den ville bli tatt opp på bånd, at det var frivillig å delta, og at intervjuet ville inngå som en første fase av en delphi-prosess. Påmelding til intervjuet ble regnet som informert samtykke (56). I tillegg ble det muntlig informert om at data ville bli anonymt behandlet, og hva resultatene skulle brukes til. Ettersom temaet for intervjuet var tjenester, og ikke individer, er de ikke ansett som fortrolige og personsensitive data. Å bidra med erfaringene sine i denne settingen skulle ikke få noen negative konsekvenser for informantene (56).

# Resultater

I alt ble 218 meningsbærende enheter identifisert, 84 fra det skriftlige materialet og 134 fra gruppeinter-

vjuet. Disse omhandlet syv hovedtemaer (se tabell 1) som bestod av 23 utfordringer og 34 endringsbehov. Appendiks gir en oversikt over alle resultatene.

# TEMA I:

# NASJONAL ORGANISERING

Informantene nevnte oftest nasjonal organisering av tilbudet til sykmeldte. Det ble formidlet et ønske om å utvikle tydeligere krav til de som skal motta penger for å drive tilbakeføringstilbud. Videre kom det fram at forskningsbasert kunnskap om risikogrupper for langtidsfravær og uførhet burde brukes mer aktivt når tilbudene skal strømlinjeformes fremover, og kostnadseffektivitetsmålinger av programmene savnes. Det ble hevdet at man kan bli henvist til samme tilbud fra både fastlege og NAV til spesialisthelsetjeneste, noe som ble oppfattet som problematisk av blant annet en tilbudsleverandør i Raskere tilbake: «Konkret da så må man unngå at NAV og spesialisthelsetjenesten yter parallelle tilbud». En av konsekvensene som ble nevnt, var at det oppstår en fare for at sykmeldte blir overbehandlet. Det ble hevdet spesifikt for Raskere tilbake-programmet at det er ustabilt og ustrukturert, og mangler tydelig mål og kontinuitet. Videre kom det fram meninger om at tilbakeføringsprogrammer som Raskere tilbake burde være felles for NAV og helsetjenesten, med fokus på samarbeidet mellom de to. Det kom også fram at organisering av tilbakeføringsprogrammer som prosjekter, slik det gjøres i spesialisthelsetjenesten, er problematisk, spesielt for de ansatte, som opplever en usikker arbeidshverdag.

Når det gjaldt Raskeretilbake-programmet og dets organisering, kom det synspunktet fram at programmet ikke har hatt noen betydning for sykefraværsnivået og burde avvikles. Et annet forslag var imidlertid at tilbakeføringsprogrammet Raskere tilbake burde fortsette og ikke legges ned, da det har generert mye positivt. Informantene mente at antallet tiltak og program til sykmeldte generelt burde reduseres, og at tilbudene fra helsetjenesten bør bli smalere og mer strømlinjeformet. Videre kom det fram at tilbudet til sykmeldte oftere må ivaretas lokalt – av primærhelsetjenesten, arbeidsplass og NAV. Det kom også forslag om å opprette en enkel lavterksel førstelinjeløsning for alle sykmeldte, ved å etablere kommunale eller interkommunale sentra.

# TEMA II: MOTTAKERNE

Det var ulike meninger om hvilke pasienter som

burde prioriteres i tilbakeføringstilbud fremover. Flere pekte på de med muskel- og skjelettplager og lettere psykiske lidelser, mens andre ville prioritere kreftsyke, ortopediske pasienter, risikogrupper for utstøting (lav sosioøkonomisk status) og de som trenger sammensatte rehabiliteringsprogram. Det ble hevdet at pasientene har vært for lenge sykmeldt før de henvises til behandling og rehabilitering. Selve sykmeldingsårsaken og behandlingen pasientene får, ble også trukket fram. En lege sa: «Vi utvikler feil program, fordi vi kaller det psykiske plager, men så er det arbeidskonflikt, skilsmisse, kriminalitet, mediekjør eller underslag det egentlig handler om. Det skjer fordi vi blir tvunget til å lyve om sykmeldingsårsak». Videre kom det fram at arbeidsplassen må overta mer av sykmeldingsansvaret i form av utvidet egenmelding og tettere oppfølging av arbeidsgiver. Det ble hevdet at sykmeldte må prioriteres, noe som må formaliseres gjennom prioriteringsforskriften.

# TEMA III: KOMPETANSE

Det ble foreslått at kompetanse om inkluderende arbeidsliv må spres blant fagfolk, ikke bare på arbeidsplassene. Kompetansen som bedriftshelsetjenesten har, må involveres mer i tilbakeføringsprogram for sykmeldte. At relasjonen som utvikles mellom tilbyder og sykmeldt, er viktigere enn profesjonsbakgrunnen til tilbyder, kom også fram, og videre at brukerkompetanse oftere må tas med i planlegging og styring av programmene. Et konkret forslag var at alle sykmeldte burde vært ferdig utredet av fastlegen og spesialister i løpet av fire uker, da det i dag tar altfor lang tid. Et forslag handlet om tilgangen til forskning, og at tilbudene trenger kunnskap om hva studier har vist om effekt av ulike tiltak på tilbakeføring. En behandler sa: «...jeg er veldig opptatt av at vi forsøker...å implementere den forskningen vi allerede har. Det gjør vi til en viss grad, men absolutt ikke nok».

# TEMA IV:

# PROGRAMMENES FOKUS OG TILNÆRMINGSMÅTE

Det kom fram at tilbudet til sykmeldte i dag er for preget av diagnosetenkning, symptombehandling og medikalisering. En behandler sa: *«Fordi jeg tenker at når vi jobber med sykefravær, … så er det det som er diagnosen, det er ikke sykdommen, så det å kalle det behandling, det blir for meg feil. Det er kanskje en bit av det…men det er sjelden det eneste,*  for løsningen på et sykefravær må alltid finnes på en arbeidsplass eller i et tiltak som NAV iverksetter». Videre ble det hevdet at tilbudene er for lite rettet mot det å kunne være på jobb på tross av helseplager. Tilbudet til sykmeldte ble ellers beskrevet som for fragmentert, lite helhetlig og samtidig, og for lite brukerrettet, individrettet og skreddersydd. En fra NAV Arbeidslivssenter beskrev hva som må til: «... det er et paradigmeskifte, ansvaret for oppfølging av sykmeldte ligger hos arbeidsgiver... Der man trives, går man på jobb med det som er friskt, der man ikke trives, så blir man hjemme med det som er sykt. Det er vel det som er det vesentlige». Det ble sagt at det kreves et skifte i hvordan tilbudene til sykmeldte skal være utformet, og at dette nye fokuset krever at det jobbes ut fra «diagnosen sykmeldt».

# TEMA V:

# **KOORDINERING OG SAMHANDLING**

Det ble hevdet at det stadig tar lengre tid å få iverksatt tiltak fra NAV. En som hadde jobbet med sykmeldte i en årrekke, sa at det som er viktigst, er at flere tiltak skjer samtidig: «Samtidighet til tiltak foregår i dag ut fra litt for mye tilfeldigheter, det er laget dialogmøter og struktur på sykefraværsarbeid [...], som til dels fungerer. Når de kommer opp på spesialisthelsetjenestenivå, der jeg jobber, så er det egentlig basert mye på bekjentskaper og kunnskaper om NAV og systemene, at du får tak i dem. Sånn bør det ikke være.» Andre forslag handlet om at det burde utvikles modeller for tettere samarbeid mellom helsetjenesten og NAV, og utvikles poliklinikker som utreder sykmeldte som har kompetanse på tvers av tradisjonelle medisinske spesialiteter. Videre kom det forslag om at hver enkelt sykmeldt burde få en lokal koordinator som syr sammen tilbudet mellom arbeidsplassen, helsetjenesten og NAV. Det ble også sagt at Raskere-tilbake programmet har gitt mer samordnende tjenester på tvers av tradisjonelle inndelinger i sykehusene, samt økt fokus på arbeidssituasjonen, og at det dermed blir viktig at programmet ikke legges ned. Meninger om at det burde bli stilt krav til at alle aktører skal samhandle med arbeidsplassen når tiltak iverksettes for den enkelte sykmeldte, kom også fram.

# TEMA VI:

# VARIGHETEN AV PROGRAMMER TIL SYKMELDTE

Det ble problematisert at tilbudene er organisert som prosjekter, og sagt at dette er en utfordring både for behandlere og henvisere. En henviser hevdet: «Når det kommer forslag eller tilbud om nye behandlingslinjer så må de ha en garanti på minste varighet og den må ikke være under to år, den bør helst være lenger.» Det ble også fremmet forslag om at de beste programmene til sykmeldte burde gjøres om til permanente tilbud, og at dette må skje ut fra dokumenterte resultater.

# TEMA VII: HENVISNING TIL TILBUD

Som nevnt ble det uttrykt at fastlegene mangler kunnskap om tilbud til sykmeldte, og at det er vanskelig for tilbud innenfor Raskere tilbake-programmet å nå fram med informasjon. Dette informasjonsproblemet kunne derved også få konsekvenser for henvisningen til tilbudene. Prosjektorganiseringen av tilbud reduserte tiltroen og motivasjonen fastlegen har til å henvise, fordi tilbudene forventes å forsvinne raskt igjen. På den andre siden ble det hevdet at fastlegene kvier seg for å bruke Raskere-tilbake programmet, da det innebærer et brudd på prioriteringsforskriften. Når NAV henviser til legespesialister og generer undersøkelser og behandling, mangler det kvalitetssikring, noe som kan føre til feil- eller overbehandling, og dette er ifølge informantene ikke en hensiktsmessig framgangsmåte. Et endringsforslag var at fastlegen burde samarbeide med bedriftshelsetjenesten i henvisningsprosessen.

# Diskusjon

Formålet med denne studien var å avdekke utfordringer og endringsforslag ved dagens behandling og rehabilitering av sykmeldte, slik eksperter på tilbud til sykmeldte erfarer det. I alt ble 23 unike utfordringer og 34 endringsbehov avdekket. Hovedfunnene fra denne studien som diskuteres videre er: [1] pasientene har vært for lenge sykmeldt når de henvises til tilbudene, og opplever å bli feildiagnostisert, sykeliggjort og medikalisert, [2] det er overlapping mellom tilbud til sykmeldte fra NAV og helsetjenesten, så tilbudene må samkjøres bedre og strømlinjeformes, [3] forhold på arbeidsplassen har for lite fokus i tilbudet til sykmeldte, og [4] tilbudene trenger både mer tilgang til forskning for å gjøres forskningsbaserte, og tydeligere dokumentasjonskrav for å vise at tiltakene er effektive.

Denne studien viser at flere aktører mener pasientene har vært for lenge sykmeldt før de blir henvist til et tilbakeføringsprogram. Tidligere studier har vist at økt varighet av sykefravær reduserer sannsynligheten for å komme tilbake i jobb (3, 5-7). Å henvises tidlig og få rask tilgang til et tilbakeføringstilbud vil derfor kunne være viktig for å hindre langtidsfravær (44) samt redusere risiko for aktivitetsdeprivasjon (8, 9). For at dette skal skje, må henvisere både ha kunnskap om hvilke pasienter som er aktuelle for tilbakeføringsprogram, og kjennskap til tilbudet som finnes. I denne studien kom det også fram synspunkter på at pasientene i et ukjent omfang blir feildiagnostisert, sykeliggjort og medikalisert. Feildiagnostiseringen handlet om at fastlegen gjennom organiseringen av sykelønnsordningen settes i en situasjon hvor han må gi diagnose på feil grunnlag for at pasienten skal ha krav på sykepenger, noe som opplevdes som problematisk. Dette er en problemstilling som også tidligere er avdekket og omtalt (57, 58). Behandlerne og tilbudene kan derved søke å løse et psykisk problem som ikke er der, mens det reelle problemet (for eksempel en arbeidskonflikt), kan forbli uløst.

Denne studien viser videre at det finnes en oppfatning om at sykmeldte står i fare for å bli overbehandlet, og at tilbud overlapper hverandre. Overlapping mellom spesialisthelsetjenestens og NAVs tilbud til sykmeldte er også tidligere avdekket (48). Våre informanter formidler faren ved at NAV også genererer spesialistundersøkelser parallelt med fastlegens henvisninger. For gruppen med uspesifikke muskel- og skjelettplager anbefales det i internasjonal forskning en normalisering og ufarliggjøring av plagene for å redusere sykdomsfrykt, gjennom tiltak der spesialister med høy kompetanse forsikrer dem om at plagene ikke er farlige, og at det er bra å gjenoppta normal aktivitet (3, 26, 27). I et slikt perspektiv vil overlapping av tilbud og overbehandling kunne føre til økt fravær framfor tilbakeføring, da eksempelvis behandlingen i seg selv holder pasienten utenfor arbeidslivet. Særlig vil dette gjelde dersom arbeid ikke ses på som en del av behandlingen, som er vanlig i en biomedisinsk tilnærming (44). Tar man derimot utgangspunkt i et biopsykososialt og systemisk perspektiv (44), vil arbeid ses som en del av behandlingen. Aktivitet som en del av behandling og bedringsprosesser er sentralt i ergoterapi (9), og sammen med fokuset på omgivelser, kan et aktivitetsperspektiv utfylle tradisjonell arbeidsrehabilitering (46). Kompetanse om hvilke tiltak som har vist effekt for hvilke pasienter, og hvilken helhet tilbakeføringen inngår i, er derfor essensielt. Denne kompetansen må både være tilgjengelig og benyttes i tilbakeføringsprogram, samt i henvisning til

disse. Arbeid er en viktig livsarena, og de fleste, med eller uten et helseproblem, vil ønske å arbeide hvis mulig (8).

Å forebygge uførhet krever at arbeidsplassen involveres i rehabiliteringen (16, 31, 42), og ekspertene i denne studien mener at det er for lite samarbeid med arbeidsplassen i dag. I et aktivitetsvitenskapelig perspektiv vil vi også løfte at arbeidsrehabilitering må inkludere fokus på både arbeidstaker, (arbeids-) miljø og selve arbeidet (59). I denne studien kommer det fram at en slik involvering av arbeidsplassen burde være et krav fra den nasjonale organiseringen til de som skal drive tilbud (41, 44). Videre har samarbeid mellom aktørene innen helse, NAV og arbeidsplassen vist seg å ha betydning for hvor raskt sykmeldte kommer tilbake i arbeid (21, 22, 30). Denne studien viser at samhandlingsutfordringene på tvers av sektorer og nivåer i hjelpeapparatet innen dette feltet erfares som betydelige, noe som også tidligere er avdekket (18, 24, 60). En bedret samhandling innen spesialisthelsetjenesten mellom ulike spesialiteter ble nevnt som et resultat av implementeringen av Raskere tilbake-programmet. Likevel er det fortsatt utfordringer knyttet til samhandling på tvers og mellom ulike aktører.

Et annet forhold som i tidligere forskning har vist seg å bety mye for tilbakeføringshastigheten, er at helsekompetanse blir overført til arbeidsplassen (13, 14), noe som i dag synes å skje i varierende grad (48). Videre må helsetjenesten også sette seg inn i og ta hensyn til krav på arbeidsplassen ved behandling og rehabilitering av sykmeldte (61). Shaw og Polatajko (2002) påpeker også at både miljømessige forhold og aktivitetsperspektiver er for lite vektlagt i tilbakeføringsprosesser (59). I denne studien opplevde man nettopp at implementering av tiltaksprogrammet Raskere tilbake hadde ført til nytenkning i spesialisthelsetjenesten, og medført et økt fokus på pasientens arbeidssituasjon. Programmer som aktivt involverer arbeidsplassen som en del av et integrert tiltaksprogram, viser god effekt på tilbakeføring (3, 13, 19).

Det ble i intervjuet hevdet at det er behov for et skifte i tilbudenes fokus, slik at man tilrettelegger for deltakelse i arbeidslivet på tross av helseplager. Dette er et syn som støttes i litteraturen som beskriver den internasjonale utviklingen innen dette området (23, 31, 44), og som vi finner igjen innen aktivitetsvitenskapelig tenkning (8, 9). Imidlertid kan det i denne studien synes som dette skiftet ikke er fullstendig implementert i helsetjenesten. En

tidligere studie (30) avdekket at tiltaksprogram for tilbakeføring i dag er fundamentert i et biopsykososialt og økologisk perspektiv, mens helsearbeidere fortsatt tenker biomedisinsk. Med andre ord: Tiltakene fokuserer fortsatt på behandling før arbeid, framfor aktiv deltakelse i arbeid som en del av veien mot bedring. Disse ulike perspektivene kan hindre vellykket implementering av tilbakeføringsprogram (30), da målene til sentrale aktører til en viss grad kan være konkurrerende eller motstridende (24, 32-34, 60). Dette må adresseres. For å fremme mulighet for deltakelse i arbeidslivet må det skapes en kontekst der arbeidstakere med helseproblemer får muligheter til å ha kontroll og ta egne valg, noe som innebærer at miljømessige faktorer også inkluderes (8, 46). I tillegg må de som driver tilbudene ha kompetanse om hva som er effektive tiltakskomponenter, og spisse tilbudene i forhold til mottakerne slik at de i større grad blir smalere og mer strømlinjeformet, slik denne studien viser at det er behov for. Fokuset på et inkluderende arbeidsliv, som vi har sett hos arbeidsplassaktører, foreslås i denne studien også å bli systematisk implementert i helsetjenesten.

# Metodediskusjon

Denne studien har noen svakheter. Ideelt sett hadde vi ønsket å gjøre flere gruppeintervjuer, med færre og mer homogene deltakergrupper, slik det ofte anbefales for gruppeintervju (56). Dette var ikke mulig innen prosjektets rammer. For å øke relevansen rekrutterte vi derfor et heterogent utvalg med informanter bestående av ulike aktører og fra ulike tjenestetilbud, med geografisk spredning (62). Til tross for denne svakheten har vi i ettertid kunne se at dataene fra intervjuet ble et rikt materiale med svært mange meningsbærende enheter.

Selv om vi tilstrebet en jevn fordeling av ulike aktører, var det flere fra helsetjenesten enn fra NAV som takket ja til å delta, og dette kan ha påvirket hvilke meninger som kom fram under gruppeintervjuet. Både ved at representantene var flere og til sammen fikk mer taletid, og i form av ulike eller motstridende meninger som det kunne være vanskelig å hevde i en slik setting. Denne utfordringen ble forsøkt imøtegått gjennom også å ha en skriftlig datainnsamling før gruppeintervjuet (se Tabell 2 for oversikt over resultater fra de ulike datakildene), samt regulering av taletid under selve intervjuet.

Videre ønsket vi å rekruttere sykmeldte for å sikre at meningene til brukerne av tilbud til sykmeldte kom fram, men mislyktes i dette forsøket. Dette er en svakhet ved studien. Representanter fra brukerorganisasjoner ble derfor invitert og deltok i studien.

Selv om å bidra med egne erfaringer i denne settingen ikke skulle få noen negative konsekvenser for informantene (56), er tjenesteytere avhengige av hvordan ressursene fordeles, enten som levebrød og/eller i forhold til å ønske det beste for pasientene (62). Det var viktig at presentasjonen av resultatene ble anonymisert ved at vi ikke knyttet sitater til beskrivelser av hvilken rolle hver enkelt ivaretok, siden det var få som representerte hver rolle. I runde II, som var en kvantitativ spørreundersøkelse med mange respondenter, var det derimot viktig å få fram hvor utbredte oppfatningene som kommer fram i første runde av delphi-studien, er i ulike grupper med ulike roller knyttet til oppfølging av sykmeldte.

# IMPLIKASJONER FOR PRAKSIS OG FORSKNING

Denne studien har først og fremst hatt som formål å generere hypoteser om hvilke problemstillinger og endringsbehov som erfares blant eksperter på oppfølging av sykmeldte. En rekke temaer ble tatt opp av informantene, og det er et behov for å forske videre på disse for å se i hvilken grad de uttrykker sentrale, utbredte og anerkjente problemstillinger, eller kun er uttrykk for enkeltstående oppfatninger om oppføling av sykmeldte. Temaene kan også tjene en funksjon for å skape en åpen og kritisk debatt i praksis og politikk om oppfølging av sykmeldte. Dette er sentralt i samfunnet generelt, men også fra et aktivitets- og deltakelsesperspektiv innen ergoterapi. Det erfares et stort behov for en slik åpen debatt. Dette er spesielt påtrengende etter noen års utvikling av et bredere spekter av tilbud til sykmeldte enn hva vi tidligere har hatt i Norge.

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Nasjonal organisering	Mottakerne	Kompetanse	Programmenes fo
Problemstillinger	Problemstillinger	Problemstillinger	Problemstillinger
<ul> <li>* Organisering av tilbudene som prosjekter er problematisk, spesielt for de ansatte.</li> <li>* Det finnes betydelig overlapping mellom tilbudene, med parallelle tilbud i helseforetak og NAV, og NAVs behandlingstilbud er proble- matisk.</li> <li>* Sykmeldte står i fare for å bli overbehandlet.</li> <li>* Raskere tilbake-programmet er ustabilt og ustrukturert, og man- gler tydelig mål og kontinuitet.</li> </ul>	* At ikke reell grunn for syke- fraværet beskrives, skaper feil fokus i tilbudene. * Pasientene har vært for lenge sykmeldt når de henvises til et tilbud.	<ul> <li>* Det er relasjonen en utvikler, som er viktigst i tilbudene, ikke profe- sjonen som utfører tiltak.</li> <li>* Det er uenighet om hvorvidt Ras- kere tilbake-programmet har effekt på sykefraværet.</li> <li>* Kostnadseffektivitetsmålinger av tilbudene savnes.</li> <li>* Raskere tilbake-programmet er for lite kjent.</li> </ul>	* Tilbudet til sykmel av diagnose og sym handling og medika * Tilbudet i dag er fo jobb på tross av hels * Tilbudet i dag er fo lig og samtidig. * Tilbudene i dag er vidrettede og skrede
Endringsforslag	Endringsforslag	Endrin gsforslag	Endringsforslag
<ul> <li>* Antallet tiltak og tilbud bør reduseres, og tilbudene i helsetjenesten bør bli smalere og mer strømlinjeformet.</li> <li>* Mer av tilbudet til sykmeldte må ivaretas lokalt av primærhelsetjenesten, arbeidsplass og NAV.</li> <li>* Lag en enkel førstelinjeløsning for alle sykmeldte gjennom kommunale/interkommunale Raskere tilbake-sentra.</li> <li>* Raskere tilbake-programmet må fortsette og ikke legges ned, da det har generert mye positivt.</li> <li>* Det utvikles et Raskere tilbake-program felles for NAV og helsetjenesten med fokus på samarbeidet mellom de to.</li> <li>* Tilbudene i NAV bør fases ut, og Raskere tilbake-programmet videreføres kun i helsetjenesten som ordinære tilbud.</li> <li>* Det må utvikles tydeligere krav til de som skal motta penger for å drive tilbud.</li> <li>* Raskere tilbake</li> </ul>	<ul> <li>* Sykmeldte må prioriteres, og dette må formaliseres gjennom prioriteringsforskriften.</li> <li>* Legen bør kunne sykmelde for reell årsak og ikke kalle f.eks. arbeidskonflikter for "lettere psykiske lidelser".</li> <li>* Arbeidsplassen må overta mer av sykmeldingsansvaret i form av utvidet egenmelding og tet- tere oppfølging av arbeidsgiver.</li> <li>* Raskere tilbake-programmet må utvides til også å gjelde kreftsyke som er på arbeidsav- klaringspenger.</li> <li>* Det må fokuseres på de med de enkle forløpene, som trenger å forkorte ventetiden til medi- sinsk utreding og behandling/ kirurgi.</li> <li>* Tilbudene må fokusere på de med uspesifikke helseplager, de med muskel- og skjelettplager og lettere psykiske lidelser.</li> <li>* De som bør få tilbud, er de som er identifisert som risikogrupper i forskningslitteraturen.</li> </ul>	<ul> <li>* Kompetansen om inkluderende arbeidsliv må nå spres blant fag- folk, ikke bare på arbeidsplassene.</li> <li>* Kompetansen som bedriftshelse- tjenesten har, må involveres mer i Raskere tilbake-programmet.</li> <li>* Alle sykmeldte bør være ferdig tverrfaglig utredet i løpet av fire uker.</li> <li>* Brukerkompetanse må oftere tas med i planlegging og styring av tilbudene.</li> <li>* Det er behov for å drive med mer utveksling av kompetanse og kunnskap mellom tiltakene og leverandørene.</li> <li>* Kun tilbud som er dokumentert effektive gjennom forskning, bør få fortsette.</li> <li>* Fastlegen har kompetanse til å behandle lettere angst og depre- sjon effektivt, og bør derfor gjøre dette.</li> <li>* Raskere tilbake-programmet må gjøres mer kjent blant ulike grupper.</li> <li>* Tilbudene har behov for evidens om hva studier har vist er effektivt for tilbakeføring.</li> <li>* Forskningsbasert kunnskap om hvem som er risikogrupper for langtidsfravær og uførhet må bru- kes mer aktivt.</li> </ul>	* Det kreves et skifte meldte skal være ut

Appendix: Resultater tematisk ordnet med problemstillinger og endringsforslag

okus og tilnærmingsmåte	Koordinering og samhandling	Varighet av program	Henvisning til tilbud	
	Problemstillinger		Problemstillinger	
dte er i dag er for preget ptomtekning, symptombe- lisering. or lite rettet mot å være på seplager. or fragmentert og lite helhet- for lite brukerrettede, indi- dersydde.	<ul> <li>* Samhandlingen mellom helsetjenesten og NAV er ofte basert på tilfeldigheter og bekjentskap.</li> <li>* Raskere tilbake-programmet har gitt mer samordnende tjenester på tvers av tradisjonelle inndelinger, så det er viktig at dette ikke reverseres.</li> <li>* Det oppleves at det stadig tar lengre tid å få iverksatt et tiltak fra NAV.</li> <li>* Det er problematisk at en instans gjør arbeidsevnevurdering, og en annen forvaltningsgruppe skal følge det opp.</li> </ul>		<ul> <li>* NAV-tiltaket avklaring brukes for lite.</li> <li>* Fastlegen mangler kunnskap om tilbud til sykmeldte.</li> <li>* Prosjektorganiseringen av tilbud i helseforetakene reduserer tiltroen og motivasjonen hos fastlegen, fordi de forventes å forsvinne raskt igjen.</li> <li>* Fastlegene kvier seg for å bruke Raskere tilbake-tilbudene, da det innebærer et brudd på prioriteringsforskriften, som ikke tillater en prioritering av sykmeldte.</li> <li>* Det er ikke hensiktsmessig når NAV henviser til spesialister og generer undersøkelser og behandling.</li> </ul>	
	Endringsforslag	Endringsforslag	Endringsforslag	
e i hvordan tilbudet til syk- formet.	* Det bør stilles krav til at alle ak- tører skal samhandle med arbeids- plassen når tiltakene iverksettes for den enkelte sykmeldte (inkludert bedriftshelsetjenesten). * Det må utvikles modeller for tettere samarbeid mellom helsetje- nesten og NAV. * Det bør utvikles poliklinikker som utreder sykmeldte. * Hver enkelt sykmeldt bør få en lokal koordinator.	* Igangsatte tilbud må vare lengre enn i dag, og minst 2-3 år. * De beste tilbudene bør gjøres om til permanente tilbud (ut fra dokumenterte resultater). * Tilbudene bør følge IA- avtalens varighet.	* Fastlegen bør samarbeide med bedriftshelsetjenesten i henvisningsprosessen.	

# Paper IV

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# Maximizing work integration in job placement of individuals facing mental health problems: Supervisor experiences

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#### Abstract.

**BACKGROUND:** Many people confronting mental health problems are excluded from participation in paid work. Supervisor engagement is essential for successful job placement.

**OBJECTIVE:** To elicit supervisor perspectives on the challenges involved in fostering integration to support individuals with mental health problems (trainees) in their job placement at ordinary companies.

**METHODS:** Explorative, qualitative designed study with a phenomenological approach, based on semi-structured interviews with 15 supervisors involved in job placements for a total of 105 trainees (mean 7, min-max. 1–30, SD 8). Data were analysed using qualitative content analysis.

**RESULTS:** Superviors experience two interrelated dilemmas concerning knowledge of the trainee and degree of preferential treatment. Challenges to obtaining successful integration were; *motivational*: 1) Supervisors previous experience with trainees encourages future engagement, 2) Developing a realistic picture of the situation, and 3) Disclosure and knowledge of mental health problems, and *continuity challenges*: 4) Sustaining trainee cooperation throughout the placement process, 5) Building and maintaining a good relationship between supervisor and trainee, and 6) Ensuring continuous cooperation with the social security system and other stakeholders.

**CONCLUSIONS:** Supervisors experience relational dilemmas regarding pre-judgment, privacy and equality. Job placement seem to be maximized when the stakeholders are motivated and recognize that cooperation must be a continuous process.

Keywords: Work disability prevention, supported employment, sick leave, vocational rehabilitation, return to work

### 1. Background

Participation in work of people confronting mental health problems has been referred to as "balancing on skates on the icy surface of work" [1]. Roughly, 70–80 percent of individuals with severe mental health problems do not participate in ordinary working life [2–4]. Still, most people living with mental health challenges are engaged in work-like activities in sheltered environments such as sheltered workshops or pre-vocational training, without receiving an real wage [5–7]. Participating in work activities is thought to be financially, socially and medically beneficial for people facing

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mental health problems [8–13]. Research has revealed that when the goal is to involve individuals with severe mental health problems in paid work activities, integrated approaches at an ordinary workplace are more effective than sheltered work [14–18]. Meeting every-day demands and expectations in the open labor market is regarded as an important element in their recovery process [1, 19–22]. However, stakeholders have observed that pressure for early placement can result in a failure to match an individual with an appropriate job [23], and fully explore possibilities for work development [23].

Supervisors generally have major concerns about employing people with mental health problems [24–26], but prior experience seems to be an important factor in determining supervisors attitudes towards such employment [27]. Deepening their knowledge of mental health challenges has been found to be an effective strategy for winning supervisors cooperation [25, 28]. When employees facing mental health problems are asked about their work environment, they generally report positive experiences of supervisors and co-workers in the social network [29].

The standard work rehabilitation approach for those with mental health issues has evolved from the "train then place" model of the 1970s to today's "place then train" paradigm, based on early placement in a competitive job [30–35]. Depending on whether the trainee has a job history; job placement may take the form of job-entry or a return-to-work approach, either of which would involve occupational habilitation or rehabilitation processes [36].

Traineeship in regular companies is an employment scheme provided by The Norwegian Labour and Welfare Administration (NAV) for those who need to test their employability, gain work experience, and thereby enhance their ability to participate in ordinary working life or return to work [37]. The trainee receives work training as part of a job placement in a company, and has to develop a training plan with her or his immediate supervisor. This plan includes goals and work tasks the trainee is required to follow through with. The supervisor has to provide a contact person who will be primarily responsible for following up, such as planning of work tasks, with the trainee.

A number of studies have concluded that the success of the "place then train" approach with individuals experiencing mental health issues would be enhanced by more communication among the core stakeholders: trainees (employees), supervisors (employers), the social security system representative, and health

personnel [38-40]. Supervisors can play an important role in strengthening the social networks of individuals facing mental health problems, according to users and work-coaches [29]. Studies from the supervisors' perspective reveal that they regard themselves as key players in the rehabilitation process of workers on disability. They are open to facilitating the return-to-work process, but feel that both their perspective and workplace constraints, such as possible accommodations, should be taken into account while planning the integration of a worker experiencing mental health problems [41, 42]. One study found that the supervisors versus the employees on sick leave valued different leadership qualities (as contact-making, and problem-solving abilities) in the return-to-work process [43, 44]. This supports the premise that the supervisors' point of view and voice should be seen as both distinct and crucial for understanding and facilitating job placements and return to work.

Rehabilitation is often described and studied from a health care provider or health service organizational perspective, with the providers or the individuals experiencing mental health problems as the chosen study sample [45-47]. Further research on challenges in working life and businesses' perspectives could make a significant contribution to our knowledge of the issues involved and effective ways of dealing with participation for those facing mental health challenges [46–48]. Even though some studies have investigated the role of supervisors in the return-to-work process [29, 38, 39, 41, 42, 44], little research has been done which elicits supervisor perspectives on ways to promote successful job placement for employees with mental health problems. As supervisors are the ones organizing the job and working close with those experiencing mental health challenges when in job placement, their role in facilitating the placement process is important. To be aware of their perspectives and include their experiences may therefore be crucial for maximizing the success of job placements.

The person, the job and the work environment are all important factors to consider in order to facilitating job placements with those experiencing mental health issues [21]. In this study an underlying occupational perspective will be held, with the focus of transition into work activities [49]. Cooperation among stakeholders is key requirement in the job placement process [50] and crucial to a successful return-to-work process [39, 40]. Even so, what maximizes work integration is poorly understood. In an effort to help close that knowledge gap, the purpose of this study was to elicit supervisors' perspectives on the challenges involved in fostering work integration to support individuals facing mental health problems who are on job placements in ordinary companies.

# 2. Methods

To elicit the supervisor's perspective on the challenges involved in job placement for people with mental health problems, we applied an explorative, qualitative design [51] with a phenomenological approach in a broad sence [52]. This allowed for exploration of the supervisors' perspectives and experiences with a low level of interpretation and without disruption from theory or researchers' presuppositions [52, 53]. Since in Norway, job placements are offered the trainee through NAV (The Norwegian Labour and Welfare Administration), the focus on supervisors' experience with cooperation with NAV was of importance.

The study was approved by Norwegian Social Science Data Services (NSD). We obtained written informed consent from all of the informants.

# 2.1. Informants

Informats were recruited through a county office of The Norwegian Labour and Welfare Administration (NAV). First, the companies that have provided job placements for at least three persons were identified. Then the companies were contacted through their manager to recruit a group of supervisors (n = 15) that would give us a heterogeneous sample: men and women of varying ages located in both the private and the public work place sector and in various types of companies, with a variety of experiences as supervisors and with trainees. Inclusion criteria for supervisors were: (I) had direct contact with trainees facing mental health problems through job placements and (II) in direct coordination with the county NAV office. An initial letter of invitation approved by NSD was used to recruit informants [52, 54]. To increase validity by offering knowledge of the study sample [55] data were collected about the number of actual trainee(s), the workplace and the informant's role there (see Table 1).

The informants were from both the public (n=5)and private (n=10) work sectors. Some informants had a higher education (n=5); other informants had completed either lower secondary school or high school (n=10). The study's sample contained some informants who had similar titles: manager (n=4), department manager (n=4), head of company (n=3). The informant group also included a deputy chairman, a maintenance supervisor, a personnel manager and a coordinator. As a group, they averaged 10 years of experience at their workplace (min-max. 0.5-44 yrs., SD 11.6 yrs.), and had been in contact with a mean of seven trainees in placement (min-max. 1-30, SD 8).

# 2.2. Data collection

The interviews took place at the supervisors' workplace in the period between December 2012 and February 2013. Each lasted between one and two hours, depending on the amount of time the supervisors could spare and how much they wished to say to the interviewer. Three researchers conducted the interviews (n=2 (ER), 5 (LL)) and 8 (LSS)). We developed a

Table 1
Characteristics of the interviewed supervisors $(n = 15)$

Supervisor (S)*	Gender	Age	Experience with job placement (n)	Public/private	Type of company
I	Male	41-50	3	Public	Public government
II	Female	50+	Many	Public	Public government
III	Female	41-50	1	Public	School
IV	Male	31-40	9	Private	Sales
V	Male	31-40	6	Private	Sales
VI	Male	41-50	Many	Private	Industry
VII	Male	31-40	4	Private	Food service
VIII	Female	21-30	4	Private	Hotel services
IX	Male	31-40	2	Public	Janitorial services
Х	Male	50+	3	Public	Health care
XI	Male	50+	20	Private	Industry
XII	Male	50+	30	Private	Health care
XIII	Male	50+	8	Private	Transport
XIV	Female	50+	1	Private	Industry
XV	Male	50+	8	Private	Industry

Note: \*The abbreviation indicating quotations from the supervisors in Results section.

semi-structured interview guide that we used as a framework for the interviews [51]. Based on what Kvale and Brinkmann (2009) describe as short story narratives we started with the initial question: "So, can you tell me about your experience with people with mental health problems in job placements? Tell me about the events and experiences you think were important". We continued with asking open-ended questions concerning the challenges the supervisor had experienced, in concrete job placement(s) by inviting to tell more; "You told me about the first meeting you have with the trainee together with the contact person from NAV. Could you tell me some more of what happens before that meeting?". The semi-structured guide gave opportunity to formulate individual follow-up questions, for instance to encourage the supervisors to verify earlier statements; "So, the contact between you and the trainee is established at first when the trainee comes to the workplace?". To ensure consistence with the study purpose and common approach to interviews, the framework of the interviews was thoroughly discussed by researchers [56]. Within this broad framework, the informants were encouraged to speak as freely as possible to ensure their perspective came forth [51, 53]. The interviews were recorded and subsequently transcribed verbatim.

# 2.3. Analysis

We analyzed the interviews using qualitative content analysis [56, 57]. This analysis is used when the existing theory or research literature on a phenomenon is limited or when the knowledge is fragmented [57, 58]. Hsieh and Shannon (2005, p. 1278) define qualitative content analysis as a "research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns". The advantages of using content analysis in present study is that the analysis is content-sensitive, it can be used to identify critical processes, and it is concerned with intentions and context [58].

In this study we used inductive, or conventional [57] content analysis i.e. we derived categories from the data [59]. The process of developing data-driven codes, or "meaningful labels" [59], was a circular process of going from raw data to code development to coding [59]. We continuously were altering between individual work and discussions in the author group. The inductive process used in this study included four steps.

In the first step we used open coding [58]. Three researchers (ER, LL and LSS) read transcriptions of all the interviews to achieve immersion and obtain general impressions independently [57]. To be able to illuminate the general impressions in light of the final step-by step analysis, individually preliminary ideas were combined in a short summary for each interview. By altering between full-text transcriptions and coding, the internal validity were strengthened [56]. The transcripts of four interviews was read through again individually by the researchers (two interviews each), and notes and headings where written in the text while reading it to describe all aspects of the content [57, 58].

In the second step the three researchers (ER, LL and LSS) came together to discuss their preliminary codes. We coded individually and together to synchronize our orientation to the process, and to discuss examples and non-examples of the codes [59]. Furthermore, all three researchers coded five interviews each with the codes decided on using NVivo software program having easy access to each other's codes and notes in the further process by sharing the file. New codes were added twice when the researchers encountered data that did not fit into an existing code.

In the third step, once all transcripts were coded, the researchers (ER, LL and LSS) examined and condensed all data (from five transcripts each) within a particular code. Some codes were then combined whereas others split into subcategories [57].

In the fourth step all codes (from 15 interviews) where then collected and categories were generated. The researchers (ER, LL and LSS) worked together linking matching codes to form named categories. This process may be illustrated by an example where initial codes as "Knowledge of trainee in advance", "Disclosure of problems to supervisor" and "Disclosure in the co-worker community" led to the category "Disclosure and knowledge of the problems". The researchers discussed both consensus and minority reflections discerned in the material [51]. Likewise the short summery of each interview was examined to search for unfinished business, as well as to ensure internal validity [56]. By taking this meta-perspective on the data, overall latent themes emerged [56]. The number of categories was reduced by collapsing those that were similar or dissimilar into broad higher order categories [57, 58]. At this point, the fourth researcher (RWA) contributed with comments, including suggestions for changes in the names for the main categories to respond more directly to the study purpose, to clarify the extent to which they expressed the same phenomena, and make

categories' meaning accessible to readers. Researchers (ER, LL, LSS and RWA) agreed through discussion on the final selection and grouping of items by focus on study purpose [54]. In the results, the responses of the supervisors are described using the final hierarchical structure of categories.

# 3. Results

In the analysis two interrelated dilemmas were identified: 1) out of concern that they might pre-judge them, supervisors seemed ambivalent about how much they wanted to know about the trainees beforehand. 2) The supervisors seemed ambivalent about whether or not they should treat everybody equally or give preferential treatment to the trainees' (see Table 2).

The dilemmas could be viewed as manifestations of the dual nature of the supervisors' perspective: On the one hand, they have a "resource orientation," – a desire to give every trainee a new chance, believing that not knowing as much about the mental health challenge will help them to treat her or him like anybody else. On the other hand, they also have a "problem orientation" that motivates them to learn about trainees' mental health problems so they can grasp potential current or future needs and thus accommodate those needs in assigning tasks.

Furthermore, we identified six challenges involved in fostering work integration to support individuals facing mental health problems who are on job placements in ordinary companies. The six challenges were divided into two categories based on their main focus; *motivational challenges* and *continuing challenges* (see Table 3).

The next section will elaborate on these two dilemmas interwoven in the challenges concerning the supervisors' efforts to find the proper balance between equal treatment and accommodation.

Table 2 Interrelated dilemmas for the supervisors

interretated diferinings for the supervisors				
	The supervisors' resource orientation	The supervisors' problem orientation		
Dilemma I	Fear of pre-judging if knows too much about trainee's mental health problems	Desire to learn and know more about the trainee's mental health problems		
Dilemma II	Desire to treat the trainee the same as everybody else	Desire to grasp the special needs of the trainee and accommodate them		

Table 3 Principal results: the six challenges for maximizing work integration

#	Challenges
1	Supervisors previous experience with trainees encourages future engagement
2	Developing a realistic picture of the situation
3	Disclosure and knowledge of mental health problems
4	Sustaining trainee cooperation throughout the placement process
5	Building and maintaining a good relationship between supervisor and trainee
6	Ensuring continuous cooperation with the social security system and other stakeholders
	1 2 3 4 5

Note: Trainee = someone facing mental health problems who is on a job placement.

#### 3.1. Motivational challenges

Challenge I: Supervisors previous experience with trainees encourages future engagement. The analysis revealed that job placements depend on the individual supervisor's personal interest in having trainees. The initial contact for the job placement was established at a personal level, by either someone at the social security office who needed a job placement site or a supervisor who needed a worker. The data reveals that supervisors who have had previous experience with trainees were motivated to receive more, and were engaged in job placements. Supervisors offered several reasons why they felt they wanted to continue receiving more trainees: "I feel privileged to be able to work with people," one informant declared, "and I feel privileged when people open up to me" (S XIII). "It's better than I expected," another informant commented. "It's a lot of work, but it's incredibly gratifying to see them succeed... handle the job and participate. That gives me something, being able to see us achieve something; have the opportunity to be involved in it" (S VII).

Challenge II: Developing a realistic picture of the situation. All informants emphasized the significance of meeting with the potential trainee together with the social security system contact person prior to entering into a contract. One supervisor elaborated on the valuable information this provided:

It's very important to have a full, honest dialogue ahead of time with the contact person who wants to place trainees, and that we receive a clear sense of what the challenges are and what kinds of accommodations are necessary. It's a problem when the contact people from the social security system don't have the same impression or assessment of the trainees that we do [after working with them]. They tend to think they can sell us on taking these trainees more easily if they minimize the problems (S XV).

Although this supervisor would have preferred more candid pre-placement appraisals of trainees, as another supervisor noted, "There are many challenges that we can't anticipate before the trainee starts work" (S VI).

Data showed trainees also need a realistic picture of the workplace they will be going to. The supervisors emphasize that the social security system has a responsibility to know the workplace well and offer the right environment to the right person. Supervisors also made it clear that the most important determinant of success in job placements was the trainee's motivation for the job. For the supervisors, this meant the trainees had not been pressured into work by the social security system or anyone else. Furthermore, that the trainees had received a clear picture of the job, so they could decide if the work was what they wanted to do. In the words of one informant, "They need to want it for themselves. The contact person should not tell someone what he or she is going to like. We shouldn't force this work on anyone" (S V).

Challenge III: Disclosure and knowledge of mental health problems. Findings show that supervisors would like trainees to provide some degree of disclosure regarding trainees' mental health issue and challenges they may face. Although the supervisors uniformly expressed a desire for information about a prospective trainee, how much they wished to know appeared to vary significantly.

For example, when it came to mental health problems, various diagnoses seemed to evoke different degrees of stigma in the workplace and expectation from supervisors and colleagues; the combination of substance abuse and psychiatry was viewed the most challenging. One informant stated:

Psychological disorders are absolutely the most difficult to work with. Firstly, you cannot see if people are ill. Furthermore, it's [mental health problems] still considered shameful. Because of this, it's difficult to be open about it – though I believe that the more candid you can be about your struggles, the easier it is to get help, and the easier it is for people to think it's okay if you're not functioning at 100 percent (S XV). Another supervisor observed that because mental health problems are not evident; "we don't see any reason to tell others about it" (S V). In general, the supervisors seemed ambivalent as to how much prior information they wanted about a trainee. One reason seemed to stem from a belief that trainees should have a fresh start with clean sheets, and not be pre-judged because of a diagnosis.

Even so, most of the supervisors felt that they were provided with insufficient information before their trainees started work. As one expressed this complaint; "As far as mental health problems are concerned, we have to ask" (S V).

# 3.2. Continuity challenges

Challenge IV: Sustaining trainee cooperation throughout the placement process. The supervisors elaborated the importance of initial assessment and facilitation of work tasks. One of the supervisors specified the questions he asked a new trainee: "Why do you want to be here with us? What do you want us to do? What are you going to achieve by being here?" Explaining the rationale for these questions, the supervisor added, "I think occasionally someone who comes to a job placement has a different set of goals than the social security system does, and it's important for me to know both" (S I).

All of the informants stressed the importance of beginning the placement with a plan formulated by the trainee, the supervisor and the social security system contact person. Many supervisors, however, declared that the trainee's wishes should carry the most weight. Informants stressed the importance of being able to assign trainees tasks with varying degrees of difficulty. Workplaces that lacked opportunities for scaffolding work tasks seemed to experience the most problems. In hotel reception, for example, "... everyone needs to know everything that has to do with reception" (S VIII).

One informant spoke of the importance of accurately assessing trainees' capabilities and interests during the job placement process, while they had the social security system and a network to provide support. The informants also talked about the significance of treating each trainee as an individual. This did not necessarily imply giving them special consideration. One supervisor stated this explicitly: "Each person gets complete follow-up from me, but we don't have anything like special consideration" (S XIII). Another was equally firm to set standards: "They are being treated as regular employees, period. The same requirements are set" (SVIII).

Other informants expressed a significantly different perspective, as "I suppose we have to be somewhat more generous toward the people in job placement" (S I). This apparently wide divergence on the issue of equal versus preferential treatment may be a function of different types of workplace to some extent. However, our analvsis shows that seemingly definitive statements on the issue may conceal a subtle ambivalence that resonates with the dilemma concerning degree of disclousure and knowledge of the mental problems a trainee was dealing with. One informant clearly expressed the delicate balance between equal and preferential treatment: "We try to the best of our ability to treat those in need of facilitation and job placement the same way we treat regular employees. I try to follow up with them in the same way [I do with the rest of the workers], and make the same kinds of demands on them, based on their abilities" (S XV).

Challenge V: Building and maintaining a good relationship between supervisor and trainee. Supervisors spoke of the significance of motivation of trainees and regular contact with trainees. "Then I actually know them," one supervisor explained. "I know the names of the members of their family and what they do in their leisure time, and we maintain an intimate dialog, so they can come to me with everything, both personal and work-related issues" (S VIII). "When crises occur," another stated, "we deal with them straight away, because that keeps on happening, that they struggle and have outbursts, et cetera. So we bring them in for a talk and try to motivate them and calm them down, deal with the difficulties" (S XII). A third informant commented that he was "doing some caretaking - it's like they're my boys, you know" (S XIV). In fact, it became evident that the relationship can become too close. One informant noted the difficulty, as a supervisor, of setting a limit to involvement:

It's actually useful to be clear that there are some things I shouldn't know, I don't need to know everything. Because you can easily be stuck in the trap of over-involvement, and then I think you're not capable of caring for them in a proper way (S IV).

One informant discussing the relationship between the trainee and the colleague guiding her or him emphasized the importance of maintaining daily contact: "If you can establish good chemistry between the trainee and the supervising employee, it builds success" (S X). One supervisor observed that early, close follow-up was particularly important when a trainee experienced mental difficulties: "It's crucial to ask how things are going early on, providing feedback and showing interest in checking up: 'How are things going; is everything working out?' You find out how they're doing.... You can't let 14 days go by without someone approaching them. That won't fly" (S X).

Challenge VI: Ensuring continuous cooperation with the social security system and other stakeholders. All supervisors affirmed that their cooperation with the social security system concerning job placement had worked well and their experiences had been good. The meetings between the workplace supervisor, the trainee and the social security system took place in community, at the workplace. Informants cited that in these meetings they had experienced situations in which the social security system had to help a trainee decrease his or her workload. One supervisor stated that he left responsibility for workload to the contact person in the social security system: "I haven't interfered with that. I'm not familiar with the diagnosis and so on, so it's difficult for me to say when he's ready to work more. They've dealt with that issue" (S IX).

Several informants mentioned they would have liked to see the contact person from the social security system at the workplace more frequently than at meetings convened for agreement extensions, adjustments of demands and other specific issues. Furthermore several claimed the trainee had complained to them of being "abandoned" at the workplace by the social security system: "They simply put the trainee into our hands and were off, and at this place you've got to make an effort yourself if you want a job". (S X). Informants said they want the social security system to be what one expressed as "... more in the picture, longer" (S XII). One, however, related that the social security system had said, "If it doesn't work we need to hear about it, and we will have to have a meeting" (S X). This kind of assurance was not sufficient for other supervisors. "I said in the beginning that they [the social security system] should have followed it up more," one commented, but admitted, "Though when the trainee says things are good and working, how much are you supposed to follow up?" (S VII).

All of the informants emphasized that having a good relationship with the contact person from the social security system was important to them. That is, supervisors wanted to be confident that they could get in touch if necessary with an easily accessible contact person. One supervisor said he would like communication and updates to go both ways: "That the contact person in the social security system will update me on how things are, and [my trainee's] current status, so that we know what is going on" (S IV). Some informants would like to have some follow-up on their own role: ... it's sometimes hard to deal with the tough cases... I have no-one to share this with. Sometimes it would have been nice to talk to somebody... just to know that what you're doing is ok" (S VI).

Most of the supervisors reported that they, the trainee and contact person in the social security system collaborated on the traineeship. Most informants had never collaborated with the health service on a job placement and initially did not want to. When we mentioned the health service, many of our informants responded with negative comments. The supervisors seem to think that the health service has a problem orientation that hinders job entry for people with mental health problems; they want the health service to focus more on the resources that the trainees can draw on. One informant observed that the health service has not been flexible in changing its approach: "They forget that if something isn't working, we have to try something new" (S XV).

One suggested a solution for closer cooperation between stakeholders; meaning workers from the health service could contribute knowledge of mental health problems and provide assistance by way of adapting a trainee's tasks. One supervisor described how this might work: "The provider from mental health services should not simply be an observer, but actively take part in the team. You have to be a full participant. Then I believe we could succeed" (S XIII).

# 4. Discussion

#### 4.1. Substantive discussion

The interpretation of the six challenges and two dilemmaes reveal that successful integration in job placements requires (I) an engaged supervisor providing work activities based primarily on the trainee's motivation; (II) strong, candid relationships that establish a common understanding of the problems and a realistic picture of the work expected; and (III) a recognition by all stakeholders (supervisor, trainee, contact person from the social security system i.e.) that job placement requires a continuous process of mutual cooperation, rather than individual uncoordinated actions by each party involved. These three main findings will be discussed successively. According to Schafft (2013) many people confronting mental health problems express a desire to be challenged, try different activities and develop new skills; to overcome barriers and encounter new things [60]. Recovery theory argues that winning respect and achieving a sense of mastery in community environments such as ordinary work is the most effective pathway to recovery for individuals confronting mental health problems [12]. This approach is evident in our study with supervisors setting standards for trainees and not wanting to provide them with special treatment.

Although the demands of working life activities can lead to growth and development [1, 19–21], work activities and demands can sometimes be overwhelming [61]. It could be argued that a supervisor's resource orientation might prevent her or him from recognizing the extra challenges mental health problems create for trainees. However, the supervisors' view, that personal resources and motivation surpasses mental health issues, is consistent with international studies [10, 62] as well as the National strategic plan for work and mental health – 2007–2012 [63].

Supervisors frequently expressed the opinion that trainee satisfaction with the job match is the most important factor in successful work integration is also evident in previous studies [21, 64]. Motivation develops when something is experienced as meaningful cite. Having meaningful activities in a valued environment, such as the open labor market, is regarded as important to recovery [12, 19, 22]. The supervisors expressed concerns that the social security system or other stakeholders might push someone into a job. The Individual Placement and Support model (IPS) emphasizes that trainees have to want the job themselves [33, 65]. It was evident that the supervisors in the present study respect their trainees, believe in their abilities and capacity, and emphasize the healthy aspects of their work. This positive attitude is central in recovery processes, which depends on confidence that an individual has the abilities and capacity to experience improvement in her or his mental health [66]. Supervisors that are able to adapt to the particular situation can facilitate a trainee's return to work most effectively by providing an appropriate level of support [67, 68].

One challenge evident in the data was that trainees must have a realistic view of both themselves and the work they will be expected to perform within the job placement. The supervisors emphasize on realism is a prerequisite for a successful job placement. Establishing realism may require considerable attention and effort. Supervisors in our study made this clear in their emphasis on the importance of adequate preliminary work. They welcomed an opportunity to clarify what the expectations of each trainee and the social security system were so they could determine if their company and the available tasks matched the trainee's wishes and needs. These findings were consistent with studies that show the importance of ensuring that work demands are appropriate to a trainee's abilities and capacity [21, 68-70]. Ensuring work demands who meet a trainee's current ability is not as simple as it might appear. The supervisors in our study expressed an acute awareness that, although they needed to know a trainee's limitations, they did not wish to know so much that they might find it hard to give the trainee a fresh start. Furthermore, the supervisors noted that they assigned more demanding tasks as trainees developed skills and made progress in their work, and consequently were continuously adjusting and re-balancing their assessments of the trainees' capabilities. The need for continuously and coherent return to work processes is also evident in the literature [40, 47].

Realistic assessments to ensure necessary accommodations and a good job match may require disclosure of mental health issues [6, 21, 71]. However, many people confronting mental health problems are hesitant to discuss these issues at the workplace [72, 73]. The concern of how much to disclose is an ongoing dilemma for the trainee in the work environment, and not resolved at the outset [74]. A combination of substance abuse and psychiatry, for instance, is seen as a particular challenge by the supervisors in our study, a finding consistent with the results in a previous study [27]. In other words, the risk that a supervisor might not want to hire or retain someone with particular mental health challenge might lead a trainee to avoid disclosure. The question of how much ought to be disclosed by a trainee at the onset was a significant issue for our informants, who held widely differing, and in some cases ambivalent, views on what was required. Research shows that there are both advantages and disadvantages to talking openly about mental health problems [22, 75]. Disclosure is not reversible. The decision whether or not to reveal the challenges is the prerogative of the person who confronts them every day [74].

The supervisors are engaged and involved with their trainees, however, feel they bear too much of the responsibility for the trainee compared to the social security contact person. Desire for two types of support was expressed by informants: follow-up with the trainee and follow-up on their own situation vis-à-vis the trainee. It is possible that social security system contact personnel, as public-sector employees, do not have the expertise necessary to provide supervisors with the support they need as some researchers have argued [60]. The supervisors, however, consistently asserted that input from all stakeholders is essential in planning the return-to-work process [41, 42, 76, 77]. Furthermore, they expressed a desire for mutual updates on progress and challenges [38, 39], and regarded the social security system contact person as a coordinator who was supposed to facilitate work participation, as well as deal with mental health problems that could affect work performance. Trainees, according to the supervisors, may not raise such issues on their own [78].

People confronting mental health problems while in a recovery-process environment like a workplace find support from professionals especially helpful [12]. Supervisors in our study stated that their trainees expressed a need for support throughout the process of obtaining and maintaining a job, nevertheless they had been left on their own too soon. Trainees need support at the workplace whether or not they choose to be open about their mental problems [47, 78]. Without follow-up, they felt abandoned as earlier reported by individuals who became disabled at a young age [69].

The few supervisors with cooperation experience with the health care sector on job placements, as well as some supervisors without such, expressed a critical attitude towards the health care system's focus on disease. The health service is cited as a possible bottleneck in work integration efforts also in earlier research [1, 8, 62, 79-81]. However, cooperation between services and support from people competent in mental health at the workplace can be considered an important factor for satisfaction and success with work integration [62, 82]. On the other hand, focus on illness could undermine the workplace emphasis on resources and equality. Kinn, et al. (2013) asserts that health personnel often focus on a patient's disease rather than his or her desire to work [1]. That said, our interviews indicate that supervisors see a need for some degree of "problem orientation" in the workplace. Successful work rehabilitation likely requires knowledge of symptoms and vulnerability, as well as the framework issues and the challenges and strains that supervisors must deal with [83]. Close cooperation among all stakeholders has been shown to be one of the crucial components of success in work rehabilitation [65]. This indicates that closer, continuous cooperation among stakeholders from the social service system, health services and the workplace could contribute to a better balance between the trainees' workplace integration efforts and mental health problems. Coordination across agencies and stakeholders is most effective when the trainee's goals and values shape the process [47, 84]. Supervisors who adhere to this principle have a greater likelihood of enjoying a successful placement.

# 4.2. Methodological limitations

Work integration requires cooperation in a reciprocal process, however, in this study only supervisor's perspective is explored. In accordance with a decision by our research ethics office, Norwegian Social Science Data Services (NSD), we did not ask any questions about specific trainees in placement, and posed person-neutral questions exclusively in our interviews. Furthermore, the severity of the health problems that confronted trainees were not disclosed to their supervisor, nor to the researchers. This may limit the external validity of our results, as it is unclear to what extent the trainees the supervisors have had in job placement is representative for trainees facing mental health issues. Even though we sought diversity in our group of informants, all informants were from one region in Norway, and their experiences may not be representative of those encountered by all supervisors in Norwegian job placements. However, several of the findings in our study are consistent with those reported elsewhere in the literature [1, 8, 33, 38–40, 42, 62, 65, 69, 70, 76, 79-81].

The researchers may have had slightly different approaches reflecting their professional backgrounds and experience. This might have affected the results due to follow-up-questions asked in the interview, and what the researchers sought for in the analysis [51]. On the other hand, multiprofessionalism and various experiences could be considered an asset, particularly since we strived to include a diversity of experiences in the material as long as the presumptions are acknowledged [51, 85]. Furthermore, we discussed methods throughout the study in an effort to achieve a common understanding of the data and ensure its internal validity [51]. The reliability of the study was strengthened by the inclusion of a fourth researcher with extensive experience with content analysis applied to assist in the analysis and the description of results.

#### 5. Conclusion and implications

From the supervisor's perspective, work integration through job placement of persons confronting mental health problems is successful when supervisors are motivated and view cooperation with all stakeholders as a continuous process. Motivation is generated through engagement, realism, disclosure and knowledge of relevant mental health issues. Supervisors experience relational dilemmas with regard to pre-judgment, disclosure and equality. Research has revealed that integration in competitive jobs is an effective antidote to mental health problems and could benefit many more individuals dealing with them. Expanding trainee opportunities for successful job placement will require additional studies that focus on various workplace perspectives.

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