

Evaluation of a model to promote greater coordination between stakeholders during vocational rehabilitation for patients with musculoskeletal disorders or neurasthenia: A qualitative study.

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Abstract

Purpose: In vocational rehabilitation, the employee's own effort is important, and it is also vital for the various professionals involved in the rehabilitation process to have a shared understanding of the process. The degree of consultation and consensus between them plays an important role in enabling the employee to return to work.

The aim of this study was to pilot test and evaluate a model for greater coordination between patients, rehabilitation centres, general practitioners and the Norwegian Labour and Welfare Administration.

Materials and methods: Data was collected by individual interviews with patients and focus group interviews with stakeholders.

Results: The coordination model gave everyone involved a joint reference point and a shared understanding of the goals for the rehabilitation process. The model also led to better coordination between The Norwegian Labour and Welfare Administration and the general practitioners.

Conclusions: The coordination model may increase the likelihood of rehabilitation goals being reached. The patients felt that they were seen and listened to, and were able to help draw up their own goals in consultation with the other parties involved. This gave the patients a greater sense of ownership of the plan. Implementing this kind of model may give general practitioners a better foundation for following up patients when they return home after staying at a rehabilitation centre.

Keywords: Model of care; Coordination of care; Vocational rehabilitation;
Qualitative Research; Focus Groups

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Introduction

Along with mental health issues, musculoskeletal disorders are an important cause of sickness absenteeism in many countries, which in turn generates significant costs [1]. Previous studies have shown varying and in some cases narrow benefits from vocational rehabilitation for these groups [2,3]. A systematic review of 14 Randomized Controlled Trials (RCTs) involving various vocational rehabilitation programmes for sickness absentees was unable to demonstrate a clear benefit in terms of getting people back to work more quickly. Eleven of the studies covered employees with musculoskeletal disorders [4].

Patients with musculoskeletal disorders are not a homogeneous group, and we need a better understanding of what kinds of intervention work for the different sub-groups and in what contexts [5]. In one study where patients with pain in their musculoskeletal system participated in a seven week-long rehabilitation programme involving various types of physical activity combined with counselling, participants who were completely off work had no benefit from the programme. However, part-time absentees and people still working their normal hours experienced improvements both in terms of pain and physical function [6].

It has been argued that during vocational rehabilitation, the employee's own effort is important, and that it is vital for everyone involved in the rehabilitation process to have a shared understanding of the process [7]. A systematic review of studies on vocational rehabilitation for patients with back pain found that consultation and consensus between the affected parties – such

as the employee, employer and company health service – play an important role in enabling the employee to return to work [8]. The individual's motivation for returning to work is important, and it is necessary to listen to what kind of work they see themselves being able to do in the future. They need to consider whether they are able to return to their previous job, or if it is necessary due to their disability to seek alternative employment [9].

Habilitation and rehabilitation are defined as planned processes of a limited duration involving clear goals and interventions, where several professionals work together to provide the necessary support to the user's own efforts in order to maximise the patient's ability to function and cope, remain independent, participate in social activities and contribute to society [10]. The services offered in this area should be coordinated, interdisciplinary and systematic. This requires the various elements of the rehabilitation process to be coordinated and to be based on common goals shared by everyone involved. The user must be very actively involved in the planning, design and implementation of the rehabilitation process[11] . The White Paper on the Norwegian Coordination Reform (Norw.: *Samhandlingsreformen*, 2009), "The right treatment – in the right place at the right time", mentioned specifically that Norwegian healthcare services are too fragmented, as they are insufficiently integrated and lack systems for coordinating the various services needed by the patient [12]. The Research Council of Norway's June 2016 assessment of the Coordination Reform found that four areas particularly needed improvement for the reform to achieve its goals. These were the cooperation agreements between municipalities and health trusts, the role of general practitioners (GPs)

in the reform, the use of digital technology for patient consultations and user involvement [13].

For users to experience a process as seamless and efficient, there must be consensus between the professionals in terms of advice, goals and requirements. The Office of the Auditor General of Norway has emphasised the importance of good cooperation for achieving a holistic rehabilitation process [14]. For patients whose treatment includes staying at a private rehabilitation centre, this means cooperation between disciplines, between the public and private sectors and across levels of treatment both before, during and after their stay. It is also necessary to communicate and cooperate with the Norwegian Labour and Welfare Administration (NAV), as well as the patient's family and employer, where relevant. Cooperation between NAV and the municipalities is an important element of the rehabilitation process [15].

The aim of this study is to pilot test and evaluate a model that systematically increases the dialogue and cooperation between rehabilitation centres, GPs, NAV and patients during the rehabilitation process. Specifically, we wanted to focus on a practice-based method comprising user involvement, at the same time as evaluating video conferencing as a tool for coordination, both in terms of its benefits and users' experience of it.

Methods

Inclusion criteria and methodology

GPs recruited patients requiring interdisciplinary rehabilitation to the project. The patient group was limited to sickness absentees (off work for 3-9 months) with the ICD-10 diagnosis codes M54.5 Lower back pain, M79.1 Myalgia or similar and F48.0 Neurasthenia or similar. Applications for inpatient treatment were sent to the regional assessment body in the local region. Patients considered entitled to, or in need of, rehabilitation, were offered inpatient treatment at the Red Cross Haugland Rehabilitation Centre (RCHRC), a private centre under the Western Norway Regional Health Authority.

The patients who participated in the project were offered a three-week stay at the rehabilitation centre. During their stay at the centre, they were given a tailored rehabilitation programme including suitable physical activities, education, group conversations and individual discussions. Cognitive therapy was used where necessary.

The coordination model

A preliminary project was carried out to define an appropriate model for greater coordination between the rehabilitation centre, NAV and the primary healthcare providers [16]. The participants in the preliminary project were GPs from four municipalities, NAV and a consultant and occupational therapist at the RCHRC. In some municipalities, other disciplines such as physiotherapists and occupational therapists were also involved. One of the aims of the preliminary project was to increase participants' understanding of each other's areas of expertise and to integrate the treatment offered by the RCHRC into the

rehabilitation process once the patient returned home in order to make it more effective.

The preliminary project concluded that there was a need for more knowledge sharing between the specialist and municipal healthcare services. There is a need for greater communication between the various professionals involved, both within municipalities and between healthcare levels. Inadequate information flow prevents effective coordination, and a structured system for coordination is needed throughout the process [17]. A coordination model was developed based on the conclusions of the preliminary project.

In order to improve communication between the municipal healthcare service, NAV and the RCHRC during the rehabilitation process, and to put the focus on user involvement, an intervention based on the coordination model was implemented in conjunction with patients staying at the rehabilitation centre (Fig 1). This consisted of three meetings, one before patients started rehabilitation, one during their second week at the RCHRC and one before being discharged. The patient, the GP and the patient's doctor at the rehabilitation centre took part in all of the meetings. A representative of the interdisciplinary team at the RCHRC (coordinator/contact person) and NAV also took part in the third meeting.

Meeting 1 was a preparatory meeting, with the aim of preparing patients for their stay and preparing the rehabilitation centre for the patient. The meeting was held at the GP's surgery, and a doctor representing the interdisciplinary team at the RCHRC participated by phone.

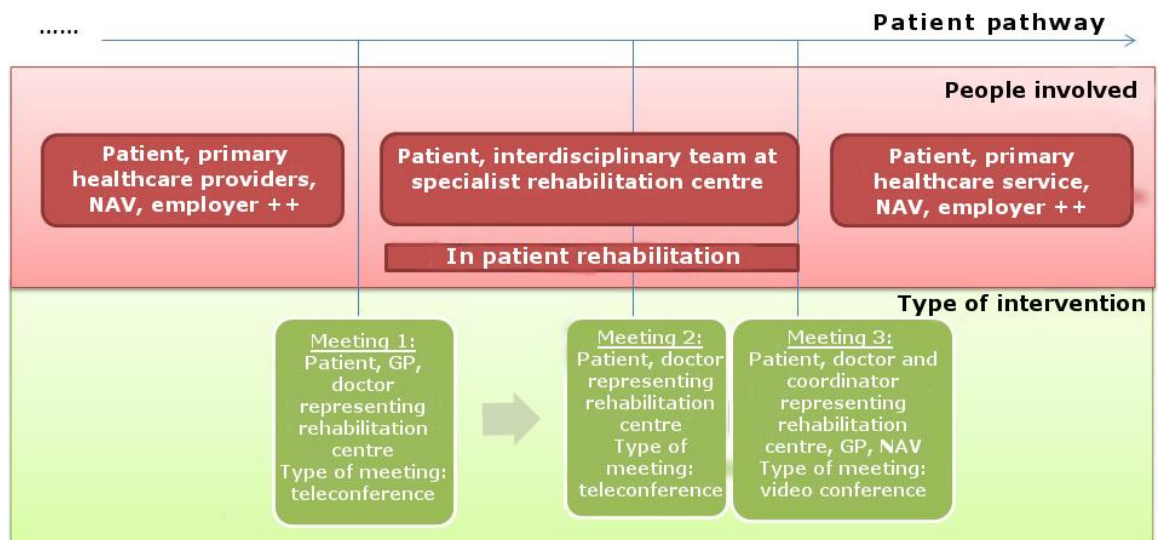


Figure 1. Diagram of the coordination model, setting out the parties and interventions involved.

Meeting 2 was held half way through the inpatient stay, with the GP participating by phone. The aim was to devise a strategy for following up the patient on returning home, with the patient's own goals being given priority.

Meeting 3 was a conversation just before the patient was discharged from the RCHRC, with the GP and NAV participating by video or phone. The rehabilitation centre was represented by the doctor and contact person/coordinator for the stay. The goal was for patients to present their own plans for how they should be followed up. The discussion also covered strategies to ensure that the suggested measures/plan of action would help the patient to return to work. Then a final report was drawn up for NAV, the GP and if relevant, for the employer.

Evaluation

To evaluate the coordination model, we chose a qualitative approach to obtain knowledge about the participants experiences with the model. We

wanted to gather information from different perspectives, both from the patients, the GPs, NAV and the rehabilitation centre. For this purpose, a qualitative design is more suitable than a quantitative approach, because it enables us to obtain in-depth understanding of the participants' experiences with the model [18,19]. The coordination model was evaluated through individual interviews with patients, as well as through focus group interviews with GPs, staff at NAV and staff at the RCHRC.

The interviews with the patients were carried out at the RCHRC. Eight patients were included and interviewed. Five of these interviews (two with females and three with males), which were conducted by the researchers involved in the project (LK and ASBW), were transcribed and are included in this study (Table 1 A).

Table 1 A Included patients

Identifier	Patients	Gender
P1	Patient 1	Female
P2	Patient 2	Male
P3	Patient 3	Male
P4	Patient 4	Male
P5	Patient 5	Female

The final three interviews were not conducted by the researchers. Instead, they were conducted by the coordinator of the project, who had some contact with the patients during their inpatient treatment, and it was therefore decided that these interviews should not be included in the analysis. The aim of the interviews was to discover the patients' own experience of the coordination model, including their views on the three meetings and the coordination between the various bodies involved.

Two focus group interviews were held, both of them were carried out at one of the NAV offices in Western Norway. One of the focus groups consisted of two GPs and two NAV employees, as well as one doctor and one physiotherapist from the RCHRC. The other focus group consisted of two GPs, one NAV employee and the same two representatives of the RCHRC who participated in the first focus group (Table 1 B).

Table 2 B Professional participants

Focus group interview 1	
Identifier	Professional Role
NAV-1	NAV employee
NAV-2	NAV employee
GP-1	General practitioner
GP-2	General practitioner
Physio*	Physiotherapist from RCHRC
Rehab Dr*	Doctor from RCHRC
Focus group interview 2	
Identifier	Professional Role
NAV-3	NAV employee
GP-3	General practitioner
GP-4	General practitioner
Physio*	Physiotherapist from RCHRC
Rehab Dr*	Doctor from RCHRC

**The same two representatives from RCHRC participated in both focus group interviews*

All of the participants in the focus groups had worked with patients involved in the coordination model project. The doctor and physiotherapist at the rehabilitation centre had had several patients, while the GPs had each had one patient in the project. The NAV employees had also worked with one patient each. Two of the patients with whom the NAV employees and GPs had worked

were the same ones. In total, therefore, the three NAV employees and four GPs had worked with five of the patients in the project.

Focus group interviews are a good way of finding out about people's experiences in situations that involve many people collaborating [20]. With this type of group discussion, the aim is to obtain information about a particular topic from the participants' views and experiences [21]. The discussion between the focus group members is used to generate data, and the interaction processes in the group are explicitly considered part of the methodology [22]. Focus groups are led by a moderator. There is also often an assistant moderator [23].

In our study, the same moderator and assistant moderator led both focus group interviews. The moderator was one of the scientists at Western Norway University of Applied Sciences (LK), while the assistant moderator was an office manager at the RCHRC. Neither the moderator nor the assistant moderator had been involved in treating the patients in the project.

Both the individual interviews and focus group interviews were based on a structured interview guide (Table 2), but supplementary and follow-up questions were also asked. Audio recordings were taken of all of the interviews, which were later transcribed and analysed.

Table 2. Interview guide

Interview guide
1. Based on your own experience, how well do you feel that having greater coordination during the rehabilitation process worked? (Advantages, disadvantages, challenges)
2. Based on your own experience, what were the meetings like? Was everyone properly listened to?

3. How did you find the use of video conferencing for the meetings? Feel free to give examples.
4. How good was the information provided before the meetings?
5. How well did you feel that the coordination between the various people worked? Feel free to give examples.
6. Do you think that having greater coordination in conjunction with the stay at the rehabilitation centre will affect the subsequent rehabilitation process?
7. To what extent do you think that greater coordination in conjunction with the stay at the rehabilitation centre will affect whether you achieve your goals?
8. Should the coordination model be introduced as standard practice? Do you have any suggestions for changes and improvements?

Interview guide. The table shows the interview guide for the individual interviews (with patients).

The interview guide for the focus groups essentially included the same questions, but they were addressed differently. (In question 7 the participants in the focus groups were asked to what extent they thought that greater coordination in conjunction with the stay at the rehabilitation centre would affect whether the patient achieves his/her goals).

Data analysis

The analysis was carried out by two of the authors (OTK and LK) using systematic text condensation as described by Malterud [20]. The individual interviews and focus group interviews were analysed separately. First the topics covered by the interviews were defined. The topics were chosen after reading the interviews and were therefore not based on the interview guide. These topics formed the basis for the code groups into which the units of meaning from the text were sorted. Where necessary, the code groups were changed during the analysis, in line with Malterud's description of the method [20]. In the next stage of the analysis, the contents of the units of meaning in each code group were reduced into condensates in first person statements – “artificial quotations”,

according to the description of the method [24]. In addition, real quotes were extracted from the text. Then an analytical text was put together for each code group, based on the artificial quotations and the quotes taken from the text [20]. Real quotes were also inserted in the analytical text, and the texts from the focus group interviews and previous stages of analysis were reviewed to ensure that the analytical text represented the voices in the original textual material. The following presentation of the results was then prepared using both the analytical text from the individual interviews and the analytical text from the focus group interviews. Further quotes were also extracted from the textual material to illustrate the content.

Ethical considerations

A successful application was made to the Norwegian Data Protection Authority for a license for the project (case number 16/00958). The Regional Ethical Committee considered the project to be a quality assured project that was not covered by the Norwegian Health Research Act (Norw.: *helseforsningslova*), and therefore outside its remit. All of the participants in the project were informed in writing about the project and signed consent forms before participating. The written information made it clear that this consent could be withdrawn at any time whatsoever and without having to give any reason.

In order to protect the anonymity of the participants, their names were not used in the audio recordings. In the focus group interviews, each participant was given a number that could be referred to during the conversation to facilitate the transcription of the interviews.

Results

Shared understanding

The patients felt that one of the advantages of the coordination model they had experienced was that the various professions get a joint reference point and a shared understanding, and decide together what should be done next.

According to one of the patients:

“Yes, and the fact I feel everyone is working more as a team. Before I came here it was really there, there and there. Sort of all over the place. So when I came here it was sort of more joined up. A bit more organised.” (P1)

In addition, they did not need to explain the same thing time and again, both to their GP and to NAV, as one of them explained:

“... because that means I don't need to tell them everything lots of times. So it's easier when they're all there together, in a way.” (P1)

Patients also said that they were seen and listened to. They could explain themselves in their own words, and the other people taking part in the meetings used language that they could understand and did not talk over them. This was also emphasised by one of the doctors at the rehabilitation centre:

“I think it means the patient gets seen. You don't get that with reports, you get it by seeing the individual.” (Rehab Dr, Focus Group interview 2)

The GPs highlighted the fact that greater coordination gives the GPs a more prominent role as the referrers and so they feel a greater ownership of the

whole process. Two of the doctors specifically mentioned the importance of having a joint reference point, in the same way that the patients did.

One of the patients noted the importance of the meetings to feel safe and comfortable:

“...it was of course a bit special with such meetings, but one feels a bit better taken care of in a way. It is more reassuring;...” (P4)

With respect to the use of a video link for the third meeting, one of the patients (P3) noted that in a video conference you see who you are talking to, and know that they are listening to you and not doing other things. The patient also added:

“This you can’t see if it is a telephone interview (meeting)” (P3)

Another patient saw it like this:

“That way we all get to see each other. That always has to be an advantage.”
(P2)

The representatives of the rehabilitation centre emphasised the usefulness of having a face to relate to and being able to look someone in the eyes. Then you do not just hear the voice of someone who may be sitting looking through some papers and thinking about other things. One NAV employee argued that video conferencing was good because otherwise it is difficult to get the GP, the doctor and physiotherapist treating the patient and the patient all in the same place at the same time, while one of the doctors said the following:

“It was very practical to have a video conference, but it requires more resources. However, I think it’s good to see people, and communication improves if you can see the other person and have eye contact.” (GP-1)

Goals and goal achievement

Several of the patients stated that the coordination meetings had influenced their own rehabilitation process. Everyone involved got a shared understanding of what was best for the patient, and that was used to agree on a way forward. Most patients believed that the meetings were important to them achieving their goals. Several patients mentioned that if their GP was kept more up-to-date and knew more about their situation, it was easier for them to return home after their inpatient treatment. One patient saw it like this:

“Yes, coming home was just easier because he (the GP) knew more than he would have done if he hadn’t been involved here.” (P1)

This ties in well with the view expressed by one of the doctors:

“... everyone was there and listened. And that saves many unnecessary questions and makes it easier to move forward together.” (GP-2)

One of the patients mentioned specifically that the coordination had played an important role in him getting to where he was now, simply because he felt more secure. Another patient gave the following reason why the meetings would play a big role in achieving one’s goals:

“Yes, absolutely. Because everyone knows about those goals.” (P5)

Representatives of the GPs, NAV and the rehabilitation centre all mentioned the importance of having clear, systematic goals. Patients must formulate their own goals in coordination with the medical staff at the rehabilitation centre and the other people who attend the meetings. The physiotherapist stated it this way:

“...I think the process here with meetings and cooperation all the way through, makes it easier for them actually to make a plan and a goal themselves” (Physio, interview 1)

This provides a good foundation for subsequent follow-up, according to one of the NAV representatives:

“For NAV it provides a starting point that is quite unique, and one that I think we need to grasp. And if we don’t grasp it, we’ll never succeed.” (NAV-1)

NAV also highlighted the fact that the cooperation and close support start earlier, which can help to prevent the sickness absence continuing for longer than necessary. It was argued that if everyone is present at the same meeting, and the patient has to say something about his or her expectations in relation to returning to work, this reduces the time needed to assess when and how this will happen. It allows everyone to contribute ideas in relation to what is the best way forward for the patient.

One NAV representative thought that the project would help to increase goal achievement by patients, whereas another one was less convinced and thought that it was too early to draw conclusions. Some of the GPs also stated that it was too early to say whether these meetings make it easier for patients to

achieve their goals. One doctor thought that the coordination model had made it possible to provide care to his patient more efficiently, while another thought that greater coordination would facilitate interaction with some patients. Both representatives from NAV, GPs and the doctor at the rehabilitation centre highlighted the challenges that arise when patients return home after an inpatient rehabilitation programme. What happens to the patient at that point is what determines whether a project works. One doctor saw it like this:

“...the challenges arise when they return to their normal, everyday lives. The rehabilitation centre is like an ideal bubble, which they get to taste and hopefully then take some of it back into their real lives.” (GP-4)

Both the doctor and the physiotherapist at the rehabilitation centre expressed a desire to increase coordination with the patient's local physiotherapist, to improve coordination between the treatment provided at the rehabilitation centre and the physiotherapy provided subsequently. That is not always the case, currently, as the doctor at the rehabilitation centre explained:

“Physiotherapists then provide treatment that has nothing to do with what we have recommended. And the GP is the referrer. And if this continues, then obviously they go back to where they started if they carry on with massage, acupuncture, ... and whatever else. Coordination is required.” (Rehab-Dr, Focus group interview 2)

The GPs pointed out the importance of the medical notes from the rehabilitation stay clearly stating what kind of physiotherapy the patient should continue to receive:

“I think it would be helpful if the medical notes were totally clear about it, and potentially it could be discussed in meeting 3, with the rehabilitation centre formulating the initial referral for physiotherapy, so there isn’t any room for us to wrongly interpret it. Normally they say “should see a physiotherapist”, but they should write down what they want to emphasise, and perhaps write the first referral. That could be useful.” (GP-3)

Discussion

The participants in the study believed that the model evaluated in this project increased coordination between patients, GPs, NAV and the rehabilitation centre. That is in line with the aims of the Coordination Reform, which emphasises that coordination between the parties involved in both the healthcare sector and other sectors is vital to ensuring holistic, targeted processes [12]. When patients are moved from one level of treatment to another within the health service, it is important to communicate well and to facilitate meetings between professionals working at the different levels [15].

One important benefit of the coordination model, was that the patient did not have to pass on information from one level to another, because everyone had a joint reference point. It is vital for everyone involved in the rehabilitation process to achieve a shared understanding and consensus, as this may enable the patient to return to work more quickly [7,8].

NAV plays a key role in this context, and the cooperation between NAV and the municipality is particularly important to the rehabilitation process [15].

This cooperation appears to be reinforced if both the GP and NAV take part in a joint meeting with patients before they are discharged.

User involvement is vital

It has been suggested that for vocational rehabilitation to work, you must use strategies that involve and engage the employee, employer and the various parts of the health service [5]. This means, amongst other things, that the employee must play an active role in the rehabilitation process. In our study, patients felt that they were seen, listened to and taken into account. This is in line with the aims of Section 3.1 of the Norwegian Patients' Rights Act, which states that in so far as possible the treatment programme shall be chosen in cooperation with the patient [25].

Everyone who requires long-term, coordinated services is entitled to an individual plan adapted to their own needs, which sets out their goals, amongst other things [11]. It is vital for the patient to be involved in drawing up this plan [26]. However, there is reason to believe that patients are not always sufficiently listened to during the rehabilitation process [15]. In the Research Council of Norway's June 2016 assessment of the implementation of the Coordination Reform, one of the conclusions was that there has been too little user involvement [13]. Empowering patients by increased involvement in their own rehabilitation process is vital for the result [27]. When patients taking part in the coordination model, said that they were seen and listened to, it may be because they helped to draw up their own goals in consultation with their GP, representatives of the rehabilitation centre and NAV. If this means they are listened to and feel ownership of the plan and its goals, it may increase the

likelihood of them achieving their goals, as suggested by previous studies [7,9]. The usefulness of having clear goals or plans was stressed by the GPs, NAV and the rehabilitation centre.

The importance of seeing each other

One area for improvement, according to the Research Council of Norway's assessment of the Coordination Reform, is the use of digital technology in patient consultations involving several parties [13]. In our study, the first two meetings were teleconferences, while the third and final meeting used video conferencing, where technical and practical considerations allowed. It appears that the people who took part in both a teleconference and a video conference preferred the video conference, because it added an extra dimension to their conversation.

There is previous evidence to suggest that using videos for consultations can make patients more proactive and thus increase user involvement. When the GP, specialist and patient interact like this, it gives patients a greater sense of security and more freedom to express themselves, making it easier for them to get across their opinions [28,29]. For many patients, non-verbal communication is important, and it has an influence on areas such as patient satisfaction [30,31]. This is in line with our study where the patients particularly emphasised the fact that you can see the person you are talking to as an advantage of video conferences. The patient's non-verbal communication may also provide information that helps the doctor when considering future treatment options [31]. This may simplify follow-up after the stay at the rehabilitation centre, in line with

previous evidence suggesting that video consultations involving several parties can enable a shared understanding and quicker resolutions [28].

It was mentioned that one of the challenges with video conferences is that they are time-consuming, particularly for GPs, who have to travel to the NAV office for the meeting. This is in line with previous research showing that telecommunication in health services has to be adaptable and efficient to meet the need of the participants [32]. When the project was carried out in 2013, doctors were not allowed to take part in video conferences from their own computers. This is now possible, thanks to new software that has been given security clearance by the relevant authorities [33,34]. There are still organisational and financial challenges associated with coordination. Electronic coordination systems are not yet sufficiently widely available, and in order to achieve the aims of Coordination Reform, there needs to be greater integration of technology, rules and the regulatory framework [13,28].

What happens when the patient goes home?

Several of the participants in the study, both doctors and NAV employees, stated that what happens to the patients when they go home after their inpatient rehabilitation determines whether the intervention has worked. In the coordination model evaluated in this project, the doctors were more involved in the part of the rehabilitation process that took place at the rehabilitation centre. Previous reports on other projects have identified challenges associated with defining the role of the GP in the rehabilitation process, arguing that this role must be made clearer [15,35]. The Regulation relating to a Municipal Regular GP

Scheme states that the GP is responsible for coordinating medical care and should help to draw up individual plans [36].

Interprofessional cooperation is fundamental in today's health care system [27]. It has been argued that when patients are moved from one healthcare provider to another, the approach has to be patient-centred and not disease-based [37]. To obtain a holistic patient-centered approach and secure a continuity in the rehabilitation process, hospital and community need to coordinate, and health care providers also need to involve the patient in the process [27,38]. Hence, the importance of building an interdisciplinary cooperation must not be underestimated REF39. The coordination model evaluated in this study, may provide the GP with a better foundation for fulfilling this role when the patient returns home after staying at a rehabilitation centre. This may be the reason why one of the doctors in the study thought that the coordination model had made it possible to provide care to his patient more efficiently, while another thought that greater coordination would facilitate interaction with some patients. Some of the NAV representatives also pointed out that the coordination model may increase goal achievement, including preventing sickness absence from lasting longer than necessary.

In the past it has been found that long-term absentees who took part in dialogue meetings with NAV and their employer found the meetings useful, but many of them were unsure whether the meetings would make it easier for them to return to work [39]. In terms of getting the patients back to work, past studies have also shown varying and sometimes narrow benefits from various types of interventions aimed at people with musculoskeletal disorders [2,4].

It has been found that an interdisciplinary approach including cognitive therapy and workplace-based intervention may have a positive impact [3]. The patients who took part in our study were given a tailored rehabilitation programme involving coordination between several disciplines, and cognitive therapy was used where necessary. However, employers and family/support people were not included in this study. Past studies has shown that involving the workplace and company health service may help patients to return to work sooner, and that the workplace plays a key role in the rehabilitation process [5,8]. It may be that consulting with patients' workplaces would have given the model additional elements and practical solutions with the potential to help patients achieve their goals.

Another factor that may influence how well patients do after they get home is the physiotherapy they are offered. In the focus group interviews, a desire was expressed to increase coordination with the patient's local physiotherapist, with the suggestion being made that this could be done by including the physiotherapist in the third and final meeting, for example. This is in line with the assessment of the Coordination Reform, which suggested that it was necessary to use electronic communication to reach more partners [13,28].

Strengths and weaknesses of the study

One of the strengths of the study is that we interviewed a number of people who had participated in the coordination model, including patients, GPs, NAV employees and doctors and physiotherapists at the rehabilitation centre. This made it possible to look at the model from a variety of angles and increases

the validity of the study. However, the study only includes five patients, and this is a limitation when it comes to the transferability of the results.

Both focus group interviews had the same moderator and assistant moderator. This increases the reliability. Conversely, the reliability may have been reduced by the patient interviews being conducted by different people.

Another factor that may reduce both the validity and the reliability, is that the questions in the interview guide may have been interpreted differently by the respondents and by us, the researchers. In addition, some of the questions in the interview guide may have been too closed or unclear and this may have influenced the interviews.

Conclusions

The coordination model gave patients, GPs, NAV employees and representatives of the rehabilitation centre a shared understanding that may increase the likelihood of the patient's rehabilitation goals being reached. The patients were able to help draw up their own goals in consultation with the other parties involved, giving them a greater sense of ownership of their rehabilitation plan. Implementing this model may give GPs a better foundation for following patients when they return home to their municipalities after staying at a rehabilitation centre.

Most of the participants in the study, seemed to prefer video conference to teleconference, but several highlighted that it is more challenging because it takes a lot of resources to plan the various meetings with so many different

people. In order to achieve the aims of Coordination Reform, there needs to be greater integration of technology, rules and the regulatory framework.

According to the results of our study, we recommend more studies on improving coordination of care and empowering the patients to be more involved in their own rehabilitation process.

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