

# Physiotherapists' Experiences of the new Better Back 😊 Model of Care

– An Interview Study

---

*Fysioterapeuters erfarenheter av det nya vårdprogrammet  
Bättre Rygg 😊 – En intervjustudie*

**Linnea Menning**

Handledare: Paul Enthoven

**Title:** Physiotherapists' Experiences of the new Better Back ☺ Model of Care – An Interview Study

**Author:** Linnea Menning

**Supervisor:** Paul Enthoven, leg. sjukgymnast, Med dr., universitetslektor

## ABSTRACT

**Introduction:** Low Back Pain (LBP) is a big health issue around the world. The Better Back ☺ model of care (MOC) has been implemented in the primary health care in Östergötland. It has been evaluated by questionnaires but a further understanding of the physiotherapists' experiences is needed.

**Purpose:** The aim was to explore physiotherapists' experiences regarding learning and applying the new Better Back ☺ model of care (MOC) in practice in primary health care in Östergötland.

**Method:** This study is a qualitative interview study with focus groups. A total of four focus groups have been interviewed with a total of 21 physiotherapists. The data has been analysed by qualitative content analysis.

**Results:** Before implementation the physiotherapists had high hopes and thought the care for LBP patients would get better and more effective. Treatments described as the largest components of the Better Back ☺ MOC were the Back School, the exercise in group, the booklet and the exercise program. It was a little bit unclear what the MOC was, it was time consuming to fill in questionnaires and hard to get patients to come to the group activities.

**Conclusion:** The expectations that the Better Back ☺ MOC was going to lead to more effective care for LBP has not yet been fulfilled. The physiotherapists plan to continue to use Better Back ☺ MOC, but it needs further development and adjustment to the clinics and the patients

**Keyword:** Better Back ☺ MOC, low back pain (LBP), implementation, focus group interviews

**Titel:** Fysioterapeuters erfarenheter av det nya vårdprogrammet Bättre Rygg ☺

– En intervjustudie

**Författare:** Linnea Menning

**Handledare:** Paul Enthoven, leg. sjukgymnast, Med dr., universitetslektor

## SAMMANFATTNING

**Introduktion:** Ländryggsbesvär är ett stort hälsoproblem i världen. Vårdprogrammet Bättre Rygg ☺ har implementerats i Östergötland. Detta har utvärderats med enkäter men det har ännu inte samlats in fördjupade åsikter från fysioterapeuter angående implementeringen och vårdprogrammet.

**Syfte:** Syftet var att utforska fysioterapeuters erfarenheter av att lära sig och använda det nya vårdprogrammet Bättre Rygg ☺ i praktiken i primärvården i Östergötland.

**Metod:** En kvalitativ intervjustudie med fokusgruppintervjuer har genomförts. Fyra intervjuer med totalt 21 olika fysioterapeuter har genomförts. Materialet har analyserats med kvalitativ innehållsanalys.

**Resultat:** Före implementering hade fysioterapeuterna höga förhoppningar om att vården för ländryggspatienter skulle bli bättre och mer effektiv. Behandlingarna som beskrevs som de största delarna i Bättre Rygg ☺ vårdprogram var ryggskolan, träning i grupp, broschyren och träningsprogrammet. Fysioterapeuterna beskrev att det fanns en oklarhet kring vad vårdprogrammet faktiskt var, att det var tidskrävande att fylla i enkäterna samt att det var svårt att få patienter att komma på gruppaktiviteterna på kliniken.

**Konklusion:** Förväntningarna om att Bättre Rygg ☺ vårdprogram skulle leda till en mer effektiv vård för ländryggspatienter har inte uppnåtts än. Fysioterapeuterna planerar dock att fortsätta att använda Bättre Rygg ☺ vårdprogram, men vårdprogrammet behöver anpassas mer till klinikerna och patienterna.

**Nyckelord:** Bättre Rygg ☺ vårdprogram, ländryggsbesvär, implementering, fokusgruppintervjuer

## Table of content

<b>Introduction</b> .....	<b>1</b>
<b>Background</b> .....	<b>1</b>
<b>Low Back Pain</b> .....	<b>1</b>
Prevalence.....	1
Risk Factors .....	2
Symptoms .....	2
Diagnosing and Classification .....	3
Physical Therapy in the Management of LBP according to recent guidelines .....	4
<b>Better Back ☺ Model of Care (MOC)</b> .....	<b>6</b>
Interventions for LBP patients in the Better Back ☺ MOC .....	7
<b>Osteoarthritis School (BOA) – a similar MOC in Sweden</b> .....	<b>8</b>
<b>Implementation of Better Back ☺ MOC</b> .....	<b>9</b>
<b>Purpose</b> .....	<b>11</b>
<b>Methods</b> .....	<b>11</b>
<b>Design</b> .....	<b>11</b>
<b>Population and recruitment</b> .....	<b>11</b>
<b>Interview guide</b> .....	<b>12</b>
<b>Analysis method</b> .....	<b>12</b>
<b>Ethical considerations</b> .....	<b>12</b>
<b>Results</b> .....	<b>13</b>
<b>Participants</b> .....	<b>13</b>
<b>The focus group interviews</b> .....	<b>13</b>
<b>Categories and subcategories</b> .....	<b>14</b>
Thoughts prior to implementation of Better Back ☺ MOC.....	15
Thoughts regarding implementation of Better Back ☺ MOC .....	16
General thoughts about Better Back ☺ MOC as a concept .....	21
Experiences regarding different components of the Better Back ☺ MOC.....	25
Using Better Back ☺ in the future .....	30
<b>Discussion</b> .....	<b>33</b>
<b>Discussion of the method</b> .....	<b>33</b>
Credibility.....	33
Dependability.....	35
Transferability .....	36
<b>Discussion of the results</b> .....	<b>36</b>
Thoughts prior to Better Back ☺ .....	36
Thoughts regarding implementation of Better Back ☺ MOC .....	37
General thoughts about Better Back ☺ as a concept .....	39
Experiences regarding different components of Better Back ☺ MOC.....	39
Using Better Back ☺ in the future .....	40
<b>Conclusion</b> .....	<b>41</b>
<b>References</b> .....	<b>42</b>
<b>Appendix A – interview guide</b> .....	<b>47</b>
<b>Appendix B - Information letter</b> .....	<b>49</b>

## **Introduction**

Low Back Pain (LBP) is a common reason to visit a physiotherapist. As a physiotherapist in the primary health care you meet patients with LBP several times every week. LBP does not only cause pain and disability for the individual but also economic losses for both the society and the individual. Persistent and recurrent LBP is common and therefore it is important to develop an effective treatment strategy (1–3). Recently international clinical guidelines were published with recommendation for management of LBP (4–6). A best practice primary health model of care was developed in Östergötland in Sweden, which contains key elements of these recommendations. Better Back ☺ model of care (MOC) is a complex intervention consisting of patient education and progressive supervised exercise (7). This study is one part of the evaluation of this care model, and describes the physiotherapists' experiences regarding learning and applying Better Back ☺ MOC in the clinics.

## **Background**

### **Low Back Pain**

#### **Prevalence**

Low back pain (LBP) has increased in prevalence the last couple of years, and is at this time one of the biggest health issues in the world (1,8,9). During the years 1999–2000 data was collected for a study, which reported the one-year prevalence in Sweden to 47.2 % while the lifetime prevalence was 69.6 %. LBP was reported to be one of the most common reasons for sick leave. In the population who reported LBP during the last year 6.4 % reported sick leave from work 1–3 days with LBP as cause (2). Another study in Sweden reported 9.5% with back or neck problem which led to sick leave during one year (10). According to a review, which included studies from 1980–2009, the global point prevalence for LBP is 18.3% (8). The global one-year prevalence was reported to 38 % in the same review. The most common age for incidence of LBP was shown to be 40–80 years. Since the human population is getting older, LBP is most likely to increase even more in the future (8).

## **Risk Factors**

Risk factors for recurrent LBP have been reported in a study in Sydney. This study reported that 24 % had a recurrent episode of LBP within twelve months after one episode of LBP. The first episode of LBP lasted 24 hours up to 6 weeks. When also analysing pain three and twelve months after the first episode of LBP, 33% of the participants had increased pain in the low back (11). This and several other studies have reported a previous episode of LBP to be a risk factor for LBP (10,12). Other risk factors that have been reported are an acute episode of high intensity of pain and a long duration of symptoms from the lower back (12).

Major depression has also been reported to be a risk factor for developing LBP (13). Work-related factors have been reported to influence the prevalence of back and neck pain in a Swedish study. One of these factors is blue-collar work, especially with repetitive tasks, in comparison of white-collar work. Sick leave because of other factors than LBP, uncertainty about the future work-situation and lack of positive tasks at work are other risk factors related to work situation. Also lack of daily exercise and impaired physical function was related to higher risk of back and neck pain (10).

## **Symptoms**

Symptoms in LBP vary with every individual. The most common symptom is local pain in the low back with or without radiculopathy in the lower extremity. The causes of the pain can sometimes be related to a specific diagnosis, for example disc herniation, but often it is non-specific low back pain (14). When a nerve root is affected radicular pain, sensory impairment and motor impairment can be present. Radiculopathy with pain and/or other neurological symptoms can be present either unilaterally or bilaterally (15). These symptoms leads to disability and difficulty to manage daily activities (14,16).

## **Diagnosing and Classification**

### ***Correlation between imaging and LBP***

Even though imaging is used in diagnosis purpose worldwide, there have been several studies questioning the correlation between magnetic resonance (MRI)-findings and LBP. There are some studies that show correlation between Modic type 1 changes, disc herniation, disc degeneration (17,18) and facet joint edema. Other conditions can often be present in individuals who do not have any pain, and therefore have low correlation between pain and findings on imaging. It is important for clinician to get the right information from the radiologist, and to not entirely rely on the MRI-findings (18). While there is a low correlation between one single diagnose and LBP, the correlation is stronger between multiply findings at MRI and LBP (19). Since there are low correlation between pain and findings on radiographic imaging this examination is not recommended according to European clinical guidelines for acute or chronic LBP (14,16).

### ***Non-Specific Low Back Pain***

LBP can be divided into different subgroups. One of these subgroups is non-specific LBP without a clear pathophysiology. Attempts to clarify this diffuse diagnose has been made by making subcategories (20,21). One model (21) classifies non-specific LBP according to which clinical findings that is correlated to which intervention that recommends. This model deprived of the significance of which anatomical structure that is affected. Four different groups with a treatment plan are mentioned in this classification system; manipulation, stabilization exercise, specific exercise and traction (21). Another classification model (20) is referring to which physiological mechanism that is causing the pain. Five different categories were made, three of them are related to input to the central nervous system, one is processing the pain and one is the output. The input mechanism is articular dysfunction, myofascial dysfunction and neural dysfunction. The processing mechanism is central dysfunction and the output is sensimotor control dysfunction. According to this model it is not important to know exactly which structure that is causing the pain, it is more important to know which one of the physiological mechanism that is the major cause of the pain (20). When examining a patient with LBP the first important thing is to identify red

(20,21) and yellow flags. By red flags is meant indications of severe pathology, while yellow flags identify psychological and social factors that affect the pain (20).

### **Physical Therapy in the Management of LBP according to recent guidelines**

Physiotherapists have an important role in the management of LBP. Information about LBP and advice about exercises and movement in combination with manual therapy are some of the important interventions physiotherapists use. An examination is done and after that the treatment that is most effective for the individual is selected. The majority of the LBP patients get sufficient effect of physical therapy and do not need surgery or other invasive interventions (14,16). The recent published clinical guidelines in Denmark for LBP patients with or without nerve root affection (4,5) and the clinical guidelines in Great Britain for LBP patients (6) recommend that the physiotherapist advise the patient to continue with normal physical activity and avoid bed-rest. Other recommended active interventions are supervised physical exercise, neuromuscular exercise and specific repeated exercise. The passive treatments that are recommended are joint mobilization, which include every passive treatment that affects the joints in the column, and can include traction and manipulation treatment. A passive treatment should always be combined with an active treatment. Patient education is also recommended, as well as group training (4–6).

#### ***Stabilization Exercise***

Stabilization exercise is one of the most common active treatments for LBP. Earlier research showed that LBP patients should avoid end-range movement in combination with strengthening of deep core muscles. Recent research resulted in recommendations to perform the movements with control instead of avoiding them (21). The muscles that are targeted with stabilization exercise are deep core muscles, for example m. multifidus and m. transversus abdominis (22). The goal of stabilization exercise is to retrain appropriate activation for these muscles. Studies have reported that patients with LBP would benefit from this intervention (23,24). Larger muscles as for example m. erector spinae, m. oblique abdominals and m. quadratus lumborum have also been suggested to be important muscles for stabilization of the lumbar column (25–27). One study compared exercises with focus on deep core muscles to exercises with focus on larger muscles in the trunk. The results of that study showed



no difference in pain, disability and cognitive status between exercises for deep core muscles and exercises for larger muscles at the three months follow-up (28). Further research is needed to identify which muscles that contribute most to stability, and thus should be prioritized in exercise for LBP patients (21).

### ***Manipulation***

The European clinical guidelines for acute LBP recommend manipulation for patients with trouble getting back to normal daily activity (14). Fritz et al. (21) also describe manipulation as one of the interventions for management of LBP. In the manipulation intervention it has earlier been suggested that it is important to have the right technique for the specific dysfunction (21). Recently this has been questioned since the different techniques have proved not to be as specific as previously thought. The spinal segments supposed to be targeted in a special manipulation method is rarely the segment that actually gets the effect (29). Some evidence shows thrust manipulations are better than non-thrust manipulations, and manipulations have better effect than mobilization. It is more important to identify which patients that would benefit from manipulation than to actually choose the right specific technique (21).

### ***Specific Exercise***

Specific repeated exercise is described as the McKenzie method or mechanical diagnosis and Therapy (MDT). The intervention involves end-range movement in a specific direction. Depending on which direction that reduces the patient's symptoms it could be movement in extension, flexion or lateral shift in the columna. The direction that is reducing the symptoms is called directional preference. A decrease in symptoms also includes centralization, which means that the symptom moves from a distal location to a more proximal location. Repeated movement in the directional preference has shown to have great effect for patient with LBP in the subgroup for the specific exercise, and even greater when a centralization effect emerges (30,31).

### ***Traction***

Traction as a treatment is used when a nerve root is affected and symptoms distally of the knee are present, and no centralization effect occurs when repeated specific

movement are performed (21). There are a few different ways to perform traction, either with help from a motorized pulley or a suspension device, or with manual force from the therapist or the patient through force or a pulling action. There is limited evidence for this treatment and further research with good quality studies are needed (32).

### ***Multidisciplinary team and patient education***

Some patients that have several factors that influence the LBP might also need help from other health professions. European clinical guidelines for acute LBP recommend multidisciplinary treatment for patient with sub acute LBP and sick leave for 4-8 weeks. The treatment should consist of exercises, Back School education, workplace visit, ergonomic advice and behavioural treatment (14). Patient education is an important intervention for LBP patients. It is important to give the right information to the patients to prevent fear-avoidance behaviour. The patient should get information that LBP is not dangerous, the columna is strong, the pain will be better faster if the patient is starting to move and work again and there are several treatments for the low back that will make it better (14,33).

### **Better Back ☺ Model of Care (MOC)**

The Better Back ☺ MOC is developed by a research group at the University of Linköping and is based on recently published international clinical guidelines (4–6). It has been implemented in primary care in Östergötland in Sweden during 2017 and 2018. During this time there has been a cooperation between the university and the clinics in Region Östergötland. The physiotherapists have been implementing and applying this Better Back ☺ MOC in the clinics during the past year. The Better Back ☺ MOC has been implemented in three different clusters. The first cluster implemented and started applying the Better Back ☺ MOC in Mars/April 2017, the second cluster in August 2017 and the third and last cluster in January 2018. Before the implementation of Better Back ☺ MOC started the physiotherapists got a two-days course with introduction to the Better Back ☺ MOC. There were two researchers (AA, KS) who were responsible for the education days. These researchers are a part of the group that developed the Better Back ☺ MOC. This Better Back ☺ MOC was

developed due to lack of a best practice primary health care model for LBP patients. Since there are a lot of LBP patients seeking primary health care there is a need for this model (7).

With the aim to compare treatment according to Better Back ☺ MOC with conventional treatment, the physiotherapists at certain clinics filled in questionnaires before implementing the Better Back ☺ MOC, while physiotherapists at other clinics only filled in the questionnaires after the implementation of Better Back ☺ MOC had started. The physiotherapists also filled in questionnaires about their thoughts on the implementation of the Better Back ☺ MOC. The results of these studies will be presented elsewhere (7).

### **Interventions for LBP patients in the Better Back ☺ MOC**

The interventions for the LBP patients consist of supervised exercise in groups and education about LBP, all the different components of the Better Back ☺ MOC are presented in Table 1. Each patient is seeing a physiotherapist who examines the patient and provides an individually adapted exercise program based on findings from the examination. To support the physiotherapists there is an examination sheet from the Better Back ☺ MOC with the most important questions and important factors to examine. The Better Back ☺ MOC presents an exercise program with example of exercises that the physiotherapist can use and give to the patient as part of a treatment. This exercise program has three steps with increased load and difficulty. The patient starts with step one, and when they manage these exercises with good quality they can start with step two and then step three. However, the physiotherapists can choose other exercises or a totally different treatment for the patient, or a combination. Then the physiotherapist fills in the questionnaire and reported what treatment the patient had been receiving. The patients can choose if they want to do the exercise at home or in the clinic together with other LBP patients in supervised group training. Another tool from the Better Back ☺ MOC is an exercise diary, which the patient can receive from the physiotherapist. The exercise diary can be a reminder for the patient to do the exercises if they are exercising at home, and for evaluation when the patient meets the physiotherapist at a follow-up. Every patient receives a booklet with information about LBP, with focus on information about LBP and self-management. Patients are also offered to participate in a Back School, which consists of a lecture

about LBP, pain and columna and discussions among the participants. The Better Back ☺ MOC gives the physiotherapist the opportunity to choose the treatment as usual, but they now also can offer an exercise program, an exercise diary, a booklet to hand out with information about LBP, an opportunity to participate in group training and a Back School (7).

**Table 1.** The components of the Better Back ☺ MOC

Education days	Two days when the physiotherapists got a introduction to Better Back ☺ MOC
Back School	A theoretical session with information about LBP, columna, general pain and also an opportunity for the patients to discuss and share experiences with each other
Exercise program	A exercise program with exercises suited for LBP patients, with a step 1 with basic stabilisation, step 2 and step 3 with progression of the exercises
Exercise in group	An opportunity for the LBP patients to do the exercise at a clinic with other patients and help from a physiotherapist
Booklet	A booklet with information about LBP, columna, pain
Exercise diary	An exercise diary were patients can fill in when they have been exercising
Examination Sheet	A sheet which the physiotherapists can use as a help in the examination
Questionnaires	Patient questionnaires which they were filling in at the first visit, after 3 and 6 months. Questionnaires for the physiotherapists to fill in after the first visit and at the end of the treatment
Website	A website with information about Better Back ☺ MOC, clinical guidelines for treatment of LBP patients and videos of the exercises

### **Osteoarthritis School (BOA) – a similar MOC in Sweden**

A similar MOC implemented and used in Sweden in several years is Better management of osteoarthritis (BOA). This MOC consists of theoretical sessions and exercise. The minimal treatment for this MOC is two theoretical sessions of 90 minutes each. Other than that the physiotherapist could adjust the MOC to the clinics routines and the personal need of the patient. There are several different theoretical sessions in the BOA concept. The first one consists of information about pathology and aetiology as well as clinical guidelines and treatment of osteoarthritis. The second session consists of information about exercise and self-management of pain and other

symptoms. The third session is held by a person with osteoarthritis with a special education from the European Osteoarthritis Communicator Programme. This person shares experiences about living with osteoarthritis. There can be other theoretical sessions held by other professions added to the programme as well. Another part of the BOA MOC is exercise, this part is optional and the patient can choose not to participate in the exercise. However if the patient is motivated to exercise they can choose to exercise by themselves or together in a group two sessions a week for six weeks. The physiotherapist has a individual sessions with the patient before starting exercising and the patient get a individual programme which they are using both if they exercise in group or on their own (34).

### **Implementation of Better Back 😊 MOC**

When implementing the Better Back 😊 MOC three different implementation models were used. The Behavioural Change Wheel (BCW) and COM-B systems were used in the planning process (7). The Behavioural Change Wheel (BCW) (35) is an attempt to cover all of the aspects important to succeed in implementation. The purpose of BCW is to help decide during which circumstances an intervention is likely to be effective. The model consists of three different “layers”; sources of behavioural, intervention functions and policy categories. The behavioural aspect can be explained with the COM-B system. The “C” stands for Capability and means that the individual needs to have the knowledge and skill to engage in the activity concerned. The “O” stands for Opportunity, and takes in account every factor that is not individual and could affect the possibility to do the activity. The “M” stands for Motivation and includes every brain process that affects the willingness to perform the activity. Goals, habitual processes, emotional responding as well as conscious and analytical decision-making are part of the Motivational factor. The “B” stands for Behavioural. All of these four components affect each other and result in certain behaviour. It is important to identify which of these aspects needs to be changed for the possibility to perform the activity. Interventions are described as activities aimed to change behaviour. Policy is described as responsible authorities actions, which enable or support interventions (i.e.g. legislation or fiscal measures) (35).

Another implementation model that was used in the planning process was the Theoretical Domains Framework (TDF) (7). It consists of 14 domains and 84 components, which can influence the possibility to succeed with an implementation. TDF is developed from BCW and the COM-B model. The different domains can be connected to the COM-B model. Capability in the COM-B model has a connection to four different domains, Knowledge, Skills, Memory, attention and decision processes and Behavioural regulation. Opportunity can be connected to two domains, Social influences and Environmental context and resources. Eight domains belong to the Motivation in the COM-B model; Social/professional role and identity, Beliefs about capabilities, Optimism, Beliefs about consequences, Intentions, Reinforcement, Goals and Emotions (36).

The implementation of Better Back ☺ MOC is being evaluated both with interviews, which are presented in this study, and questionnaires, which are presented elsewhere. The physiotherapists answered the questionnaires at baseline (when the implementation started), after three months and after twelve months (7). This questionnaire is called Determinants of Implementation Behaviour Questionnaire (DIBQ), and has been developed based on the TDF. The purpose of this questionnaire is to make the TDF easy to apply in practice (37). The DIBQ is based on an earlier version of the TDF (38) with only twelve domains instead of fourteen as it is today(36). During the development of the DIBQ some changes were made and the final result consists of 18 domains with 93 items (37).

The answers from the DIBQ-questionnaires will provide quantitative data about the implementation and use of the Better Back ☺ MOC by the physiotherapists. However, to better understand the answers from the DIBQ-questionnaires and to be able to further develop the Better Back ☺ MOC a better understanding regarding physiotherapists' experiences about learning and using the care model in practice is needed. A better understanding about the physiotherapists' experiences regarding the Better Back ☺ MOC is not yet collected.

## **Purpose**

The aim was to explore physiotherapists' experiences regarding learning and applying the new Better Back ☺ model of care (MOC) in practice in primary health care in Östergötland.

## **Methods**

### **Design**

The design of this study was a qualitative interview study with focus groups. The interviews were semi-structured. An inductive method was used since there was no knowledge about this specific subject before the study. The Better Back ☺ project is done in cooperation with the University of Odense in Denmark and a similar focus group study is performed there. The interview guide has been discussed with the Danish researchers before using it in this study.

### **Population and recruitment**

The population for this study consists of physiotherapists working in primary health care clinics where the Better Back ☺ MOC has been implemented in the County Council of Östergötland, Sweden. Criteria's for inclusion are that they participated in the Better Back ☺ course during the implementation and that they still are working with the Better Back ☺ MOC. Criteria's for exclusion were if they were on a longer sick leave or parent leave when the interviews were held. Since there are five bigger clinics in Östergötland the aim was to perform four or five focus group interviews, with five to eight participants, in different geographical areas of the region.

Information about the study and a request to participate in the study (Appendix B) was sent by e-mail to the contact-person/physiotherapist for the Better Back ☺ project in all participating clinics. A copy of this e-mail was also sent to the manager for every clinic. The contact-persons then recruited interview-participant who met the criteria's for inclusion from their clinics.

## **Interview guide**

Open and semi-structured questions were used during the interview (Appendix A). Questions about motivation to participate in the Better Back ☺ project, usefulness of the course for preparing the participant to use the Better Back ☺ MOC, and attitudes regarding treatment of patients with LBP were included in the interview guide. All focus group interviews started with the following open question “We are going to talk about Better Back ☺. Do you have any general thoughts you want to tell us about?” A similar interview guide was used in Denmark earlier and gave relevant answers according to the researchers. There were two interviewers (PE and LM), PE asking the questions and LM observing and taking notes in all the focus group interviews..

## **Analysis method**

An audio recorder was used during the interviews and after the interviews the data was transcribed to text. The expected interview duration was 60 to 80 minutes per interview. In the transcript every word was written exactly as it was said, and also notes about for example laughter or if someone was interrupted. An inductive analysis process was performed since there are no previous studies on this subject. Qualitative content analysis was used to analyse the data (39). The analysis was made in the program Open Code (40) starting with an open code process. First the whole text was read through several times(39). Meaning units were identified and each meaning unit was described with a code. The codes were divided into categories. Both the author of this article (LM) and the supervisor (PE) were doing the coding process and the analyses were then compared and discussed before deciding the final results(39).

## **Ethical considerations**

This study is part of a bigger project that has been approved by the Linköping regional ethics review board (dnr 2017/25-31). However, performing focus group interviews with participating physiotherapists was not included in the project application. Therefore, an amendment was applied for which was approved in April 2018. When recruiting the participants for this study an information letter was e-mailed



with information about what the aim of this study was and how the interviews were performed. This e-mail was sent to the manager at the clinic for approval. There was also information about that the participation was voluntarily, that they were anonymous in the presentation of the results and that they could cancel their participation whenever they wanted. Before the interview the participants signed consent to participate in the study. The interviews were held in the clinics during working hours. Therefore the interviews took time from patient- and administration work, which could be a disadvantage for the patients and the physiotherapists. At the same time the physiotherapist got the opportunity to influence this future best practice care model for LBP patients. The purpose of this Better Back ☺ MOC is that the LBP patients will get better health care in the future. It will also be a benefit for the physiotherapist when structured clinical guidelines will be available.

At the time of the interviews none of the two interviewers (LM and PE) were working at a clinic that treated patients according to the Better Back ☺ MOC. LM participated in the Better Back ☺ course about one year before the interviews were held and treated a few patients with LBP according to the Better Back ☺ MOC.

## **Results**

### **Participants**

Four focus group interviews in three different administrative and geographical areas of the Region were performed during April and May 2018. A total of 21 physiotherapists were interviewed, with six physiotherapists in two interviews, five in one and four in one. Seven participants were men and 14 were women with an age between 24-61 years. The experience of working with LBP patients differed between 6 months up to 41 years. Three physiotherapists had studied longer than three years at the university; all the other had a bachelor degree in physiotherapy. However 17 physiotherapists had further education regarding LBP outside of the university.

### **The focus group interviews**

Four focus group interviews were held. The shortest interview lasted 45 minutes and the longest lasted 75 minutes. The interviews were held during working hours at the clinics where the participants worked.

### **Categories and subcategories**

The analysis process resulted in five categories. Each category has a number of subcategories as displayed in table 2. The categories and subcategories are presented in table 2 and further explained below. Quotes from the interviews are presented under each subcategory and after each quote there is a number to explain which participant and which group the quotes are from, for example “- 1:4” which means group #1 and participant #4. All the quotes have been translated from Swedish to English.

**Table 2** Overview of categories and subcategories that emerged from the analysis.

<b>Categories</b>	<b>Subcategories</b>
<b>Thoughts prior to implementation of Better Back ☺ MOC</b>	<ul style="list-style-type: none"> <li>- Expectations of Better Back ☺ MOC</li> <li>- Risks with Better Back ☺ MOC</li> </ul>
<b>Thoughts regarding implementation of Better Back ☺ MOC</b>	<ul style="list-style-type: none"> <li>- Good cooperation with the university</li> <li>- Motivation for Better Back ☺ MOC</li> <li>- Implementation worked well</li> <li>- Implementation uncertainty and doubts</li> <li>- Implementation difficulties</li> </ul>
<b>General thoughts about Better Back ☺ MOC as a concept</b>	<ul style="list-style-type: none"> <li>- The concept of Better Back ☺ MOC is good</li> <li>- Need for Better Back ☺ MOC</li> <li>- Benefits of Better Back ☺ MOC</li> <li>- Comparison with osteoarthritis school (BOA)</li> <li>- Differences/similarities in the care for LBP patients from before implementation</li> </ul>
<b>Experiences regarding different components of Better Back ☺ MOC</b>	<ul style="list-style-type: none"> <li>- Experiences from the education days</li> <li>- Experiences regarding the questionnaires</li> <li>- Experiences regarding the examination sheet</li> <li>- Experiences regarding the exercise program</li> <li>- Experiences regarding the exercise in group</li> <li>- Experiences regarding the Back School</li> <li>- Experiences regarding the booklet</li> <li>- Experiences regarding the exercise diary</li> <li>- Use of the website</li> </ul>
<b>Using Better Back ☺ in the future</b>	<ul style="list-style-type: none"> <li>- Continued application of Better Back ☺ MOC</li> <li>- Adapt Better Back ☺ MOC to the clinic</li> <li>- Adapt Better Back ☺ MOC to the patients</li> <li>- Better Back ☺ MOC need to be developed</li> <li>- New ideas for the future</li> </ul>

### **Thoughts prior to implementation of Better Back ☺ MOC**

This category consists of thoughts before the implementation of Better Back ☺. Two different subcategories, which describe expectations and risks with Better Back ☺ are presented below.

#### ***Expectations of Better Back ☺ MOC***

Prior to the implementation of Better Back ☺ MOC the physiotherapists had high expectations of the concept. They expected the concept to result in better care for LBP patients. They had good experiences from the Osteoarthritis school (BOA) earlier

and expected the Better Back ☺ MOC to be just as effective as that concept. They thought the concept would result in a more effective way of working for the physiotherapists. The physiotherapists also expected that the Better Back ☺ MOC would include many patients in the exercise group and the Back School. Another expectation was that their patients would be able to participate in groups of 6-8 patients. In that way it would also be possible to make the care for LBP patients more effective.

“Mmm, I had these expectations too, just to have more movements to maybe be able to put the LBP patients in groups a lot more, more alive, more go in the group.” - 1:3

Prior to the implementation some physiotherapists did not expect anything special and some had negative expectations. They thought it would take much time and that they would have to work really hard to implement this new MOC. Expectations for the education days were that it would just be a lecture were they would just be told what to do, and there were no expectations of practical training.

### ***Risks with Better Back ☺ MOC***

Prior to the implementation the physiotherapists thought that there was a risk that the physiotherapists would not do a proper examination of the patient and instead just give them the exercise program and assign them to the group for exercising and Back School. They feared that the physiotherapist would miss out to give the patient a diagnosis or classification. This could result in that every LBP patient would get the same treatment even though they need different treatments depending on what their problem is.

” It was a fear we had when we discussed prior to the project, just that, will it be like as soon as a patient with back-problems seeks care they will directly go to the group and Back School. And that one as a physiotherapist would not do a proper clinical examination; is this a suitable, is this patient suitable for this type of..?” - 1:3

### **Thoughts regarding implementation of Better Back ☺ MOC**

This category consists of five subcategories. Thoughts about the implementation process, what has worked well and what the difficulties have been are presented.

### ***Good cooperation with the University***

The physiotherapists described a good cooperation with the researchers from the University. They thought it was good that someone was doing the research so that the LBP patient can get a better care. They described a good dialogue with the researchers from the University and that they could discuss things and give their opinion. They described that they could contribute with experiences from the clinic to improve the Better Back ☺ MOC. Every clinic had one or two physiotherapists who were contact person and responsible for the Better Back ☺ and they could present the opinions from the group to the researcher.

“And really good that we could ask and they sort of explained and, I think it was something you said, or just, we had not even thought about that (the comment the physiotherapist said). We have a different view when we have experiences from the clinic.” - 3:1

### ***Motivation for Better Back ☺ MOC***

Many physiotherapists described a motivation for helping the researchers with the study and also a motivation for giving better care to LBP patients. Some different factors came up in the interviews were they described that it was important to know that the Better Back ☺ MOC results in better care for LBP patients. Another important part was contact with the university with updates on the data collection to keep them motivated. The physiotherapists described that their motivation decreased when there were difficulties. One difficulty was that it took a lot of time for the physiotherapists to fill in questionnaires or that the patient did not get the questionnaires before the first visit.

“And then it is fun to be able to contribute because there is this research study. You would like to contribute.” - 2:6

Some physiotherapists described that they already had their way of working with LBP patients and that they did not want to apply the Better Back ☺ MOC. There was a difference between the physiotherapists who worked at different clinics in the motivation for applying the Better Back ☺ MOC, some clinics described that everybody were using it and other clinics described that some used it and some did not want to. The physiotherapists talked about being open-minded about testing this new MOC and give it a chance. A reason for not using Better Back ☺ MOC was that the physiotherapists did not think that it is possible to generalize treatment for LBP.

“The problem is that we have different opinion about how much the treatment for LBP patients can be generalized.” - 4:4

### ***Implementation worked well***

The physiotherapists described several things that had worked well during the implementation of Better Back ☺ MOC. A factor that contributed to that the physiotherapists used the MOC regularly was if the group of physiotherapists was small, and the physiotherapists had a good cooperation and support between each other. Another good thing was that everybody had got the same introduction at the education days, which led to that everybody knew what was going on and could use it. Questions and thoughts about applying the Better Back ☺ MOC were discussed among the group members and they gave support to each other to use it. One group described that the doctors and the nurses at different health centres knew about Better Back ☺ and had recommended patients to participate in it. That group also had doctors visiting them at the clinic during the implementation of Better Back ☺ and described it as a good thing that they got to know what Better Back ☺ is. All groups described a good support from the managers and from other colleagues. The Better Back ☺ MOC was also easier to apply than expected according to the physiotherapists.

“But I think it went smoothly, smoother than I expected. So, it was more positive than I thought from the beginning.” - 3:5

One group described that they started right after the education days and that it was an important factor that it worked well with the implementation. The physiotherapists

also described that they did not think that they had missed doing a proper examination and diagnosis/classification of the LBP patients. Some clinics had a lot of LBP patients for including to Better Back ☺.

”There are usually a lot of relevant patients.” - 2:2

### ***Implementation uncertainty and doubts***

The physiotherapists described some uncertainty about what Better Back ☺ MOC is. Especially in the beginning they did not really know what Better Back ☺ MOC was and what was new and different from before. This resulted in a lot of questions in the beginning. It was unclear if they should just use the exercise program and were limited to just the tools from Better Back ☺ MOC. One physiotherapist described that Better Back ☺ MOC was not a MOC in his opinion; it was just some suggestions of treatments for LBP.

“ I can’t tell what the MOC is. Is it the exercises, or the Back School, or is it if I use MDT exercises or if I mobilize the back? What is the MOC? It was hard to answer; I cannot even today say what it is... Or I think it is all of it, but for me that is not a MOC, it is just suggestions of all different treatments of the back.” - 1:1

Some physiotherapists were not working at the clinic when they started to collect questionnaires and did not know why they did it. Some physiotherapists described that it was clearer now what Better Back ☺ MOC was, but some were still confused. The physiotherapists described that it was hard to remember to hand out the booklet and that they sometimes forgot it, and they handed it out on the second visit in some cases. Sometimes the patient did not fill in the questionnaires before their visit but did it after, even though it was recommended that the patient should do it before the first visit. There were some components of the Better Back ☺ MOC that were not used as much, for example the exercise diary and the examination sheet. It was a little bit unclear when the study was finished and how they should work with the Better Back ☺ MOC after the study. They did not have a plan for further application of the Better Back ☺ MOC and the physiotherapist did forget about using it.

“I do not know if it was because I was a little bit unsecure about the switch between. When did the study end? And when is it open for anybody? I have felt that I was not sure about that.” – 4:1

### ***Implementation difficulties***

One difficulty that was described was that the Better Back ☺ MOC was not ready when the first clinics started to use it. They described that there was a lot of work left to do for making it easy to apply in practice. One group described that it was hard to implement Better Back ☺ MOC because they are a big clinic with many physiotherapists with different opinions and motivations about Better Back ☺ MOC. In that way some physiotherapists were using it while others did not, therefore it was hard to make it a routine in the clinic.

“I think it had been hard to get started for a lot of people, including myself, to make it a routine and something you think about when you meet back-patients. I have not got there yet.” – 4:1

The same group described that they had a lot of new employed physiotherapists who did not participate in the education days and did not get the background information and therefore did not use it that much. After the study was finished and all the questionnaires were done the physiotherapists were supposed to keep on using the Better Back ☺ MOC, but in many cases they did not continue or they used it less.

“We are a group where there are a lot of people on parental leave and many new physiotherapists, which leads to that the new physiotherapists just have to use it. Then you can not just take for granted that they are using it, you have to give a lot of support and explain why and how they are supposed to use it.” – 4:2

Participants told that some LBP patients did not want to participate in the study, which led to less patients in the Back School and the group for exercise. This was most common among patients with acute pain in the low back, they were generally not that interested in Back School and group training, but just wanted to get help to



handle the pain. Many patients did want to exercise at home and did not have time to come to the clinic during the day. One reason for that is that many patients have jobs to go to and did not have time to go from work to participate in the exercise group and the Back School. This led to the fact that there were few patients in the group activities. One clinic described that their facilities were old and the patients did not want to exercise in their clinic. Another hard thing for the physiotherapists were to choose which patients that could benefit from which part of the Better Back ☺ MOC, it was hard to decide if the patient was suited for the Back School or not for example.

“It is a challenge when a patient comes for the first time to make a prognosis. What treatment should we give the patient?” - 4:2

How the patients were booked to the first visit at the physiotherapist did matter if they were included in the study. When the patient was booked by a nurse at a health centre it was sometimes unclear if it was LBP or hip problem or something else. Therefore the patients did not get the questionnaire before the visit and it was not clear until the first visit was done if it was LBP. When that happened many physiotherapist did not wanted to start over with questionnaires, and the patient were excluded.

The physiotherapists described that it took a lot of time and was hard to fill in the questionnaires. In general it took a lot of time and recourses to implement Better Back ☺ MOC, and the physiotherapists had to work hard. At the time of the interviews the Better Back ☺ MOC had not got to be a routine in the clinics, the physiotherapists were still adjusting the MOC to the clinics and the patients. One clinic described that they had just one Back School but it was just a few patients participating. Another clinic described that the implementation had not worked out and that they had stopped having the Back School and the exercise in group.

### **General thoughts about Better Back ☺ MOC as a concept**

This category describes over all thoughts about Better Back ☺ MOC as a concept. Starting with the physiotherapist describing that the concept is good, then that there

is a need for Better Back ☺ MOC, and also the benefits of Better Back ☺ MOC. The last two subcategories describe comparisons with the osteoarthritis school (BOA) and then differences and similarities from before.

***The concept of Better Back ☺ MOC is good***

The physiotherapists described that the Better Back ☺ MOC has a good purpose and is well made. Some physiotherapists had only good experiences from working with Better Back ☺ MOC. Better Back ☺ MOC is good for physiotherapists with lack of experience about patients with LBP and can be used as a support for new physiotherapists. It gives everyone the same basic knowledge and the differences in the care of LBP are less.

“And then it will be more the same care for everyone. It does not have to be a big difference for the patients if you follow a concept. A concept results in more the same care for everyone.” - 3:6

It gives a structure to the care for LBP patients. Better Back ☺ MOC is described as another tool to work with and apply in the clinic, something to add to the knowledge the physiotherapists already had. It was also described that it was good that the physiotherapists got material from the Better Back ☺ to use in the care for LBP patients.

Better Back ☺ MOC was described as good for the patients with long-lasting LBP. It also helps the physiotherapists to help patients who only want MRI and for patients that seek treatment many times for the same LBP. It was good that Better Back ☺ MOC focuses on explaining pain and fear of movement related to the LBP. Participants described that the combination of Back School and training was appreciated among both patients and physiotherapists.

Better Back ☺ MOC also gave the physiotherapists an update on the clinical guidelines and a confirmation that they are giving the right treatment to LBP patients. It was good that the physiotherapist was free to choose other treatments and was not restricted to use only the tools from the Better Back ☺ MOC.

“In the beginning I felt like we were restricted, this is how we should work, to evaluate the exercises from Better Back ☺ MOC. But it was not like that, and now I do not feel any restriction by the MOC.” – 1:4

### ***Need for Better Back ☺ MOC***

The physiotherapists described a need for Better Back ☺ MOC. LBP is one of the most common reasons to seek care by the physiotherapists at the clinics. A structured MOC for this big group of patients is well appreciated.

“We meet a lot of patients with low back pain. Therefore it is really good that we can offer more to them.” – 1:4

The physiotherapists also described that it is hard to know about the latest research about LBP and that they needed this update about LBP. They described that they did not had time to read about LBP during working hours and that it was appreciated to get an update form the university.

### ***Benefits of Better Back ☺ MOC***

The benefits of Better Back ☺ MOC were described as better knowledge about LBP and that the patient could be able to handle their LBP in the future if the problems came back. It was also good that it was an opportunity for patients’ family and friends to get to know about LBP and get a better understanding about the patients’ issues. Many physiotherapists described Better Back ☺ MOC as useful for a large proportion of the LBP patients. The LBP patients realised that LBP is a common issue when they got to know that there was a study going on about LBP, and also got to meet other patients with the same problem at the group activities. The physiotherapists described that they could give more to the patients and that it resulted in better care for LBP patients. It offered a possibility to help patients with LBP before their pain became prolonged and a bigger issue that needed extended care.

“Not having to wait a long time or meet special criteria’s, instead get help in time before they are in need of multidisciplinary rehabilitation or other more extended care that will cost more money for everyone.” - 2:1

Participants described that the concept also prevents the patient from being booked to different physiotherapists and testing different treatments many times, instead they got to participate in Better Back ☺ MOC and it was clear that this was the treatment that every physiotherapist would give.

### ***Comparison with osteoarthritis school (BOA)***

Many parallels were drawn between the osteoarthritis school (BOA) and the Better Back ☺ MOC. Both concepts contain physical exercise in combination with information in a group lecture. The patients also fill in questionnaires in the BOA. The BOA has become routine and forms an important part of the care for osteoarthritis patients in a way that Better Back ☺ MOC not yet is. One difference between osteoarthritis and LBP is that LBP is more complex and diffuse, and that there are many different theories about how to treat LBP. It is clearer what osteoarthritis patients benefit from and the physiotherapists are working more alike with these patients.

“In comparison with osteoarthritis, it is not the same, we agree more about knee and hip osteoarthritis. Mmm. Both about the background and what the patients need.” - 4:2

The participants referred to the implementation of BOA, and described that the osteoarthritis patients are required to try the BOA before they get to see a doctor for an opinion and opportunity to get surgery for their knee. The clinical guidelines are not that clear with LBP patients. The patients can call the physiotherapist and ask for participation in BOA, but that has not happened with LBP patients and Better Back ☺ MOC. Patients with LBP are generally younger than the osteoarthritis patients, and therefore it is easier for osteoarthritis patients to come to the clinic more often if they are retired.

### ***Differences/similarities in the care for LBP patients from before implementation***

Group activities (Back School and exercise in group) for LBP patients were new activities in every clinic. Exercise in group and lectures for patients had been a part of

the care for some other patients with other diagnoses, but for LBP it was new. Other things that were new were the booklet, the questionnaires and a prepared exercise program with progression of exercises. Similarities from before were that the physiotherapists already gave similar information to the patients in the individual visits. Some physiotherapists did point out that there was more focus on psychological and behavioural aspects on the LBP now than before. The physiotherapists described that they are treating the LBP patient the same way now as before Better Back ☺ MOC was implemented.

A physiotherapist had been using manual therapy less since implementation of Better Back ☺ MOC and had really been trying out this new concept.

“It is exciting, I have especially been practising to not use manual treatment, I use manual treatment a lot in my profession. Therefore I have been practising not to be hands-on, and decided to try this concept and see what I think, and I think it has worked really good, really, really good.” – 2:6

Some physiotherapists said that they have been thinking extra about which examinations they were doing and why, and had been thinking one extra time before they classified the LBP. Some physiotherapists had changed their way of working with stabilization exercises and been more thorough with the first steps of finding the stabilization muscles. They also described that they called the patients more often if they did not show up on their visit, and they did it because they wanted to include many patients in the study.

### **Experiences regarding different components of the Better Back ☺ MOC**

This category describes physiotherapists' experiences from the different components of the Better Back ☺ MOC.

#### ***Experiences from the education days***

Every physiotherapist who worked at the clinic at the time participated in the education days. They thought it was positive that all physiotherapists got the same education. The impressions from the education days were that it was well made and a good structure of the day. It was good that it consisted of both theoretical and practical components.

“I thought, for me, the education was really good, because then I understood the purpose of it, why we did it and what we were supposed to do in the future.” - 3:1

During one part of the education days the physiotherapists were divided into small groups and got to test the exercises and also discuss among each other. Many physiotherapists thought it was a good opportunity for discussion and described that they did not get to discuss in that way often. They also thought it was good to get the latest research about LBP and the background to Better Back ☺ MOC presented. It was good that they got to discuss and ask questions to the researchers (AA, KS). The physiotherapists described that they did get a good presentation of what the Better Back ☺ MOC was and how they were supposed to apply it in the clinic. They also thought the researchers were very enthusiastic and inspiring which led to inspiration and motivation among the physiotherapists. It was not that much new information about LBP but was a good repetition and a confirmation that they did give the right care to the LBP patients. One group described that they had the education days together with other clinics in the same cluster, and it was really inspiring to meet other physiotherapists which they did not work with on daily bases. One thing that came up was that it would have been useful to go through the questionnaires for the patients. There were some thoughts about the days but some physiotherapists did not remember much of the education days.

“And it is also a change to discuss among each other, which we do not get the opportunity to do that often, to be able to discuss methods for treatment and examination.”  
- 4:1

### ***Experiences regarding the questionnaires***

The questionnaires that the physiotherapists filled in also took time and effort and were a little bit hard to fill in. It was hard to do the classification of the patient in the questionnaires for the physiotherapists.

“Personally I think it was a messy questionnaire (questionnaire for the physiotherapists to fill in), and I think almost everyone who hands it in says that it is really hard to fill in what is it asking for, I do not understand.” – 1:3

The opinions regarding the questionnaires for the patients were a little bit different between different physiotherapists, some thought it gave good information that was useful in the treatment for the patient while some thought they were hard to answer and the answers did not match what the patient told them during the visit. It took a lot of time for the patient to fill in the questionnaires.

#### ***Experiences regarding the examination sheet***

The examination sheet was described as something that the physiotherapists could use as help in the examination. However none of the physiotherapists that were interviewed described that they had used it. It was described as a small part of Better Back 😊 MOC and that focus had been on other things.

#### ***Experiences regarding the exercise program***

The physiotherapists thought the exercise program was good. The physiotherapists were familiar with the exercises and had used those for patients with LBP before. It was also good that the exercises had different parts with progressions of the exercises. The patients got motivated to work hard to be able to get to the next step on the exercise program. The pictures included in the exercise program made it easier for the patients to understand the exercises. It was easy to take the program and just mark the exercises the patient should do and hand it out. The physiotherapists appreciated that the exercises were performed in lying, sitting and standing. The exercises could easily be done at home. It was also good that there was one short and one long version of the exercise program. Part 1 of the exercise program was used as a part of the examination to investigate the core stability. The physiotherapists described that

it was hard for some patient to even be able to do part 1 of the exercise program and they sometimes just got stuck in the first part and had to go on to part 2 even though the patient did not manage to do part 1. Otherwise the patient would lose their motivation for exercise.

“As we mentioned earlier, I think it is good to have the progression already in the exercise program. They can see what they have to work for and if they are getting better then they can do the harder exercises later.” – 3:3

### ***Experiences regarding exercise in group***

The exercise in groups was described as one of the main component of the Better Back ☺ MOC. The physiotherapists described that it was positive to have supervised exercises. They got a chance to help and give support to every patient with the exercises. It was different physiotherapists that held in the groups with the exercises and therefore the patient got feedback from different physiotherapists, this was described as something good that the patients could benefit from. The groups resulted in higher compliance of exercises, since some patients had low compliance of exercising at home. Often the group exercises contained a small number of patients, which was perceived as potentially diminishing the effect of exercise in group. It was LBP patients with different ages and diagnoses of LBP who participated in the group. The patients who were at the groups and exercised were over all satisfied and it was good that different physiotherapists could give feedback to the patients. However it took a lot of resources to have one physiotherapist a whole hour in the gym when there were just one or two patients exercising.

“Sometimes at the exercise in group you have almost been a personal trainer to one patient.” – 1:3

### ***Experiences regarding the Back School***

Along with the exercise in groups the Back School was described as one of the main component of the Better Back ☺ MOC. The physiotherapists had a hard time recruiting patients to the Back School. According to the physiotherapists one of the reasons was that the patients were working and had a hard time leaving work for exercise.



According to the physiotherapists the information in the Back School needed to be adjusted. The physiotherapists described that it was a lot of repeating in the information. Some physiotherapists thought they could have the same information to all the LBP patients and other thought they needed to have different information to different diagnoses/subcategories. The physiotherapists thought it was good that the Back School consisted of information about pain in general, fear of movement and also behavioural and psychological factors. It was also good that they talked about ergonomics. They thought it was a good idea that patients got to meet other LBP patients and discuss and share among each other. It was appreciated to combine theory with exercise and easy to recommend the patient to go to the Back School.

“I think the Back School, I think it is something that has been thought about in physiotherapy for a long time, like we had in the lecture here, that the pain in itself, I think it is very applicable for low back pain and actually just the knowledge about what pain is, and maybe work with the fear of movement that many patients have, to start moving their back and dare to move.” - 2:1

#### *Experiences regarding the booklet*

The booklet was easy to hand out to the patient and contained relevant information according to the physiotherapists. They described it as well balanced with just enough information. The information in the booklet could help to get the patient less worried about their LBP. A lot of physiotherapists described that they used the booklet a lot. They gave information about LBP to the patient during the visit and then the patient could go home and read the booklet at home and discuss it at the next visit. It was also a good preparation for the patient to read before the Back School. Some physiotherapists described the information to be good for some LBP patient but not for all, and that it needed to be adjusted for different diagnoses. Something that could be added to the booklet was more information about posture.

“It is always hard to know how to think, how much information you should have, but I think it is pretty well balanced, that it is good information that is not too heavy.” - 3:4

### *Experiences regarding the exercise diary*

The physiotherapists described that they had not been using the exercise diary. The patient had been experienced it hard to fill in the exercise diary. The physiotherapist also described that the patient got to fill in the exercise diary and then discussed with the patient how much they had been exercising relating to if their symptoms had reduced or not. If the patient had not been doing the exercise it could explain that the symptoms had not been reduced.

### *Use of the website*

The physiotherapists had not been using the website regarding the Better Back ☺ MOC very much. Many physiotherapists described that they did not know what was at the website. One group described that they had downloaded everything from the website and put it in their own data system. Physiotherapists described using the website if they had been looking for something special, and one person had been asking questions to the researchers. Since the education days were good they did not need to get in to the website for information. It was good that there were videos at the website of the exercises so that they could get reminded and also show the patients. However they also wanted the patients themselves to have direct access to the videos.

### **Using Better Back ☺ in the future**

This category presents the thoughts about further application of Better Back ☺ MOC and care for LBP patients. Thoughts about how the concept can be developed in different ways and new ideas are presented below.

### *Continued application of Better Back ☺ MOC*

All groups had plans to continue using Better Back ☺ MOC. One important factor for further application was that new physiotherapists could get a Better Back ☺ education and an introduction to the clinics routines in applying it. One group felt like

they could give an introduction by themselves to new physiotherapists while another wanted the University to help them with a new education day for new employees.

Another factor for further use of Better Back ☺ MOC was that it would be smooth and not take longer time than it did before Better Back ☺ MOC was implemented. One group described that they needed to do a new start-up with the Better Back ☺ MOC after the summer, and that they need to be clear about how they should apply Better Back ☺ MOC in their clinic.

“I think it would have worked better if you do a new start-up. After the summer, for example the first of September, start up again and be clear about how to apply it. To make it clearer, because now it is very...” – 4:3

Some groups needed to discuss among each other how they were supposed to use the Better Back ☺ MOC and which patients that should be included in the Back School and the exercise in group. The physiotherapists in one clinic wanted to schedule time for reading the material from the website. The physiotherapists described that they needed reminders for using Better Back ☺ MOC in different ways. It is important that one or two physiotherapist have responsibility to remind the other physiotherapists and give introduction to new physiotherapists at the clinic. Hopefully more people will know about Better Back ☺ MOC and it would be a routine to use Better Back ☺ MOC.

“I think a lot of reminders, when it starts, it begins in two weeks, it begins in one week, tomorrow it begins, on Tuesday is the next Back School. You have to nag a little bit in the beginning.” – 4:3

### ***Adapt Better Back ☺MOC to the clinic***

The physiotherapists described that the Better Back ☺ MOC needed to be adapted to the clinic. They described that they need to develop and adjust so that Better Back ☺ MOC will work for their conditions in their clinic. Some groups had already started to adjust Better Back ☺ MOC to their clinic and some were planning to do it in the future. The physiotherapists described that they are going to use the components of

Better Back ☺ MOC that fits their clinic and how they work. The most important factor to adjust is to get it more time effective and also prioritize the components that actually are useful for their clinic.

“Exactly, so there is a big chance right now, when we are supposed to apply it every-day in the clinic, to reduce the time it takes.” – 4:4

### ***Adapt Better Back ☺MOC to the patients***

One of the biggest issues with Better Back ☺ MOC is that many patients do not participate in the Back School and the group exercise. Therefore there is a big need for adapting Better Back ☺ MOC to the patients. Some clinics had already tried to re-schedule the Back School to Friday afternoon because they thought it would be easier for patients to come to the clinic at that time. However this had not worked out and they still need to come up with something that fits the patients better. One clinic planned to have more times for the group exercise so that it would be easier for the patient to choose what time fits them. Another way to adjust the Better Back ☺ MOC to the patients is to discuss with the patient and let them choose if they want to exercise at home or at the clinic for example. It is also important to choose components of Better Back ☺ MOC that the patient could benefit from.

“I think it is more like in dialogue with the patient, what kind of person is it, to present the different choices, either you (the patient) can come here and exercise and someone can watch you, or you can exercise at home, or at your gym. In that way it is more the patients themselves that choose how much support they need.” – 2:6

### ***Better Back ☺MOC need to be developed***

Physiotherapists expressed that Better Back ☺ MOC needs to be developed further. The Better Back ☺ MOC needs to have different information for different LBP diagnoses/subgroups. The physiotherapists agreed that the Back School was the part that needed to be adjusted the most. The physiotherapists expressed that they need to discuss and develop Better Back ☺ MOC together at every clinic.

### *New ideas for the future*

For the future the physiotherapists had a lot of different new ideas. One of the ideas was that the questionnaires would be able to fill in at a website before the visits. In that way it would also be easy for the physiotherapists to copy the answers to the journal and therefore it would be less time consuming. One suggestion was that the videos of exercises and a Back School video would be accessible for the patients. Another idea is a larger booklet with more detailed information about LBP. Prevention of LBP through open Back Schools for everyone (not just LBP patients) was also a suggestion. They wanted to be able to design their exercise program on the computer and be able to add other exercises to the program. They also wanted to have a web-education about Better Back ☺ MOC that physiotherapists could watch and be reminded and also new physiotherapists could get the education.

## **Discussion**

### **Discussion of the method**

In qualitative studies the quality of the study can be measured from trustworthiness. Three different factors are important to consider; credibility, dependability and transferability. This can be compared to reliability and validity in qualitative studies (41).

#### **Credibility**

Focus group interviews are useful when evaluating the implementation of for example a MOC in a clinic. A focus group interview allows the participants to discuss among each other, and to get new ideas and thoughts about the topic. It can be a very useful method for topics that are not very sensitive. It may not be a good idea to use focus group interviews if the topic is sensitive and were it is a risk that the participants do not want to share with others (42). The current topic is not that sensitive to share with others, it is about a new way of working at the clinic, therefore focus groups were considered a good method for these interviews. A risk with focus groups is that everyone does not get to say everything they want to, maybe someone talks a lot and someone talks less. The interviewers task is to try to get everyone's opinion

and to stimulate to discussion (42). Since the participants in these focus group interviews were working together at daily basis it was considered that they may be used to share thoughts and discuss topics with each other, therefore it was considered a good method for that reason too. In the interviews everybody participated and talked and shared their thoughts, although some did talk more than others. The interviewer sometime had to interrupt a participant and ask for others opinion when someone had talked a long time, with the purpose to get everyone's opinion. It seemed like everyone got to talk if they wanted to, they did not abrupt each other and sometimes there were pauses during which it was free to add something to the discussion.

Since this is an inductive interview study it was desirable to get a lot of different opinions regarding this topics it is seen as a strength with this study that it was physiotherapists with variations of experiences. The plan was to have 6-8 participants in every interview group, which is the most common number of participants in focus group interviews (42). However it were 4-6 physiotherapists that had the opportunity and volunteered to participate. This can affect the study since the experiences from fewer physiotherapists than desirable were collected. However the smaller groups may have resulted in better conditions for everyone to express their experiences. The groups were somewhat smaller than could be optimal, but the participants mostly knew each other well and there was a lot of interaction in the groups.

A mail was sent to one or two physiotherapists that were responsible for Better Back ☺ MOC for every clinic. After that they helped to recruit volunteers for the interviews with help from our information letter (Appendix A). Which physiotherapists that were recruited for the interviews differed from clinic to clinic, which might effect the results of this study. Probably the physiotherapists most positive to Better Back ☺ MOC participated in the focus groups from bigger clinics, while every physiotherapist working in a smaller clinic that had the opportunity participated in the focus groups.

Two persons (LM and PE) performed the interviews. The same persons analysed the data from the interviews and LM made the original draft of the report. It is good that the persons who analysed the data also performed the interviews, in that way it is

easy to remember details from the interviews and understand the participants answers better (42). None of the interviewers had done focus group interviews before. Therefore the interviewers discussed the interview after the interviews to identify if something could be done differently. However a good interviewer needs practice to develop a good technique and to be good at interviewing (42). The result could have been different with more experienced interviewers. There were four interviews included in this study, and it could have been useful to have more focus groups included. However the four interviews were similar to each other and not much new information came up in the last interview. Therefore it seems like there is enough data to answer the research question.

The codes, subcategories and categories were compared, and if there were differences or something was unclear, that was discussed until agreement between LM and PE was reached. During the discussions there were about five subcategories that were a little bit unclear and which was discussed more. The discussions after the analysing process can increase the understanding of the material (39).

### **Dependability**

For reaching dependability the interviewers tried to make the interviews as similar as possible during the whole study. A risk is that the interviewers get new information and knowledge in the topic and therefore adjusts the questions for the next interviews and try to lead the conversation to earlier answers in earlier interviews. It is important to try not to do that for achieving good dependability (41). Neither of the interviewers had a lot of experiences with interviewing before this study. Because we planned to do only four interviews it was decided that one person (PE) would ask the questions during all the interviews and the other person (LM) would observe and take notes during all interviews. In this way the interviews were more similar to each other. Another factor that contributed to make the interviews similar to each other was that a semi-structured interview guide was used. The interviewer asked the same questions and then added some follow-up questions when needed with the purpose of getting more information on the subject from the participants.

## **Transferability**

Transferability is about if the results can be transferred to other groups of people (41). In this study it is important that the results are transferable to other physiotherapists working in primary care both in Östergötland and other regions in Sweden who are going to use the Better Back ☺ MOC in the future. Since both small and large clinics were involved in the interviews, and there was a big variation in ages and experiences of LBP the result mirrors how it looks in the clinics today. Furthermore both male and female physiotherapists participated in the interviews.

## **Discussion of the results**

The purpose of this study was to capture the physiotherapists experiences regarding learning and applying the Better Back ☺ MOC in the clinics. Many physiotherapists were positive to the introduction of Better Back ☺ MOC in their clinic. They expressed that it was good to implement this MOC since LBP is a common issue. Some parts of the MOC worked well, but there were also difficulties implementing the Better Back ☺ MOC, and the difficulties varied between clinics.

## **Thoughts prior to Better Back ☺**

Before implementation the physiotherapists had high hopes that the care for LBP patients would be more effective. However, since there were few patients in the back school and the group activity the participants thought that the care for LBP patients was not more effective during the implementation period. The physiotherapists described that they needed more time for making the Better Back ☺ MOC a routine in the clinic. Once the Better Back ☺ MOC is more known by patients and more of a routine in the clinics the physiotherapists thought it would provide more effective and better care for LBP patients. One risk that was expressed was that the physiotherapists would miss doing a proper examination and just put the patient in the group exercise without knowing if it was the best treatment for the patient. However, the physiotherapist described in the interviews that this was not the case since there were just a few patients in the group activities.



## **Thoughts regarding implementation of Better Back ☺ MOC**

Another subject that the participants agreed about was that the cooperation between the University and the clinics worked well. They could ask questions and discuss with the researchers for solving problems and to develop the Better Back ☺ MOC. A similar collaboration did take place when a shoulder programme was implemented earlier in the same region and with collaboration with the same university (43).

When evaluating the implementation of the shoulder programme the physiotherapists also described a good collaboration with the researchers (43).

The different groups described different components that worked well and different difficulties during the implementation. One model described in the background of this article is the COM-B system (35). There were not any experiences expressed that the physiotherapists did not have the skills to apply Better Back ☺ MOC. Therefore the Capabilities to use the Better Back ☺ MOC seemed good. One group wanted more time for reading about Better Back ☺ MOC and maybe the Capability would be stronger if they got that opportunity. The Opportunity varied among the clinics. All groups described that they had good support from the managers and other colleagues. However, another factor was how many LBP patients they had and if the patients wanted to participate in the Better Back ☺ MOC. This varied between clinics, physiotherapists in one group described that they did not have a lot of LBP patients during a certain period. Others described that they had a lot of LBP patients. The biggest problem was that the patients did not want to participate in the Better Back ☺ MOC or that they did not have the opportunity to come to the Back School and the group exercise. The Motivation differed between the physiotherapists. The physiotherapists in the group working at the biggest included clinic described that the motivational factor was one of their biggest problems for implementing Better Back ☺ MOC and to make it a routine in the clinic. Physiotherapists in other groups described that there was good motivation for implementing the Better Back ☺ MOC, but when difficulties were identified the motivation was hard to find. The difficulties often resulted in more time consuming work. The Behavioural differed between physiotherapists in these situations. Some clinics took a pause in using the Better Back ☺ MOC while trying to come up with another more effective solution. Other

groups had been solving the problems and were still applying the Better Back ☺ MOC in the clinic.

In the earlier mentioned evaluation of a shoulder programme in the same region a challenge in the implementation was the motivation from the patients (43). This factor was not something that the physiotherapists that had been working with Better Back ☺ MOC described as a challenge. In the implementation of the Better Back ☺ MOC the motivations among physiotherapists were discussed more than the motivations among patients. The motivation among physiotherapists was a factor that was discussed when the shoulder programme was implemented too, and just as the physiotherapists that used the Better Back ☺ MOC described it was unclear why some physiotherapists did not use the programme. In both implementation processes time was mentioned as an important factor; it was described that it takes a lot of time and effort to implement a new way of working. The time consuming work did lower their motivations (43).

It has been shown that it is important to consider the physiotherapists' attitudes and beliefs when implementing new clinical guidelines and that physiotherapists often focus on biomechanical treatments in the care for LBP patients (44). The Better Back ☺ MOC focuses both on biomechanical and psychological factors. The physiotherapists described that one difference from before implementing the Better Back ☺ MOC was that there was more focus on physiological factors in the booklet and the Back School. This could be a challenge when implementing the Better Back ☺ MOC, since there is focus on other factors than the physiotherapists are used to. It has been shown that clinical guidelines can feel like a threat if they differ from the practitioners' way of working (45). At the same time the physiotherapists described the psychological parts as a positive impact to their treatment for LBP patients.

There were three different clusters in the main study, one cluster implemented the Better Back ☺ MOC in March/April 2017, one cluster in August 2017 and one in January 2018. Since it takes about 1-2 years for something new to be a routine (46) it is expected that it has not become a routine today. The groups that were first to implement the Better Back ☺ MOC still had Back Schools regularly, possibly because

they had a longer time to implement the Better Back ☺ MOC than the others. Maybe the other groups need more time to make it work in their clinic.

### **General thoughts about Better Back ☺ as a concept**

The physiotherapists had different experiences of the Better Back ☺ MOC. Some described that they were unsure about what Better Back ☺ MOC is. Since LBP is a diffuse diagnosis and that every patient needs a different treatment it is hard to develop a MOC that gives direction exactly how you should treat the individual patient. Physiotherapists compared the Better Back ☺ MOC with the osteoarthritis school (BOA). One of the differences between those two is that physiotherapists agree in a greater extent that the treatment of osteoarthritis consists of physical exercises and information (34). For patients with LBP there are a lot of different treatments (21) and it is harder to create a MOC that gives the best treatment to all LBP patients. Maybe it is because of that it has been hard for everyone to be motivated and willing to use the Better Back ☺ MOC.

A programme for shoulder pain was implemented in the same region and in collaboration with the same university. When evaluating this with focus groups some physiotherapists described that they had changed their way of working with shoulder patients, while others described that they already had been working according to the programme before implementation (43). These experiences were the same from the physiotherapists that had used the Better Back ☺ MOC. Experiences of giving the same care as before as well as some changes were described.

### **Experiences regarding different components of Better Back ☺ MOC**

Some components of the Better Back ☺ MOC were used frequently, while other components were used less frequently. The exercise program, the booklet, the Back School and the group exercise seemed to be the most used components. The exercise diary and the examination sheet had not been applied that much. The physiotherapists described that the exercise program was well made. This is something that the physiotherapists in the evaluation of the shoulder programme that were implemented

a few years ago in Östergötland described too (43). In both studies the physiotherapists described that the researchers had done a well done work before the implementation, and this fact inspired the physiotherapists to use the shoulder programme as well as the Better Back ☺ MOC. Some discussion about what information in the Back School should consist of did take part during the interviews. Some physiotherapists thought the same information could be given to all the LBP patients, while others thought that the information should be adjusted to the specific diagnoses. Clinical guidelines show that most important things to inform the patients about is that LBP is not dangerous, the columna is strong, the pain will be better faster if the patient is starting to move and work again and there are several treatments for the low back that will make it better (14,33). These guidelines do not mention that you should adjust the information to the specific diagnoses. On the other hand everyone agrees that it is important to give the patient the right diagnosis and try to classify the non-specific LBP (20,21). It seems like it is important to adjust the treatment to the patient, no physiotherapist would give exactly the same exercises, but can we generalize the information for this group? Some physiotherapists seem to think we can and some do not.

### **Using Better Back ☺ in the future**

New ideas for the future that were mentioned in the interviews was that the patient would be able to fill in the questionnaires on a website, look at videos of the exercises and be able to look at a Back School at a website. The last couple of years Swedish authorities have been working on the digitalization of health care. Region Östergötland is working in different ways with this new concept (47). If the patients would be able to get some information and help from a website, it would be a part of this new digitalization of the health care. This may also solve the problem that LBP patients have a hard time coming to the Back Schools in the clinic, it would be easier to participate in a Back School at a website. Participants in all the groups described that it is important for new employees to get an introduction to the Better Back ☺ MOC and the routines in every clinic. There is a need for continuous collaboration between the university and the clinics in the future for achieving this.

## **Conclusion**

Before implementation the physiotherapists had high expectations and thought the care for LBP patients would get better and more effective. During the implementation the cooperation between the physiotherapists in the clinics and the researchers worked well. There was some uncertainty about what the Better Back ☺ MOC was, and what was different from earlier management. The physiotherapists expressed that the MOC seemed most useful for patients with long-lasting LBP and the MOC provided an opportunity to help patients before their pain became prolonged and a bigger issue that needed extended care. The components that were described as the most important components of Better Back ☺ MOC were the Back School and the exercise in group. The booklet and the exercise program were used a lot, while the exercise diary and the examination sheets were used less. All clinics planned to continue to apply the better Back ☺ MOC, but it needed to be adjusted to their clinic and to the patients.

## References

1. Manchikanti L, Singh V, Falco FJE, Benyamin RM, Hirsch JA. Epidemiology of Low Back Pain in Adults. *Neuromodulation Technol Neural Interface*. 2014 Oct 1;17(S2):3–10.
2. Ihlebæk C, Hansson TH, Lærum E, Brage S, Eriksen HR, Holm SH, et al. Prevalence of low back pain and sickness absence: A “borderline” study in Norway and Sweden. *Scand J Public Health*. 2006;34(5):555–8.
3. SBU. Ont i ryggen, ont i nacken. En systematisk litteraturöversikt. Stockholm: Statens beredning för medicinsk utvärdering (SBU); 2000. SBU-rapport nr 145/1. ISBN 91-87890-60-7.
4. National clinical guidelines for non-surgical treatment of newly occurring lumbar nerve root affliction (lumbar radiculopathy). Danish Heal Auth [Internet]. 2016; Available from: <https://sundhedsstyrelsen.dk/da/udgivelser/2016/lumbal-nerverodspaavirkning-ikke-kirurgisk-behandling>
5. National clinical guidelines for non-surgical treatment of newly occurring lower back pain. Danish Heal Auth [Internet]. 2016; Available from: <https://sundhedsstyrelsen.dk/da/udgivelser/2016/nkr-laenderygsmerter>
6. National Clinical Guideline Centre (NICE) Low back pain and sciatica: management of non-specific low back pain and sciatica. Assessment and non-invasive treatments. England [Internet]. 2016; Available from: <https://www.nice.org.uk/guidance/indevelopment/gid-cgwave0681/documents>
7. Abbott A, Schröder K, Enthoven P, Nilsen P, Öberg B. Effectiveness of implementing a best practice primary healthcare model for low back pain ( BetterBack ) compared with current routine care in the Swedish context : an internal pilot study informed protocol for an effectiveness- implementation hybrid type. *BMJ Open* 2018;1–21.
8. Hoy D, Bain C, Williams G, March L, Brooks P, Blyth F, et al. A systematic review of the global prevalence of low back pain. *Arthritis Rheum*. 2012;64(6):2028–37.
9. Vos T, Flaxman AD, Naghavi M, Lozano R, Michaud C, Ezzati M, et al. Years lived with disability (YLDs) for 1160 sequelae of 289 diseases and

- injuries 1990-2010: A systematic analysis for the Global Burden of Disease Study 2010. *Lancet*. 2012;380(9859):2163–96.
10. Bergström G, Bodin L, Bertilsson H, Jensen IB. Risk factors for new episodes of sick leave due to neck or back pain in a working population. A prospective study with an 18-month and a three-year follow-up. *Occup Environ Med*. 2007;64(4):279–87.
  11. Stanton TR, Henschke N, Maher CG, Refshauge KM, Latimer J, McAuley JH. After an Episode of Acute Low Back Pain, Recurrence Is Unpredictable and Not as Common as Previously Thought. *Spine* 1976. 2008;33(26):2923–8.
  12. Hancock MJ, Maher CG, Latimer J, Herbert RD, McAuley JH. Can rate of recovery be predicted in patients with acute low back pain? Development of a clinical prediction rule. *Eur J Pain*. 2009;13(1):51–5.
  13. Currie SR, Wang J. More data on major depression as an antecedent risk factor for first onset of chronic back pain. *Psychol Med*. 2005;35(9):1275–82.
  14. Van Tulder M, Becker A, Bekkering T, Breen A, Del Real MTG, Hutchinson A, et al. Chapter 3: European guidelines for the management of acute nonspecific low back pain in primary care. *Eur Spine J*. 2006;15(SUPPL. 2):169–91.
  15. Germon T, Singleton W, Hobart J. Is NICE guidance for identifying lumbar nerve root compression misguided? *Eur Spine J*. 2014;23(SUPPL. 1):20–4.
  16. Airaksinen O, Brox JI, Cedraschi C, Hildebrandt J, Klüber-Moffett J, Kovacs F, et al. Chapter 4: European guidelines for the management of chronic nonspecific low back pain. *Eur Spine J*. 2006;15(SUPPL. 2):192–300.
  17. Steffens D, Hancock MJ, Maher CG, Williams C, Jensen TS, Latimer J. Does magnetic resonance imaging predict future low back pain? A systematic review. *Eur J Pain (United Kingdom)*. 2014;18(6):755–65.
  18. Ract I, Meadeb JM, Mercy G, Cuffe F, Husson JL, Guillin R. A review of the value of MRI signs in low back pain. *Diagn Interv Imaging*. 2015;96(3):239–49.
  19. Jensen RK, Kent P, Jensen TS, Kjaer P. The association between subgroups of MRI findings identified with latent class analysis and low back pain in 40-year-old Danes. *BMC Musculoskelet Disord*. 2018;19(1):62.
  20. Dewitte V, De Pauw R, De Meulemeester K, Peersman W, Danneels L, Bouche K, et al. Clinical classification criteria for nonspecific low back pain:

- A Delphi-survey of clinical experts. *Musculoskelet Sci Pract.* 2018;0(0):66–76.
21. Fritz JM, Cleland JA, Childs JD. Subgrouping Patients With Low Back Pain: Evolution of a Classification Approach to Physical Therapy. *J Orthop Sport Phys Ther.* 2007;37(6):290–302.
  22. Hodges PW, Tucker K. Moving differently in pain: A new theory to explain the adaptation to pain. *Pain.* 2011;152(SUPPL.3):S90–8.
  23. Hides JA, Jull GA, Richardson CA. Long-Term Effects of Specific Stabilizing Exercises for First-Episode Low Back Pain. *Spine (Phila Pa 1976).* 2001;26(11):243–8.
  24. Shaughnessy M, Caulfield B. A pilot study to investigate the effect of lumbar stabilisation exercise training on functional ability and quality of life in patients with chronic low back pain. *Int J Rehabil Res.* 2004;27(4):297–301.
  25. McGill SM. Low Back Stability: From Formal Description to Issues for Performance and Rehabilitation. *Exerc Sport Sci Rev.* 2001 Jan 1;29(1):26–31.
  26. McGill SM, Cholewicki J. Biomechanical basis for stability: an explanation to enhance clinical utility. *J Orthop Sports Phys Ther.* 2001;31(2):96–100.
  27. McGill SM, Grenier S, Kavcic N, Cholewicki J. Coordination of muscle activity to assure stability of the lumbar spine. *J Electromyogr Kinesiol.* 2003;13(4):353–9.
  28. Fallis A. Trunk Muscle Stabilization Training Plus General Exercise Versus General Exercise Only: Randomized Controlled Trial of Patients With Recurrent Low Back Pain. *Phys Ther.* 2005;53(9):1689–99.
  29. Beffa R, Mathews R. Does the adjustment cavitate the targeted joint? an investigation into the location of cavitation sounds. *J Manipulative Physiol Ther.* 2004;27(2):118–22.
  30. Browder. David, A; Childs. John, D; Cleland. joshua, A; Fritz. julie M. Effectiveness of an Extension-Oriented Treatment Approach in Subgroup of Subjects With Low Back Pain. *Am Phys Ther Assoc.* 2007;87(12):1608–18.
  31. Long A, Donelson RG, Fung T. Does it matter which exercise? A randomized control trial of exercise for low back pain. *Spine (Phila Pa 1976).* 2004;29(23):2593–602.
  32. Harte AA, Baxter GD, Gracey JH. The efficacy of traction for back pain: a



- systematic review of randomized controlled trials. *Arch Phys Med Rehabil.* 2003;84(October):1542–53.
33. Burton AK, Waddell G, Tillotson KM, Summerton N. Information and advice to patients with back pain can have a positive effect: A randomized controlled trial of a novel educational booklet in primary care. *Spine (Phila Pa 1976).* 1999;24(23):2484–91.
  34. Thorstensson CA, Garellick G, Rystedt H, Dahlberg LE. Better Management of Patients with Osteoarthritis: Development and Nationwide Implementation of an Evidence-Based Supported Osteoarthritis Self-Management Programme. *Musculoskeletal Care.* 2015;13(2):67–75.
  35. Michie S, Stralen MM Van, West R. The behaviour change wheel : A new method for characterising and designing behaviour change interventions *The behaviour change wheel : A new method for characterising and designing behaviour change interventions.* 2011;42(April).
  36. Cane J, O'Connor D, Michie S. Validation of the theoretical domains framework for use in behaviour change and implementation research. *Implement Sci.* 2012;7(1):1–17.
  37. Huijg JM, Gebhardt WA, Dusseldorp E, Verheijden MW, van der Zouwe N, Middelkoop BJ, et al. Measuring determinants of implementation behavior: psychometric properties of a questionnaire based on the theoretical domains framework. *Implement Sci.* 2014 Dec 19;9(1):33.
  38. Michie S, Johnston M, Abraham C, Lawton R, Parker D, Walker A. Making psychological theory useful for implementing evidence based practice: A consensus approach. *Qual Saf Heal Care.* 2005;14(1):26–33.
  39. Elo S, Kyngäs H. The qualitative content analysis process. *J Adv Nurs.* 2008;62(1):107–15.
  40. Open Code 4.03 - Umeå universitet. 8601 [cited 2018 Sep 29]; Available from: <http://www.phmed.umu.se/enheter/epidemiologi/forskning/open-code/>
  41. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today.* 2004;24(2):105–12.
  42. Krueger RA, Casey MA. *Focus groups - a practical guide for applied research.* London: SAGE Publications; 2015.
  43. Carljford S, Nilsing E, Johansson K, Holmgren T, Öberg B. *Practitioner*

- experiences from the structured implementation of evidence - based practice in primary care physiotherapy : A qualitative study. 2018;(August):1–8.
44. Gardner T, Refshauge K, Smith L, Mcauley J, Goodall S, Hübscher M. Physiotherapists ' beliefs and attitudes in fl uence clinical practice in chronic low back pain : a systematic review of quantitative and qualitative studies. *J Physiother.* 2017;63(3):132–43.
  45. Court AJ, Cooke A, Scrivener A. They ' re NICE and Neat , but Are They Useful ? A Grounded Theory of Clinical Psychologists ' Beliefs About and Use of NICE Guidelines. *Clinical psychology and psychotherapy* 2017;910(November 2016):899–910.
  46. Socialstyrelsen. Om implementering. Tryck Edita Västra Aros, Västerås. 2012;1–20.
  47. Krispinsson M. eHälsa. Region Östergötland. Available from: <https://www.regionostergotland.se/ehalsa/> 2018.

## **Appendix A – interview guide**

### Introduction questions

We are going to talk about Better Back ☺ MOC. Do you have any general thoughts you want to tell?

Can you tell something about your experiences with Better Back ☺ MOC?

What were your expectations before the education days?

Can you tell about your thoughts regarding the education days?

In which way do you use the knowledge you got from the education days?

### Focused questions

What factors are important for your ability to use the Better Back ☺ MOC?

Can you tell how the education days have contributed to your ability to use the Better Back ☺ MOC?

Are there other factors that can be important for the ability to use the Better Back ☺ MOC?

(if necessary mention...)

- Factors at the clinic
- patient-related factors
- factors among your colleagues?

In which way do these factors affect the possibility to use the Better Back ☺ MOC? Please explain more?)

Do you plan to continue to use the Better Back ☺ MOC in the future?

Are there factors that affect your decision to choose to work with the Better Back ☺ MOC?

If you think about one year from now, which factors are important for if you are going to continue to use the Better Back ☺ MOC? Please expand your answer.

How is your view in general for management of patient with non-specific low back pain?

Has the Better Back ☺ MOC changed how you treat your patients with low back pain? In what way?

Do you have expectations on Better Back ☺ MOC to result in other effects than specific effect for low back pain?

Can you describe which effects Better Back ☺ MOC has for the patients?

What do you think the patients' experiences are from getting treatment according to better Back ☺ MOC?

What do you think others (colleagues, patients, doctors, managers, etc.) think about you using Better Back ☺ MOC? Does it matter to you?

What knowledge, tools and capabilities do you need in order to use Better Back ☺ MOC?

What are your thoughts about the tools presented at the education days?

How do you find you are capable of using Better Back ☺ MOC?

What experiences (good, bad, others) do you have in

- Selection of patients to the different treatments in the MOC
- Doing the patient education
- Training patients with the exercises
- Use the booklet
- Clinical reasoning
- Others experiences?

## Appendix B - Information letter

### Information till fysioterapeuter/sjukgymnaster angående gruppintervju i syfte att utvärdera Bättre Rygg ☺ vårdprogram

Just nu pågår ett arbete med att utvärdera Bättre Rygg ☺ vårdprogram som har implementerats och tillämpats i Östergötland under 2017 och fram tills nu. Tidigare har du fått fylla i enkäter för utvärdering av Bättre Rygg ☺ vårdprogram. För att få fördjupad förståelse för era upplevelser erbjuds du att delta i en fokusgruppintervju som kommer att genomföras under våren. Intervjuerna kommer att genomföras i fokusgrupper med 6-8 deltagare i varje grupp och tanken är en grupp från varje arbetsplats.

Intervjuerna genomförs på uppdrag av forskargruppen som arbetar med Bättre Rygg ☺ vårdprogram. Intervjun kommer att genomföras av Paul Enthoven och Linnea Menning. Målet med intervjun är att fånga upplevelser av att lära sig samt tillämpa Bättre Rygg ☺ vårdprogram i praktiken.

Intervjufrågor kommer att ställas till gruppen, som sedan får diskutera detta. Vi vill gärna få så många åsikter som möjligt. Materialet kommer att analyseras. Resultaten kommer att presenteras i Linneas magisteruppsats samt användas vid utveckling av Bättre Rygg ☺ vårdprogram.

Deltagandet är frivilligt och deltagaren kan när som helst under studiens gång tacka nej till att fortsätta delta utan närmare förklaring. Materialet kommer att behandlas konfidentiellt och presenteras anonymt i uppsatsen.

För frågor angående studien, kontakta oss gärna!

Med Vänliga Hälsningar

Linnea Menning  
Leg. Fysioterapeut  
Linnea)  
student masterprogrammet  
Linköpings universitet

Paul Enthoven  
Leg sjukgymnast (handledare  
Universitetslektor  
Linköpings universitet

**Samtycke deltagande i intervju för utvärdering av Bättre Rygg ☺ vårdprogram**

Datum: .....

Härmed samtycker jag till att delta i fokusgruppintervju med syfte att beskriva fysioterapeuters upplevelser av att lära sig samt tillämpa Bättre Rygg ☺ vårdprogram.

---

Namn

Underskrift