Understanding Facilitators and Challenges to Care Transition in Cardiac Rehabilitation: Perspectives and Assumptions of Healthcare Professionals

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Abstract

Cardiac rehabilitation is an essential part of treatment for patients with cardiovascular disease. Cardiac rehabilitation is increasingly organized outside hospital in community healthcare services. However, this transition may be challenging. The aim of this study was to examine assumptions and perspectives among healthcare professionals on how facilitators and challenges influence the transition from hospital to community healthcare services for patients in cardiac rehabilitation. The study followed the Interpretive Description methodology and data consisted of participant observations and focus group interviews. The analysis showed that despite structured guidelines aimed to support the collaboration, improvements could be made. Facilitators and challenges could occur in the collaboration between the healthcare professionals, in the collaboration with the patient, or because of the new reality for patients when diagnosed with cardiovascular disease.

Keywords

rehabilitation, community and public health, adherence, compliance, community-based programs, Denmark

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Introduction

Cardiac rehabilitation (CR) is essential in treatment of patients with cardiovascular disease (CVD) (Visseren et al., 2022). The purpose of rehabilitation is to enable a meaningful life considering the patient's perspective and overall life situation through a collaborative process between the patient, healthcare professionals and other relevant stakeholders (Maribo et al., 2022). CR involves a multidisciplinary approach including physical activities, patient education, risk factor modification, psychosocial support, and nutritional guidance (Visseren et al., 2022). In recent years, care and rehabilitation has increasingly been moved out of hospitals and into community healthcare services (Buckley, 2021; Pesah et al., 2017). Providing rehabilitation closer to patients? home and everyday life in the local community may enable patients to continue educational or work-related activities (World Health Organization, 2018). Community healthcare services include a variety of services such as rehabilitation in for example, intermediate care facilities and clinics (NHS England, n.d).

The transition from hospital to community healthcare services may, however, be challenging, and information may be lost, misinterpreted or distorted increasing the risk of patient drop-out of CR (Philibert & Barach, 2012; Sommer et al., 2022). Collaboration across settings may be challenged due to different policies, work environments and cultures in each setting, insufficient systems to transfer information between the settings, and missing information in discharge letters (Lyngsø et al., 2016; Møller et al., 2022; Petersen et al., 2019).

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Close collaboration and efficient communication between hospital and community healthcare services may thus ensure a more smooth transition for both patients and healthcare professionals (Coleman & Berenson, 2004; Møller et al., 2022).

In Denmark, CR is free of charge for Danish citizens and covered by the public and tax-financed health and welfare system (The Ministry of Interior and Health [Indenrigs- og Sundhedsministeriet], 2022; Vrangbæk, 2020; Zwisler et al., 2016). CR partly takes place outside hospitals in politically led municipalities responsible for community healthcare services (The Ministry of Interior and Health [Indenrigs- og Sundhedsministeriet], 2022; Vrangbæk, 2020; Zwisler et al., 2016). Division of responsibilities and collaboration between hospitals and community healthcare services are based on national guidelines (Danish Health Authority [Sundhedsstyrelsen], 2012). Post discharge, patients are followed-up in hospital outpatient clinics and evaluated by a doctor and a nurse concerning eligibility for CR. Denmark follows international guidelines, and all patients with ischemic heart disease (IHD) should be automatically referred to CR. Patients with heart failure and valve replacement are assessed and those eligible are referred to CR (Danish Health Authority [Sundhedsstyrelsen], 2015 (No longer valid as of 2023)). Patients referred for CR are enrolled in a CR program, which starts continuously to avoid delays for patients (Central Denmark Region and 19 municipalities [Region Midtjylland og de 19 midtjyske kommuner], 2015; Zwisler et al., 2016). Importantly, during community healthcare services-based CR, hospital specialists are responsible for the medical treatment and are available to healthcare professionals for consultations and advice (Central Denmark Region and 19 municipalities [Region Midtjylland og de 19 midtjyske kommuner], 2015).

Worldwide, 54.7% of countries offer CR programs, but studies show that drop-out from CR programs in Europe range from 17 to 24% (Brouwers et al., 2021; Pardaens et al., 2017; Supervia et al., 2019). Despite national guidelines providing a framework for the transition between hospital and community healthcare services, enrollment in and adherence to CR remain low in Denmark, ranging from 24% to 39% (Sommer et al., 2022; Svendsen et al., 2022). Further knowledge is needed on challenges in the transition between hospital and community health services for patients in CR as well as the role of healthcare professionals. The aim of this study was to examine assumptions and perspectives among healthcare professionals on how facilitators and challenges influence the transition from hospital to community healthcare services for patients in CR.

Method

This qualitative study used participant observations and focus group interviews and was guided by the Interpretive Description methodology (Thorne, 2008). The methodology is anchored in applied practice and takes its starting point in research questions from clinical practice to generate practice-based knowledge, and create new insight and knowledge leading to improvement of clinical practice (Thorne, 2008). Using this methodology enables a pragmatic approach, as methods and theories vary aiming at selecting the methods and theories to gain the best possible understanding of the research question (Thorne, 2008). The pragmatic approach in Interpretive Description highlights the research aim and aims to ensure that the findings are relevant and transferable to clinical practice (Thorne, 2008). The study followed the Consolidated Criteria for Reporting Qualitative Research (COREQ), see Supplemental File A.

Setting

This study was carried out in the outpatient cardiac clinic at a general hospital (Hospital) and in three community healthcare services in three municipalities (Community healthcare service A, B, and C) in Central Denmark Region. Overall, the three municipalities varied in size and population density. The Hospital is the referring hospital for community healthcare service A, B, and C, respectively and manage referral to CR when patients are in the outpatient cardiac clinic. The municipalities offer various healthcare services including CR.

Participants

The participants were healthcare professionals working with CR in Hospital or in community healthcare services. At Hospital, nurses, medical doctors, and medical secretaries were recruited. All healthcare professionals were part of the same team; medical doctors were part of a rotation and their work in the cardiac clinic was time limited. In the community healthcare services, nurses and physiotherapists were recruited. Specialists such as for example, dieticians supported the CR team in the community healthcare services. Nurses and physiotherapists managed the CR program, including collaboration with the Hospital. Purposive sampling in accordance with the study aim was used for recruiting participants for the focus group interviews. The head of the CR team in each of the community healthcare services (A, B and C) and the Hospital were consulted on who to recruit and facilitated the recruitment. The head of the CR team was instructed to recruit relevant participants in accordance with the study aim. Sixteen participants representing a variety of health professions involved in CR were invited and all completed the focus group interviews (Table 1).

Data Generation

This study was planned and carried out from May 2021 to December 2022.

| Table I. | Demographic | Data for | Study | Participants. |
|----------|-------------|----------|-------|---------------|
|----------|-------------|----------|-------|---------------|

| | | Number |
|------------------------|-------------------|--------|
| Sex | | |
| | Female | 14 |
| | Male | 2 |
| Age | | |
| - | 25–35 years | 2 |
| | 36–45 years | 5 |
| | 46–55 years | 6 |
| | >56 years | 3 |
| Educational background | | |
| - | Nurse | 8 |
| | Physiotherapist | 4 |
| | Medical doctor | 2 |
| | Medical secretary | 2 |
| Work experience in CR | | |
| | I–10 years | 12 |
| | >11 years | 4 |

Participant Observations. Participant observations were conducted to gain insight into the social and physical context regarding referral and enrollment to CR (Koch & Vallgårda, 2008). The observations were conducted by the first author at the outpatient follow-up in the cardiac clinic at Hospital. A total of 74 meetings were observed in connection with scheduled follow-up meetings (30-60 min) on randomly selected days. The first author's role during the observations was categorized as moderate participation as the author's engagement during the meeting was limited. Between the meetings, the first author was able to ask follow-up questions and engage with the healthcare professionals. The observations were guided by an observation guide (see Supplemental File B) and focused on both the patients and healthcare professionals. The current study focuses on the healthcare professionals, whereas observations focussing on patients will be used for future studies. The observations focused on the interaction between healthcare professionals and patients, patients' considerations, and expectations regarding CR in the community healthcare services and how these as well as CR in general were addressed by healthcare professionals. Field notes were made during observations and the generated knowledge was used to develop the interview guide for the focus group interviews and to support the findings from the focus group interviews.

Focus Group Interviews. A total of four face-to-face focus group interviews with 2 to 8 participants in each interview were conducted—one in each community healthcare services A, B and C and one at the Hospital. One participant at the Hospital participated online due to COVID-19. Face-toface focus group interviews were chosen to ensure participants could exchange different perspectives and experiences within the group (Krueger & Casey, 2015; Rabiee, 2004). A semi-structured interview guide was used for the interviews. The guide was developed based on the observations in this study and a review of the literature (Table 2). The interview guide focused on the healthcare professionals' perspectives on the organization, collaboration with the other settings, and their view on the patients. The focus group interviews were held separately in each of the settings for the participants to be able to speak openly and avoid possible censorship regarding the collaboration across settings. The focus group interviews were conducted by an experienced interviewer (the first author) and lasted between 51 and 72 min and all were audio-recorded and transcribed verbatim by the first author.

Data Analysis

The analysis was guided by the four iterative inductive analysis steps in Interpretive Description (Handberg, 2021; Thorne, 2008). The NVivo 2.0 software was used to support and structure the analysis. An example of the analytic steps is depicted in Figure 1.

- 1. *Initial coding:* The first, second and last author read two transcripts and made initial codes. Based on the empirical data and research aim, the first, second and last author discussed the initial impression and codes and developed an initial coding tree.
- Descriptive labels: Based on the initial coding tree, the first author reread the material, focussing on uncovering general relationships and patterns. Descriptive labels were formulated and the second and last author were included in a discussion.
- 3. *Initial themes and patterns:* The first author drafted initial themes including content. The second and last author were included in a joint discussion on the initial themes and patterns in the data.
- 4. Final categorization structure: The first author drafted the final categorization structure. The author team were included in a joint discussion of the interpretation and patterns of the data and the presentation of the findings (Handberg, 2021; Thorne, 2008). The author team consisted of two men and four women with clinical and research experiences and competencies from the fields of public health, nursing, physiotherapy, and medicine, and hence contributing to the analysis with various perspectives and reflections.

Ethics

The study was registered and approved in the Central Denmark Region's register of research project (no. 1-16-02-602-20). All participants gave consent to participate prior to the observations. All participants received oral and written information prior to the focus group interviews and provided written informed consent to participate in this study.

Table 2. Interview Guide.

| Category | Interview questions | Follow-up questions |
|---|--|--|
| The patient | What is of importance for the patients regarding their diagnosis? How do you experience patients' understanding of their diagnosis? What considerations do you have in your evaluation of patients' eligibility and referral to CR? | In your perspective, how well does CR match the rehabilitation needs of the patients? |
| Multidisciplinary rehabilitation | What are your considerations and reflections on CR? Who do you think is important in relation to CR? | Why do you think it is important for patients to participate in CR? What do you experience patients need in relation to CR? |
| Systemic challenges and facilitators | How do you experience the collaboration between the hospital and the community healthcare services? How does it affect your work that the hospital has the medical responsibility for patients during CR? In your perspective, what is needed for more patients to participate in CR? In your perspective, why do you think some patients do not enroll in or drop out of CR? | In your experience, what might affect your collaboration? |

Anonymity was ensured for all participants during the analysis and in the presentation of the findings.

Results

The aim of this study was to examine perspectives and assumptions among healthcare professionals on how facilitators and challenges influence the transition from hospital to community healthcare services for patients in CR. A total of three themes and six subthemes were identified. The analysis showed that facilitators and challenges could occur in the collaboration between healthcare professionals, in the collaboration with the patients or because of the new reality when patients are diagnosed with a heart disease. When examining facilitators and challenges in the transition from hospital to community healthcare services, all aspects in and the interplay between the three themes should be considered to fully understand the mechanisms challenging referral and enrollment to CR (Figure 2).

Collaboration Between Healthcare Professionals

The collaboration between healthcare professionals was identified as essential. Collaboration refers to the collaboration both within the team and across settings. According to the healthcare professionals in the present study, this collaboration could act as both a facilitator and a challenge. Two subthemes were identified: Cooperative structures and relations, and Shared knowledge and understanding.

Cooperative Structures and Relations. All participants' described collaboration between the Hospital and community health-care services as important in relation to referral and enrollment to CR in the local community healthcare services. This was evident in the interviews, where healthcare professionals in both settings referred to CR as a collective program.

We have a fixed time and a list of things we need to discuss with the patient and we address CR at both the follow-up meeting in the hospital, during the 12 weeks in the community healthcare service and at the final meeting. So, if there is something we do not have time for, they handle it in the community. And they start up by having an initial meeting with the patient where they discuss the state of the patient and what the patient would like us to help them with and what we can offer. (Nurse, hospital, >11 years' experience).

All healthcare professionals highlighted the opportunity to communicate regarding any uncertainties or concerns as important in their collaboration with the patient. According to the healthcare professionals in the community healthcare services, it provided a sense of security in their collaboration with the patients to be able to consult the hospital if there were any questions regarding for example, medication or blood pressure and heart rate measurements.

It means a lot that we can call the cardiac clinic if there are any doubts. We have a lifeline at the hospital. (Physiotherapist, community healthcare services, 1-10 years' experience).

According to all healthcare professionals, getting to know the professionals in the other teams was an important part of the collaboration. This was facilitated by meetings, courses, and project days with attendance by staff from both the hospital and the community healthcare services. All healthcare professionals argued that close relations improved the collaboration and that the collaboration was generally successful although improvements could be made. The community-based healthcare professionals addressed that the culture was different regarding documentation. In their view, their documentation was more detailed than the documentation at Hospital. The community-based healthcare professionals sometimes expressed they felt turned down by the Hospital-based healthcare professionals when they asked questions regarding a

| Step 1 Initial coding | Prejudice | Collaboration across | One doctor, one response | Communication across | Professional relationships | Taking ownership over CR | Setting specific knowledge | Securing knowledge in the team | Handing over knowledge | Hotline to a doctor |
|--|-----------|-------------------------|-----------------------------|-------------------------|---|---|-------------------------------------|-----------------------------------|---------------------------|------------------------|
| | 虏 | ⇔ | ⇔ | ⇔ | ⇔ | | ⇔ | ⇔ | ⇔ | ⇔ |
| Step 2 Descriptive labels | | Collaboration across | ross | Relationsh | Relationship across | Lec | Learning by doing | | Hotline to a doctor | tor |
| | | ⇔ | | | | | ⇔ | | ⇔ | |
| Step 3 Initial themes and patterns | | | Understanding each other | ach other | | She | Sharing knowledge | | Professional security | urity |
| | | | \Box | | | | ⇔ | | ⇔ | |
| Step 4 Final categorisation structure | | | | Them Subthemes: Coop | ne: Collaboration betw perative structures and r | Theme: Collaboration between the healthcare professionals Subthemes: Cooperative structures and relations & Shared knowledge and understanding | ofessionals edge and understandi | ing | | |

Figure 1. Example of the analytical process.



Figure 2. Health professionals' perspectives and assumptions on how facilitators and challenges influence referral and enrollment to CR between the hospital and the community healthcare services.

patient. This was the cause of some frustrations for the healthcare professionals in the community healthcare services and challenged the collaboration.

Shared Knowledge and Understanding. The healthcare professionals in both settings had different views of what was important knowledge for their collaboration with the patient. According to the community-based healthcare professionals, the hospital-based healthcare professionals sometimes considered their questions as less relevant. The hospital-based healthcare professionals confirmed this perception by stating that the written correspondence from the community healthcare services was sometimes a little excessive.

But they (the healthcare professionals in the community) are very good at noticing how the patients are actually doing, follow up and send a written correspondence to us. We can see that on the correspondence letters, and sometimes we may think that it is a little too much (laughing). (Nurse, hospital, >11 years' experience).

However, hospital-based healthcare professionals acknowledged the thoroughness of the work in the community. For community-based healthcare professionals, waiting for a written plan from the hospital doctor on what to do next was sometimes a challenge. They argued, that these challenges could be reduced by closer relations across the settings and insight into each other's way of working, which could strengthen and positively affect the collaboration with the patients.

Sharing and securing knowledge within the teams was a standard procedure in both settings. At the Hospital, the medical doctors often relied on the knowledge and experience of the hospital nurses, and in the community healthcare services, the more experienced staff were often consulted. However, sharing and securing knowledge across the settings was a challenge. This was evident in the interviews were the community-based healthcare professionals pointed out that some of the information from the hospital had a biomedical focus on patients' cardiac disease. They acknowledged this information as important, but in their experience, more information about the patients' psychosocial situation could be useful in their initial meeting with the patient, and facilitate their collaboration and enrollment into CR.

We only receive a description of the practical elements regarding the patient, there is nothing listed about how the patient have experienced the process. I think sometimes we could wish for a little bit more. (Nurse, community healthcare services, 1-10 years' experience). The hospital-based healthcare professionals also experienced challenges regarding sharing and securing knowledge across the settings. The referral process was sometimes challenged by healthcare professionals not having settings specific knowledge regarding for example, scheduled days and time of exercise and patient education. Patients sometimes had specific questions regarding framework and content of CR.

The patient has read about CR beforehand. The patient is still working and would like to know in details (days and time) when CR is planned. The healthcare professionals in the hospital and the patient talk a lot about having an arrangement where the patient can get time off from work to attend, without a salary cut. The nurse highlights the importance of CR and the doctor and nurse recommend the patient to be referred and discuss the options in the community healthcare services. The patient agrees and are referred. (Observation note).

Despite the lack of setting specific knowledge, the hospitalbased healthcare professionals addressed this issue by encouraging patients to be referred to CR and raise their questions at the initial meeting in the community healthcare service.

Collaboration With Patients

According to the healthcare professionals, an essential part of CR was to collaborate with the patients, and this could affect both the referral process and the CR program. The collaboration could be influenced by their access to knowledge regarding the patient, their relationship with the patients, as well as their ability to guide and counsel the patients. These factors acted as both facilitators and challenges. Two subthemes were identified: Establishing relationships and understanding the patient journey, and Healthcare professionals as guides and sources of knowledge.

Establishing Relationships and Understanding the Patient Journey. According to all healthcare professionals, the collaboration with patients was an essential part of CR and may influence referral and enrollment. In their collaboration with the patients, healthcare professionals aimed to uncover the patients' needs, perspectives and life situation. The needs of the patients varied, and the community-based healthcare professionals were able to make individual adaptions. For some patients this could be preferring to do exercise on their own and only participating in patient education while other patients could be experiencing cognitive challenges and having issues coping with many people. According to all healthcare professionals, individual health counseling could be a solution for these patients. The hospital-based healthcare professionals used the flexibility in the CR program to motivate and aid the referral process.

They discuss the possibility for the patient to adapt CR to their individual needs and that the patient should discuss this with the healthcare professionals in the community. (Observation note).

You can always tell the patients that they can be referred and then talk to the healthcare professionals in the community. Talk to them about what the possibilities are and how it can be adapted to the patients' needs. (Nurse, hospital, >11 years' experience).

From the interviews and observations, it was evident that focus on the patients' individual needs was a priority in both settings. The healthcare professionals argued that establishing a relationship with the patients was important. For this relation to be successful, the patients needed to trust the healthcare professionals.

For our part, it is at the initial meeting we need to establish a relation to the patient that enables them to be comfortable opening up so they feel inclined to enrol in the programme. (Physiotherapist, community healthcare services, 1-10 years' experience).

According to all healthcare professionals, feeling safe and having a trusting relationship was a facilitator to ensure a good collaboration with the patients. Establishing relationships involved normalizing some of the feelings the patients' experienced. Healthcare professionals perceived that normalizing the patients' frustrations or negative feelings such as feeling angry or sad or having trouble remembering, strengthened the relationship with the patients and made their needs assessment of patients easier. Another challenge in CR according to hospital-based healthcare professionals was the possible delays in inviting patients to the post-discharge follow-up meeting in the cardiac clinic. Not being able to keep up with the patient flow sometimes resulted in patients being introduced to CR later than planned, which negatively affected the patients. The medical secretaries sometimes experienced patients calling to ask why they had not been invited for the meeting yet. The timing of introducing the patients to CR was according to hospital-based healthcare professionals important, so patients did not feel left alone or in doubt about who to contact between hospital discharge and introduction to CR. In the healthcare professionals' perspective, some patients experienced the time from discharge to the outpatient follow-up meeting in the cardiac clinic as long and expressed having missed someone to talk to about their experiences and concerns. According to the hospital-based healthcare professionals, some patients would benefit from being invited for a meeting in the cardiac clinic earlier and even before they were supposed to be referred to CR. This would give the patients the opportunity to discuss their experiences and concerns with healthcare professionals, which could reduce potential psychological stress experienced by some of these patients.

Healthcare Professionals as Guides and Sources of Knowledge. In addition to understanding and adapting to patients' individual needs, the healthcare professionals in both settings were responsible for guiding patients. Knowledge regarding the patient' possibilities within CR, and helping patients understand the benefits of CR, were examples of the guidance provided by the healthcare professionals. According to the healthcare professionals in both settings, guidance in relation to return to work was important for most of the patients of working age. Some healthcare professionals from both settings, however, expressed not having sufficient knowledge to guide patients in this. They expressed the need for more knowledge or having the opportunity to consult for example, a social worker.

I do not know that much about the labour market and return to work. And what is good practice and what are the patients' options? Besides being able to get time off work to attend CR without a salary cut, what are their options. And it would be beneficial if we had someone who could guide us and we could confer with. (Physiotherapist, community healthcare services, 1-10 years' experience).

Healthcare Professionals' Perspective on Patients' New Reality

As previously described, collaboration was an essential part of CR. The healthcare professionals' ability to collaborate with the patients was affected by several factors such as understanding patients' own perception of their disease, needs for recovery, and understanding of CR. Two subthemes were identified: Health perception and regaining bodily trust, and Joining a new community and everydayness.

Health Perception and Regaining Bodily Trust. According to all healthcare professionals, being diagnosed with a CVD is for most patients' life altering and may be associated with frustrations and fear. According to the healthcare professionals in both settings, patients' reactions to their new reality did not necessarily depend on their diagnosis or type of treatment. The psychological aspects of dealing with a new diagnosis was clear to the healthcare professionals, but patients reacted differently. Several healthcare professionals experienced that patients' way of coping with their diagnosis could ultimately affect their view on CR. According to the community-based healthcare professionals, some patients expressed concerns regarding their treatment and whether their cardiac disease was actually "fixed." In both settings, the healthcare professionals sometimes experienced patients being frustrated and expressing the need to understand why they had become ill. In patients who believed they lived a healthy life this could cause frustration.

Patients will say, "I am not overweight, I do not smoke, I eat healthy, I exercise .. Why me?" Understanding that there are other factors influencing, like presdisposition? is something some patients have a hard time understanding. "But why me? My neighbour is overweight" right, so for some patients it is difficult to understand why they got the diagnosis. (Nurse, community healthcare services, 1-10 years' experience).

The community-based healthcare professionals sometimes experienced patients expressing they did not see themselves as being ill after they had received the medical treatment and enrollment to CR could be challenged.

Joining a New Community and Everydayness. According to all healthcare professionals, some patients had a negative view on CR as something offered to people who are ill, and patients who did not see themselves as ill found it difficult to see the relevance of CR. However, CR is an opportunity for patients to regain bodily trust by exercising and testing their fitness capacity in a controlled environment. Furthermore, it gives patients the opportunity to focus on their health. The healthcare professionals used this argument to motivate patients to participate in CR.

In general, we also have a lot of younger patients who say, "well I am already exercising, I do a lot of sport so I cannot see why I need to participate in CR" and for those patients it is all about us telling them that CR is not solely exercise, it is a whole package, they have the opportunity to look at their lives and re-evaluate their lifestyle, so it is not only exercise. (Nurse, hospital, >11 years' experience).

According to healthcare professionals in both settings, the peer support element in CR was an essential part of the program. Learning how other patients have coped with the new reality of being a patient with CVD, reassured patients that they were not alone and that the experiences of others could be very rewarding. The community-based healthcare professionals experienced that meeting peers could generate hope for newly diagnosed patients and make them believe that they would be able to return to life as it was.

Sometimes it helps a lot of our patients to see how well others are doing. Because when they initiate CR, some patients think that they will never be better so by seeing the progress others have experienced can encourage a hope for many patients. (Nurse, community healthcare services 1-10 years' experience).

The hospital-based healthcare professionals addressed that patients meeting peers with similar experiences regarding their illness could add another perspective than the perspective of healthcare professionals.

According to the healthcare professionals in both settings, the new reality as a patient with CVD was also affected by returning to work. In their experience, some patients felt pressured by their employer or the job centre, but health professionals also experienced that patients put pressure on themselves and felt obligated toward their colleagues and employer. In my experience, most employers are tolerant. However, there are some patients who stop CR because they have to return to work because they have had a long sick leave and some are being pressured to return to work relatively quick and need to stop or do not enrol in CR to begin with. (Nurse, community healthcare services, 1-10 years' experience).

To accommodate this challenge, the healthcare professionals in both settings suggested offering CR outside normal working hours. Engaging the employer in the process was also viewed as an option by the healthcare professionals to ensure patients' adherence to CR.

Discussion

This study examined perspectives and assumptions among healthcare professionals on challenges impacting on transition from Hospital to community healthcare services for patients in CR. According to all healthcare professionals, delays in patient flow could negatively affect patients as they felt left alone and did not know who to contact during this period. Waiting for referral to and enrollment in CR may result in patients not entering CR when they need it (Palmer et al., 2020). According to the hospital-based healthcare professionals in this study, this could be addressed by inviting patients for a meeting before being ready to start CR. Reducing the response time between the hospital and the community healthcare services, or the hospital communicating any delays, could enable the community healthcare professionals to adapt their work accordingly.

The Hospital has the medical responsibility for patients during CR and according to all healthcare professionals, this provided security in their daily work and for the patients. However, staff in the two settings had different views on when to communicate and which information to share. The community-based healthcare professionals advocated for a more biopsychosocial view on information as this could ease their initial encounter with the patient and facilitate the collaboration and enrollment. This is supported in the literature stating that the biopsychosocial perspective is a central part of rehabilitation in general and a core skill for healthcare professionals in rehabilitation should be to adapt to the patient's social context (Wade, 2020a, 2020b). Previous studies have found that collaboration and coordination between hospital and community healthcare services can be challenged due to different policies, cultures and approaches toward the patients (Møller et al., 2022; Petersen et al., 2019). Despite the collaboration being seen as important and overall well-functioning, the challenges experienced by the community-based healthcare professionals may be explained by different cultures and approaches in the two settings. In the healthcare professionals own view, closer collaboration and insight into each other's work could help facilitate this and eventually result in improved referral to and enrollment in CR for the patients.

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Lack of referral is a well-documented challenge in CR (Kotseva et al., 2018). From the observations and focus group interviews it was clear that lack of referral was not a predominant issue and hospital-based healthcare professionals used the possibility for individual adaption as a motivational aid in the referral process. They encouraged patients to be referred and discuss the individual opportunities with the healthcare professionals in the local setting. Endorsement by healthcare professionals to CR is a known facilitator to enrollment into CR (Ghisi et al., 2013). According to all healthcare professionals in this study, establishing a trusting relationship with the patients was important for assessment of their needs to be successful. Trust between patients and healthcare professionals is an important element in healthcare and patients who trust their caregivers are more likely to share personal information, listen to the advice and engage in their own healthcare (Becker & Roblin, 2008; Greene & Ramos, 2021). From the focus group interviews and the observations, it was clear that all healthcare professionals were dedicated to create a safe space and establish a trusting relationship with the patients.

The healthcare professionals in both settings experienced encountering patients of working age with questions and concerns in relation to return to work. Return to work has previously been identified as a challenge to enrollment to CR (Ravn et al., 2022; Sommer et al., 2022). According to the healthcare professionals in this study, the pressure related to return to work could be from the employer or job centre but also from the patients themselves. The legislation in this field is complex and healthcare professionals in both settings sometimes found it challenging to guide patients on this topic. A study found that building a trusting relationship between the patient and healthcare professional is effected by the patient's view on their competences such as their knowledge (Greene & Ramos, 2021). As return to work was a dilemma for many patients, the lack of knowledge and guidance from the healthcare professionals could pose as a challenge related to referral to and enrollment in CR. Access for patients to a social worker in connection with CR with profound knowledge of legislation related to the labor market may solve return to work issues for the patients.

According to the healthcare professionals in this study, patients who did not see themselves as being ill might not see CR as relevant, which affected their enrollment into CR. Several studies report that some patients do not enroll in CR as they feel confident that they can manage the disease on their own (Foster et al., 2021; Ravn et al., 2022; Schopfer et al., 2020). According to the healthcare professionals in our study, some patients argued that they were already active and questioned their need for CR. It was important to the healthcare professionals to explain to patients that CR is not solely an exercise program and the ability to adapt the program to meet individual needs was an important focus.

The present study has several strengths and limitations. The study benefited from applying established tools, frameworks and methodologies including an observation guide, an interview guide, the COREQ criteria and the Interpretive Description methodology (Thorne, 2008). These guided the structure of data generation, analysis, and presentation of the results to ensure transferability (Noble & Smith, 2015). All interviews and observations were conducted by the same person (first author) to ensure stringency in data generation. The findings were thoroughly discussed between all authors to ensure rigor and validity in the analysis and reduce the effect of preunderstandings developed by the first author during observations and interviews (Noble & Smith, 2015). The use of multiple data generation methods was considered a strength in the production of a more comprehensive and nuanced view on the study aim (Noble & Smith, 2015). Validity and trustworthiness of the analytical process were strengthened by the illustration and description of the four iterative inductive analysis steps from Interpretive Description and the use of rich quotes to support the analysis (Noble & Smith, 2015; Thorne, 2008). Observations were conducted prior to the focus group interviews, and the interviewer and most of the participants were familiar. The healthcare professionals were also familiar with the project, and some had been consulted during the developing phase. This may have resulted in participants providing the answers expected by the interviewer. However, focus group interviews were used as a method to facilitate a discussion among the participants and the interviewer facilitated this by encouraging participants to state their opinions and stressed that there were no wrong answers (Krueger & Casey, 2015). Various discussions exists regarding sample size within qualitative research (Krueger & Casey, 2015; Sandelowski, 1995). Data saturation is not the overall outcome in ID where the aim is to gain an indepth understanding of the experiences and perspectives, hence there are no specific requirements regarding sample size. Rather the sample size should reflect the research questions and the researcher should reflect on how many participants are needed for the findings to be representative for the overall aim (Thorne, 2008). The sample size of the present study consisted of healthcare professionals from all involved settings, various age, work experience and educational background and this broad variety was considered a strength. The focus group interviews were held separately in the four settings to avoid potential censorship and gain knowledge on potential challenges in the collaboration across. Having mixed the focus groups across the settings may have resulted in a different dynamic and added other perspectives to the discussion. The quality of data from the focus group interviews was strengthened by ensuring participants feel comfortable and their views are valued (Krueger & Casey, 2015). This study focused on CR and was conducted in the catchment area of one hospital. However, the transition from the Hospital to community healthcare services is similar to other regions in Denmark. Facilitators and barriers identified in this study are thus transferable to other settings and patients with other diagnoses than cardiac disease.

Conclusion

This study found that facilitators and challenges influencing the transition from hospital to community healthcare services are multidimensional and may occur in the collaboration between healthcare professionals, in healthcare professionals' collaboration with the patient or because of the new reality when patients are diagnosed with CVD. Although structured guidelines describe responsibilities in relation to CR and the organization of CR allowed healthcare professionals to communicate regarding patients, this study found that collaboration could be improved. Insight into each other's work, a closer relationship, and awareness of the different cultures, policies and approaches may ease communication and improve the collaboration. Lack of knowledge regarding CR in the community healthcare services could challenge the referral process at the hospital. However, this study showed that encouraging patients to be referred to CR and discussing individual options facilitated referral. Waiting time between hospital discharge and introduction to CR could pose as a challenge to enrollment. Inviting patients for an introduction meeting at the hospital before commencing CR could improve patient safety from hospital discharge until CR. In the healthcare professionals' daily work, lack of knowledge regarding legislation on return to work posed as a challenge. Access to a social worker with profound knowledge of labor market legislation could help guide and counsel the patients in CR.

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Ethical Approval

The study was registered and approved in the Central Denmark Region's register of research project (no. 1-16-02-602-20). All participants gave consent to participate prior to the observations. All participants received oral and written information prior to the focus group interviews and provided written informed consent to participate in this study. Anonymity was ensured for all participants during the analysis and in the presentation of the findings.

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Supplemental Material

Supplemental material for this article is available online.

References

- Becker, E. R., & Roblin, D. W. (2008). Translating primary care practice climate into patient activation: The role of patient trust in physician. *Medical Care*, 46(8), 795–805. https://doi. org/10.1097/mlr.0b013e31817919c0
- Brouwers, R. W. M., Houben, V. J. G., Kraal, J. J., Spee, R. F., & Kemps, H. M. C. (2021). Predictors of cardiac rehabilitation referral, enrolment and completion after acute myocardial infarction: An exploratory study. *Netherlands Heart Journal*, 29(3), 151–157. https://doi.org/10.1007/s12471-020-01492-0
- Buckley, J. P. (2021). The changing landscape of cardiac rehabilitation; from early mobilisation and reduced mortality to chronic multi-morbidity management. *Disability and Rehabilitation*, 43, 3515–3522. https://doi.org/10.1080/09638288.2021.1921062
- Central Denmark Region and 19 municipalities [Region Midtjylland og de 19 midtjyske kommuner]. (2015). *Management programme for cardiac disease* [In Danish] [Forløbsprogram for hjertesygdom]. https://www.rm.dk/siteassets/sundhed/sundhedstilbud-og-forebyggelse/kronisk-sygdom/hjertesygdom/ forlobsprogram-for-hjertesygdom-231115.pdf
- Coleman, E. A., & Berenson, R. A. (2004). Lost in transition: Challenges and opportunities for improving the quality of transitional care. *Annals of Internal Medicine*, 141(7), 533–536. https://doi.org/10.7326/0003-4819-141-7-200410050-00009
- Danish Health Authority [Sundhedsstyrelsen]. (2012). Guidelines for chorinic disease - the generic model [In Danish][Forløbsprogrammer for kronisk sygdom – den generiske model] (Version 2.0. ed.).
- Danish Health Authority [Sundhedsstyrelsen]. (2015). No longer valid as of 2023. National Clinical guideline for cardiac rehabilitation [In Danish] [National klinisk retningslinje for hjerterehabilitering]. Danish Health Authority.
- Foster, E. J., Munoz, S.-A., Crabtree, D., Leslie, S. J., & Gorely, T. (2021). Barriers and facilitators to participating in cardiac rehabilitation and physical activity in a remote and rural population: A cross-sectional survey. *Cardiology Journal*, 28(5), 697–706. https://doi.org/10.5603/cj.a2019.0091
- Ghisi, G. L. M., Polyzotis, P., Oh, P., Pakosh, M., & Grace, S. L. (2013). Physician factors affecting cardiac rehabilitation referral and patient enrollment: A systematic review. *Clinical Cardiology*, 36(6), 323–335. https://doi.org/10.1002/clc.22126
- Greene, J., & Ramos, C. (2021). A mixed methods examination of health care provider behaviors that build patients' trust. *Patient Education and Counseling*, 104(5), 1222–1228. https://doi. org/10.1016/j.pec.2020.09.003
- Handberg, C. (2021). Chapter 1. Interpretive description: A research methodology in applied practice [In Danish] [Interpretive description : en anvendelsesorienteret forskningsmetodologi].
 In C. Handberg & A. Lunde Jensen (Eds.), *Interpretive description: A research methodology in applied practice* [In Danish]

[Interpretive description : En anvendelsesorienteret forskningsmetodologi] (pp. 17–34). Aarhus Universitetsforlag.

- Koch, L. & Vallgårda, S. (Eds.). (2008). Research methods in public health (1 ed.). Gyldendal Akademisk.
- Kotseva, K., Wood, D., & De Bacquer, D. (2018). Determinants of participation and risk factor control according to attendance in cardiac rehabilitation programmes in coronary patients in Europe: EUROASPIRE IV survey. *European Journal* of *Preventive Cardiology*, 25(12), 1242–1251. https://doi. org/10.1177/2047487318781359
- Krueger, R. A., & Casey, M. A. (2015). Focus groups : A practical guide for applied research. Sage Publications.
- Lyngsø, A. M., Godtfredsen, N. S., & Frølich, A. (2016). Interorganisational integration: Healthcare professionals' perspectives on barriers and facilitators within the Danish Healthcare System. *International Journal of Integrated Care*, 16(1), 4. https://doi.org/10.5334/ijic.2449
- Maribo, T., Ibsen, C., Thuesen, J., Nielsen, C. V., Johansen, J. S., & Vind, A. B. (2022). *Whitebook on rehabilitation* [In Danish] [Hvidbog om rehabilitering] (1 ed., Vol. 1). Rehabilitation International Denmark [Rehabiliteringsforum Danmark].
- Møller, N., Lerbæk, B., Kollerup, M. G., & Berthelsen, C. (2022). Building bridges from different settings to a common ground – Strengthening transitions for older patients with multiple chronic conditions: A qualitative descriptive design. *Nordic Journal of Nursing Research*. Advance online publication. https://doi.org/10.1177/20571585221114514
- NHS England. (n.d). *What are community health services*. NHS England. Retrieved May 15, 2023, from https://www.eng-land.nhs.uk/community-health-services/what-are-community-health-services/
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-Based Nursing*, 18(2), 34–35. https://doi.org/10.1136/eb-2015-102054
- Palmer, K., Bowles, K.-A., Lane, R., & Morphet, J. (2020). Barriers to engagement in Chronic Heart Failure Rehabilitation: An Australian Survey. *Heart Lung and Circulation*, 29(8), e177–e184. https://doi.org/10.1016/j.hlc.2019.07.012
- Pardaens, S., Willems, A.-M., Clays, E., Baert, A., Vanderheyden, M., Verstreken, S., Du Bois, I., Vervloet, D., & De Sutter, J. (2017). The impact of drop-out in cardiac rehabilitation on outcome among coronary artery disease patients. *European Journal of Preventive Cardiology*, 24(14), 1490–1497. https:// doi.org/10.1177/2047487317724574
- Pesah, E., Supervia, M., Turk-Adawi, K., & Grace, S. L. (2017). A review of cardiac rehabilitation delivery around the world. *Progress in Cardiovascular Diseases*, 60(2), 267–280. https:// doi.org/10.1016/j.pcad.2017.08.007
- Petersen, H. V., Foged, S., & Nørholm, V. (2019). It is two worlds" cross-sectoral nurse collaboration related to care transitions: A qualitative study. *Journal of Clinical Nursing*, 28(9-10), 1999– 2008. https://doi.org/10.1111/jocn.14805
- Philibert, I., & Barach, P. (2012). The European HANDOVER Project: A multi-nation program to improve transitions at the primary care—inpatient interface: Table 1. *BMJ Quality* & *Safety*, 21(Suppl 1), i1–i6. https://doi.org/10.1136/bmjqs-2012-001598
- Rabiee, F. (2004). Focus-group interview and data analysis. Proceedings of The Nutrition Society, 63(4), 655–660.

- Ravn, M. B., Uhd, M., Svendsen, M. L., Ørtenblad, L., & Maribo, T. (2022). Why do patients with ischaemic heart disease drop out from cardiac rehabilitation in primary health settings. A qualitative audit of patient charts. *Frontiers in Rehabilitation Sciences*, 3, 1–7. https://doi.org/10.3389/fresc.2022.837174
- Sandelowski, M. (1995). Sample size in qualitative research. Research in Nursing & Health, 18(2), 179–183. https://doi. org/10.1002/nur.4770180211
- Schopfer, D. W., Nicosia, F. M., Ottoboni, L., & Whooley, M. A. (2020). Patient perspectives on declining to participate in homebased cardiac rehabilitation: A mixed-methods study. *Journal* of Cardiopulmonary Rehabilitation and Prevention, 40(5), 335–340. https://doi.org/10.1097/hcr.000000000000493
- Sommer, C. G., Jørgensen, L. B., Blume, B., Møller, T., Skou, S. T., Harrison, A., & Tang, L. H. (2022). Dropout during a 12-week transitional exercise-based cardiac rehabilitation programme: A mixed-methods prospective cohort study. *European Journal* of Cardiovascular Nursing, 21(6), 578–586. https://doi. org/10.1093/eurjcn/zvab119
- Supervia, M., Turk-Adawi, K., Lopez-Jimenez, F., Pesah, E., Ding, R., Britto, R. R., Bjarnason-Wehrens, B., Derman, W., Abreu, A., Babu, A. S., Santos, C. A., Jong, S. K., Cuenza, L., Yeo, T. J., Scantlebury, D., Andersen, K., Gonzalez, G., Giga, V., Vulic, D., . . . Grace, S. L. (2019). Nature of cardiac rehabilitation around the globe. *EClinicalMedicine*, 13, 46–56. https:// doi.org/10.1016/j.eclinm.2019.06.006
- Svendsen, M. L., Gadager, B. B., Stapelfeldt, C. M., Ravn, M. B., Palner, S. M., & Maribo, T. (2022). To what extent is socioeconomic status associated with not taking up and dropout from cardiac rehabilitation: A population-based follow-up study. *BMJ Open*, 12(6), 1–8. https://doi.org/10.1136/bmjopen-2022-060924
- The Ministry of Interior and Health [Indenrigs- og Sundhedsministeriet]. (2022). *Danish Health Legislation* [In Danish] [Bekendtgørelse af sundhedsloven]. Retrieved June, 1, from https://www.retsinformation.dk/eli/lta/2022/210
- Thorne, S. (2008). Interpretive Description. Left Coast Press.
- Visseren, F. L. J., Mach, F., Smulders, Y. M., Carballo, D., Koskinas, K. C., Bäck, M., Benetos, A., Biffi, A., Boavida, J.-M., Capodanno, D., Cosyns, B., Crawford, C., Davos, C. H., Desormais, I., Di Angelantonio, E., Franco, O. H., Halvorsen, S., Hobbs, F. D. R., & Hollander, M.; E. S. C. Scientific Document Group. (2022). Corrigendum to: 2021 ESC guidelines on cardiovascular disease prevention in clinical practice: Developed by the Task Force for cardiovascular disease prevention in clinical practice with representatives of the European Society of Cardiology and 12 medical societies with the special contribution of the European Association of Preventive Cardiology (EAPC). *European Heart Journal*, *43*(42), 4468–3337. https://doi.org/10.1093/eurheartj/ehac458

- Vrangbæk, K. (2020). International Health Care System Profiles, Denmark. https://www.commonwealthfund.org/internationalhealth-policy-center/countries/denmark
- Wade, D. T. (2020a). What attributes should a specialist in rehabilitation have? Seven suggested specialist capabilities in practice. *Clinical Rehabilitation*, 34(8), 995–1003. https://doi.org/10.1177/0269215520925869
- Wade, D. T. (2020b). What is rehabilitation? An empirical investigation leading to an evidence-based description. *Clinical Rehabilitation*, 34(5), 571–583. https://doi. org/10.1177/0269215520905112
- World Health Organization. (2018). Access to rehabilitation in primary health care: An ongoing challenge. (WHO/HIS/ SDS/2018.40) World Health Organization.
- Zwisler, A. D., Rossau, H. K., Nakano, A., Foghmar, S., Eichhorst, R. I., Prescott, E. I. B., Cerqueira, C. S., Soja, A. M. B., Gislason, G. H., Larsen, M. L., Andersen, U. O., Gustafsson, I., Thomsen, K. K., Hansen, L. B., Hammer, S., Viggers, L., Christensen, B., Kvist, B., Egholm, A. C. L., . . . May, O. (2016). The Danish cardiac rehabilitation database. *Clinical Epidemiology*, *8*, 451–456. https://doi.org/10.2147/ clep.s99502

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