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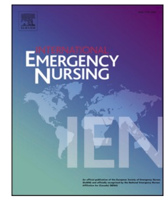

Original Research

"Make the best use of resources in organizations and society at large"—Professionalś experiences of the Collaborative Health Care model

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ABSTRACT

Background: Collaborative Health Care (CHC) is an integrated health care model in Sweden in which municipal and regional health care resources are coordinated to provide fast, coherent, and seamless health care in patients' homes.

Aim: Explore registered nurses' experiences of working within the Collaborative Health Care model.

Methods: A qualitative, inductive design was used and was reported in accordance with the COREQ checklist. Semi-structured individual interviews were conducted via video with eight registered nurses—six women and two men aged 27–65 years—with experience working in the CHC health care model. The interviews lasted between 40 and 105 min and were recorded and transcribed verbatim.

Results: The findings consist of three categories, divided into nine subcategories and illustrated by quotes. The CHC is experienced as a work model in progress, spurring initial feelings of anxiety and frustration. Working in the health care model is described as challenging due to uncontrolled increase in workload, complex assessments, and limited knowledge about the patient. Participants found CHC to be beneficial in several ways for patients and their relatives, for health care professionals, for participating organizations, and for society at large.

Conclusion: Implementing an integrated health care model like CHC can initially be experienced as challenging. Health care professionals can experience initial feelings of frustration and anxiety, since the usual workload may be affected by unexpected assignments, requiring knowledge to conduct complex, and sometimes novel, assessments. Working in CHC is a learning process resulting in increased competence. Participants found CHC to be beneficial in several ways, making the most out of resources in organizations and society at large to provide coordinated integrated care to patients in their homes.

1. Introduction

A worldwide transformation of health care services is essential to meet the growing demands of health care in an increasingly older population. It is suggested that integrated care, in favor of a hospital-focused system or a low investment in health, can aid in achieving the Sustainable Development Goals [1]. According to the World Health Organization (WHO) [2], comprehensive community-based approaches and interventions that support integrated care are vital for care providers to foster healthy aging. Integrated care requires close collaboration between primary care, in-patient care, and municipal home health care. Cooperation between health care professionals is an essential skill in everyday work with patients [3], as factors influencing a patient's choice to seek emergency and urgent care services involve access to and confidence in primary care, opening hours and locations, and perceived need for emergency medical services [4]. Implementing collaboration between several health care actors requires strong, courageous, and sustainable leadership at all levels [5]. To meet the needs of the health care transformation, different health care models are implemented targeting integrated care [6–9], and others on interprofessional care and collaboration [10–13]. Previous research has shown that integrated care models and interventions may lead to a reduction of emergency call volumes, reduction of fall-related transports [14], and reduced unnecessary hospitalization and emergency room visits [15], especially when

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they involve home visits from geriatric teams [16]. However, evidence for the cost-effectiveness of preventive integrated care is limited [9]. When integrated care programs are to be implemented, it is important to evaluate the specific aim of the model [17] as the context in which the model will be implemented is an important factor [17,18].

The integrated person-centered Collaborative Health Care model (CHC) was developed in 2009 in the western region of Sweden to provide coherent and seamless health care and tighten the care chain in primary care by coordinating available health care resources. The CHC model is a unique health care model in Sweden, in which different health care actors such as primary care, hospital care, home health care, ambulance services including SOS alarm, and the national telephone helpline for healthcare in Sweden—Swedish healthcare direct (SHD1177) —collaborate by sharing responsibilities in provision, organization, and the financing of healthcare. Normally in Sweden, each health care actor is independently responsible for each service due to separate authorities and organizations. Patients that have experienced the CHC model perceive that it leads to faster acute care and that it uses society's resources in a unique way, as health care professionals collaborate across organizational borders [8]. However, when implementing new integrated care models, the experiences of involved health care professional merit consideration. In this study, we aim to explore registered nurses' (RN) experiences of working within the Collaborative Health Care model.

2. Methodology

2.1. Design

The study employed an inductive qualitative design using semi-structured individual interviews analysed with qualitative content according to Elo Kyngäs [19], and was reported in accordance with the COnsolidated criteria for REporting Qualitative research (COREQ) checklist [20].

2.2. Setting and sample

Purposive sampling was used to recruit participants with experiences working within the CHC model from three of eleven feasible municipalities. Inclusion criteria included experience in one of the following health and medical care actions: answering phone calls as an RN at SHD1177 and coordinating another RN in home health care to make a home visit if needed; working with While Waiting for Ambulance (WWFA), which is when an operator at the SOS alarm system coordinates the closest RN in home health care to initiate actions needed to support the person calling SOS while waiting for the ambulance to arrive; or working in assistance missions, situations in which one RN in a health care organization asks for help with nursing interventions from a RN in another health care organization with, e.g., blood sampling, home visits, or ECGs.

Responsible heads of health care teams delivering one of the listed services consented to the study aim, and to provide oral and written information to their staff members of the study at a workplace meeting. The responsible heads provided contact information of registered nurses in their organization who were willing to participate in the study to the first and third author, who e-mailed information letters about the aim of the study.

After a couple of weeks, the first author contacted the prospective participants by e-mail and asked if they wanted to participate in the study. The interviews were to be carried out in person or digitally via a video-interview, based on the participant's request. An appointment for an interview was set with those who consented to participate based on their wishes regarding place, date, and time. Of the 12 contacted persons, ten agreed to participate in the study, and all preferred video-interviews since data collection took place during the COVID-19 pandemic. Of the ten participants who were willing to participate, eight were interviewed. The personś who declined participation were not able to participate in an interview at the available times, or due to increased workload.

2.3. Data collection

Data were collected via semi- structured individual interviews by the first author from autumn 2020 to spring 2021. The interviewer was a RN with several years' experience working within hospital and municipal health care. The interviews lasted between 40 and 105 min (a mean of 53 min) and were recorded and transcribed verbatim. The interviews were introduced with an overall question, "Could you tell me about your experience of working in Collaborative Health Care?" Probing questions were used and depended on the participants' experiences and responses to deepen the content in the interviews. Among the included participants, six were women and two were men, aged 27–65 (mean 43 years), working as registered nurses in ambulance service in three different areas and/or home health care from four municipalities. They had varied experience of working as registered nurses and/or ambulance nurses (range 2–22, mean 12 years) (Table 1).

2.4. Data analysis

A qualitative content analysis was conducted following an inductive approach [19]. The analysis followed the three main phases of preparation, organizing, and reporting, as described by Elo and Kyngäs [19]. In the preparation phase, each transcribed interview was read through several times to get a sense of the whole and understand the essential meanings in the text. In the next step, text that responded to the study aim was marked and divided into meaning units which were further condensed and labelled with codes. Differences and similarities within the codes were compared, contrasted and merged into subcategories and categories, describing the manifest content. This process continued until agreement emerged among all authors and was characterized by iterative movements, in order to strengthen credibility. To illustrate the original data and enhance the description of the categories, quotations are used.

2.5. Ethical considerations

This study was designed and performed according to Swedish Act on Ethical Scrutiny of Research Involving Human beings [21], stating that ethical approval is not needed when healthcare professionals are asked to participate in research about work-related questions. The study was also conducted in accordance with the Declaration of Helsinki [22]. All participants were informed about the content and the study aim both orally and in written format. Oral and written consent was obtained from the participants for their participation in the study and for their information to be published as a research article. The interview transcripts are stored at a password secured server at the University, according to ethical standards and to the Swedish Act on Ethical Scrutiny of Research Involving Human beings [21].

3. Results

The findings consist of three categories, divided into nine

Table 1
Characteristics of study participants.

	Total N = 8	Women n = 6	Men n = 2
Age, range 27–65, (mean)	43.25	32.5	43.0
Working experience, range 2–22 years, (mean)	11.8	11.6	12
Ambulance care (n)	4	2	2
Home health care (n)	5	5	0

subcategories (Table 2) illustrated by quotes.

3.1. A work model in progress

The perspective on CHC was described as having changed over time. Anxiety and frustration were common feelings at the implementation of the model, but eventually changed. Now, the participants instead experienced the need for more assignments and more knowledge. A need for more collaboration was described, as were activities that were implemented late in the model that did not work so well.

3.1.1. Anxiety and frustration at first

Participants who were involved since the start of Collaborative Health Care described that there was initially great dissatisfaction with the model. Many had a premonition that this way of working would increase workloads and create stress and anxiety. It was difficult to see how one's own daily work would benefit from collaboration, and saw a risk in not having enough time for one's own patients. Since the working method had not been tested before, many had difficulty understanding how collaboration across organizational boundaries would work.

"You did not see the full potential at first." (Participant #4)

Participants from home health care were worried about not having enough time for their own work asks and felt anxious about being asked to perform WWFAs all the time.

"At the start we were afraid that there would be two WWFAs per day. But that has not been the case." (Participant #7)

There was also a concern about not possessing the knowledge required to handle WWFA. There were many preconceived notions about each other's tasks. Conflicts sometimes arose when assignments needed to be delegated to evening or night shifts, who did not feel that there was time, and frustration arose. There was also frustration that professionals from the other organization did not trust the initial assessment of the patient's status. It was also difficult to find good contact routes at first, and it was sometimes perceived as personal when it came to how well collaboration could be achieved. Over time, the working method became settled in the participating organizations and began to flow, and the collaboration between organizational boundaries was appreciated.

The collaboration model was experienced to work less well in organizations that had been incorporated into the model later on. Participants felt frustrated that primary care that was incorporated comparatively late collaborated to an extremely small extent and seemed less familiar with how the system could be used or how resources could be utilized. Ignorance of the fact that a prescription from a doctor is required for an ECG is an example that was raised as an obstacle, but viewed as an issue that will be solved over time.

Table 2
Categories and subcategories.

Category	Subcategories
A work model in progress	Anxiety and frustration at first The importance of knowing each other and co-locating Training and follow-up in collaboration
Challenges with the working method	Regular work is affected Complexity of assessments Limited knowledge about the patient
Benefits in several ways	The patient receives faster care and avoids unnecessary health care visits Make the best use of the resources in the organizations and society at large Competence and knowledge increase for staff and money for the organization

3.1.2. The importance of knowing each other and co-locating

When the model had been in operation for some time and routines were established, the working method was appreciated as a concept and many perceived that there were too few assignments and would have preferred to get into a habit and establish a routine. Participants also saw the potential of the working method and the multiple collaboration opportunities. It was believed to be important to get to know each other better, in order to establish easier and faster contact routes.

"To exchange some experiences, speak a little about what it looks like from my perspective, and I get knowledge and awareness of how they look at things, then you can, yes, tell each other." (Participant #1)
"It is a very good type of care that, if it is to be developed in any direction, it has to be developed even more. I think it is important since the need for care in the home will only increase and I think we all need to work together more to make this good for the people and I think you benefit from it in the long run." (Participant #2)

The participants expressed that there are not actually very many professionals working in ambulance care, home care, 1177, and primary care in a municipality. The participants described several initiatives that were conducted with the purpose of better understanding each other, but a co-location where the activities were physically closer had been even better.

3.1.3. Training and follow-up in collaboration

Participants stressed that more opportunities for collaboration days where joint training and experiences were to be exchanged and real cases could be discussed would have been appreciated. Practice days in collaboration were highlighted as a way of increasing safety when working in the care model. The possibility of training together with experienced staff in cases that you might come across was considered valuable, especially for colleagues who did not feel safe in working in WWFA.

"We have to help RN in home health care to feel safe in WWFA because when you talk to each other you hear many who are unsure about WWFA and choose to give up. Then there is a risk that patients will be seriously affected." (Participant #2)

Registered nurses working in the ambulance also wanted to be involved in the introduction of new advanced healthcare equipment available in home health care, since it comprised techniques with which they were unfamiliar and had encountered during their own training. At the same time, there was a need to refresh knowledge from undergraduate nursing education, such as catheter replacement, which is not common to handle in the ambulance, but which is a common assignment within CHC. The participants said that the possibility of following up assignments exists but is perceived as complicated, which leads to a sense of powerlessness. Being able to follow how a patient has managed and receive an explanation for unexpected and sometimes unusual symptoms would have led to an increase in competence.

"To be able to follow up for a learning purpose to see—did I make the right assessment, could he had stayed at home or was it right for him to have been sent in?" (Participant #8)

Another aspect that emerged was that a common medical record system had facilitated the work and collaborative training and follow-up within CHC, which is not now the case. Participants described that after the assignment has been completed, a medical record entry is sent to primary care that has one system for documentation. The hospital does not have the same medical record system and can read which assignments have been performed and which assessments have been made at home. The diverse documentation system also hinders follow-up on cases for learning purposes.

3.2. Challenges with the working method

The participants described challenges working with the CHC model. Their regular work was affected when they had to redirect their work and prioritize a WWFA assignment that needed their immediate attention. The complexity and responsibility in carrying out assessments was addressed and the value of having colleagues to discuss issues with was highlighted. The limited knowledge regarding the patients visited in a WWFA assignment, compared to the knowledge about patients in home health care, was a challenge and it was the participants' responsibility to make assessments regarding appropriate interventions.

3.2.1. Regular work is affected

The participants described that they sometimes felt divided between choosing between their own planned work activities and receiving WWFA that needed to be answered immediately. Having to leave or wait to go to a seriously ill home health care patient at the same time as another person may be in need of even more urgent help, was experienced as difficult. Participants from home health care described that they can now turn off their tracker when they cannot accept an assignment. Such occasions may include, for example, caring for a patient in need of palliative care.

> *"If I am with a seriously ill patient, who may be close to death, then I cannot go, then I usually do not have the alarm with me, or I turn off the alarm for a while, because our patients come first, anyway"* (Participant #7)

Regular work could also be affected if there is not enough time to handle both CHC assignments and the scheduled planned visits. This is especially noticeable at night and on weekends when RNs in home health care are often responsible for more patients and have longer distances to drive. Another aspect that emerged was that meeting more people and patients during CHC assignments increased the risk of becoming infected with SARS-CoV-2 and passing on the infection to fragile home health care patients.

3.2.2. Complexity of assessments

The participants described that patient assessments are central to the model and emerged as difficult tasks. Situations in which colleagues from other organization needed advice or more eyes and hands on deck when assessing a patient's symptoms are common. Being able to ask other practitioners in situations where the assessment of the patient resulted in deciding to let the patient stay at home, or taking the patient in to emergent care in an ambulance was described as giving participants a sense of security.

> *"It is a great responsibility to let a patient who calls and asks for help to stay at home."* (Participant #3)

One risk that emerged was that in order to be able to make a correct assessment, both competence and experience are required. The participants emphasized that everyone working in CHC are trained and experienced RNs. However, experience in assessing complex symptoms and situations can be difficult. Therefore, many choose to go in pairs for certain types of assignments. In addition, participants also pointed out that assessments of the patent's situation are made in real time and that their status can change even 10 min later.

> *"There is a risk that you become overconfident even when you have been helped in an assessment, and yes, we will keep this patient at home and see how it develops, and then it develops very quickly in a negative direction."* (Participant #1)

One advantage of the CHC, according to participants, is that the opportunity for an extra visit a few hours later exists; something which is not feasible in other municipalities that do not use CHC. The participants also pointed out that, as always, if there is the slightest doubt, the patient should be taken to the hospital, and that there should be no stigma surrounding this decision.

3.2.3. Limited knowledge about the patient

Having limited knowledge about the patient is something that registered nurses working in the ambulance are accustomed to. Registered nurses from other organizations felt unfamiliar with this, and it was something that was not self-selected. Many patients who need health care at home have a complex health history. Not knowing anything about the patient and the home situation could therefore be experienced as uncertain. Participants described how sometimes threatening situations arose, given the risk that the patient or relatives were under the influence of drugs. The most important thing was that their own safety must come first, even if the patient is in urgent need of help.

> *"You have to drive kilometers on a gravel road, and you do not know where you end up, and now I have seen a lot of rubbish in my other job, of course you have to be cautious. It could be dogs and a person with severe dementia who does not understand what happens if the wife calls us. So, there are external risk factors."* (Participant #5)

The participants emphasized the importance of going in pairs to certain assignments to ensure their safety and they had been educated on how they would act in the event of the risk of threats or violence. On a few occasions, the police force had to accompany.

3.3. Benefits in several ways

Working in the CHC model was found to be beneficial in many ways. Patients receive help faster, in their home, and unnecessary hospitalizations can be avoided. The whole situation can be addressed and noted, including supporting relatives, when providing health care in the home. Providing health care according to the CHC model is experienced as making the most out of society's resources but also as increasing health care providers' knowledge and skills, which is beneficial for participating organizations and society at large.

3.3.1. The patient receives faster care and avoids unnecessary health care visits

According to participants, patients receive faster care after 911 alarms, since staff who are closest to the person who receives the alarm arrive first and can begin to provide medical care. Another important aspect is that the inhabitants of the municipalities can receive a home visit even if the municipality does not offer home health care, and the patient does not have to go to the emergency center, health center, or emergency room.

> *"If I can go and change a catheter on a Saturday morning or evening instead of having to go to the hospital or the emergency room, society has saved both money and the patient's suffering and time."* (Participant #3)

In many cases, it feels good to visit the patient at home to be able to see the situation as a whole; how it actually is. According to participants, they have yet to meet a patient who does not think the collaboration model has been beneficial.

> *"It's still a luxury, that you make a call to 1177 and then you have someone who comes to your home."* (Participant #6)

According to participants, patients appreciated receiving help quickly and smoothly without having to leave their homes. The participants experienced that they could also support the patient's relatives during home visits, who are often overshadowed in acute situations, since the primary focus is on the patient's demands.

3.3.2. Make the best use of the resources in organizations and in society at large

Participants felt favorable about working in the CHC since they felt they were utilizing society's resources in the most optimal way.

Supporting primary care activities was perceived as rewarding because participants were aware that many inpatient care activities should be conducted by primary care. In cases where the patient could not easily go to primary care, they could instead visit patients at home:

> *"We were out on an assignment for the health center where a lady needed an ECG but was so ill that she could not get to the health center. Then we went there and took an ECG and sent it to the physician at the primary care center."* (Participant #1)

Ambulances helping out with less urgent situations while waiting for the next alarm, or home health care staff starting the provision of emergency medical health care while waiting for an ambulance were described as beneficial ways of utilizing the expertise of various organizations and for society at large.

3.3.3. Competence and knowledge increase for staff and money for the organization

Accepting CHC assignments led to increased learning opportunities with the resulting increased knowledge and competence, as perspectives were expanded in new patient meetings. This novel way of working led to a change in everyday work life that felt exciting:

> *"We as staff still have the opportunity to broaden our knowledge. To encounter something we are not used to, that is useful."* (Participant #4)

Participants expressed that the assignments also generated extra money for their own organization, which increased the awareness and development of financial skills among their colleagues. This financial incitement spurred many to want to go on as many missions as possible. When someone came back from a successful assignment, they were happy both for that their expertise was enough to solve the situation and for earning some money for the organization.

"Did you go on alarm and it went well? What fun for you." (Participant #5).

Some said that they almost felt a little jealous of the person who had been alerted. The assignments were described as "*extra spice in everyday life*". The experience of being useful and doing good for the patient and the organization felt satisfying.

4. Discussion

The results of this study reveal that registered nurses working in the CHC model find it to be a model in progress, as they see challenges with the working method but also perceive several benefits.

In this study, several home health care nurses described how they initially felt anxiety and worry regarding how many WWFA calls there would be and how stressful it would become, since WWFA was an assignment that was out of their control and added to their regular workload. Some lacked confidence as to whether they were properly educated for acute missions. A previous study on home health care nurseś views on WWFA missions showed similar results [23]. Ambulance nurses who have worked less than 12 months in the ambulance revealed comparable feelings, striving for balance during the transition process. Initially they felt insecure and lacked knowledge [24]. A similar transition was seen in the present study, where the initial worries from registered nurses in home health care transformed into expectations and a wish for more missions, as the home health care nurses saw the benefits in their own knowledge base, and also the benefits for the patients and the patients' relatives.

To further develop integrated care, participants found it useful and important to get to know one another, and wished for increased opportunities for joint collaboration where experiences could be exchanged. A previous study described how regular meetings and good communication are key factors for implementing community-based integrated care [25]. In the present study, the participants also spoke of the beneficence in how the CHC model promoted teamwork, which in turn improved work satisfaction and knowledge levels, supporting a previous study [7]. A metasynthesis revealed how a shared vocabulary, along with clear communication and continuous team meetings, are important to provide adequate health care for patients when working in interprofessional teams [26]. The participants in the present study described how different views of onés own and others' roles in the health care chain was an asset but also a barrier. Professionals' perspective of integrated health and care has been shown to involve an awareness of culture and professionalism [27].

A barrier in integrated care is the variety of different digital platforms [27]. This aspect was brought up in the present study, as participants lacked shared documentation and a patient journal system. Digitalization is a key factor in future health care organizations, and the development of common information technology platforms is an urgent need [5].

In the present study, professionals perceived how implementing an integrated care model effected their regular work, and led to increased workload. A study on primary care professionals showed similar findings, as implementing an integrated care model increased workloads [15]. The participants narrated how not knowing the patient and the home situation could be perceived as uncertain and stressful. Ambulance nurses have described emergency calls as being stressful, with unclear circumstances increasing stress levels. Having discussions with colleagues directly after the assignment were reported as being particularly stress-reducing [28].

The CHC integrated health care model was described as leading to beneficial wins in several ways. A recent study conducted on SHD1177 functions within the CHC model describes how home consultations by registered nurses could be an option in managing patients' needs and conditions at home in order to avoid acute clinic visits [29]. The participants in the present study similarly explained that they find the CHC model leads to fewer unnecessary health care visits, supporting previous research [14–16]. The CHC model also led to quicker access to health care for patients, something that patients receiving CHC highly appreciated [8]. Implementing interventions that treat the patients faster in an acute situation may save lives. If an automated external defibrillator is used before the ambulance arrives, the 30-day survival rates increases [30]. Integrated health care models such as the CHC model, could improve the gap between primary and secondary care [31] as well as psychological healthcare by providing holistic solutions that improve treatment adherence, health and emotional well-being, and quality of life for patients with chronic illnesses and disabilities [32]. It could also increase opportunities for RNs to engage in clinical leadership and proactive care management, supporting retention of both RNs and care workers [33]. Integrated care models may also promote interdisciplinary collaboration, by allowing RNs to work closely with other healthcare professionals, essential for providing patient-centered care and addressing complex health care needs [31,34]. However, evidence as to the cost-effectiveness of preventive integrated care is limited [9]. It is important to evaluate the aim of the integrated care programs to be implemented [17], as the context in which the model should be implemented is an important aspect to consider [17,18]. The concept of WWFA is not unique, as it has been introduced by firefighters and home health care nurses in regular municipalities, although it is not as well established as in the CHC. Regardless, it is important is to involve all stakeholders in the implementation process and both the preparation and design of the process for the implementation to be successful [35]. When implementing new work models it is important to prepare the RN by training in practice, to have collegial and peer support, but also to strengthen nursing competence and personal skills development to enhance overall professional growth [36].

5. Conclusion

Implementing an integrated health care model could be challenging at first, leading to frustration and anxiety among health care professionals, as the usual workload was interrupted by new, unexpected,

and often complex assessments. When these worries are conquered, several benefits are experienced, since the patients receive health care more quickly and thereby avoid unnecessary hospitalization and other acute health care visits. Implementing an integrated health care model such as CHC is also a learning process, since health care professionals gain increased competence and knowledge. According to the participants, CHC is a work model that makes the best use of the resources of participating organizations and society at large to provide coordinated integrated care to patients in their homes.

5.1. Limitations

As is the case for all studies, this study has limitations. Data collection took place during the COVID-19 pandemic, which influenced participants' everyday work experience. Although the sample size was small, it was perceived as sufficient to offer a rich and varied understanding of the phenomenon. Several of the participants had worked in the care model prior to the pandemic and therefore could speak to CHC both prior to and during the pandemic. Furthermore, the interviews were performed as video meetings, as preferred by the participants This might have influenced the character of the interviews. Video interviews have, however, been found to be comparable to in-person interviews in terms of data quality [37].

6. Implications for nursing practice

The study suggests that when implementing new work models within health care context, there should be opportunities to practice in beforehand, and to have patience before evaluating the results of such implementation. Health care professionals need time to implement new working methods, as their ordinary tasks are complex. Integrated health care models such as the Collaborative Health Care (CHC) model should be further developed and implemented according to the participants in this study.

Ethical statement

This study was conducted in accordance to the Declaration of Helsinki [22], and designed, planned, and performed as per Swedish law stating that ethical approval is not needed when professionals are invited to participate, voluntarily speaking about work-related issues.

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CRediT authorship contribution statement

Jenny Hallgren: Writing – review & editing, Writing – original draft, Visualization, Validation, Resources, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Maria Klingberg:** Writing – review & editing, Project administration, Conceptualization. **Maria Karlsson:** Writing – review & editing, Resources, Project administration. **Catharina Gillsjö:** Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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