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EMPIRICAL STUDIES

Interprofessional collaboration in a community virtual ward: A focus group study

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Abstract

Background: The problem of a lack of nurses is expected to worsen in the future. With an ever-increasing number of elderly patients with multimorbidity and a shortage of healthcare professionals, primary care must innovatively organise their services to offer more sustainable healthcare services. Organising healthcare services in a community virtual ward has been found to improve the quality of life for vulnerable elderly populations.

Aim: The aim of the study was to explore healthcare professionals' experiences of interprofessional collaboration in care for patients with multimorbidity in a community virtual ward in the Norwegian context.

Methods: Focus group interviews were conducted in this qualitative exploratory study. A purposive sample of 17 healthcare professionals working in a community virtual ward in Norway was interviewed. Data were analysed using thematic analysis.

Results: The study results show that healthcare professionals recognise a need for patient involvement in the community virtual ward to offer more sustainable healthcare services at home. Furthermore, the results show how healthcare professionals experience the use of assessment tools and whiteboard meetings as useful tools for facilitating interprofessional collaboration. The study results also describe how interprofessional and holistic follow-up with patients with multimorbidity contributes to increased focus on health promotion in the community virtual ward.

Conclusion: We found that interprofessional collaboration in community virtual wards may be a sustainable way of organising healthcare services for patients with multimorbidity living at home. Interprofessional collaboration with a patient-centred and health promotion approach, seems to increase the quality of the follow-up for patients with multimorbidity living at home. Additionally, mutual interprofessional trust and respect seems to be essential for making use of the unique expertise of different professions in the follow-up for patients with multimorbidity. In the future,

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both the patient's voice and opinion of their next of kin should be considered in the development of more sustainable homecare services.

KEYWORDS

community virtual ward, focus group interview, healthcare professionals' experience, interprofessional, patients with multimorbidity, qualitative research

INTRODUCTION

Western populations are ageing rapidly, and the prevalence of patients with multimorbidity is increasing [1]. Leijten et al. [2] describe multimorbidity as at least two chronic conditions, physical or mental, occurring simultaneously. Patients with multimorbidity often require the services of multiple healthcare professionals [2–4]. Statistics indicate that there will not be enough healthcare professionals to take care of the increasing number of elderly patients [5, 6]. Therefore, primary health care must reorganise their services to offer more sustainable health care.

A new way of organising primary healthcare services for patients with multimorbidity is the use of community virtual wards (CVWs), which have been tested at an international level [7–9]. A CVW consists of different primary healthcare professionals (i.e. general practitioners, physiotherapists, occupational therapists and nurses) who provide targeted care to individuals living at home with multimorbidity and complex care needs [10, 11]. A non-physical CVW provides interprofessional health care by assessing each patient, offering timely mobilisation of services and monitoring to support patients, so they can continue living at home [7–9].

A CVW often consists of a team of different healthcare professionals who collaborate in the follow-up of the patients with multimorbidity living at home. The way the CVW is organised varies across different countries. In the United Kingdom, the CVW team in primary care is led by a general physician (GP). Additionally, nurses provide care for patients with multimorbidity with a focus on self-management [12]. Patients are selected by conducting risk stratification based on the number of hospital admissions within the last 6–12 months and comorbidities [12]. In Canada, the CVW is led by a GP, and nurses provide daily follow-up on patients after discharged from the hospital [7]. In Hong Kong, the CVW also focuses on post-discharge hospital patients. The patients receive follow-up care from two dedicated teams from both the hospital and community [8]. The nurses in the hospital setting work with consultant geriatricians focusing on discharge preparation, including medication management and symptom recognition. The community team provides homecare follow-up on patients newly discharged from a hospital [8]. In Ireland, the CVW team also includes healthcare professionals from both hospitals and the community. Patients receive interprofessional followed up care for 3–7 months [9].

There is limited research in the Norwegian context on caring for patients with multimorbidity in CVWs. Identified research reports describe different healthcare professionals' roles in an early stage of testing a CVW [13, 14]. These reports focussed on how the healthcare professionals follow-up with patients who are newly discharged from a hospital without any systematic inclusion of GPs in the interprofessional follow-up with patients. Additionally, Eines et al. [15] described interprofessional collaboration (IPC) in CVWs as a useful approach for patient-centred care for those with multimorbidity living at home [15].

Research indicates that IPC can have positive effects on patients' outcomes [16]. Organising interprofessional healthcare services is therefore essential for improving the quality of care for vulnerable elderly population [8, 9, 11, 17, 18]. Zwarenstein, Goldman and Reeves define IPC as a process in which different professional groups work together to positively impact health care [19] (p. 3). Additionally, Willumsen [20] characterises IPC as a collaboration among different healthcare professionals in decision-making processes. IPC in CVWs is described as most beneficial for people with long-term medical conditions and complex health and social care needs—typically, older people living at home [16, 21]. Despite the documented IPC benefits, there is a lack of studies on experiences stemming from IPC implementation in primary healthcare services [16] and a lack of knowledge about healthcare professionals' experiences with IPC in CVWs [22, 23]. Furthermore, Antipas and Kirkevold [24] highlighted the lack of a systematic evaluation of the CVW as a model for taking care of patients with multimorbidity in Norwegian municipalities. Therefore, this study aimed to explore healthcare professionals' experiences with IPC in providing homecare health services to patients with multimorbidity in a CVW in Norway.

METHODOLOGY

Study design

This qualitative exploratory study used a descriptive approach [25] and was performed in line with the

consolidated criteria for reporting qualitative research (COREQ) checklist [26]. Data were collected through focus group interviews. Focus group interviews increase the respondents' opportunity to share and compare experiences, and they give researchers access to data pertaining to experiences revealed during group sessions [27].

Setting

In Norway, all patients have a legal right to receive home-care services when needed. Normally, these services are run by nurses and nurse assistants, with GPs having legal responsibility for medical follow-up. To offer more sustainable care for patients with multimorbidity, the municipality in this study began offering interprofessional home care services in a CVW in 2018. Healthcare professionals working in this CVW are GPs, physiotherapists, a social worker, nurses and nurse assistants. These professionals assess all registered elderly patients with health issues related to acute exacerbation of illness, general dysfunction or injuries. In addition, the healthcare professionals are obliged to contribute their specific professional knowledge and skills. Nevertheless, GPs always need to approve medical decisions when interprofessional measures are suggested in the CVW. A Registered Nurse conducts the first home visit within 3 days after the patient is registered in the CVW. The nurse invites both the patient and their next of kin to collect data on the patient's state of health, needs and wishes. The first home visit conversation is based on the standardised dialogue 'What matters to you', focussing on patient involvement and resources. Additionally, the nurses collect data on the patient's use of medication, results from a 4-m walking test, and a nutrition and fall screening.

Patients admitted to the CVW are daily followed up by nurses and nurse assistants. Other allied healthcare professionals, such as GPs, physiotherapists or a social worker may also be involved. Additionally, different healthcare professionals collaborate in weekly whiteboard meetings to discuss each patient's health status. Halfway through and at the end of the follow-up in the CVW, healthcare professionals conduct systematic evaluations together with the patient and their next of kin. The evaluation is based on the patient's defined goals and the results of retesting of the same tests conducted during the first home visit.

Participants

The participants, working as healthcare professionals, were recruited from one small municipality in Norway. The recruitment was done after obtaining the healthcare services manager's approval of the study. Healthcare professionals with experience working interprofessional in a CVW ($n = 23$) were invited to participate in a focus group interview. A purposive sample of 19 healthcare professionals agreed to participate. Unfortunately, two of them, the social worker and a nurse could not participate due to unexpected critical work tasks. The healthcare professionals were divided into four focus groups (Table 1).

TABLE 1 Description of participants

	Participants	Age
Focus group interview a	One GP Two nurses Two physiotherapists	37–68
Focus group interview b	Two nurses Three nurse assistants	36–49
Focus group interview c	Two nurses Three nurse assistants	23–54
Focus group interview d	Two nurses	31–43

Ethical considerations

The study was performed in accordance with the Ethical Guidelines for Nursing Research in the Nordic Countries and was reported to the Norwegian Centre for Research Data (ID:295680) [28]. The participants were given written information about the study, including information about their rights, confidentiality, voluntary participation and the freedom to withdraw from the study at any time without stating any reasons or suffering consequences. Informed consent was obtained from all participants before the focus group interviews. According to Norwegian law, no ethical approval was required because only healthcare professionals were included. The four interviews were coded as a, b, c and d, and the participants were numbered to ensure anonymity.

Data collection

Four focus group interviews were conducted in 2019–2020 in a quiet area at the participants' workplace. The interview guide was based on experiences from research reports [14, 15]. The interviews were initiated with the following questions: 'Can you tell us about your experiences caring for patients with multimorbidity in the CVW?', 'Can you elaborate how you work interprofessional in the CVW?' and 'Can you explain how patients with multimorbidity are involved in the follow-up?'. During the interview, we added questions such as 'Could you please explain a bit more?' and 'Do I perceive your meaning correctly when you say...?' The first author conducted the interviews. The

last author took notes and ensured that the main questions were in focus. At the end of the interviews, the participants were given the opportunity to give feedback to the researchers' summarised key points. The focus group interviews lasted between 50 and 80 min. The interviews were audio-recorded and transcribed verbatim. The total number of transcribed words from the focus group interviewees was 44,850.

Data analysis

We conducted a qualitative thematic analysis inspired by Malterud [25]. First, two researchers (TFE, CKUG) read all interview transcripts independently several times to gain an overall impression of the data material, exploring preliminary themes of relevance. Each researcher listed their preliminary themes, and these themes were critically reflected on and discussed. Next, we systematically reviewed the transcribed interviews line by line to identify meaning units or text fragments that represent healthcare professionals' experiences with IPC in providing homecare health services to patients with multimorbidity in a CVW. Third, we condensed and abstracted the content of the meaning units into different code groups. All authors were involved in the third analysis step, and a consensus was reached through discussions. Finally, the code groups were synthesised and summarised as themes derived from data. As a final check, participants were presented with the analysis results, which they acknowledged were recognisable. Table 2 presents an example of the analysis process.

RESULTS

The study results show that healthcare professionals recognise a need for patient involvement in the CVW to offer more sustainable healthcare services at home. Furthermore, the results show that healthcare professionals consider the assessment tools and whiteboard meetings to be useful tools for facilitating IPC. The study results also describe how an interprofessional and holistic follow-up on patients with multimorbidity contributes to increased focus on health promotion in the CVW.

What matters to you? The patient voice in the CVW

In all focus group interviews, the healthcare professionals emphasised the benefit of listening to the patients to identify, define and carry out goals and measures for patients with multimorbidity in the CVW: 'The patients' voice helps us adjust the measures in a better direction' (Physiotherapist, a:4). In particular, the nurses talked

TABLE 2 Examples of the analysis process from meaning units to themes

Meaning units	Codes	Themes
We respect and listen to each patient's needs. Different healthcare professionals can suggest measures, but they are useless if the patient is not listened to, involved with and motivated for the measures or activities	Importance of listening to the patient's needs and wishes	What matters to you? The patient's voice in the CVW
One individual score does not tell everything, but when we discuss our assessments interprofessionally, we reach better solutions for the patients	Assessment tool scores in interprofessional discussions	Use of assessment tools: A better overview of the multimorbid patients' health condition
I like the way we all suggest use of welfare technology to prevent unfortunate injuries and health deterioration	Suggestions of promoting health measures	A shared interprofessional focus on promoting health in the CVW
I like the way interprofessional whiteboard meetings contribute to better use of interprofessional competence in planning measures for the patients	Whiteboard meetings lead to better use of interprofessional competence	Whiteboard meetings—a useful tool for IPC in the CVW

about the importance of listening to and collaborating with the patients and their next of kin when the patients define their goals for the follow-up in the CVW. The nurses also shared their experiences with the patients' next of kin as an important and necessary supporter enabling some patients to continue living at home. The healthcare professionals highlighted how they experienced the importance of the patients' voice in the daily follow-up: 'We respect and listen to each patient's needs. Different healthcare professionals can suggest measures, but they are useless if the patient is not listened to and involved and motivated for the measures or activities' (Physiotherapists, a:4). The GP also talked about involving the patients to offer healthcare services that meet the patient's needs: 'I agree, without involving and respecting each patient's needs, our suggestions are useless' (GP, a:1).

The focus group participants talked about the ethical challenges when the patients define their goals without any guidance or advice from the healthcare professionals working in the CVW. Sometimes, they perceived the patients' goals to be unrealistic. They have also experienced instances in which patients' inner motivations have inspired patients to put forth extra efforts to reach their goals: 'We should never underestimate how motivation can be a driving power for the patients reaching their defined goals' (Nurse, c:1).

Use of assessment tools: A better overview of a multimorbid patient's health condition

The participants shared their experiences with the assessment tools they use, and they mentioned examples such as the 4-m walking test, fall risk assessment tool and nutrition screening tool. More of the interviewees talked about how they observe and assess all patients within 3 days after being registered in the CVW. Additionally, the nurses and nurse assistants mentioned how they use the assessment tool National Early Warning Score (NEWS2) if they are concerned about the patients' health status. The nurses and nurse assistants also told how they systematically use NEWS2 to assess clinical values such as respiratory rate, oxygen saturation, systolic blood pressure, pulse/heart rate, level of consciousness and temperature. The interviewees reported that NEWS2 was a useful assessment tool to identify patients with acute exacerbations, heart or lung disorder events, diabetes or infections, especially when following up with patients with multimorbidity post-discharge from the hospital. In particular, the nurses shared their experiences about the use of assessment tools as crucial to identifying acute exacerbations and exchanging information interprofessional. Both the nurses, the physiotherapists and the GP highlighted how the assessment scores lead to an objective and standardised starting point for interprofessional discussions. An equal understanding of the assessment scores was also mentioned as useful carrying out follow-up measures. Particularly, the nurses emphasised that assessment scores gave them more confidence when they need to contact the GP. 'When we have competence and skills with using different assessment tools, I think we contribute to faster treatment of patients with exacerbations, and thus reduce the severity of complications' (Nurse, b:4). However, the GP pointed out how he appreciated getting and discussing the patients' scores: 'I rarely visit and observe the CVW patients at home, so I'm completely dependent of exchanging and discussing the patients' scores and health situation' (GP, a:1).

A physiotherapist elaborated on how conferring with other professionals in the CVW on the results of systematic mapping and use of assessment tools contributes to increased quality of care. 'One individual score does not tell everything, but when we all discuss our assessments, we reach better solutions for the patients' (Physiotherapist, a:5). Furthermore, the participants also highlighted how multiple professional perspectives when discussing the patients' scores, leads to a better overview of the health conditions of patients with multimorbidity. The GP emphasised that attending interprofessional discussions was worth the time spent because it contributes to better quality of follow-up measures. The healthcare professionals within all the focus groups talked about the benefit of exchanging both complementary observations and knowledge about the health condition of the patients with multimorbidity, which helped them gain a better overview of the patients' health condition.

A shared interprofessional focus on promoting health in the CVW

The healthcare professionals highlighted the importance of focusing on activities promoting health to support elderly patients with multimorbidity so they can continue to stay at home. The IPC has contributed positively to this regard: 'I think we now have a culture for focusing on promoting health when discussing the patients' issues' (Nurse, b:2). All the interviewees discussed how they focus on promoting health. The nurses especially talked about how frequently home visits lead to patients feeling confidence getting healthcare services at home instead of in a nursing home or hospital. Some of the healthcare professionals also mentioned how they recommend that patients use welfare technologies, such as GPS, memory planners, medical dispensers or oxygen saturation monitoring, to

increase the health promotion focus among patients with multimorbidity: 'I like the way we all suggest use of welfare technology to prevent unfortunate injuries and health deterioration' (Nurse, c:3).

The way the healthcare professionals focus on medication reviews was also emphasised as an important reducing risk for falls: 'After reducing the painkillers, I think the patients' risk for falls has reduced. Fall prevention is a good example of promoting health in the CVW' (Nurse, b:4). Some healthcare professionals also talked about how using standardised assessment tools contribute to earlier detection of acute deterioration. Therefore, the interviewees indicated the assessments tools to be important for promoting health because they reduce the severity of complications and prevent hospital admissions and mortality. This common, interprofessional focus on promoting health may contribute to a systematic follow-up with the multimorbid patients which enables them to stay at home.

Whiteboard meetings—A useful tool for IPC in the CVW

The healthcare professionals described the whiteboard as useful for getting information such as a patients' name, date of admission, specified primary contact, reason for admission, data from the 3-day mapping and assessment tools and information about the patients' needs and defined goals for the follow-up in the CVW. The participants also stated that the whiteboard visualise the patients' health conditions. 'I feel the whiteboard helps me get information of each patient's situation in the interprofessional discussions' (Physiotherapist, a:5). Furthermore, the healthcare professionals talked about how the use of the whiteboard leads to a shared understanding of each patients' goals, which helps them to prioritise interprofessional measures more systematically: 'I like the way interprofessional whiteboard meetings contribute to better use of interprofessional competence in planning measures for the patients' (Nurse, a:2). The GP elaborated on how weekly in-person interprofessional whiteboard meetings contribute to better coordination and continuity in the follow-up with patients with multimorbidity in CVWs, because they exchange information and knowledge and discuss each patient's health condition.

Additionally, the participants talked about how mutual interprofessional trust and respect lead to constructive communication and discussions. The healthcare professionals emphasised how important it was that the senior management facilitated and supported them in planning and running weekly whiteboard meetings. In particular, the nurses and nurse assistants elaborated on how the role of the CVW leader is significant in coordinating and sharing information among the healthcare professionals in the CVW. Additionally, the CVW leader would obtain information on the patients' health condition from the employees engaged in the daily follow-ups and prepare what is to be discussed in the whiteboard meetings: 'The nurse who leads the CVW always asks us what to report to the other professionals' (Nurse assistant, c:2).

After the weekly meetings, the CVW leader informs the nurses and nurse assistants which measures are to be prioritised: 'I also feel like a part of the IPC when the CVW leader informs us about the conclusion of the weekly whiteboard meeting' (Nurse assistant, c:5). In particular, the nurse assistants and nurses, who provide daily follow-ups, confirmed the importance of being involved and informed about new measures. Additionally, the GP talked about the usefulness of taking part in the whiteboard meetings: 'The observations and information shared in the whiteboard meetings help me to ensure better measures in the medical treatment of the patients' (GP, a:1). Even though the GP wants to prioritise the weekly whiteboard meetings, he sometimes, unfortunately, could not participate. A physiotherapist explained the importance of prioritising attending the weekly white board meetings: 'If someone misses a whiteboard meeting, the absent member must be contacted afterwards, which leads to extra workload especially for the leader' (Physiotherapist, a:4). Most healthcare professionals also discussed the importance of prioritising participation in the whiteboard meetings because fewer members contribute to insufficient interprofessional discussions.

DISCUSSION

The healthcare professionals in this study highlighted how interprofessional discussions based on the use of assessment tools contribute to a more informal communication in the IPC and increase the holistic approach to follow-ups with patients with multimorbidity in the CVW. This finding contrasts with van der Aa et al. [29] who emphasised that healthcare professionals often lack a holistic view in caring for patients with multimorbidity. The municipality's way of organising IPC in a CVW may promote a holistic approach to care for patients with multimorbidity. Vaartio-Rajalin and Fagerström opined that it is crucial for healthcare professionals to take 'the whole' patient's needs, aims and meaning into consideration in care provision [5]. Additionally, Cushen et al. highlighted the importance of using assessment tools when healthcare professionals decide measures for patients with multimorbidity in a CVW [11]. This study also shows how the use of assessment tools may contribute to earlier identification of acute exacerbations, faster medical treatment, and thereby

reduced severity of complications. Therefore, interprofessional discussion of assessment scores and medication reviews may be essential to prevent hospital admissions and mortality for patients with multimorbidity.

This study identified how healthcare professionals pay attention to what matters to the patients. The interviewees emphasised the importance of close collaboration with patients and their next of kin when defining patient goals for their stay in a CVW. To consider what has the most impact for the patients and to help the healthcare professionals to individualise and prioritise measures [30], this study showed that patients should be involved in planning, implementing and evaluating the measures in CVWs. In comparison, Seaton emphasised that patients often lack opportunities to be involved and provide feedback concerning their healthcare needs [16]. This may indicate that organising healthcare services through a CVW with IPC may increase patient involvement. Because this study indicates that patient involvement is crucial to promoting of health for patients with multimorbidity, it seems to be essential that municipalities establish a culture of IPC. Additionally, Hald, Bech and Burau also pointed out how a culture of IPC may increase the quality of the healthcare services [3].

To focus on patient-centred care, the healthcare professionals in this study were aware of the need to include next of kin in follow-ups with patients with multimorbidity. Collaboration with the patients' next of kin was emphasised as crucial, which is also supported by Pohontsch et al. [31]. Kuipers et al. found that GPs and homecare nurses did not prioritise involving the patients' next of kin due to the extra time required [32]. To ensure that patients with multimorbidity live at home as long as possible, healthcare professionals need to prioritise time for supporting and advising patients' next of kin. Vaartio-Rajalin and Fagerström found that patient-centred care can be offered effectively when a continuous and trustful relationship is established between the healthcare professionals, the patient and their next of kin during the planning and evaluation of care [5]. Consequently, not involving a patient's next of kin may increase the patient's risk of hospitalisation or admission to a nursing home. Because of the increasing number of elderly patients and a shortage of healthcare professionals, healthcare services are dependent on voluntary contributions from patients' next of kin to offer sustainable services.

In line with Larsen, Broberger, and Petersson [18], this study shows how healthcare professionals experienced a need to exchange knowledge and apply different perspectives to offer better follow-up care to patients with multimorbidity in a CVW. According to previous studies—such those by Lewis et al. [9], Ohta, Ryu, and Otani [30], Zwarenstein, Goldman, and Reeves [19], and Wallace et al. [33]—challenges may arise if the different professionals continue to work in silos and adopt a reactive approach to care. This study shows the importance of mutual interprofessional trust and respect, which leads to a common desire to address the patients' needs. The perspectives of all healthcare professionals were considered equally important in the weekly in-person interprofessional whiteboard meetings. Additionally, a culture of IPC increases coordination and continuity in the follow-up on patients with multimorbidity in this municipality. Clancy, Gressnes and Svensson [34] also show that physical proximity promotes both informal and formal discussions in IPC and that collaborating activities may be more easily managed in smaller municipalities. This study also indicates that IPC in the CVW is characterised by non-hierarchical relations among the professionals. Follow-ups with patients with multimorbidity without interprofessional exchange of observations, knowledge and assessments can reduce the quality of the patient-centred and holistic care in the CVW. Furthermore, research indicates that interprofessional coordination of care is found to be essential in reducing healthcare costs and improving patient outcomes and care quality [9, 33, 35, 36].

The healthcare professionals in this study highlighted the importance of focusing on health promotion activities to keep patients with multimorbidity at home instead of being hospitalised. Additionally, the use of welfare technology and digital devices for detecting deviating patterns or acute exacerbations at an earlier stage, is useful in caring for patients with multimorbidity from a distance [37]. According to Poitras et al. [38], the use of digital devices can motivate patients to engage in health promoting activities. A prerequisite is, of course, that the patients receive the necessary training in how to use and report results. Therefore, municipalities with an expected lack of healthcare professionals should consider using digital devices for distance monitoring as part of the follow-up in CVWs. This can reduce the number of home visits and driving time for healthcare personnel and contribute to more sustainable healthcare services.

Strengths and limitations

This study offered an overview of healthcare professionals' experiences with follow-up care for patients with multimorbidity in a CVW in a Norwegian context, which is an under-researched topic in the literature. The trustworthiness of the methodological performance in this study is strengthened using COREQ [26]. The use of focus group interviews enables a dynamic dialogue among different healthcare professionals. Even though this study finds that the different healthcare professionals feel equal,

potential power and position-related inequity may impact the results. Additionally, the transferability of the results is limited because of a small sample size from one municipality in Norway. The fact that only one GP, two physiotherapists and no social worker participated may have affected the results. An additional limitation might be that the fourth focus group consisted of only two nurses, but they contributed to the study by carrying out reflective discussions about IPC in CVWs. Despite a purposive sample of 17 healthcare professionals, we considered the sample to be sufficient, as we identified variations in their experiences and achieved data saturation after the focus group interviews.

Another limitation might be that the interview questions were not pilot tested. Therefore, a potential researcher bias might have set in. Focus groups are susceptible to bias because group and individual opinions can be swayed by dominant participants or the moderator [27]; thus, we cannot exclude the possibility of some experiences not being brought to light. Some participants may have felt hesitant and reported their experiences according to the expectations of others. However, we believe that the participants felt encouraged to share and discuss their experiences within the group. Additionally, the participants were allowed to give feedback on the moderator's understanding of the key point gleaned from the interviews.

To strengthen the study's trustworthiness, the researchers aimed to ensure reflexivity in every step of the research process. The analysis process was documented and discussed among the researchers many times at every step of the process. Finally, we assume the results may have significance for other municipalities that are considering establishing a CVW as part of their healthcare services to provide high-quality follow-up care to patients with multimorbidity living at home.

CONCLUSION

This study shows that CVWs may be a sustainable way of organising healthcare services for patients with multimorbidity in small municipalities, which can help patients stay at home longer instead going to a nursing home. Non-hierarchical IPC in a CVW with systematic use of assessment tools and a holistic patient-centred and health promotion approach seems to increase the quality of follow-ups with patients with multimorbidity living at home. Furthermore, this study shows how mutual interprofessional trust and respect is essential to making use of the unique expertise of different professions in patient follow-up. The study also shows that healthcare personnel acknowledge the necessity of including next of kin in follow-ups with patients with multimorbidity. Because next of kin appear to be essential in follow-up care, their experiences need to be explored. It is not a sustainable model if the next of kin becomes exhausted supporting patients with multimorbidity. In the future, the opinions of both patients and their next of kin need to be considered in the development of more sustainable homecare services.

AUTHOR CONTRIBUTIONS

Trude Fløystad Eines and Cecilie Katrine Utheim Grønvik designed the study. Trude Fløystad Eines conducted project management. Trude Fløystad Eines and Cecilie Katrine Utheim Grønvik obtained ethical approval, facilitated recruitment and conducted the focus group interviews. Trude Fløystad Eines, Marianne Storm and Cecilie Katrine Utheim Grønvik analysed the data set and prepared the full draft of the paper. All authors contributed to the writing of the manuscript, and all approve the final version for publication.

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CONFLICT OF INTEREST STATEMENT

The authors declare that there is no conflict of interest.

ETHICAL APPROVAL

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