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Views of family members on using video calls during the hospital admission of a patient: A qualitative study

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Abstract

Background: Utilization of video calls on hospital wards to facilitate involvement of and communication with family members is still limited. A deeper understanding of the needs and expectations of family members regarding video calls on hospital wards is necessary, to identify potential barriers and facilitate video calls in practice.

Aim: The aim of this study was to explore the views, expectations and needs of a patient's family members regarding the use of video calls between family members, patients and healthcare professionals, during the patient's hospital admission.

Methods: A qualitative study was carried out. Semi-structured interviews with family members of patients admitted to two hospitals were conducted between February and May 2022. Family members of patients admitted to the surgical, internal medicine and gynaecological wards were recruited.

Results: Twelve family members of patients participated. Family members stated that they perceive video calls as a supplemental option and prefer live visits during hospital admission. They expected video calls to initiate additional moments of contact with healthcare professionals, e.g. to join in medical rounds. When deploying video calls, family members mentioned that adequate instruction and technical support by nurses should be available.

Conclusion: Family members considered video calls valuable when visiting is not possible or to participate in medical rounds or other contacts with healthcare professionals outside of visiting hours.

Implications: Family members need to be supported in options and use of video calls on hospital wards. Additional knowledge about actual participation in care through video calls is needed as well as the effect on patient, family and healthcare professional outcomes.

Impact: Using video calls on hospital wards can provide family members with flexible alternatives for contact and promote family involvement.

Reporting Method: COREQ guidelines.

Anne M. Eskes and Irene P. Jongerden shared senior authorship.

Patient or Public Contribution: Family members of patients admitted to hospital have contributed by sharing their perspectives in interviews.

What does this paper contribute to the wider global clinical community?

- Family members perceive additional value from the use of video calls on hospital wards.
- For family, use of video calls needs to be facilitated with clear instruction materials and support.

Trial and Protocol Registration: Amsterdam UMC Medical Ethics Review Committee (ref number W21_508 # 21.560).

KEYWORDS
family members (MeSH), hospital, hospital wards, video calls

1 | INTRODUCTION

During the COVID-19 pandemic, communication among patients, family members and healthcare professionals was impacted by social distancing and isolation requirements (Kennedy et al., 2021). As a result, video calls were widely used on COVID-19 hospital wards for the best possible maintenance of communication and family engagement (Fang et al., 2020). With the widespread use of video calls throughout the COVID-19 pandemic, their potential for enhancing communication among patients, family members and healthcare professionals during hospital admission became more apparent (Dhahri et al., 2020). Video calls became increasingly prominent and are expected to become an even more important part of the future of healthcare (Kichloo et al., 2020). Despite the increased use of video calls in healthcare, there remains limited understanding of their potential use during hospital admission.

2 | BACKGROUND

Video calls, i.e. real-time connection between people on two or more locations through audio and video transmission (Mallow et al., 2016), are widely used in society. Though they have become a part of the daily lives of many people and are increasingly used in healthcare settings, their usage on hospital wards is not common. Usually, video calls in healthcare are used in outpatient care, such as in remote monitoring of patients with chronic diseases and physicians' consults (Chi & Demiris, 2015; Fang et al., 2020; Isautier et al., 2020; Kichloo et al., 2020). Furthermore, studies on the use of video calls during hospital admission are often limited to COVID-19 wards and specialized wards, such as intensive care units (ICUs) and paediatric wards (Chen et al., 2021; Custer et al., 2021; Kennedy et al., 2021; Otte et al., 2022; Rahul et al., 2021; Vinadé Chagas et al., 2021). Research on the usage of video calls on other hospital wards remains limited.

The use of video calls for outpatient consultations in hospitals is considered acceptable and appropriate, with reported high satisfaction on use and convenience among healthcare professionals, patients and family members (Byrne & Watkinson, 2021; Dhahri et al., 2020; Isautier et al., 2020). Moreover, the use of video calls at home, particularly among healthcare professionals, patients with dementia, stroke or heart failure and their family caregivers, was suggested to support educational interventions (Chi & Demiris, 2015), facilitate shared decision making (Chi & Demiris, 2015), and provide supportive care to family members (Graven et al., 2021) and improve their psychological and emotional functioning (Chi & Demiris, 2015; Graven et al., 2021). In adult ICUs, video calls were also found acceptable during the COVID-19 pandemic and were considered an effective tool for communication with family members (Chen et al., 2021; Kennedy et al., 2021; Otte et al., 2022; Rahul et al., 2021). Furthermore, family involvement through video calls is becoming increasingly common in paediatric wards, thereby promoting parental participation (Custer et al., 2021; Vinadé Chagas et al., 2021). On paediatric ICUs, participation through video calls was found to further improve family access and workflow efficiency after the COVID-19 pandemic (Custer et al., 2021; Vinadé Chagas et al., 2021). In addition, video calls can facilitate a family-centered approach, for example, by involving family members of oncological patients during medical rounds (Petersson et al., 2020).

Implementation of video calls was expedited because of the COVID-19 pandemic and was mainly used as an alternative to personal visits from family members. Although most hospitals no longer restrict family visits anymore, the integration of video calls into routine care on hospital wards could potentially offer a family centred way of involvement during a patient's hospital admission. It gives family members the opportunity to participate in care if physical presence is not possible. Users' favourable perceptions towards video calls in different contexts indicate their potential for hospitalized patients and their potential to enhance satisfaction among family members (Otte et al., 2022). However, it is not yet clear how family members view the option to use video calls on hospital wards and what challenges they expect. An understanding of these perceptions and challenges will provide insight for the future of using video calls on hospital wards and their potential in enhancing family

involvement. This understanding will help identify and address the potential barriers that patients' family members foresee and help facilitate the use of video calls in practice.

3 | THE STUDY

3.1 | Aim

The aim of this study was to explore the views, expectations and needs of a patient's family members regarding the use of video calls between family members, patients and healthcare professionals, during the patient's hospital admission.

4 | METHODS

4.1 | Design

We conducted a qualitative study using semi-structured interviews. This study is reported in accordance with the consolidated criteria for reporting qualitative studies (COREQ) (Tong et al., 2007).

4.2 | Study setting and recruitment

The study population consisted of family members of adult patients who were admitted to the surgical, internal medicine, or gynaecological ward of a university medical center and a teaching hospital in The Netherlands. These selected wards align with the broader context of general hospital wards, on which nurses, physicians and other healthcare professionals work together to deliver comprehensive care to adult patients. Each participating ward has approximately 20 to 30 beds with a nursing: patient ratio of 1:4 or 1:5. Most care on these wards is delivered by registered nurses with a vocational (NLQF4) or bachelor's degree (NLQF6). None of the participating wards has previously incorporated video calls in practice. This study therefore adopted an open-ended approach to explore the potential use of video calls on hospital wards, emphasizing family members' perspectives.

Through purposive sampling, we aimed for variation among the participants in terms of sex, age, relationship to the patient and travel time to the hospital to obtain a wide range of perspectives (Boeije, 2009). Patients from the selected wards were approached by one researcher (AidB) with the assistance of their nurses, considering the minimum hospital stay requirement of 3 days. With permission of the patients, eligible participants were approached by the same researcher (AidB), during visiting hours on the wards or via telephone. Participants and the related patients received verbal and written information about the study before the interview.

We aimed for a sample size of at least 12 interviews, as is recommended when aiming for in-depth knowledge about perceptions (Boddy, 2016).

4.3 | Inclusion criteria

The term "family members" in this study refers to close biological or emotional relations such as parents, spouses, adult children, siblings or close friends (Omole et al., 2011). Family members were considered eligible if (1) the patient had a length of hospital stay of at least 3 days, as this gives family members adequate understanding of the provided care on a hospital ward, (2) the family members were registered as contacts in the electronic health record, (3) they had the ability to speak and understand Dutch and (4) they were 18 years or older.

4.4 | Data collection

All interviews were held between February 2022 and May 2022. The interviews were semi-structured, using an interview guide that included questions about experience with video calling in health care and in daily life as well as needs and preferences when using video calls (see Data S1) (Bélanger et al., 2018; Lee & Coughlin, 2015; Olding et al., 2016). Additional prompts and probes were used to invite further responses from the participants. The topics were evaluated during the iterative process of data collection and data analysis (AidB, CC, IJ), and no major changes were made to the interview guide.

Interviews were held in a secluded room on the hospital ward (face to face) or via video calling (Microsoft Teams), depending on the participant's preference. All interviews were conducted by the same researcher (AidB), who works as a nurse in the teaching hospital involved in this study but was not involved in care of the participants. Demographic data were collected from participants prior to the interviews, as well as from the related patients to provide context to the findings. Observational memos were made to contextualize the data beyond the transcripts and provide additional insight such as non-verbal cues, which would assist in data analysis and interpretation (Boeije, 2009). The conducted interviews lasted between 31 and 65 min. Data collection was stopped after 12 interviews, when no new relevant themes arose in the analysis of the most recent interviews.

4.5 | Data analysis

All interviews were audio-recorded and transcribed verbatim directly after the interview. Data were coded and analysed following the principles of reflexive thematic analysis, using an inductive approach (Braun & Clarke, 2006, 2021). The analysis was guided by six steps (Braun & Clarke, 2006, 2021). First, the transcripts were read and reread by two researchers (AidB, CC) to familiarize themselves with the data. Second, initial codes were assigned to important segments of the transcripts, using codes directly derived from the content of the transcripts. Accordingly, the observational memos were used to contextualize the codes (Boeije, 2009).

The first two transcripts were coded independently by the two researchers and the interpretation of segments and codes was compared and discussed with a senior researcher (IJ). Because consensus was high, all subsequent transcripts were coded by one researcher (AidB) and codes were refined through discussion with the second researcher (CC). Third, codes were sorted and grouped into potential themes by the research team through collaborative meetings. In these meetings, the team members engaged in discussion and challenged their interpretations to ensure a comprehensive analysis. Fourth, the potential themes were checked in relation to the representative data extracts and the complete dataset by one researcher (AidB), and a thematic map was generated. Fifth, themes and sub-themes were further refined by the research team, again through collaborative meetings, and clear definitions and names were generated. Finally, appropriate quotes were extracted from the transcripts to support the main themes and sub-themes.

Data analysis was supported by the software program MAXQDA (version 22.0.1, VERBI GmbH, Berlin, Germany).

4.6 | Ethical considerations

This study was conducted according to the Amsterdam UMC Research Code, which follows the Declaration of Helsinki, Code of Conduct for Research Integrity, and the Dutch General Data Protection Regulation (GDPR). The Medical Ethics Review Committee of a university medical center (Amsterdam UMC, location AMC) reviewed the study protocol and concluded that the Medical Research Involving Human Subject Act (WMO) does not apply to this project (reference number W21_508 # 21.560).

Before the interviews, both the demographic data and signed informed consent forms were obtained from participants and from the related patients. Participant numbers were used to ensure that none of the collected data can be traced back to the participants.

4.7 | Rigour

Credibility in this study was enhanced through member checking, which involved returning a summary of the themes to the participants (Korstjens & Moser, 2018). No comments were received that required changing the original themes. Moreover, the observational memos were used to help with data interpretation, promoting researcher reflexivity by reflecting on their potential influence on data interpretation, and enhance the results' credibility (Boeije, 2009; Korstjens & Moser, 2018). Data analysis and interpretation were conducted with multiple researchers from the research team, which further contributed to the credibility and dependability of the study (Korstjens & Moser, 2018).

By providing a complete description of study population and its demographics along with quotes from the participants to substantiate the findings, transferability and confirmability were enhanced (Boeije, 2009; Korstjens & Moser, 2018).

5 | FINDINGS

5.1 | Characteristics of participants

A total of 46 eligible participants was approached, 34 of whom declined to participate. Though they were not obliged to provide a reason, declining family responded that they did not have time for an interview, were emotionally occupied with the patient's condition, or did not consider themselves able to provide a view on video calling. In total, 12 family members participated, most of whom were male and patients' spouses. The participants' age ranged from 33 to 77 years, and travel time to the hospital ranged from 10 to 35 min (see Table 1). Eight interviews took place face to face at the hospital, and four were conducted online using Microsoft Teams.

TABLE 1 Characteristics of participating family members and related patients.

Variable (range)	Family member (*N* = 12) *n* (%)	Patient (*N* = 12) *n* (%)
Sex		
Male	7 (58)	4 (33)
Age (Family member: 33–77 years; Patient: 47–91 years)		
≤50 years	5 (42)	1 (8)
51–59 years	4 (33)	3 (25)
≥60 years	3 (25)	8 (67)
Hospital		
Academic	6 (50)	6 (50)
Teaching	6 (50)	6 (50)
Relationship to the patient		
Spouse	8 (67)	-
Child	3 (25)	-
Grandchild	1 (8)	-
Travel time to the hospital (10–35 min)		
≤20 min	6 (50)	-
21–29 min	2 (17)	-
≥30 min	4 (33)	-
Medical specialty		
Surgical	-	4 (33)
Gynaecological	-	4 (33)
Internal	-	4 (33)
Estimated hospital length of stay (4 days–6 weeks)		
≤7 days	-	3 (25)
8–13 days	-	2 (17)
≥14 days	-	7 (58)

All participating family members had experience with the use of video calls from work or private use. Few had experienced video calls with healthcare professionals in the form of a physician's consult. None of the participants had experience using video calls with healthcare professionals during a patient's hospital admission.

Through analysis, two main themes were generated: (1) perceived value and opportunities of using video calls as a supplemental option for communication and (2) perceived needs for using video calls.

5.2 | Perceived value and opportunities of using video calls as a supplemental option for communication

Family members stated that they prefer "live" communication above all else. They expressed that they would not consider video calls a replacement of physical presence, such as during visiting hours, unless having no visitors would be the alternative. They perceived the use of video calls as a potential supplemental option to current care on the hospital wards to initiate additional moments of contact.

> I think specifically as an extra. And maybe for people who can't have visitors, then of course it's useful, because otherwise nobody would come.
>
> Participant 5, daughter, 51–59 years

Family members often addressed the potential of using video calls for other family members and patients rather than for themselves and their situation. Several family members could envision themselves using video calls during the patient's hospital admission. Family members stated that the value of video calls would depend on the patient situation. They felt that video calls should be deployed according to patients' and family members' needs rather than wherever possible.

> I think the added value therefore depends very much on the situation. Maybe in difficult situations, where a lot of care is needed for a patient. Or if there's a lot of information that needs to go back and forth between family and doctors and nurses.
>
> Participant 9, spouse, male, ≥60 years

Family members expressed that video calls could be a useful tool if physical presence is not possible, such as outside of visiting hours or when attending to other obligations. Joining in with video calls would be quick and convenient because it can be done from home or work. Family members perceived video calls with healthcare professionals as an improvement over telephone calls because of the additional nonverbal communication.

> In such a case, perhaps the nursing staff could have said 'well, she's back, it went well, your mother would like to say hello, but she's still tired' [...] via video calling just saying hello, that you can simply see how she moves and that everything is fine.
>
> Participant 8, daughter, ≤50 years

Family members considered video calls with the patient's physician as a valuable addition, especially during medical rounds. They considered it valuable to be able to ask questions and receive the physician's information firsthand because the patient is not always able to recall all the information. Family members felt that their presence could provide valuable emotional support to the patient, as well as support the patient with taking in all the information. They felt that it would be helpful for both the patient and themselves because two sets of ears can often be an advantage. Family members also felt that they had knowledge about the patient that they could share, which they believed would be helpful to the care provided. They expressed that using video calls to join medical rounds would make them feel more involved in general as well as with the decision-making process during the patient's admission period.

> [...] also the idea that I can make choices at all. Because the information is provided afterwards and maybe then, you can be a bit more involved, [...] afterwards you hear this and that are the side effects, and I think that if I had known that beforehand, I might have made different choices. I do think it would be better with the option to video call.
>
> Participant 7, spouse, female, ≤50 years

The possibility of involving multiple family members in the video call was considered valuable, especially when distance is a factor or if the meeting was unexpected. Including several family members would allow more family members to feel involved as well as ask questions that others might not have asked.

> [...] I live nearby, but my sisters live an hour and two hours away. When they say, "we have a meeting with the doctor in an hour," they can't be there. Then, it would be ideal if you can use video calling.
>
> Participant 5, daughter, 51–59 years

Family members expected nurses to establish video contact between the patient and the family in case of need on the patient's side, such as in case of distress or feeling uncomfortable, lonely, or emotional. They believed that video calls could play a role in providing comfort to the patient at that specific moment.

> I can imagine that if you have a situation in which the patient is restless, unhappy, uncertain, and maybe

> even a bit unreasonable, unmanageable, well that's very unpleasant for the family to hear, like 'your father is having a very hard time,' and then actually, knowing your father [...], you know that he has misbehaved. Then it is nice to be video called in situations like that.
>
> Participant 3, spouse, male, ≥60 years

Although some family members considered the amount of contact with nurses during visiting hours sufficient, others mentioned that they would appreciate exchanging information through video calls, sometimes without the patient's presence. Some expected that video calls with nurses would be most valuable when the patient is seriously ill because frequent moments of contact would be even more preferable. Others mentioned that video calls with nurses could have been helpful when preparing for hospital discharge.

> Yesterday I had the transfer nurse on the phone, well it would have been nice if I could have known who it was. So, then I would have liked video calls as well. Because you are talking about care and home care and how the situation is [...] but then she can simply get a better idea of who she has in front of her and whether I can handle it yes or no, and well, I can also get a bit of an idea of her. So yes, video calling could have really contributed something in this case.
>
> Participant 11, spouse, female, 51–59 years

When family members were asked when they would not prefer to use video calls, all of them described a scenario in which the physician needed to deliver bad news. Although none of them had experienced this through video calls before, they doubted whether using video calls in this context would be appropriate.

> I just think that with heavy topics that that's too complicated, then I wouldn't advise doing it via video calling. Then I think a personal conversation is better. [...] I think that's a matter of feeling. I think video calls are then somehow distant and impersonal.
>
> Participant 10, spouse, male, ≥60 years

5.2.1 | Summary theme 1

Family members viewed video calls as a convenient alternative and supplemental option to physical presence. They found video calls with healthcare professionals valuable for asking questions, providing emotional support and sharing patient knowledge. Involving multiple family members in video calls was seen as beneficial, especially when distance was a factor or unexpected meetings occurred. While some found contact during visiting hours sufficient, others desired information exchange through video calls, even without the patient's presence. Video calls with nurses were seen as valuable for seriously ill patients, during hospital discharge preparations, and in case of patient distress. However, using video calls for receiving bad news was considered less appropriate.

5.3 | Perceived needs for using video calls

Family members shared their perceived needs and preferences regarding the use of video calls on hospital wards, including technical features, user-friendliness and privacy.

5.3.1 | Technical features

According to the family members, various technical features were considered valuable, such as seeing multiple people through one camera, recording the conversation to watch again later and having multiple people present from various locations. In addition, they expressed the importance of being able to use different devices and different brands because they would want the video calls' platform to be compatible with their own devices. They also expected that a tablet would be provided to the patient during admission. On that note, they mentioned that it should not be assumed that all family members have a device with video capability, especially the older generation.

> Those at home, of course they also have to be able to video call and have the equipment for it. [...] The internet connection may be there, but I think a video call with the doctor via your phone on that small screen is not ideal at all.
>
> Participant 7, spouse, female, ≤50 years

5.3.2 | User-friendliness

Most family members stated that they had adequate understanding of technology, and the use of video calls but would expect challenges for elderly people. Some family members mentioned that the use of video calls could pose a challenge because they were less skilled with computers. Family members emphasized the importance of user-friendliness, where simplicity is essential along with good audibility, visibility and internet connection. In addition, most mentioned that they would expect someone from the ward to support patients in using video calls and offer family members instructions and some form of support they could turn to if needed.

> I am not very good with computers and things, but the generation above me has even more trouble with it, so yes, user-friendliness is very important. [...] because for me, if it's just clearly explained, I can handle it well.
>
> Participant 11, spouse, female, 51–59 years

5.3.3 | Privacy

Privacy was found to be of great importance among family members. However, they did not express concern because they trust that the regulations for data protection would be followed. On this aspect, they stated that adequate information provision is essential.

> I do think it's very important, that you explain how that [privacy] is guaranteed. Well, if it's a program where the privacy is well taken care of, then I wouldn't be so worried about it. I'm never so afraid of that myself, but it is an aspect that people need to be well informed about.
>
> Participant 8, daughter, ≤50 years

5.3.4 | Summary theme 2

Family members valued technical features such as multi-person viewing, recording capabilities and compatibility with different devices. They expected user-friendliness, support from nursing staff and emphasized privacy and data protection.

6 | DISCUSSION

Family members perceive video calls as potentially valuable when they are used as a supplemental option and not as a replacement. They expect video calls to initiate additional moments of contact for them with patients and healthcare professionals, which could potentially contribute to their involvement during hospital admission. When deploying video calls, user-friendliness, technical features and privacy are considered important, and adequate instruction and offering technical support are needed.

In our study, family members were pertinent about the additional option of video calls and emphasized that they should not be used as a replacement for visiting. This is in line with previous studies on ICU wards, in which family members considered video calls valuable but by no means a replacement for visiting and inferior to "live" communication (Digby et al., 2022; Kennedy et al., 2021).

Family members in our study expressed that using video calls to initiate additional moments of contact could make them feel more involved in a quick and convenient way. They shared their views on the widespread and flexible use of video calls on hospital wards as well as the expectation of additional moments of contact with healthcare professionals outside of visiting hours, such as digitally attending medical rounds. Multiple studies, conducted on various wards, found similar results. For instance, in multiple ICU studies, the strong desire of family members to join medical rounds was found as well (Calderone et al., 2022; Simon et al., 2021), and family members joining medical rounds reported a positive experience as well as a reduction in their anxiety and increased satisfaction (Calderone et al., 2022). Furthermore, studies from oncology and paediatric wards found that the use of video calls to engage family members in medical rounds improved family involvement (Petersson et al., 2020; Vestergaard et al., 2019; Yager et al., 2017). These studies stated that video calls can indeed create flexibility for family members' involvement while being at a distance or attending to other obligations (Petersson et al., 2020; Vestergaard et al., 2019; Yager et al., 2017). On the other hand, from the perspective of healthcare professionals, implementing video calls during medical rounds could be of consequence to healthcare professionals' work routines, and support from healthcare professionals still varies (Østervang et al., 2019). Because family participation through video calls has shown to increase empowerment for both patients and their families (Østervang et al., 2019), healthcare professionals should establish matching expectations and proceed in a manner that promotes family participation.

Family members in our study expressed no concerns regarding privacy because they trust that regulations would be followed. This finding corresponds with those of another study in which neither family members nor healthcare professionals were concerned about privacy when using video calls (Kennedy et al., 2021). Meanwhile, privacy and security are considered priorities by healthcare professionals when facilitating video calls in practice, a necessity driven by the rigorous legislation in healthcare, and should be upheld to ensure confidentiality of patient information (Wierda et al., 2020). Furthermore, similar to other studies, family members expressed that access to a device is not obvious, nor is familiarity with technology (Digby et al., 2022). Especially in elderly people (i.e., 65 years and older), compared to middle aged and younger people, the use of video calls can be more challenging (Dinesen et al., 2016; Petersson et al., 2020). Of note, challenges for nurses with using video calls were also seen on COVID-19 hospital wards, such as limited technical skills and unfamiliarity with devices (Maaskant et al., 2021). Both technological literacy and possession of a device with video capability could pose challenges when deploying video calls in practice. Although telehealth was found to decrease healthcare costs in various contexts, notably by improving access to primary care and enhancing remote monitoring (Dhahri et al., 2020; Kichloo et al., 2020), given the potential challenges perceived by participants in the present study, is it important to thoroughly assess the feasibility and potential benefits before making a decision to invest in video calls.

6.1 | Strengths and limitations

A strength of this study is that family members from two hospitals and various hospital wards were included, which has contributed to greater variation among the participants. Moreover, our study focused on a broader context: general hospital wards, rather than specialized wards such as paediatrics or ICU. While it is far less common to focus on video calls on more general hospital wards, our findings suggest their potential benefits for patients and their family members on these wards as well. By expanding our focus to this wider context, the transferability of the findings was enhanced, providing insights that extend beyond specific specialties. However, this study has some limitations. First, a substantial proportion of the approached family members declined participation. The main reason for decline was the perception of not being able to form a view of the research subject matter. Family members who declined participation could have provided a different view to the study, and they might have addressed different or additional needs to the participants in the study. Second, participants' actual experience with using video calls in a healthcare setting was limited. This occasionally led to statements about the extent to which they expected others to find the use of video calls valuable rather than how they expected video calls to be used among themselves. Third, despite aiming for purposive sampling, the study sample was rather homogenous because most participants were middle aged and patients' spouses. Moreover, all participating family members reported travel time to the hospital between 10 min and 35 min, which can be considered living in the proximity, and may have influenced their view of using video calls in relation to distance. Because distance can be an important consideration when choosing to use video calls (Byrne & Watkinson, 2021), a wider variation in travel time among participants could have provided additional insights.

6.2 | Recommendations for further research

Considering the rather homogeneous sample in this study, future research should focus on a wider variation among family members because they might have different needs regarding video calls. For instance, because most family members in this study were middle aged and had at least a basic level of understanding in digital literacy, and therefore would be able to use video calls, people with low digital literacy might have other or additional needs and their perspectives should therefore be further explored. In addition, given family members' views on the widespread and flexible use of video calls on hospital wards, future research should focus on identifying the various situations in which video calls are suitable in practice. Furthermore, the relatively close living proximity of the family members in our study calls for future research that focuses on the use of video calls with further geographical proximities because geographical proximity of family members was shown to be associated with decreased use of healthcare use among surgical patients (Bucher et al., 2022). The potential benefits of using video calls as a tool to digitally improve proximity as well as the effect on patient and family outcomes should be further explored.

6.3 | Implications for practice

Our study enhances the existing knowledge of using video calls by exploring their potential on general hospital wards. The findings demonstrate that video calls have potential application in contexts other than specialist hospital wards (e.g., paediatrics or ICU). Providing family members with the option to use video calls on wards can offer a family centered way of involvement during a patient's hospital admission. It can provide family members with flexible alternatives for contact in a quick and convenient way. Healthcare professionals should be aware of the potential benefits of using video calls during hospital admission. Healthcare professionals should proactively introduce video calls to patients and family members, who should also feel empowered to request video calls themselves. Clear instructions, covering technical aspects and situational considerations, are essential for both healthcare professionals, patients and family members. Additionally, hospitals must provide robust technical support to ensure seamless and secure video communication.

7 | CONCLUSION

Social distancing policies and increasing geographic distances between hospital and home have increased the need for alternative and flexible ways to use video calls to involve family members on hospital wards. Family members and healthcare professionals should be made aware of the possibilities that video calls can provide. Family members of admitted patients perceive the use of video calls as a valuable supplement to current care. More insight into the potential benefits of using video calls on hospital wards and the effect on patient and family outcomes is needed.

AUTHOR CONTRIBUTIONS

AidB, CC, JM, JdM, AE, IJ: Made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; AidB, CC, JM, JdM, AE, IJ: Involved in drafting the manuscript or revising it critically for important intellectual content; AidB, CC, JM, JdM, AE, IJ: Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content; AidB, CC, JM, JdM, AE, IJ: Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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