ABSTRACT

Context: During the COVID-19 pandemic, UK care homes rapidly adopted videoconferencing to communicate with health and social care colleagues. Studies show that health and social care professionals adapted well to online consultations. Less well known are the views of care home staff on using online consultations and how it impacted their workload and responsibilities.

Objective: To explore the experience of using videoconferencing for consultations during the COVID-19 pandemic from the perspective of care home staff.

Method: Online interviews with care home staff [n = 13] who had facilitated videoconferencing between residents and health and social care professionals. Data were collected from June to October 2021 and analysed thematically.

Findings: Experiences varied but key facilitators were having the infrastructure, training, and support for staff. Barriers were concerns about the benefits and suitability for use with older people living with dementia and/or frailty. Care home staff discussed new ways of working and undertaking new tasks. Consequently, staff developed new skills and confidence in using the technology. However, considerable time was needed to schedule, prepare, and facilitate consultations. Videoconferencing had the potential to support staff and strengthen working relationships with external professionals.

Limitations: This is a small study with 13 participants from 11 care homes. It complements professional accounts of videoconferencing privileging the care home view.

Implications: Fewer face-to-face meetings are anticipated to discuss residents’ care with visiting professionals. We need to address care home IT infrastructure and implicit expectations that care home staff can assimilate these changes amidst staffing shortages. A better understanding is needed about how to support care home staff in these roles, how this changes interdisciplinary working, and effects on residents’ care.
INTRODUCTION

Care homes deliver housing, 24-hour care, and in some settings, nursing to some of the oldest and most frail within the UK population. Medical and specialist nursing support and assessment of social care needs are provided by visiting health and social care professionals (Davies et al., 2011). During the COVID-19 pandemic, care home residents accounted for 33% of COVID-19 related deaths in England (Comas-Herrera et al., 2020). Social distancing measures to control the spread of the virus were put in place so health and social care services moved much of their provision online (NHS England, 2020). This resulted in an increased uptake of videoconferencing technology by care homes to facilitate residents’ access to appointments and maintain contact with health and care professionals (Helmer-Smith et al., 2020; Newbould et al., 2019). Little is known about care home staff experiences and perspectives of videoconferencing and how its ongoing use in this sector may affect workload and engagement with primary and acute care services.

During the height of the pandemic, visiting health and social care practitioners working with care homes reported positive experiences using videoconferencing to maintain contact, sustain working relationships, conduct examinations, and make clinical decisions, and care home staff were recognised as vital in facilitating these remote consultations (Warmoth et al., 2022). Videoconferencing has been demonstrated to be an effective way of accessing health and social care provision in care home settings that can allow faster access to services (Newbould et al., 2019; Helmer-Smith et al., 2020), reduced hospital admissions, and improved cost-effectiveness (Hex et al., 2015; Baxter et al., 2021). Little is known about the impact of this adoption in social care settings.

Before the COVID-19 pandemic the number of people working in adult social care was not meeting the level of demand (National Audit Office, 2018). During COVID-19, the loss of input from family carers and staff shortages led to increased workloads (The Health Foundation, 2020; White et al., 2021; Hanna et al., 2022). Post-pandemic, there continues to be significant recruitment and retention challenges, exacerbated by staff burnout and low pay (Health and Social Care Committee, 2021; Skills for Care, 2022). In a work setting where staff are already under multiple pressures it is unclear if using videoconferencing mitigated or contributed to strain experienced by the workforce.

The use of online or video consultations in care homes requires a reliable IT infrastructure and a workforce able to adapt to different methods of consultation (Goodman et al., 2017; Newbould et al., 2019). The pandemic forced UK care homes to rapidly adopt videoconferencing to communicate with health and social care colleagues. The known digital divide was further exposed by COVID-19 and its relationship with ethnicity, poverty, poor health, and age (Bibby and Leavey, 2020; Cheshmehzangi et al., 2022). The lack of digital infrastructure also reinforced a known inequity experienced by care homes around access to information and resources for those who are most vulnerable and the people who care for them (Iliffe et al., 2016).

This qualitative study explored the experience of using videoconferencing during the COVID-19 pandemic from the perspective of care home staff. The objectives were to investigate the barriers and facilitators of using videoconferencing with health and social care consultations for older people and its perceived impact on their care work and working relationships.

MATERIALS AND METHODS

PARTICIPANTS

Care home staff were recruited to participate in interviews via emails sent to existing care home staff networks (i.e., local community NHS trust and third sector support organisations), a national WhatsApp (WhatsApp LLC) group for care home staff, and contacts arising from the earlier study with primary care and social care practitioners (Warmoth et al., 2022). Individuals who expressed an interest in being involved in the study were sent study details via email and offered a phone conversation for further information.

DATA COLLECTION AND ANALYSIS

Semi-structured interviews were conducted from June to October 2021 with a topic guide that explored participants’ involvement with videoconferencing, which professionals they had used it with, situations when it had been useful (or not), and thoughts about its future use. All interviews were carried out via videoconferencing (Zoom Video Communications, Inc.). Interviews lasted an average of 31 minutes and ranged in length from 22 to 58 minutes. Interviews were recorded and transcribed verbatim.

A thematic approach was adopted to analyse the interview transcripts. We drew on assumptions that this is an iterative, reflexive process, focused on meaning and meaning-making that is context-bound, to understand what the care home staff experienced (Braun and Clark, 2006; Braun and Clarke, 2019). A single researcher familiarised themselves with the data by reading and rereading the transcripts and organised the data initially by interview prompts. Coding focused on recurring issues and observations by participants as they described their experiences and represented what was important or difficult. Codes were organised to build a thematic account and evidence for each theme reviewed and discussed by the research team. The data were organised and mapped initially as descriptive categories using NVivo 12 (QSR International Pty Ltd, 2018).
ETHICAL CONSIDERATIONS
The study received ethical approval from the University of Hertfordshire Ethics Committee with Delegated Authority (protocol number aHSK/SF/UH/04595). Participants were remunerated for their time with a £30 voucher. As the interviews could trigger difficult memories and explored emotive topics, participants were offered information on places of support at the end of the interview.

RESULTS
Thirteen care home staff with direct experience using videoconferencing technology to communicate with health and social care professionals were interviewed. Participants all had senior roles within their care home, see Table 1. They represented 11 care homes across England, nine of which were classified as medium-sized (11–49 beds) and two were large (50+ beds) (Care Quality Commission, 2017).

The analysis and organising themes address the study objectives of: (1) the facilitators and barriers to using online consultation and (2) the impact of using this technology on care home staff.

FACILITATORS AND BARRIERS TO ONLINE CONSULTATION
IT Infrastructure
The lack of digital infrastructure undermined the staff’s ability to participate in videoconferencing. For example, unreliable Wi-Fi connections and insufficient electronic devices in the care homes (e.g., tablets, laptops, and mobile phones) to support online consultations. This was further complicated by the lack of consistency in which platform was used. Staff described using any one of three commercially available platforms including Zoom (Zoom Video Communications, Inc.), Microsoft Teams (Microsoft Corporation), and WhatsApp (WhatsApp LLC), as well as the healthcare specific platform, Attend Anywhere (Attend Anywhere Pty Ltd.).

The practical consequences of this variability were that depending on who they were communicating with, care home staff were using different platforms for the same resident. To be able to connect residents with social workers, physiotherapists, speech and language therapists, and, most frequently, General Practitioners (GPs) required staff to master how to use each of these different platforms.

To address the shortcomings of the care home IT infrastructure and the asynchrony between the software used in care homes and that used in GP surgeries, care home staff described using workarounds. This included relying on their personal mobile phones to support appointments. This was intrusive and potentially costly, affecting their data usage contracts, as this participant reflected: ‘I’ve got one nurse who didn’t have unlimited data and stuff, she was like “why am I using my stuff?”’ Participant 6.

Over time, most care homes in the study were able to acquire more devices and upgrade their Wi-Fi connection which facilitated the use of online consultation and less reliance on staff workarounds. Buy-in from care home providers and senior staff, dedicated budgets, and existing technology availability enabled the infrastructure to be put in place and faster adoption of this new way of working.

Care home staff skills and training
Care home staff skills and training influenced the use of this technology. Staff familiarity and experience with technology affected who was involved. Senior members of staff were more likely to organise and participate in the remote consultations. This was, not only because of limited access to equipment and the nature of the appointment (e.g. healthcare assessment), but also a feeling that other members of staff were not confident using the technology. Who, from the care home staff, took on the role appeared to be an ad hoc process. None of the care homes interviewed had access to formal training for using this technology for consultations in the initial stages of the pandemic. Often, a key member of staff who was confident with the technology had been identified within the care home to support others:

No, nothing formal [referring training], no we’ve got like a home administrator, [name omitted] who’s really, really good with tech so I sat down with her a couple of times saying ‘ahh help, log me on, how do you get on this?’ ... [name omitted] helped me a bit but nothing formal, no. I don’t think anyone did. Participant 6.

There was no consistent approach or agreed minimum skill set to take on this role of remote consultations coordinator or champion. Participants described drawing on existing skills and knowledge within the home and worked together to develop their skills.

Staff were more likely to be engaged with the implementation of videoconferencing for online consultations when management listened and reacted
to staff needs about using this technology. One manager explained that they had to think through how staff might react, and prepare staff with the equipment and set up consultations:

You know, they, people don’t want to use tablets – they lose them, they don’t charge them correctly, everyone, they like a computer or a laptop and so we had to you know, really think about that. Participant 4.

The manager recognised how inexperienced their staff was with this technology (tablets) and decided to employ technology that their staff was more familiar with (laptop computers) to enable online consultations. This theme illustrated how care home staff relied on their existing skills and knowledge, informal training, and peer support to use videoconferencing for consultations.

Efficacy and appropriateness of using video consultations

Staff thought the technology was not always useful or appropriate, especially when many residents were unable to understand that they were communicating with medical or social care professionals. Care home staff thought it also constrained the detail and depth of the discussions. In one situation, even when a resident did understand, they had difficulty maintaining concentration or remembering what they wanted to discuss. The usual cues and prompts of a face-to-face consultation were missing:

I think the resident found it hard [because] he couldn’t really understand what was going on, he could hear what was going on and was able to answer but I think it was not as easy for him as if he’d been sat in an office. And I think equally so, possibly because it’s being done on a television you don’t remember to say as much. And this is somebody that’s you know, with it and able to answer and it flummoxed him, as to what he needed to do and how he needed to be. Participant 12.

These concerns about residents’ understanding, related to worries about the quality of residents’ care. As video consultations became routinised, participants perceived that the information exchanged was increasingly superficial and meaningless.

They’ve just been doing monthly videoconferencing calls just to sort of say hello to the resident and they just basically say ‘hello I’m Dr so and so’ and then the resident says their name and then the doctor says hello and then we move onto the next person. It’s not really about having a consultation at all, it’s just I think a paper exercise for the GPs so that they can say they’ve seen someone in the last 28 days. That’s how we see those calls because they’re not particularly useful, generally … our monthly calls with the doctors. Participant 13.

During the study, UK government guidance allowed professionals providing care to residents to enter care homes. However, many participants reported that professionals had chosen not to visit the home. For some, this was reassuring as they felt this protected their residents from the virus. Most, however, suspected that the time-related benefits of not doing on-site visits were the reason for the continued use of videoconferencing, especially once in-person visits were acceptable or allowed. In some circumstances, videoconferencing had the unintended consequence of losing the spontaneous, indirect support that staff usually gained when healthcare professionals visited. The technology was not seen as increasing or improving care home staff’s ability to access external advice and support when compared to pre-pandemic encounters.

There were also concerns about how videoconferencing put residents at a disadvantage for assessments of a mental capacity or those assessing someone’s condition to be eligible for financial support.

Just I feel like it’s not been fair to them, they’re not getting the best – the benefit of the doubt I suppose because they’re … I’ve had times when I’ve had a DoLS [Deprivation of Liberty Safeguards] assessor saying that they’ve got absolutely no capacity when I know they’ve got a bit more than that but it’s because of the way it’s being done. Participant 6.

Care home staff gave multiple examples of the potential for misdiagnosis or misinterpretation of somebody’s mental capacity. Participants felt that video calls with a healthcare professional were most appropriate or effective when a resident had a visible, minor condition that could be seen whilst maintaining a resident’s privacy. For more complex conditions (situations where it was unclear why the resident was unwell or those that were related to intimate areas) participants were clear the healthcare professional should visit in person, and not use online consultation.

Participants also worried about dignity with death and end-of-life decisions being made using video calls. During the pandemic, some care home staff were asked to certify death and assess residents as end-of-life via video call. This delegation of responsibility and practice was described as uncomfortable and inappropriate:

When you’ve got another lady that has died and you are waiting for somebody to verify her death
and you are making phone call after phone call after phone call asking for somebody to come and verify her. And after sixteen hours still no-one has been to verify her and then you get a phone call from the doctor saying they’re going to do it via video link...And you’re doing all of the checks on this lady that the doctor should be doing. There is no dignity, no respect, for this poor lady that might not mean anything to that doctor on that video call but means a great deal to the carers that have been looking after her. Participant 8.

Participants shared the diverse ways that video consultations were being used with health and care professionals when it was unclear if it was in the best interest of the resident. It was represented as offering a poorer experience of quality health and social care.

**IMPACT OF USING THIS TECHNOLOGY ON CARE HOMES**

**Staff development and empowerment**

One of the positive outcomes of the rapid adoption of remote consultation during the COVID-19 pandemic was care home staff reporting greater confidence using the technology, performing some healthcare tasks, and acquiring greater clinical knowledge through being involved in the conversations between the healthcare professional and the older person. The increased use of online consultations meant it became incorporated into their day-to-day work.

I think we did improve over time. No, and – no, I don’t think we did, we definitely did! We did improve as we became more familiar, and it became more commonplace. Participant 3.

The repeated use and support from peers resulted in staff being less apprehensive about conducting video consultations.

To prepare for and facilitate online consultations, care home staff were required to record resident observations, for example, skin breakdown and temperature, and report them to the doctor. One care home owner (a nurse) who provided training to staff to enable them to interpret the significance of vital signs such as temperature, respirations and responsiveness described her experience:

Talking to the staff they’re actually struggling with it. I’m familiar with it [because] I’m a nurse but it’s a residential care home and they’ve had a steep learning curve with learning new sorts of, types of observations and then learning what those observations mean. So it’s about them having training as well. So we’ve had to spend a lot of time training the staff, getting them to show me the observations so that I check they’re ok. Participant 13.

The use of videoconferencing could blur the distinction between the roles of the care home and external health and social care practitioners, as care home staff were conducting these examinations. Where visibility was limited by the camera, participants described offering suggestions as to what they thought the diagnosis was. This was challenging especially if staff were unsure of their ability to do this. However, as online consultations were embedded into practice, care home staff felt they became more skilled and knowledgeable, taking on responsibilities that they would not have done before the pandemic.

**Effect on workload and time use**

The impact of online consultations on staff workload varied. Some participants reported a reduced workload because virtual ‘visits’ were shorter and more focused than in-person visits to the care home. Others described how it was more time-consuming because of needing to set it up and inconvenient and disruptive to the care home routines due to scheduling of the video consultations to suit the healthcare professionals. As this participant describes:

They leave it till the end of the day when we haven’t got as many staff around, so it takes someone, one person at least half an hour to do that call. You can’t tell when it’s coming. I mean it’s usually before half past six but that’s quite a busy time for us. So that’s a bit of a frustration with it and it does take time because the residents aren’t all in one place. We’re a 32 bedded care home so they could be anywhere in the building and we’ve [got to] go and find them so that takes time. Participant 13.

The move to online working, including consultations, could change the dynamics within the care home. Some participants explained that they were less available to colleagues, spending greater time in their offices. One participant was concerned that moving things online was making her seem less approachable as a manager:

I think there is a little bit of – so because I do quite a lot of them, then there is a bit of like my door being closed to the team. Participant 4.

This required managing staff expectations, for example, pre-empting interruptions with a ‘do not disturb’ sign on the door. Some participants reported having to be more prepared for calls, gathering the data that they would need before the call (such as recording observations and collecting any other relevant information for the
Preparation for the calls was time-consuming but some staff were more confident and engaged during the consultations. Staff played an active role in facilitating videoconferencing calls from managing the set-up and use of equipment to answering and repeating questions. Unlike face-to-face encounters, sometimes two care home staff needed to be involved during an appointment, especially when residents had cognitive impairment. The following participant reflected on their role in the appointments:

So, ... with any of those appointments then there needs to be somebody present to hold the device ... otherwise a lot of residents will touch what's in front of them and not realise that they've disconnected. And also to remind them where the voice is coming from [because] sometimes sight plays a part and they won't know where it is and it can be quite confusing for someone with dementia if there isn't somebody there to reassure them. Participant 4.

All these activities (scheduling, preparing for, and facilitating consultations) took time away from interacting with the residents, which was what they enjoyed and valued about their work. Although participants did not agree on whether their workload was increased, how they spent their time did change.

Working relationships with health and social care professionals
Participants’ experiences of working relationships with health and social care professionals during the pandemic were mixed. Some reported feeling well-supported through videoconferencing and able to build new relationships or maintain existing good relationships with external professionals. These relationships helped to reduce isolation and work as a team during unprecedented times.

But yeah so, it has been tough but yeah I mean, with the videoconferencing when nobody was allowed in, couldn’t come into the care homes and that, it was good that it kept us in touch with the people we knew as well ... your district nurses, your GP’s and that because you could still see that familiar face and not just a name. So it still made you feel like you had people out there helping you, assisting you and helping you fight the cause. Participant 10.

Practical support and assurance from external professionals were valued — videoconferencing was a way to stay connected with their wider social and health networks.

Conversely, for some care home staff, when compared to in-person consultations, videoconferencing was unable to mitigate staff’s feelings of being alone, forgotten, and abandoned. Even in cases where they had previously had good existing relationships with health and social care colleagues.

It’s broken, I was having this conversation recently, we had a very good relationship with our doctors and our mental health team but that’s broke down. Participant 11.

The rapport achieved during face-to-face appointments was lost due to the impersonal nature of videoconferencing. Participants reported the absence of the usual preamble and chat before doing an assessment, which helped the professionals get to know the residents and staff. There were examples of when the time was taken to have informal conversations, and this was identified as helping to maintain the relationship. The different impacts on their working relationships with health and social care professionals appeared to hinge on whether the use of the online consultations was evidence of the care home being supported as part of a team caring for the resident.

DISCUSSION

This study explored the experiences of using videoconferencing to communicate with health and social care colleagues during the COVID-19 pandemic from the perspective of care home staff. Experiences varied but key facilitators were having the infrastructure, training, and support for staff to develop skills. Staff used workarounds when they were unprepared and did not have the necessary equipment. There were concerns as staff perceived video consultations as potentially undermining residents’ dignity and access to care.

The perceived benefit of using this technology on staff’s care work and working relationships was mixed. The organisation and delivery of video consultation could create opportunities to learn new skills, become more clinically aware of residents’ needs and be recognised as a valued member of the wider team. It was unclear if their workload had increased, but more time was needed for scheduling, preparing, and facilitating online consultations with residents. These advantages were less
obvious if staff perceived the consultations were to reduce travelling time, the length of visits and opportunities to raise additional concerns.

The lack of staff preparation at the beginning of the pandemic was compounded by limited technological infrastructure (e.g., Wi-Fi connection or device capabilities) affecting the uptake of remote consultations. This has been documented in previous literature as a major barrier to implementation (Shulver et al., 2016; Warmoth et al., 2022; Wherton et al., 2020). A key finding from this study is how care home staff implemented workarounds, often using their own mobile phones and data. Workarounds are not uncommon when new technology is adopted and can lead to a lasting restructuring of the technology (Procter et al., 2016). The pandemic functioned as a catalyst to improve investment in technology provision in this setting for consultations. Some care homes were provided with tablets to help residents receive ongoing care (Department of Health and Social Care, 2020). Nevertheless, the current infrastructure and workarounds, with some care homes better equipped than others, created a situation of inequity widening the digital divide (Bibby and Leavey, 2020; Cheshmehzangi et al., 2022).

Participants in this study (care home staff) were also concerned about the quality of the information obtained using this medium and its suitability for undertaking intimate assessments or deciding on a person’s mental capacity; concerns that were mirrored in a study that focused on the experiences of visiting health and social care professionals using videoconferencing (Warmoth et al., 2022). GPs in the community reported that video consultations often lacked detail about residents and the increased ease of access did not mitigate the stress of making clinical decisions, prescribing, and assessing risk (Murphy et al., 2021). Similar to the present study findings, GPs have also expressed concerns about assessing a person’s capacity via video consultation, describing it as almost impossible (Dixon et al., 2022). Given the prevalence of dementia and complex health conditions in the care home population (Barker et al., 2020), further research is required to investigate how consultations via videoconferencing can be sensitive to these needs. Warmoth et al. (2022) study participants described a hybrid approach (combining in-person visits with video consultations) as more appropriate for these examinations and assessments.

Key to delivering high-quality health and social care to care home residents is good working relationships between the home and external professionals (Goodman et al., 2017). This study found that whilst videoconferencing was preferable to phone calls it was not always sufficient to maintain effective working relationships and could damage them. There were examples in this study of how videoconferencing led to the loss of informal support and relationship-building through spontaneous or informal interactions. GPs have also reported lower work satisfaction from using remote methods of consultation due in part to the loss of face-to-face interactions (Dixon et al., 2022). This may have been heightened by the extreme pressures and isolation experienced by care homes throughout the pandemic (Hanna et al., 2022), although for some staff videoconferencing was seen as having provided much-needed assurance and support to the care homes. Further research could address what needs to be in place to foster and maintain relationships between health and social care professionals and care home staff.

At a time when there were limited staff resources (Newbould et al., 2021) and staff shortages (National Audit Office, 2018; Health and Social Care Committee, 2021), this study provides new insights into care home staff’s experiences of using videoconferencing throughout the pandemic and its impact on them. It also complements work on the visiting professionals’ experience (Warmoth et al., 2022) and experiences of Welsh care homes (Johns et al., 2021). For care home staff, these changes to working practices led to a redistribution of roles within care homes and responsibilities that for some, increased skills in assessment. However, there was no extra remuneration or recognition for a workforce that experiences high levels of burnout, high turnover, stigma, low pay, and poor job satisfaction, before (National Audit Office, 2018) and during COVID-19 (Hanna et al., 2022; Skills for Care, 2022; Health and Social Care Committee, 2021). The upskilling found in this study may be beneficial when caring for people with more complex needs compared with 10 years ago (Skills for Care, 2022) but it raises questions about the kind of training and opportunities for career progression this reallocation of roles and responsibilities requires.

**LIMITATIONS**

Firstly, this study is limited by being based on the accounts of 13 care home staff despite a wide range of experiences being described from different regions in England. These views may not represent the experiences of other care home staff. This small sample reflects the difficulty of recruiting care home staff during the pandemic when they faced higher pressure and competing demands. The logistics of identifying and recruiting care home staff can mean that the accounts of visiting professionals dominate the literature and care home staff voices are seldom heard. This paper provides an opportunity to balance the narratives of saving professionals’ time and improving residents’ and staff’s access to healthcare with accounts that highlight the need for additional support and guidance for care home staff. Secondly, only care home staff’s perceptions of the resident experience were reported. Future work should explore residents’ experience using video consultations during the pandemic and see whether, and if so how, they differ from the care home staff and health and social care professionals.
CONCLUSION

Care homes experienced new pressures and rapid changes during the pandemic. This study highlights the key role that videoconferencing played in maintaining health and social care provision for residents. The findings provided a new understanding of how care home staff facilitated online assessments and consultations and its impact on working lives and relationships. Future directions for research should address how best to engage with older people (especially those with cognitive loss) and how to foster and maintain relationships between health and social care professionals and care home staff. Videoconferencing has a clear place in future care delivery and this study has identified future areas for staff development and support to optimise its potential.

ACKNOWLEDGEMENTS

We would like to express our appreciation of and thanks to the participants for their contribution to the study.

FUNDING INFORMATION

This research was supported by the National Institute for Health Research (NIHR) Applied Research Collaboration East of England. The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care.

COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR AFFILIATIONS

Krystal Warmoth  orcid.org/0000-0003-0615-5778
University of Hertfordshire, UK

Chloe Bennett
University of Hertfordshire, UK

Jennifer Lynch  orcid.org/0000-0002-2601-7498
University of Hertfordshire, UK

Claire Goodman  orcid.org/0000-0002-8938-4893
University of Hertfordshire, UK

REFERENCES


FACEBOOK INC. WhatsApp.


QSR INTERNATIONAL PTY LTD 2018. NVivo. 12 ed.


ZOOM VIDEO COMMUNICATIONS INC. Zoom.