Remote care for chronic pain: A qualitative evaluation with managers, practitioners and patients

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Remote care for chronic pain: A qualitative evaluation with managers, practitioners and patients

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Abstract

The Covid-19 pandemic obliged many healthcare providers to transition rapidly to a remote-only model of care. Concerns have been expressed about patient access to remote services, their appropriateness for sensitive consultations and physical examinations. Pre-pandemic research into telemedicine showed evidence of its effectiveness but patient, staff and service user perspectives on remote care approaches remain unclear. This study explored the experiences and perceptions of care among patients, practitioners and managers in a single UK chronic pain organisation whose services were delivered remotely (telephone and online) during the pandemic. Nineteen participants (7 patients, 7 practitioners, 5 managers) took part in in-depth qualitative interviews, conducted via telephone or online. Transcripts were analysed thematically. Five service provider and four service user themes were generated. Service provider themes comprised "The change process," "Accessibility and efficiency," "Effective when remote: Contact, support and education," "Concerns about communication, connection and disembodied work," and "Supporting and sustaining the team." Patients' themes comprised "Preferences, expectations and acceptance of remote care," "Convenience and accessibility," "Sense of support" and "Delivery modality matters." The study provides evidence from the qualitative evaluation of a single remote only service of its benefits and limitations as perceived by stakeholders. Findings suggest that service providers could address limitations, and progress to a blended care package, based on for patient need and choice. Further attention could be paid to services delivered by telephone, and to staff communication skills, resources, time management and wellbeing needs.

Keywords

Chronic pain; Remote care; Patient experiences; Servicer provider perspectives; Qualitative evaluation.

Introduction

During the Covid-19 pandemic, many healthcare providers made the transition to remote care. People with chronic pain were disproportionately affected by the pandemic, with evidence of greater suffering, impairment, loneliness and isolation (1-5). Before the pandemic, telemedicine demonstrated some success in supporting chronic pain patients, facilitating crucial contact with practitioners (6, 7), and overcoming financial and practical barriers (8). Concerns included patients' internet access, limited by age and socio-economic factors; technological issues; challenges in discussing sensitive topics and undertaking physical examinations (6, 8-10).

Patient and practitioner perspectives on the effectiveness and acceptability of remote care for chronic pain, compared with traditional approaches, remain unclear (1). Patient-centred care is an important element of biopsychosocial healthcare models (11-13) and vital in the management of chronic pain conditions (14). Patient perspectives, alongside those of staff, are therefore essential in evaluating and improving healthcare practice (13).

Although there is little focused on this patient group, general reports of the effectiveness and acceptability of remote care early in the pandemic were encouraging. DePuccio et al. (15) found positive perceptions among physicians of its safety, efficiency, convenience and acceptability but acknowledged the missing patient perspective. Nuffield Trust (16) reported that two thirds of patients accepted remote care when surveyed but commented on the need for further reviews. Real world evaluations of remote care, accounting for different perspectives, could offer practical examples and inform the development of care guidelines (17).

The acceptability and effectiveness of remote care services for people with chronic pain conditions needs further investigation (2, 18-20). As remote delivery is likely to continue in some form, multi-perspective evaluations will inform high quality, safe services for future chronic pain patients. This study explored patient, staff and manager perspectives on the remote service offered by one United Kingdom (UK) chronic pain care provider during the Covid-19 pandemic.

Methods

Theoretical framework

Critical realist ontological and epistemological assumptions underpinned the study (21), which recognise that reality has stable and enduring features that exist independently of human perception, but that individuals have different experiences of the real. Individual accounts reflect those experiential differences (22), and are appropriately accessed via semi-structured, in-depth qualitative interviews.

Context

This UK-based evaluation was conducted within a single chronic pain healthcare organisation, which provides pain clinics to the National Health Service (NHS) across England, UK. The NHS is the UK's publicly funded healthcare system whose care is free at the point of delivery. The chronic pain service is delivered by a multi-professional team of clinicians, including nurses, physiotherapists, occupational therapists, and mental health professionals. All individual care transitioned during the Covid-19 pandemic to telephone or videophone, and the group programme was delivered via an online platform.

Sampling

Purposive sampling was used, to ensure different stakeholder perspectives were represented, including those of managers, practitioners of various professions, and patients with chronic pain. All stakeholder groups were informed about the study by email and invited to contact the research team for further information about participation. Inclusion was based on direct involvement with remote care as patient, practitioner or manager, and on diagnoses of fibromyalgia or chronic widespread pain syndrome in patients.

Data collection

Qualitative interviews of 25 – 40 minutes duration were conducted via online platform (n=17) or telephone (n=2) and audio recorded. Service provider interviews were conducted June to July 2021; patient interviews, between December 2021 and February 2022. Questions were decided within the collaborative research team of social scientists, physiotherapists, and biomedical scientists, based on varied professional perspectives and awareness of existing literature. Items focused on participants" experiences, thoughts and feelings relating to the remote care they had received or delivered. Patient and staff topics included their expectations, experiences, issues relating to communication, technology, support, rapport and motivation, perceptions of effectiveness and remote care potential in future care. Staff and managers were also asked about the transition process. Audio-recordings were securely, professionally transcribed; identifying information was removed.

Data analysis

Interview data were analysed using inductive thematic analysis (23). Provider data (staff and managers) were analysed separately from service user data (patients), to reflect their different perspectives. Transcripts were coded; patterns in participants' experiences of remote care were mapped conceptually; comparisons were made within and between transcripts. The main analyst was a psychologist and experienced qualitative researcher; a sociologist and a physiotherapist specialising in chronic pain contributed impressions of a subset of data; emerging themes were discussed and refined.

Ethical compliance

Ethical approvals were granted by the organisation and the University (ref ER29170588); informed consent was obtained via email; participants were offered a shopping voucher to acknowledge their time commitment and contribution.

Results

Participants

Nineteen people (16 female; 3 male) consented to participate, including 5 managers, 7 practitioners and 7 service users. Managers participated in leading the transition to remote service delivery; four also had a practitioner role. Practitioners had delivered care via telephone or online to patients; professions included nursing, physiotherapy and psychology. Patients were diagnosed with either fibromyalgia or chronic widespread pain syndrome; all had received remote care individually or in groups from the organisation during the pandemic.

Findings

Five themes were generated from the service provider (manager and staff) and four from service user (patient) data, resulting in a total of nine themes.

Service provider themes

Table 1 presents the service provider themes and illustrative data extracts.

The change process

There were three stages to the change process. An initial stage involved rising to the sudden challenge, responding rapidly as an organisation and addressing immediate issues. Reflecting back on this stage, practitioners and managers recognised with pride the flexibility and "can do" attitude which they believed characterised the organisational response. The adaptation and learning process which followed saw some initial anxiety and reluctance largely replaced by increasing positivity towards, confidence in and enjoyment of the remote delivery experience. The final reflective stage involved applying lessons learned, planning for an anticipated future blended delivery approach, and considering improvements in training, skills, support, self-care and time-management strategies.

Accessibility and efficiency

Remote delivery was considered to reduce geographical barriers for staff and patients. Greater accessibility for patients who struggled to attend in person due to pain, fatigue, anxiety meant attendance was higher and cancellations lower. Remote care was perceived to improve cost-effectiveness and efficiency, allowing more to be done in less time, though some had been slowed by technological issues in the early stages. Greater efficiency gave some the sense of working more effectively, because tools were accessible and they could fit work around other demands; however, others felt less professional in their home office or when patient appointments were disrupted by technical issues. Many commented on the longer, intensified working day, with fewer natural breaks between activities. This created pressure and a blurring between work and home life. Some also questioned whether patient engagement and attention was reduced in telephone appointments or when blacked-out in online video sessions.

Effective when remote: Contact, support and education

Certain important aspects of the service were considered well suited to remote delivery. Staff and managers commented being to maintain contact with and support for patients, in contrast with other service providers. Shorter and one-sided remote interactions worked well, including pain management groups, patient education, information-giving to support behaviour change, structured appointments to take a history or discuss medication. Remote care was considered beneficial for socially anxious patients, and to limit the "distraction" created by the possibility of and pressure for hands-on care, allowing greater focus on and more time for verbal pain management strategies. Most service providers believed that patients were largely happy with the quality of the remote care they received.

Concerns about communication, connection and disembodied work

In contrast, this theme reflected provider concerns about the limitations of remote delivery. In-person contact was considered important for both staff and patients, and something unmeasurable and intangible but nonetheless vital was missing from remote encounters. Rapport-building was difficult, which affected the intimacy and mutual enjoyment of therapeutic contact. “Disembodied” care captured the missing physical, sensory element, seen as important to thorough assessment and full engagement. Remote care relied heavily on words, and staff missed being able view body language and offer physical assessment, care and teaching tools. Interactions might feel less threatening to anxious patients, but the reduced non-verbal element created concerns about the thoroughness of assessments. Practitioners felt extra effort was needed on their part to ensure the patient was engaged and had heard and understood advice.

Supporting and sustaining the team

Remote care affected practitioner well-being. Many reported enjoying its flexibility and efficiency; however, negative impacts were more frequently mentioned, including working harder, carrying a heavier emotional burden, isolation, stress, “cabin fever” and a feeling of “sameness” which could impact their motivation for work. Maintaining support for remote-working staff was a high priority for managers, and staff spoke of awareness and appreciation for the support they had received. A key element was finding new ways to meet, interact and offer training to staff. Most reported enjoying WhatsApp discussions, online gatherings and the immediacy with which technical and clinical support could now be provided. Regarding team functioning, some believed that remote work had reduced the closeness of the team while others believed that reduced geographical barriers and better online connectivity had enhanced and expanded the team.

Service user themes

Table 2 presents the service user themes and illustrative data extracts.

Preferences, expectations and acceptance of remote care

Over half of the patients expressed a clear personal preference, at least initially, for in-person care, though most described approaching the prospect of remote care with an open mind. Despite some early anxiety and disappointment, only one participant remained unhappy afterwards with the service they had received; the majority had either accepted or gone on to enjoy their remote care experience.

Convenience and accessibility

Similar to staff and managers, patients appreciated the convenience and efficiency of remote care. They had found it easier to schedule appointments around other commitments. They reflected on the benefits of being able to continue receiving care and support when they might otherwise have cancelled or missed an appointment due to pain or illness, symptoms of depression or anxiety. Patients had been sent additional resources via email. Most were able to access them on their telephones or tablets, though some reported not receiving or being unable to open them. Patients typically found it helpful to have these accessible on their phones when needed, compared to the paper versions they might previously have been given during in-person appointments. Few had encountered any significant technological issues or barriers with the remote service.

Sense of support

Patients were asked about their sense of support, and most spoke about their gratitude for the organisation and practitioner efforts to maintain contact and support throughout the pandemic, in contrast to their experience of other healthcare providers. They appreciated that staff had listened, understood and advocated on their behalf. Those who provided mixed accounts of support had strongly missed the lack of in-person contact or wanted additional help, such as a telephone support line they could call for advice.

Delivery modality matters

The mode of care delivery clearly mattered to patients. This final theme reflected a wealth of data about different forms of care patients had received before and during the pandemic, and their sense of the relative importance and utility of each. Most patients saw in-person care as important and preferable because of its perceived benefits for their wellbeing. In its absence, they lacked the personal connection they had enjoyed with the practitioner, missed talking freely and receiving physical care; they missed non-verbal elements and found communications generally less personal and more effortful. Despite these issues, a few were very happy with their overall experience and keen to continue with remote care. Telephone emerged as the least preferred mode of delivery, despite being the most common during the pandemic. Patients reported feeling calls were brief or rushed, finding it hard to explain, contribute to the discussion, be understood, hear, focus and remember information. However, they appreciated the convenience of telephone calls for short chats and structured appointments. Not all of these patients had been offered video-based care, but most reported wanting or enjoying this mode of delivery. They considered video calls had much of the convenience of telephone, and most (though not all) of the benefits of in-person interaction. Video was perceived as useful for groups, despite – for some - reduced rapport-building, interactions which felt more effortful, and long sessions proving tiring. Similar to practitioners and managers, most patients saw benefits in a future where a blend of in-person and remote care was offered. Given their different needs and varying experiences of remote modalities, however, these participants had not enjoyed the lack of choice available to them during the pandemic. They wanted to be offered options in future, and have their individual needs and preferences considered.

Discussion

Findings demonstrated generally positive perceptions of remote care, which was considered convenient, efficient, and effective in maintaining contact and providing educational aspects of care. Concerns were raised about the impact of missing non-verbal communication and physical presence on assessment, care, rapport and wellbeing. Staff felt supported and had adapted well but sometimes experienced isolation, work-home life blurring, time management and work intensification as problematic. Patients generally preferred in-person care, welcomed video-based care but found some aspects of telephone-based care limiting. A blended delivery model, based on choice and need, was considered acceptable by all participants.

This study adds important qualitative detail about the perceived benefits and limitations of remote care for different stakeholders, when using specific delivery modes for different purposes, responding to calls for a better understanding of the suitability of remote care delivery for different patient groups via different media (24). The scope of the evaluation is limited by its small sample, its focus on a single UK NHS-based service. It is unclear how transferable findings might be to the private sector, internationally and beyond the pandemic period.

Staff and patients were similar in their preference for in-person care, alongside their recognition of and appreciation for the flexibility, ease, convenience of remote care. This supports existing pre-pandemic evidence from the chronic pain field specifically (6, 8-10), and mid-pandemic evidence more broadly (25, 26), that remote care delivery is generally welcomed.

The at-times-unsatisfactory experience among patients of telephone-based care, and their perception of its limitations beyond short, structured interactions, are noteworthy. Compared with in-person consultations and video calls, telephone calls are quick, cheap and convenient but lack visual cues and physical presence. Previous research has suggested that telemedicine offers benefits (6), with measured outcomes similar to usual care (27); however, a recent evaluation of telemedicine quality during the pandemic reported that telephone consultations were considered lower in quality than in-person appointments, particularly for those with greater need (26). Perceptions of telemedicine during the pandemic could have been adversely affected by the lack of choice over modality, and its more pervasive use for care perhaps better conducted in-person. Our findings reflect the perception of chronic pain patients whose complex symptoms, which may have deteriorated during the pandemic (2-5), could have affected their experience of telephone care. Further evaluations beyond the pandemic period would be useful.

One finding which emerged strongly from staff and patients was the importance of an unmeasurable, intangible beneficial effect of personal presence which was missed for both staff-to-staff and staff-to-patient interactions, and whose absence was perceived to impact wellbeing. Concerns expressed here reflect those elsewhere in the remote care literature (24, 25, 28) and in UK general practice survey data (16). This study offers insight into what is important about in-person contact, including rapport, comfort, small-talk, full sensory communication, and increased focus and attention. These experiences are difficult to replicate in any remote delivery modality, though video encounters were considered to come closer than telephone interactions. Previous reviews have found that video-based care can be as effective as in-person care (29), and is more acceptable than other remote forms of care (25).

Research with mental health service users has revealed similarly mixed findings, in which the positive benefits of convenience were offset by losses of non-verbal elements of care, and concerns about a future over-reliant on remote care delivery (24). In keeping with other evidence (25), most of these patient and staff participants embraced a future with blended care, if driven by need and choice, not just efficiency. Other researchers have raised concerns about the ability of remote care to meet the needs of patients with chronic, complex conditions and argued for a package of care which accounts for individual needs and preferences (24).

In a possible future of blended care which includes remote modes of delivery, it would be beneficial to compare practitioner assessments conducted through different modalities for thoroughness and safety, to develop remote assessment guidelines and reassure practitioners and patients. Similar calls have been made previously to establish remote care standards, improve quality and evaluate modalities of care (26). This could include what does and does not suit remote care via telephone, investigating the benefits, risks, quality and safety of phone calls for different therapeutic purposes with chronic pain patients. The increased potential of video-based care should be explored, to reduce the reliance on telephone-based care. Future research should consider remote care quality across services and with larger samples, including publicly and privately funded services within and beyond the UK.

In terms of the staff experience, potential improvements were suggested in the form of support and training for staff around time-management, physical and emotional well-being, remote communication skills, and in technology and home office provision. Similar recommendations are made elsewhere, highlighting the need to ensure staff can make the best use of remote care options, improve confidence with and develop communication skills for different modalities, and address risks to both staff wellbeing and patient safety (24).

In conclusion, when it comes to care quality, in focusing only on what can be measured – efficiency, attendance, outcome-based effectiveness – chronic pain services may risk losing sight of the important human element which impacts the experience for staff and patients. This small-scale study revealed positive attitudes among managers, staff and patients towards the remote care they received and delivered during the Covid-19 pandemic, as well as helpful detail about less satisfactory elements. Based on this and future research, best practice guidelines could be developed to ensure high quality care for chronic pain patients in which remote care delivery forms part of a blended care package.

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Statement of Human Rights

This study was conducted in accordance with the 1964 Declaration of Helsinki and its subsequent amendments.

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Conflicts of Interest Statement

The authors declare that they have no conflict of interest.

Table 1: Service provider themes (staff and practitioners)

Theme	Subtheme	Illustrative quotations
The Change Process	Stage 1: Rising to the Challenge	*Some people have asked us, "How did you manage? How did you keep your workforce engaged and manage stress and everything?" … I think the tech that we already had, and a really flexible, pretty resilient workforce beforehand.*
	Stage 2: Adapting and Learning	*Obviously, a lot of learning has had to take place … The way that you consider your background, for example, at home. Or if you are on the telephone, the way that you introduce yourself, like you say, so that you can still enable that rapport to be built, but without that face-to-face contact.*
	Stage 3: Applying Lessons and Moving Forward	*I think we'll always have both, but I don't know what the ratios will be.. It might be 60-40, as in 60 face-to-face, 40 online. I think that's reasonable… it'll be patient choice, so who knows?*
Accessibility and Efficiency	An Accessible Approach in a Smaller World	*We have seen a definite reduction in patients cancelling their appointments and patients DNA-ing their appointments through the lockdown, because they are not having to travel … Again, patients that just wouldn't have attended a clinic for anxiety reasons.*

	Efficiency of Time, Money, Resources	*It's really useful when you've got two toddlers, that you need to get ready in the morning and you need to go and pick up after work … I have appreciated having that flexibility to be at home.*
	Doing my Job Better?	*Actually, I'm providing a better quality of care at the moment, because I'm able to see exactly what we've discussed, what we've not discussed, where the pain is, MRI reports, diagnosis, without the patient even realising I'm looking at a computer and seeing what I'm seeing.*
	Is it Too Convenient?	*I think that's the problem with this remote way of working, is you can fill your diary and have one meeting and pretty much jump into the next.*
Effective when Remote: Contact, Support and Education	Maintained Contact and Support	*I think the positive message there was that we were maintaining communication with people that potentially living with chronic pain can be isolating.*
	Pain Management, Education and Behaviour Change	*But the majority of our work, once you've maybe done the assessment, etc., and you're kind of just delivering your pain management education component of things, it doesn't really matter where you're doing that.*
	History-taking and Medication	*A lot of the initial information gathering can be done over a screen or a telephone. There is a lot of history with chronic pain, isn't there? Patients often want to tell their story and the journey … that that can be gathered really nicely over a telephone or a video.*

	Talking without Distraction	*A lot of people want you to put your hands on and do something for them. So, it's taken away the option of that, which, in a way, I think is quite helpful because people know you're not going to be able to do that side of it.*
	Satisfaction and Effectiveness	*I think the quality of the sessions are still good. Because they are understanding whatever your explaining; they're taking it on board.*
Concerns: Communication, Connection and Disembodied Work	Personal Contact and Connection	*That group rapport between the patients. I don't know whether we have developed that as well over a video link … "Shall we go out for a coffee at the same time next week?" I haven't picked up on that happening within a Zoom pain management programme as well.*
	Disembodied Care	*You can't have a patient in front of you and look at their movement properly and give them appropriate exercises and see how they do that. So, there is that physical side of things.*
	Gentler Communication	*If you're not face to face with somebody, if you're literally just over the phone, if you want to gently challenge somebody, it doesn't come across as quite as confrontational, and people maybe aren't quite as embarrassed.*
	Limited and Effortful Communication	*I was finding that it was quite difficult having phone calls with patients, because they'd be talking away, and then they'd ask you a question and then they'd just carry on talking. Then, because you can't see them and you can't*

		see their reaction, it's very difficult to interject ... It's quite difficult to have a two-way conversation.
Supporting and Sustaining the Team	Personal Well-Being	*So, I think my experience has been that it's been mixed, to a degree. For some people, again, the working from home has been okay, they are certainly some benefits with that. But again, not seeing people face-to-face, that isolation, has been really challenging. I think also being able to really draw that line between work and home life, some people have found really difficult.*
	Maintaining Staff Support	*But I was asking on WhatsApp group while I was talking to the lady, and I was able to then get, "Yes, you need to go to hospital, will you ring 999?" She said, "Yes," she will. Then (my colleague) said, "Ring her back afterwards. If she's not made arrangements, you ring it for her." I was able to get all that without having to leave a patient in a room by themselves and I was able to deal with that relatively easy.*
	Finding New Ways to Meet	*We have even done social activities together over Zoom sessions. Like at Christmas and a Halloween quiz and things like that. That is just not something that we would have done previously. We might have had a Christmas meal out, but that might have been once a year social event. So I think it really has brought the team closer together.*

	Impact on the Team	*I think the dynamic in the team has changed incredibly, because there isn't that just seeing one another, on and off, all the time … We had new members of the team who, I think, found it much harder to be inducted into the team and develop relationships.*

Table 2: Service user themes (patients)

Theme	Subtheme	Illustrative data extracts
Preferences, Expectations and Acceptance of Remote Care	Personal preferences for in-person care	*If I have to speak on the phone, I will. Like I said, I'm not going to look a gift horse in the mouth. But if I can see face-to-face, then I will do it.*
	Disappointed by prospect of remote care	*Just really disappointed because I did get a lot out of it before, when it was face-to-face… face-to-face is just much better. You feel like you can talk more when you see somebody eye to eye.*
	Accepting prospect and enjoying experience of remote care	*I was fine with it, to be honest… I was starting to get really down and depressed at the time, and I was concerned about that. And then they said, "Oh, well, it will be Zoom, because of Covid," so I was quite pleased about that, yes.*

Convenience and Accessibility	Ease, convenience and efficiency	*When I'm not having a great day, it is a much easier service to access for me than to have to go somewhere ... I sat on the bed, and I could put my weighted blanket on me that made me feel a little bit, you know, less, sort of, in pain, less anxious.*
	Accessibility of emailed resources	*They've been good with keeping up information. And then I've downloaded the PDFs, so I've got them on my phone. When I first got them, I read them, and then there was another time ... I went back and referenced it.*
	Impact of technical issues	*I'm not stupid when it comes to computers, but I'm not tech savvy like they are now, so I thought I hope this is not complicated but, no, I was fine.*
Sense of Support	Feeling supported and grateful	*They've been really supportive ... It's been positive all the way through. I can't speak highly enough of them, they've been really, really amazing with me.*
	Mixed impressions	*I'd say it was half and half, really ... I did feel supported then and they actually understood what I was going through ... It would have been nice to ring up if you're having a really bad day and ask to talk to somebody, and say, "Look, what could I put in place to help me?"*
Delivery Modality Matters	In-person best for communication and wellbeing	*I think probably I am more comfortable in person because I can also see their reaction. Whereas at the moment, I can't see their reaction ... Whereas over the phone, it's very impersonal, isn't it? You can't have a joke or anything about this, or "Did you find where to park?" ... There are no*

		icebreakers. Whereas when you're in person, there is always something, isn't there?
	Remote care was ideal for me	*So, this was quite handy that it was a phone call so I could attend. It was just quite nice and relaxed. I suffer quite bad with mental health and actually going places, whereas talking on the phone, it is not too daunting.*
	Phone delivery suited to brief communications	*I find it easier, when you're in person, maybe there are more things happening that you can focus your mind, to keep you on track, kind of thing ...I know that I struggle with that on the phone. And like I said, sometimes you forget and my brain just goes blank, and I'm like, "Whoa."*
	Video acceptable and could be offered more	*I prefer Zoom calls ... a phone call is great for a five-minute talk. If I had a therapy session dealing with my pain, and the therapist wanted to check up on me, if it was five minutes or something, a phone call would be perfectly fine. But for anything longer than ten or fifteen minutes, I think Zoom is more suitable.*
	The future: blended care with choice	*I wouldn't mind it, as long as it is a combination. I don't want it just to be over the phone, because, as I said, I struggle with the GP at the moment, and it doesn't work. So, for me, if it has to be either remote or face-to-face, I would say face-to-face, because the remote needs to be in a combination with face-to-face.*