

Connecting at a Distance: Fostering Empathy in Remote Healthcare Applications

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Abstract

In recent years, remote healthcare has become more and more relevant. It provides unique advantages and can increase accessibility to healthcare for many. Although remote healthcare has unique advantages, it also has some unique drawbacks. One of these is the negative experiences of patients and health-care providers (HCP) using remote healthcare. A systematic literature review revealed that both patients and HCP dislike remote healthcare, and feel it is often 'cold' or impersonal, but research that measures empathy between patients and HCP surprisingly does *not* find a significant difference between empathy in remote healthcare and face-to-face settings. In light of this, this research aims to answer the question: "How can technology foster the *necessary* degree of empathy between patients and healthcare providers, to improve the quality of telehealth applications?"

To answer this question, semi-structured interviews were conducted with general practitioners (GPs) and their utterances were analysed using a design thinking approach, using customer journeys and bottom-up pattern analysis of their utterances. The goal was to output a set of design recommendations grounded in the literature, which have been validated through a qualitative approach.

The interviews revealed that empathy was not actually lacking between patient and HCP. HCP *did* often have strong negative opinions of remote healthcare. It was hypothesized that these negative opinions led them to believe that the empathy they can convey using remote healthcare was lacking, even when in reality patients were satisfied. This would also explain the revelation from the literature review that indicated that there was no significant difference in empathy between face-to-face and remote settings. The created customer journeys, supported by the discovered patterns, revealed three types of opportunities for changing the negative opinions of GPs: Opportunities to *persuade* GPs to try more remote healthcare, opportunities for GPs to *share* knowledge about remote healthcare, and opportunities to reduce the *stress* GPs experience.

Implementing the created design recommendations based on the discovered opportunities might change the negative opinions GPs have of remote healthcare. In turn, the empathy they experience and expect during their use of remote healthcare might improve.

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Introduction

1.1 Motivation and Initial Research Question

In recent years, remote healthcare has been on the rise. It has the potential to deliver care in new and innovative ways and can provide access to care to people that had little before [DT16].

The Corona crisis highlighted the need for remote healthcare. To combat the pandemic and stop the spread of the virus, different safety measures were introduced, such as social distancing and the wearing of face-masks in public spaces. Avoiding face-to-face contact in education, on the work-floor and in medical settings became the norm. Patients still require care, however, so novel ways of communicating have to be explored.

One of these is remote healthcare, or 'telehealth'. Telehealth is the provision of health care remotely by means of a variety of telecommunication tools, including telephones, smartphones, and mobile wireless devices, with or without a video connection [DT16].

Telehealth could prove essential in providing the care patients need, while respecting safety measures. Telecommunication tools can be used by medical workers to assess and provide care for patients without the need to meet face-to-face and risk exposure.

Telehealth is not a lesser version of 'standard' healthcare. This form of providing care has its own advantages and disadvantages. In the examination by Dorsey and Topol [DT16], telehealth is noted to increase the access to care. Patients that live long distances away from the nearest hospital no longer need to travel to see a doctor, and both doctors and patients save time and money by communication from their own home or office instead of traveling. This, in turn, lowers the bar for patients to seek out medical attention and allows people that otherwise did not have access to medical care to receive it, such as people in the military, prisons or who live in rural locations.

This does not mean that telehealth is a direct improvement over face-to-face health-care. Dorsey and Topol [DT16] note that many legal, clinical and social barriers remain for telehealth, as well as insurance coverage problems. Especially the clinical issues mentioned are of interest to this study.

The clinical issues seen in Dorsey and Topol [DT16] are the lower quality of the relationship between patient and physician, the examination and the general care. Other studies report similar issues. In Gordon et al. [Gor+20], diabetes patients that had contact with their doctors through telehealth were asked to report on their experiences. While they appreciated the efficiency of telehealth, as it reduced their travel time and increased their access to appointments, they also reported several drawbacks. The patients reported that they were more concerned about errors occurring in their care and felt less comfortable talking to their doctors. They expressed difficulty in establishing a relationship with their doctors using telehealth.

On the other side of the relationship, doctors are also reporting that they feel obstructed by the barriers that telehealth creates, as in Liu et al. [Liu+07]. Their comparison of face-to-face and telehealth consultations show that telehealth consultations are shorter than face-to-face consultations, less medical data was recorded and patient-oriented behaviour patterns were less common.

Both patients and providers have trouble establishing an empathic relationship over telehealth. They are less comfortable and the visits seem less effective.

For this reason, an initial research question was established:

"How can we foster empathic relationships between patients and providers through telehealth?"

1.2 Approach

This research aimed to answer the research question by conducting semi-structured interviews with health care providers (general practitioners). These interviews were set-up based on the findings in the literature. The interviews were then analyzed using a design thinking approach, using customer journeys and pattern recognition. The goal was to output a set of design recommendations grounded in the literature, which have been validated through a qualitative approach.

1.3 Contributions to HCI

This research aims to contribute to the field of HCI by:

- Gaining a deeper understanding of the related work. Understanding to what extent and how empathy between patient and health care provider is affected by the use of telehealth.
- Proposing a set of evidence-based design recommendations for the development of telehealth systems that support empathy building between patients and general practitioners where appropriate.
- Contributing to the broader HCI field by filling in the knowledge gap concerning empathy in telehealth.

The rest of this thesis is organised as follows. Section 2 presents the related work, the research gaps, and the revised research question on the basis of these gaps. Section 3 presents the Methods, including the participants, the used research methods and the structuring of the gathered data. Section 4 presents the results with focus on the patterns that emerged from the interviews with healthcare professionals. Section 5 discusses these findings in a synthetic format, and presents limitations and opportunities for future work. Finally, section 6 concludes with the key findings of this work.

Related Work

In this chapter, the related work will be discussed. A systematic literature review was conducted and searches were done in the CINAHL and PubMed databases in December 2021. Inclusion and exclusion criteria are discussed. After applying exclusion criteria and going over the found papers in multiple rounds, 13 papers are chosen for the related work. These papers reveal four main findings. Finally, the original research question is revised based on the new information found in the related work.

A systematic literature review was conducted. Two key terms were identified in the preemptive research: 'telehealth' and 'empathy'. In order to be as comprehensive as possible, terms that were used interchangeably in the papers found during the preemptive research were also used, those being 'telemedicine' and 'compassion'. This resulted in the following search string: (telemedicine OR telehealth) AND (empathy OR compassion). Searches were run in the CINAHL and PubMed databases in December 2021.

Inclusion/Exclusion Criteria

Though the background for this research was the increased use of telehealth because of the COVID-19 pandemic, papers that looked into telehealth during the pandemic were excluded if they focused on care outcomes during the pandemic. This was done because comparing telehealth to face-to-face healthcare when the latter is not an option due to restrictions does not provide an even ground for comparison.

Furthermore, papers that were beyond the scope of communication or telehealth were excluded, as they were not relevant for this research. Those papers were excluded based on their titles if those did not include at least some reference to empathy, telecommunication or healthcare. Papers were also excluded based on their abstracts if these revealed that the paper was not actually about telehealth and empathy. Finally, after reading the whole text, some papers were excluded because their topic was not relevant after all.

Papers that were about the development of interventions or education were also excluded, as this research is not focused on developing or evaluating education curricula. Protocols and editorials were also excluded, since these are not empirical research. Finally, papers were excluded that turned out to not have abstracts or full text available, or not be available in Dutch or English.

Results

Searches in PubMed and CINAHL provided 217 results. The found papers were filtered step-by-step by determining if they should be included when looking at the title, the abstract and finally the full text. Looking only at their titles and filtering out doubles left us with a total of 84 results. After reading the abstracts, a total of 39 results were left and finally, after reading the whole text of the articles, 13 papers remained that were included in the related work.

2.1 Patients and Providers Dislike Telehealth

Patients and their health care providers (HCP) fear that using remote healthcare will make their interactions feel impersonal. Claborn et al. [Cla+18] conducted a qualitative study examining the adoption and acceptability of telehealth interventions for HIV disease management. Both patients and providers felt that, while telehealth interventions could provide unique utility to patients, they feared that telehealth could not provide vital parts of care. According to the HCP, patients need increased social support and desire empathic, in-person interactions but telehealth may not be able to provide these. Patients and providers both described telehealth interventions as feeling "cold" and "impersonal".

Earlier literature, like the systematic review by Henry et al. [Hen+17] identified the beliefs and attitudes of HCP as one of six important themes in telehealth literature. They referred to this as the *Pre-interactive* theme, and define it as: *Pre-interactive elements are comprised of several different HCP characteristics including beliefs, attitudes, confidence, and cultural competence that precede a positive approach toward working with patients through telehealth.*

They found that providers that believe telehealth is limiting the quality of the care they can provide are unwilling to adapt telehealth. The literature indicated that there was a relationship between the willingness of clinicians to adapt to a role in telehealth with their belief that telehealth would have positive outcomes for

their patients. This relationship seems to hold across different types of clinicians. In one study, it was found that nurses that knew little about the way telehealth would improve the care they could give their patients was associated with how ready they felt to implement it for remote monitoring. In another study examining nurses, interviews with them found that giving feedback about patient outcomes from telehealth may contribute to more positive views about telehealth. The same held for physicians, who were informed that telehealth increases access to care in a large survey and afterwards, more easily accepted telehealth practice.

2.2 Measured Empathy Contradicts Negative Views of Telehealth

In contrast to the negative views on telehealth in terms of alliance and empathy, research seems to indicate that these are consistently rated equal in different consultation settings with different types of HCP, like physicians, psychiatrists and nurses.

An important part of healthcare is Alliance. Alliance is a commonly used concept in mental health care. It is defined as "[alliance] represents an emergent quality of partnership and mutual collaboration between therapist and client" by Horvath et al. [Hor+11]. Alliance has been shown to be vital to positive health care outcomes.

In Henry et al. [Hen+17], another discovered theme was "Relational", which is about the relationship between HCP and patients. Rapport building between patient and provider seems to be uninhibited by telehealth. Multiple studies with different research designs that examined different types of communication modes report positive outcomes for building rapport and fostering collaboration. Another four articles reported that telehealth therapeutic interactions allow for alliances, collaborative decision making and good patient outcomes. In a study that interviewed nurses and family caregivers on telehealth, it became clear that establishing rapport and trust was vital for the patient-provider relationship. It was reported that greater rapport increased the likelihood that home caregivers would initiate contact with nurses. Finally, a study exploring the role of nursing in telehealth concluded that the relationship building between a patient and their provider is more important than the monitoring of their health through a device.

Irvine et al. [Irv+20] know that a large amount of qualitative research shows that there are many reservations about telehealth, and that the use of telehealth has

impact on the alliance, disclosure, empathy, attentiveness and participation of mental telehealth. What they want to find out in their systematic review is if there is any empirical data on the interactional differences between telephone and face-to-face psychological therapy. They found that there was no empirical evidence that the lack of visual and physical co-presence is detrimental to alliance formation, disclosure, empathy, attentiveness or participation. Alliance is consistently rated similar by HCP, patients and third party raters. This review seems to show a paradox. Empirical studies consistently show that there are no significant differences in the interactional features of mental telehealth, but providers remain uncertain or negative about the usage of it. This might be due to the providers belief that they rely more on visual cues than they actually do.

Irvine et al. [Irv+20] examined studies that asked patients to rate the most important factors in the forming of therapeutic alliance. It was shown that eye-contact is considered to be one of the most important individual factors. Nonverbal gestures and body language, which therapists believe are important parts of face-to-face therapy that might be lost through telehealth, are rated as significantly less important than the therapists validation of the patients experience. Validation involves different actions by the therapist such as "*normalizing the patient's experience, framing it as reasonable or understandable, identifying and reflecting back feelings, paraphrasing, agreeing, and making encouraging and comments*". None of these actions rely on visual cues or physical co-presence and therefore should be possible in telehealth visits.

There is more research that indicates that there is little difference in the alliance strength and empathy displayed in telehealth visits compared to face-to-face visits. Zilliagus et al. [Zil+11] examine the effectiveness of telehealth use in consultations for hereditary breast and ovarian cancer genetic counseling. Teleconsultations were shown to be about as effective as 'normal' face-to-face consultations and the perceived empathy of both the counselor and the clinician in the teleconsultation was rated to be similar to the one in face to face setting.

The aim of a qualitative study by Elliot et al. [Ell+20] was to understand what interpersonal and communication behaviour is seen as positive by patients during a telehealth visit and to see if patient-centered relationships can be established virtually. They found that interactions with the provider are mediated using their interpersonal, relational and communication skills. The most important medical communication aspects that patients noted was "establishing rapport". They hypothesize that providers who are inter-personally attuned or aware of the interpersonal aspects of communication are able to communicate non-verbally and instill a sense of patient-

perceived provider empathy using a video platform. Providers can compensate for the missing physical cues by relying heavier on eye contact and observation.

There is yet more. Studies examining alliance and empathy for caregivers [SH19], home-based palliative patients [Gur+15], during general [Ros+21] and dermatological visits [DEV05] all indicate that the alliance and empathy during telehealth visits are not significantly different than in face-to-face settings.

2.3 There Is No Set of Best Practices for Fostering Empathy in Telehealth

It seems that HCP do manage to foster empathy, but might do this subconsciously, without always being aware of the techniques they employ to do so.

In Henry et al. [Hen+17] both the verbal and nonverbal communication in telehealth visits are identified as important themes in the literature.

As for verbal communication, findings varied from study to study. Some studies find that telehealth visits were shorter, and providers spend less time socializing with their patients. Liu et al. [Liu+07] find that providers make less empathy and praise type utterances in telehealth than in face-to-face meetings. There was less patient-oriented behaviour. Other studies find that providers were more open and made more small talk than in face-to-face meetings. Nurses were more open on the telephone than face-to-face, as they made more patient utterances, asked more open-ended questions, made more friendly jokes and indicated more often that they were listening. A study employing focus groups reported that the difficulty in assisting patients who do not understand medical language is made worse by language barriers and technical problems. Finally, while another study suggests that more education and training could help develop skills specifically for communication over the phone, the specific aspects of verbal communication that increase the need for clear language were not described.

There is no clear indication of what needs to change in the verbal communication of HCP. Studies report contradictory results and it is unclear how exactly to improve the communication skills of HCP.

The findings on nonverbal communication seem more cohesive. Henry et al. [Hen+17] identified seven articles that focused on nonverbal communication. HCP felt like they had less control over different parts of nonverbal communication in

telehealth, like their eye contact, body positioning, movement, facial gestures, voice quality and vocal tone. This is interesting, as a more recent systematic review by Kemp et al. [Kem+20] notes that one of the advantages of using telehealth is the ability to view yourself during the visit, granting more control by allowing you to adjust your body language, increasing control over nonverbal communication.

It is not clear in what way exactly the different parts of nonverbal communication should be used-e.g., How much eye contact should there be? What is the ideal body positioning? What should the provider's vocal tone be?

Multiple articles stated the importance of equipment quality and placement, as they should support a 'telepresence'. Another study reported something similar: In order to develop their 'video presence', providers should stay visually attentive, exaggerate facial expressions at times, and ensure there is a clear view of the provider's face and body language.

In a more recent paper, Barbosa-Angles and Hamilton [BH20] attempt to develop the concept of 'telepresence' and examine the human interactions involved in telehealth visits. Their definition is as follows: Telepresence is a set of behaviours that can be used to describe a positive experience in a telehealth visit. They identified six attributes that contributed to telepresence: Body language, eye contact, verbal communication, therapeutic relationship building (alliance), acknowledging the presence of technology and patient and provider presentation on screen.

'Telepresence' is discussed in the 'nonverbal communication' section of Henry et al. [Hen+17], but seems equally related to the 'environment' section of their paper, the final theme they identified in the literature and discuss. Environment highlights the importance of the environment of the HCP during care delivery. Patients may appreciate assurances that their privacy is protected and that the HCP guarantees confidentiality beyond the transmission of data. Multiple aspects of the environment to take note of were identified in different articles. Delivering health care through a phone in a public space may cause problems as there may be others nearby that can hear the conversation that is supposed to be confidential. Furthermore, using headphones is recommended to protect the privacy of conversations. Technical equipment should be placed in environments familiar to the patient, like the office of their HCP and not a general meeting room. The environment should remain distraction free and interruptions should be prevented as much as possible. More recent studies, like Elliot et al. [Ell+20] also suggest that the visual set-up of the provider's set up could contribute to the effectiveness of rapport building.

2.4 Subtle Facilitators of and Barriers to Empathy and Alliance

Telehealth provides unique ways of delivering care and therefore comes with its own advantages and disadvantages. We need to be aware of the currently known facilitators and barriers to empathy in telehealth in order to improve it. In a systematic review, Kemp et al. [Kem+20] attempt to determine the facilitators of and barriers to telehealth use among patients and HCP in the delivery of empathic mental health care.

Facilitators of empathic care through telehealth are the safety, accessibility and the feedback possibilities it provides. HCP can provide care in situations where there might be risks to their person, such as in prisons. Some patients seem to feel more at ease when communicating at a distance, through the anonymity this brings, though other there is no empirical evidence to this effect [Irv+20]. The on-demand use and the far distance reaching abilities of telehealth are strong facilitators. Finally, the ability to view yourself on screen during the interaction with a patient could allow you to evaluate your own body language and responses to social cues.

The barriers to empathic care that telehealth comes with are the personal beliefs and perceptions of HCP and patients about telehealth discussed earlier in this chapter; the lack of social cues in text-only forms of telehealth, the feeling of neglect from silence/nonresponses in communication, group sizes (with larger groups leading to less engagement), obstructive positioning of computers during visits, technical issues like lagging and poor video quality and finally, the stage of the patients illness.

2.5 Key Literature Review Findings and Revised Research Question

As [Hen+17] state in the closing remarks of their systematic review, it seems that telehealth can be one of the most effective tools to increase access to care and remove barriers preventing people to seek out care, but that HCP from different disciplines and backgrounds struggle to adapt the interpersonal behavior and attributes that are needed to provide clear communication, establish therapeutic relationships and achieve high quality outcomes using telehealth.

Providers and patients both have negative preconceptions of telehealth and the empathy and relationships that are conveyed and build through it. Research seems to indicate that these views are not entirely justified, as it seems possible to establish strong, empathic relationships between patient and provider. Some facilitators of- and barriers to empathy in telehealth have been identified and should be kept in mind going forward. Finally, in spite of the many benefits telehealth offers and in spite of the growing application of telehealth throughout the health sector, there is no defined set of best practices for building empathic relationships through telehealth.

The original research question "How can we foster empathic relationships between patients and providers through telehealth?" needs to be revised. The literature indicates that empathy is rated positively by patients and HCP. The problem seems to not be that it is impossible to create a strong empathic bond between patient and HCP, but that especially HCP do not believe it is (as) doable as in face-to-face settings or that they feel they are lacking in visual information that they miss because of the format.

The new research question going forward will therefore be:

"How can technology foster the *necessary* degree of empathy between patients and healthcare providers, to improve the quality of telehealth applications?"

Methodology

In this chapter, the employed methodology is discussed. The type of participants sought after, the way they were approached and the success of this approach are discussed. Participants were interviewed using a semi-structured interview method. All of their utterances were gathered on a digital board with post-its. Non-relevant utterances were filtered out and the remaining ones were organised to make the data comprehensible and allow analysis. Using the utterances, two customer journeys were created based on two personas. This resulted in a number of opportunities for improvement. In addition to the customer journeys, all of the utterances were analysed using a bottom-up approach to see if any patterns could be identified between the utterances of different general practitioners. This also resulted in a number of patterns.

3.1 Participants

Based on the literature research, while both patients and HCP dislike telehealth, HCP seem to have more issues with adapting and feel like they lose vital information, even when the literature contradicts this. For this reason, and to address scope and time concerns, it was decided that out of these two groups, HCP should be approached. There are many types of HCP across a large variety of medical fields. Furthermore, this is a group that is quite difficult to involve as participants due to their high workload, which means a low number of participants was expected. This is why it was decided to focus on a specific group of HCP, in order to avoid muddling the data with single participants from different medical backgrounds.

The specific group of HCP that was decided on was general practitioners and general practice-based nurse specialists (GPs). General practice-based nurse specialists interact with patients in similar ways to general practitioners and often work at general practices with general practitioners, which is why they were included. These groups were chosen since they have a large amount of contact with patients, are a common group approached in the research found in the literature and they can be approached directly, unlike medical specialists.

Participants were sampled using Convenience and Snowball sampling. Since the target participants were specific types of HCP, who are hard to recruit because of their high workload and valuable expertise, participants were recruited using convenience sampling. GPs were approached by calling their practice and sending e-mails. The researcher also approached GPs through their own network. Participants that agreed to being interviewed were asked afterwards to nominate colleagues, friends or acquaintances for further interviews.

Two participants were recruited through convenience sampling and another two were recruited through snowball sampling, resulting in a total of 4 participants.

3.2 Interviews

Interviews were selected as the data gathering method since, for this research, it was necessary to dive deep into the subjective experiences of the different GPs recruited. Focus groups were considered an option but ultimately discarded because of the complex scheduling problems this method would cause for the different GPs.

The interviews were semi-structured. A set of questions was prepared but left room to follow up on interesting answers and other interesting freely volunteered information by the GPs. During the interviews, the questions asked focused on the personal experiences of the GPs during their use of telehealth to help their patients. Both of these groups help their patients through telehealth using **remote consultations**. In this research, remote consultations are defined as consultations that are done by talking over the phone or using video-calling software on a computer.

Interviews were recorded using a smartphone with a recording application. Afterwards, interviews were transcribed by ear in Nvivo by the researcher. This resulted in four interview transcripts which served as the foundation for the rest of the research.

3.3 Structuring of the Data

Based on the interview transcripts, a list of all utterances by the GPs was created. This created a large amount of data that was unorganised and hard to comprehend. The utterances were organised in three steps in order to create structure and to make it possible to analyse the data.

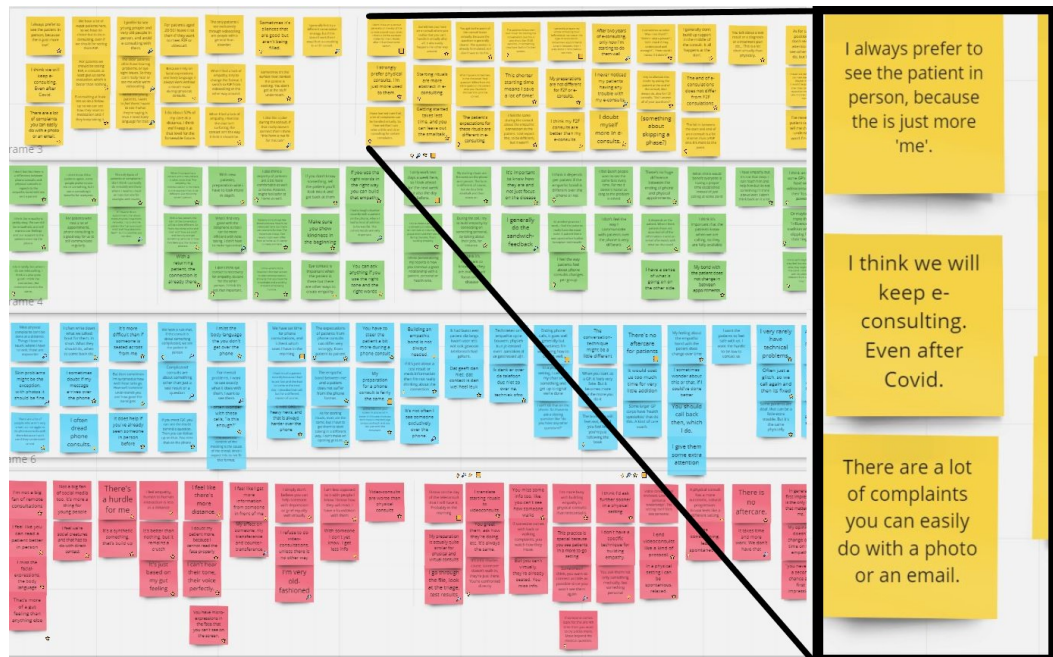


Fig. 3.1.: Step 1: Creation of post-its in Miro with all GP utterances. Each colour represents a different participant and all made utterances are included, without judging them for relevance.

Step one was the creation of the a Miro board, a digital tool that allows user to create virtual whiteboards to work on. All of the utterances were written on different post-its and grouped together and colour-coded based on which participant made the utterance.

Step two was the removal of utterances that were not relevant to the research, or that were too vague to infer information from e.g. "Not a big fan of social media too, it's more a thing for young people". A list of all the relevant utterances can be found in Appendix A, ordered per participant.

Finally, for step three, utterances were grouped together based on different topics. To begin with, the utterances were grouped based on what part of the process of a remote consultation they concerned. A single remote consultation was divided into five parts: **Before the consultation, start of the consultation, during the consultation, end of the consultation and after the consultation.**

This was not enough to categorize all utterances, however, so three additional categories were created to categorize the remaining ones: **General opinion of remote consultations, Patients and their expectations and Technical aspects & problems.**

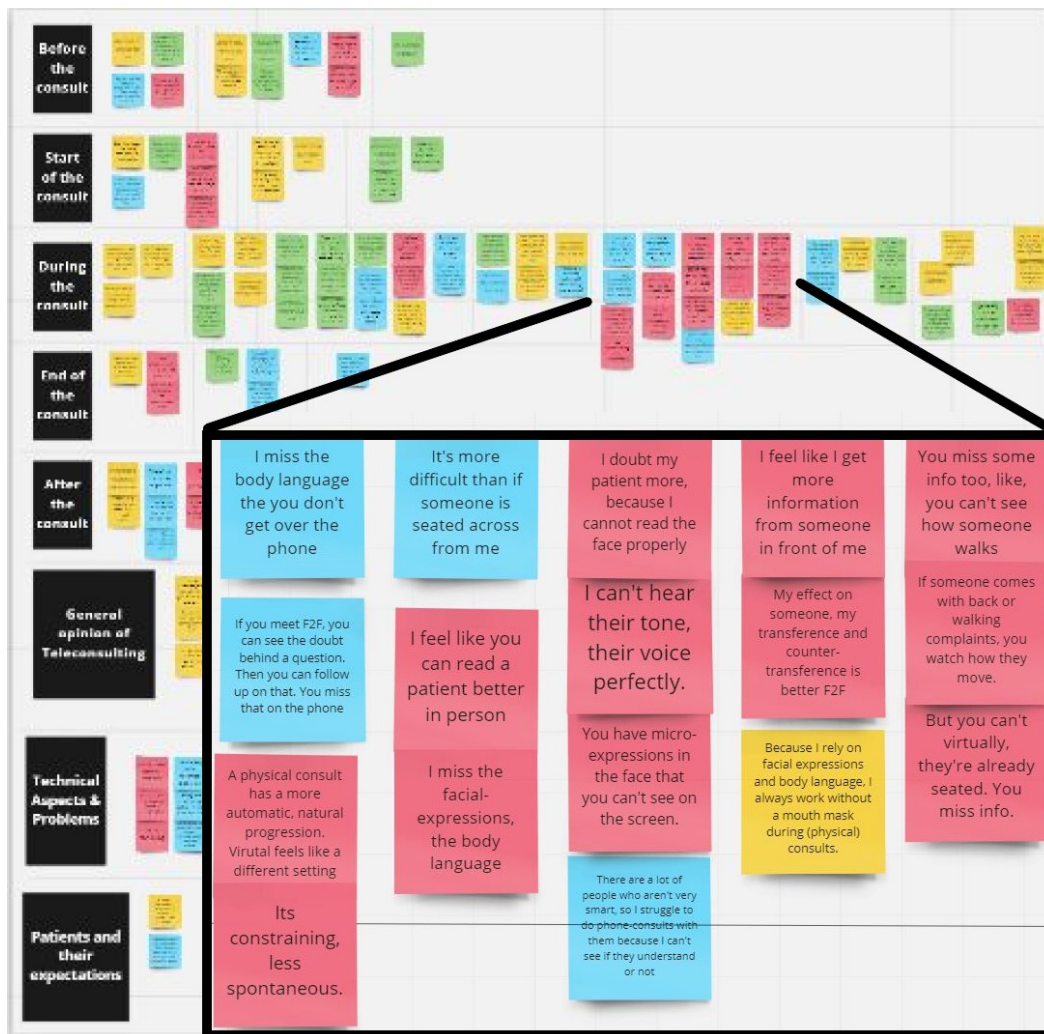


Fig. 3.2.: Step 3: The utterances of the general practitioners are grouped into topics to create more structure in the data and allow analysis. Here is a close-up of some utterances that are in the 'During the consult' topic.

The 'General opinion of remote consultations' category concerned utterances that were about remote consultations in general and could not be assigned to one specific part of the process.

The 'Technical things and problems' category concerned utterances that were about technical difficulties experienced or tools used by the GP during remote consultations, like the phone, camera, microphone or headphones.

The 'Patients and their expectations' category concerned utterances that were about what certain patients are like, how the GP sees them, and what the GP thinks they expect from face-to-face- and remote consultations.

3.4 Customer Journey

Using this overview of the utterances, a customer journey was created. The classic customer journey format was altered to fit the current research, since the GPs are not customers in this scenario. A customer journey was still deemed the best tool to understand the experiences and emotions of the GPs better, and to find out where the opportunities for improvement are.

In order to create a customer journey, personas to go through the journey first needed to be created. This was done by looking for similarities in the grouped set of utterances made by the GPs. Two types of GPs seemed to exist: Those who did not mind doing remote consultations and thought that the empathy in these consultations was at least 'okay', and those who disliked doing remote consultations and who felt the empathy in these consultations was bad or worse than in F2F consultations.

The utterances that inspired these two personas were gathered together and from the two groups two descriptions of personas were crafted.

The two created personas were Sam, who feels remote consultations can be effective and empathic, and Rowan, who feels their remote consultations are unempathic and uncomfortable. Their exact description were as follows:

*I'm **Sam**, and a GP at a local clinic. I am in touch with modern developments and am willing to at least try new things. I've done quite some remote consultations and my opinion about them is semi-positive. I think remote consultations can be the perfect format in certain situations, and brings me quite a few advantages in my work. I think I can be as empathic as in F2F consultations. While I feel comfortable doing remote consults, I still prefer F2F consultations in most situations and feel I am better at them. I see remote consultations are not perfect, but I also see the advantages to remote consults and will keep doing them in the future.*

*My name is **Rowan**, and I have been a GP for a long time at a large practice. I would describe myself as old-fashioned. I strongly dislike remote consultations. Remote consultations do not allow me to be as empathic as F2F consults (or at all). Remote consults are uncomfortable and awkward. I strongly prefer F2F consultations in every situation and feel I am better at them. I see remote consultations as a crutch, only to be used in cases where there is no alternative.*

The customer journeys themselves were created by recreating the process of a remote consultation through the gathered GP utterances and then letting the two personas

go through their respective journeys, thinking about their experiences step-by-step and comparing GP utterances for these stages of the process.

As mentioned above, the format of the two customer journeys was altered from classic customer journeys to fit the current research. The GPs are not customers buying a product after all, but more similar to providers of a service to their patients.

The customer journeys consisted of the following six parts:

1. **Journey Steps** - the step of the experience that is being described and to which all of the other information in the column belongs
2. **Actions** - the exact actions the GP does at this step, their context and the information they are seeking
3. **Needs, Pains and Concerns** - What the GP wants to achieve or avoid
4. **Touchpoint** - The tools and services they interact with during this step
5. **Range of Emotions** - How they feel about the Needs, Pains and Concerns described above
6. **Opportunities** - What the researcher thinks could be done to alleviate the discovered Pains and Concerns and to facilitate the Needs.

After all the other sections of the two journeys were completed, the **Opportunities** field was filled by analysing the journey and conceptualizing possible solutions to pains, needs and concerns found.

3.5 Patterns

In addition to the customer journey, all of the utterances were analysed using a bottom-up approach to see if patterns could be identified in the utterances of different GPs. The process-organised utterances were each separately interpreted and matched with other utterances that seemed to indicate a pattern. When there were no more utterances to add to a pattern group, they were given a sentence-name to describe the pattern they represent, like "*Empathy is build within a short time frame and often not analyzed later or thought about actively*".



Fig. 3.3.: Persona Creation Process. At the left are the utterances that gave rise to the persona, at the center is the first form of the persona in a short statement and at the right is the final product of text that formed the basis of the persona, in this case Sam.

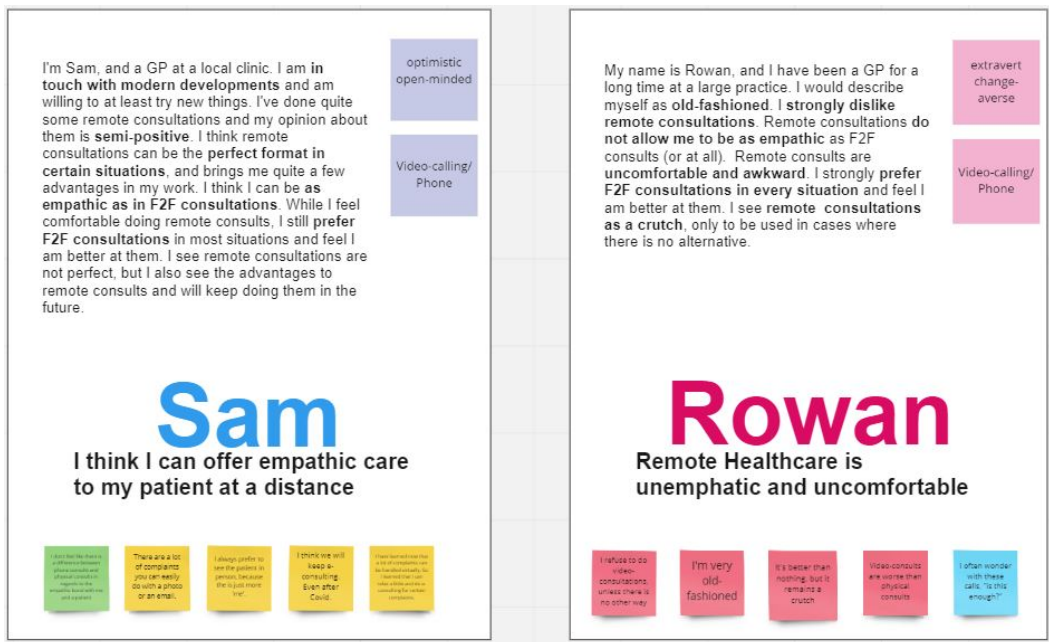


Fig. 3.4.: The two created personas. Sam is more positive about remote healthcare while Rowan is more negative.



Fig. 3.6.: One of the pattern groups created during the pattern analysis. On the right are the utterances that together formed the pattern on the left, which is also the sentence-name of the pattern group

Results

This chapter will feature a full list of the discovered patterns, following the Pattern analysis of the grouped utterances in figure 3.2 described in the previous section. There are too many to describe them all in detail, so they have been grouped together with similar patterns based on what they relate to. The patterns are accompanied by an indicative quote that contains one or more utterances made by the GPs that gave rise to the patterns described in that section. The groups and patterns in that group are listed in no particular order.

4.1 GP experiences

These patterns all relate to the personal experience of the GP during an e-consult. They give detailed insight into what the GP is feeling and what their opinions of different aspects of the e-consult are.

"I doubt my patient more, because I cannot read the face properly. I can't hear their tone, their voice perfectly. You have micro-expressions in the face that you can't see on the screen."

- GPs dread remote consultations and doubt themselves more, no matter their opinion of remote consultations in general
- GPs feels that information is lost in remote consultations
- Some GPs are less comfortable in a digital setting
- GPs feels remote consultations also have their advantages
- GPs are surprised at effectiveness of remote consultations
- GPs do not think far ahead about their e-consults
- GPs do not want to meet vulnerable patients virtually

4.2 Empathy

These patterns all relate to the empathic bond the GP builds with the patient, the techniques they use to do this and empathy in general in a remote consult.

"During the call, I try to build empathy by connecting on something personal, by talking about their jobs, for instance. I think it's important to know how they are and not just focus on the disease."

- GPs opinion of the empathic bond they have with a patient rarely changes over time, and if it does, it does so in the same way it does following F2F contact
- GPs differ strongly in how aware they are of empathy techniques they employ. Some GPs actively and consciously employ techniques and others do not think about it at all
- Empathy is build within a short time frame during the e-consult and often not analyzed later or thought about actively
- GPs don't always want to build an empathic bond between themselves and their patient
- Empathy is not always needed in a consultation
- Opinion of empathy in remote consultations differs per GP, but a majority expect it to be bad or worse than in a F2F consult

4.3 e-Consult Structure

These patterns all relate to the structure and content of an e-consult, and the way that those differ from a F2F consult.

"Getting started takes less time, and you can leave out the small talk. This shorter starting time means I save a lot of time."

- There is no standard, planned aftercare. Only preemptive repair-work in case the GP makes a mistake or wants to prevent one
- The consult format does not affect preparation. Both remote consultations and F2F consultations are prepared for in the same way

- Starting rituals are translated but shorter, both from the GPs side and the patient's.
- Call end might be 'colder' and less natural, if the GP is not used to remote consults
- Many e-consults are about simple things
- In e-consults, you get to the point faster
- Patients are rarely seen only digitally

4.4 Patients

These patterns relate specifically to patients and their expectations.

"The patients follow their own 'ritual' for starting the conversation, but this is very short, like 15-20 seconds. It's something they have 'built-in' in their system. The patient's expectations for these [starting] rituals are different in e-consulting."

- New patients require more effort to connect to empathically
- Patient expectations are different from the GPs expectations

4.5 Technical Aspects

These patterns relate to the more technical aspects of remote consultations. This includes technical issues and tools used.

"It depends on the location if I have technical problems or not. When they happen its very disruptive because it builds irritation with both parties. To fix it, you stop the whole conversation and try again."

- Technical problems differ per person/location and are disruptive but solvable
- GPs are certain and confident about camera usage

Discussion, Limitations and Further Work

This chapter will discuss the created design recommendations that were based on the opportunities found in the customer journeys. Whenever one or more of the found patterns supports the design recommendation, this is mentioned and discussed below that recommendation. Finally, limitations and further work are discussed.

5.1 Design Recommendations

The created customer journeys indicated multiple opportunities for improvement. Based on these opportunities, design recommendations were created.

Three types of opportunities were discovered. The first type was about opportunities to **persuade** GPs; to convince them to do more remote consultations by showing off the advantages and creating tools that make it easier to e-consult. These tools could be integrated into the software they already use, like their calendar application.

The second type was about opportunities for **learning**; to give GPs information about empathy in remote consultations, feedback from themselves, their peers and patients, FAQ's and possibly e-learning modules created by peers and researchers. The desired effect here is to change the (often) negative preconceptions GPs have about remote consultations by showing both research-based data about the effect of e-consultations and the personal experience of other GPs and patients.

The final type of opportunity was focused on **stress reduction**. This specific opportunity seeks to alleviate the stress caused by (possible) technical issues by creating a specific piece of software.

5.1.1 Persuading GPs

A first design recommendation is using the planning tool(s) of the GP to persuade them to do more remote consultations. Remote consultations take up a shorter

amount of time than F2F consultations. If the GPs planning reflected that time difference clearer, it might create more positive associations with the remote consultations.

A second design recommendation is to reduce the amount of clicks a GP needs to do before they can start their remote consultations. Using their planning tool, a function could be build that allows GPs to start remote consultations directly from their planning. This might reduce their (cognitive) workload and possible errors or delays in the process of starting a remote consultation. Improving the ease with which remote consultations happen might persuade GPs to utilize them more because they are more comfortable with them.

A third design recommendation that uses the planning tool to persuade GPs is to create a tool that can calculate the amount of time GPs are saving by using remote consultations. This might persuade them to continue doing remote consultations by showing off the amount of time they save in a very direct way. If they already use their planning tool to start calls, that tool itself will likely able to calculate the amount of time a meeting took (and therefore saved in comparison to a F2F constulation).

A fourth and final design recommendation to persuade GPs is focused on the GPs that strongly dislike remote consultations. They are sometimes self-described as "old-fashioned" and/or dislike telehealth based on a "gut-feeling". These GPs might dislike remote consultations because of an aversion to (new, complex) software and/or dislike of change in the way they do their day-to-day work, combined with the other negative preconceptions of remote healthcare, such as the loss of information. It will be hard, but these GPs might be persuaded to try more remote consultations if the advantages are emphasized and conveyed properly, in addition to the learning curve for new software being flattened as much as possible.

This recommendation is also supported by the found patterns in the GP utterances. As discovered in the literature, this research indicates that GPs have negative opinions about remote healthcare. What is surprising here, is that GPs also have these negative opinions when they have made little to no use of remote healthcare. GPs with less to almost no experience in remote healthcare seem to dislike this method often to an equal or greater amount as their peers who *have* used it. They seem to see the drop in quality as inevitable because of the consultation format.

5.1.2 Learning from Peers and Patients

A first design recommendation in regards to helping the GP learn more about remote consultations is based on patient expectations. Patients have different expectations from GPs in remote consultations. These seem to not be overly complex, but they are quite particular. We might be able to help GPs learn and retain this information by creating a small FAQ, with help from their peers, regarding remote consultations. GPs should be able to check this within the short preparation time they have between consultations (max. 2 minutes) and it should be possible to disable and (re-)enable in case GPs have no need of it or want to see it again.

This recommendation is also supported by multiple found patterns. These patterns reveal that the needs of the patient and their expectations might differ in certain aspects *and* that some GPs are already aware of this. Firstly, GPs feel that the expectations of patients are different in remote consultations. Patients expect shorter consultations, that are more to the point. Some GPs adjust their own expectations to meet those of the patient's, and they seem to feel more confident and comfortable in remote consultations as a result of this. Their peers that do not adjust their expectations seem to have a more negative opinions of remote consultations as well. The FAQ might help them understand and adjust their patients expectations and their own.

This feeling, that the consultations are shorter, is supported by the pattern that indicates that the goals of remote consultations are often different from F2F consultations. They are often used for simple checkups or the sharing of general test results, with the exception of test results that have serious implications for the health and/or further life of the patient.

Finally, an empathic bond is not always needed, according to some GPs. Since remote consultations are often about these simple check-ups, or the sharing of test results, they feel that there is no need to (re)establish an empathic bond with a patient. Additionally, if the GP feels that they are not going to see the patient they are talking to again, in the case of an expat or a traveling patient, they do not want to 'invest' in the patient by building an empathic bond.

As second design recommendation concerns GPs and their self-reflection. Some GPs might be able to learn more from their own experiences, as not all GPs self-reflect on recent consultations. A self-reflection form that encourages them to consider their own experience and that they can optionally share (anonymously) with other GPs might help all GPs learn from their own and other's experiences with remote consultations.

A third design recommendation focuses on learning from peers from different perspectives. Firstly, GPs that reflect on their remote consultation experience negatively and see that peers have the opposite experience might benefit from a more in-depth learning form with those peers in order to overcome the cause of this negative experience. Secondly, Some GPs feels like body language is very important, but previous research and other GPs indicate that it is not. This 'loss' of information might be a mental wall that many GPs hit in the remote consultation process. We might be able to change their mind and help them overcome this by having other healthcare experts like them share their opinions and experiences with not relying on body language in remote healthcare. Finally, Some GPs are not sure how to end remote consultations smoothly and feel they are very 'rigid' and 'fake' in their structure and behaviour. They are used to more natural and smooth interactions from their F2F consultations. Learning from other GPs that are more used and comfortable with remote consultations might be the an effective solution to this problem. They could share their experiences and techniques in a simple guide or (for a more interactive experience) in an (online) seminar.

A fourth design recommendation is about patient feedback. GPs could learn exactly about the particular needs and wants of their patients in remote consultations by asking them to fill in a short questionnaire after the consultation is over. This questionnaire could ask patients about their experienced empathy, the productivity of the meeting, how comfortable they were and if the GP did something specific that was the felt was particularly helpful or had the opposite effect. This feedback might help the GP feel more confident in their own skills in remote consultations.

A fifth design recommendation could be based on the feedback gleaned from these feedback forms. GPs doubt themselves more in remote consultations. They are more insecure about their ability to build empathy. We might be able to help them by introducing a set of (e-)learning materials that focus on the differences of patient interaction and/or on empathy-building tools for remote consultations. These materials should likely focus on the way consultations can be opened in a way to break the ice well, and on how empathy is often build at the start of a remote consultation.

5.1.3 Stress Reduction

GPs know how to resolve tech issues, but are nervous about the uncertain looming threat of tech issues at the start of a remote consultation. It is recommended to create a tool that screens the quality of the internet connection and checks if

audio and microphone are functional before a meeting starts. This might instill confidence and peace of mind in the GP, and make them more comfortable with remote consultations.

This recommendation is supported by the discovered Patterns. GPs seem confident and skilled in their use of technology. There is no need to help them understand their tools better. The main issues they experience with technology seem to be technical issues like their microphone or camera not being recognized by their video calling software or a faulty internet connection. They know how to solve these issues when they arise, but these issues often come as a surprise at the start of a consult. Tech problems can be annoying, but seem to not be an important reason for GPs to avoid remote consultations. Still, a way to avoid them might improve the overall experience of both patients and GPs.

5.2 Limitations

There are four main limitations to this research that need to be kept in mind when examining its results and outcomes.

The first limitation concerns the issue that only a small group of GPs was interviewed (four). The reasons for this have been explained in the methodology section, but nevertheless this means that the results and insights of this research are based on the experiences of only a few people. This undoubtedly is a biased view of the research topic and the ways to address the research question.

Another limitation is that the group of GPs that was interviewed were almost all, except for one, working at the same general practice. This means that they almost all see a similar group of patients, unlike a group of GPs from different practises would have. This likely colours their perspective of their patients similarly, and is not an unbiased view of GP patients in general.

A third limitation is that, while this topic and research question can apply to many types of HCP, for this research only GPs were interviewed. Other types of HCP likely have different experiences and insights into the topic, and could drastically alter the outcomes of the research.

A final limitation is that when examining a bond between two people, it is important to look at both people involved in this relation. In this research, however, no patients were spoken to and therefore their perspective is lacking in the results. Previous

research indicates what their opinion might be, but is not a proper replacement for examining perspective first-hand in this research.

5.3 Future Work

There are at least a few ways that this research can be expanded upon. Mainly, the limitations might be addressed in the future. This means that a larger group of GPs, and/or a mix of different types of HCP are interviewed. In addition, patients might be involved first-hand in that research, to get a complete picture of the empathy experienced by both parties in remote healthcare and what the root causes of the experiences of patients and HCP are.

Conclusion

This research set out to answer the question: **"How can technology foster the necessary degree of empathy between patients and healthcare providers, to improve the quality of telehealth applications?"**

The related work revealed that empathy was rated to be about equal in face-to-face and telehealth settings. Both patients and health-care providers (HCP) still prefer face-to-face settings, and feel telehealth can be 'cold' or impersonal. This feeling was reflected in the discovered patterns, based on General Practitioner (GPs) utterances. GPs feel that the empathy build between themselves and the patient is good, but that there is a 'barrier' of sorts in place that they struggle to describe.

The literature has shown that not the patients but the HCP can have the strongest negative preconceptions about telehealth, which was also seen in the patterns in this research. Especially GPs with less experience using telehealth were negative about its uses, though of course they might use it less because of their original negative experience.

On top of that, the literature has also shown that HCP with negative preconceptions about telehealth struggle to adapt to using it, but that this can change when they are more or less 'forced' to utilize it for an extended period of time due to circumstances (like the corona pandemic). HCP opinion can shift strongly once they have to rely on telehealth for an extended period of time, which in turn seems to improve the effectiveness of the telehealth measures they use. This was also seen in the patterns discovered. Some of the GPs were surprised at the effectiveness of remote healthcare once they relied more on it. They had a negative opinion of telehealth, but once they used it more and more, this changed and they were positively surprised at the unique advantages it provided.

It seems that empathy itself is not the actual issue in telehealth, but that HCP believe that empathy will be worse based on their negative preconceptions and limited telehealth experience. Furthermore, these negative feelings about telehealth seems to create a downwards spiral when the GP has to use telehealth. They are disappointed with its effectiveness, which reinforces their negative opinions, which seems to negatively impact the effectiveness of telehealth.

This is why the created design recommendations focus on three aspects that have little to do with empathy itself in telehealth: Persuading GPs to utilise remote consultations (more), sharing knowledge and know-how about remote consultations (and how they change the interaction between GP and patient) between peers and patients and stress-reduction for remote consultations.

Implementing the design recommendations might alleviate the problems discovered in this research and seen in the related work. They might break the downwards spiral of disappointing remote consulting, convince GPs to consider the unique advantages of remote consultations and reduce the stress associated with the technological aspects of remote consultations. In turn, we might see a change in the opinions of GPs about empathy in remote healthcare, the empathy they experience and describe might start to match up more closely to the levels measured between them and their patients.

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Appendix

A

A.1 List of all relevant utterances

A.1.1 All Relevant Utterances Made by Participant A

I always prefer to see the patient in person, because the is just more 'me'.

I think we will keep e-consulting. Even after Covid.

There are a lot of complaints you can easily do with a photo or an email.

For patients we should be seeing F2F, e-consults at least give us some evaluation, which is better than nothing.

E-consulting at least lets us do a follow-up so we can see how they react to medication and if they keep taking it.

I prefer to see young people and very old people in person, and avoid e-consulting with them.

The older patients often have hearing problems, or eye-sight issues. So they can't really hear or see me while we're videocalling.

As for the young patients, I want to feel them! I want to see if what they're saying is true. I need body language for that!

Because I rely on facial expressions and body language, I always work without a mouth mask during (physical) consults.

The only patients I see exclusively through videocalling are people with a general fear-disorder.

When I feel a lack of empathy, I try to change the format. I switch to F2F from videocalling or the other way around.

I feel a lack of empathy when I feel like the clue isn't surfacing; the contact isn't the way I think it should be.

Sometimes it's silences that are good but aren't being filled.

Sometimes it's the surface level contact the patient is seeking. You don't get at the stuff underneath.

I also like a joke during the consult. If that really doesn't connect then I think "this form is not fit for this talk"

I generally first try a different conversation strategy, but if this doesn't work then I swap from e-consulting to a F2F consult.

I learn I have an e-consult generally on the day of the consult around noon, when I check a list the assistant makes for them. Rarely after 4 if we have some 'admin'.

I strongly prefer physical consults. I'm just more used to them.

I have learned now that a lot of complaints can be handled virtually. So I learned that I can relax a little and do e-consulting for certain complaints.

Sometimes you have an e-consult where you realize that you can't handle it virtually after all. It also rarely happens the other way around.

Starting rituals are more abstract in e-consulting.

Getting started takes less time, and you can leave out the smalltalk.

You get to the point of the consult faster virtually, because the question is generally clearer. The question is already formulated, so I don't have to do this.

What happens sometimes, is that the actual 'help question' differs from the literal question the patient asks you. You don't discover this until the consult.

The patient's expectations for these [starting] rituals are different in e-consulting.

The patients follow their own 'ritual' for starting the conversation, but this is very short, like 15-20 seconds. It's something they have 'built-in' in their system.

This shorter starting time means I save a lot of time!

I feel the same during the consult about the empathic connection to the patient. I did expect this, to be different, but it wasn't.

I generally prepare my whole consulting hour beforehand, not matter the type of consultation. Sometimes appointments jump in between, then I prep about 2 mins before i see them.

My preparations are not different for F2F or e-consults.

I think my F2F consults are better than my e-consults.

After two years of e-consulting, only now I'm starting to do them well.

I never noticed my patients having any trouble with my e-consults.

I doubt myself more in e-consults.

I sometimes wonder: "Was I too blunt?", "Didn't I skip a phase?", "Did I check if they understood well enough?", "How could I notice if it didn't?"

I try to alleviate this doubt by asking the patient at the end of the consult, like I always do, also for F2F consults, "Did I answer all of your questions?"

I generally don't build up rapport in the middle of the consult. It all happens at the start.

The end of video consultations does not differ from F2F consultations.

The bit in between the start and end of an e-consult is a lot shorter than a F2F one. It's more to the point.

You talk about a test result or a diagnosis or a treatment plan etc... This is a lot short virtually than physically.

As for camera positioning, I don't really pay attention to it. I see others always do, but I don't.

I never ask patients if they can hear/see me well. Maybe I should. It would be good because then they can tell me to reposition the camera or talk into the microphone more.

I've never had a patient cut in and tell me they don't understand a word I'm saying.

As for body language, I prefer to keep a little more distance from the camera. I want more than just my face to be visible, my whole posture.

I'm an outlier in this. Most GP's get really up and close to the camera.

I really want to see everyone's body language.

As for aftercare, It depends on the medical question if it is needed. If the patient needs more treatment or needs to hear a results they should call back or make a new appointment.

Aftercare is not different for F2F or virtual consults.

When I see a patient the next time, the empathic bond is always stronger. You build something together.

Sometimes I do feel like the empathic bond worsens, but then I try a different consulting type.

Empathic bond strength does not grow differently in e-consulting or F2F for me.

What I do notice is that Irritation is a lot harder to deal with in physical and video consults. Phone consults are easier.

In phone consults, I can breathe out the irritation a lot easier. I can take some extra breaths, relax my posture.

What's also easier in virtual consults is the steering of patients. This absolutely has to do with the expectancy pattern of the patient.

It depends on the location if I have technical problems or not. When they happen its very disruptive because it builds irritation with both parties. To fix it, you stop the whole conversation and try again.

A.1.2 All Relevant Utterances Made by Participant B

I don't feel like there is a difference between phone consults and physical consults in regards to the empathic bond with me and a patient

I think the empathy is pretty okay. We can still be empathetic and still express our feelings and our support to the patients even via the phone.

I do it rarely, but when i do use videocalling, I think it's also quite good. I think the connection, the communication is the same.

I don't know if the patients agree, [...], but I see e-consulting's benefits for everyone.

The only types of patients or complaints I don't think I can really do remotely are those where I need to check an injection site for example with insulin.

If I have to do an appointment that about these physical inspections remotely, I try to ask the patient like "can you touch this?" and "how does this feel?". So it is possible, just not ideal.

When i'm preparing a consult with a new patient, it takes more time. The empathy, the communication is not there so the approach has to be different. But this is the same in person.

With a new patient, the start of the conversation will be a little different. So "hello my name is this and that" and "how are you?" and then try and get something personal or how he's feeling at the moment etcetera.

With a returning patient, the connection is already there.

With new patients, preparation wise i have to look more in depth.

What I find very good with the telephone is that I can be more efficient with note taking. I don't have to make eyecontact.

I don't think eye contact is necessary for empathy, to care for the other person. I think it's not that important.

I also think a majority of patients are a bit more comfortable as well at home. Patients might feel safer at home as well.

Patients think things like blood pressure have to be measured here, but there are solutions for that. The meters are cheap. Test results might even differ from at home so it's better to measure there.

I think what's more imporant than eye contact is: clear communication, showing that you have the knowledge and providing answers while being humble.

If you don't know something, tell the patient you'll look into it and get back at them, stay humble

Make sure you show kindness in the beginning

Eye contact is important when the patient is there but there are other ways to create empathy.

If you use the right words in the right way you can build that empathy.

I had a tough situation recently with a patient on the phone, where I had to kind of ask him is he was fat. The correct words are very important.

You can ask anything if you use the right tone and the right words

I only work two days a week here, so I look ahead for the next week but also the day before.

I try to make a personal note every consultations, so I can look at it during my preparation and then use it during the talks. That's building empathy

I think personalizing my reports is how you continue a good relationship with a patient, personal or health wise.

My starting rituals are the same on the phone as in person. The form is different, of course, but we do a little smalltalk and then move on.

During the call, i try to build empathy by connecting on something personal, by talking about their jobs, for instance.

I think it's important to know how they are and not just focus on the disease

I generally do the sandwich-feedback

I think it depends per patient if the empathic bond is different over the phone or not

At another practice I work, I feel the patients really have the need to be. A patient there was upset when I called to explain test results [without meeting her first]

I feel the way patients feel about phone consults changes per group

I feel Dutch people want to see the same face every time. For me it doesn't matter as long as the problem is solved

I don't feel the way I communicate with patients over the phone is very different

There's no huge difference between the ending of phone and physical appointments.

It depends on the patient. When I think patients have not absorbed all of the information, I send an e-mail afterwards with what we discussed

I have a sense of what is going on on the other side.

My bond with the patient does not change in between appointments.

I have empathy but it's not that deep. I can reach him and help him but its not something I'll think about later. I don't think back on it a lot.

I think an issue some GP's might have with videoconsulting is their 'loss of power'

Or maybe it's more their 'influence' or tradition which is slipping from their fingers

I think GP's might say that they feel less empathy but what they might mean is "the bond I normally feel with my patients is different from what is is now."

A.1.3 All Relevant Utterances Made by Participant C

Most physical complaints can't be done at a distance. Things I have to touch, where I have to look, those are impossible

Skin problems might be the exception, with photos it should be fine.

There are a lot of people who aren't very smart, so I struggle to do phone-consults with them because I can't see if they understand or not

I often write down what we talked about for them. In short. What they should do, when to come back etc.

I sometimes doubt if my message arrives over the phone

I often dread phone consults.

It's more difficult than if someone is seated across from me

But then sometimes I'm surprised at how well these talks go. How well someone understands you and how good the bond gets

It does help if you've already seen someone in person before

We have a rule that, If the consult is about something complicated, we see the patient in person

Complicated consults are about something other than just a test result or a question

If you meet F2F, you can see the doubt behind a question. Then you can follow up on that. You miss that on the phone

I miss the body language the you don't get over the phone

For mental problems, I want to see exactly what it does with them, I want to see them

I often wonder with these calls, "is this enough?"

The expected content of the meeting is the cause of the dread, since I expect this to not fit this format.

We have set time for phone consultations, and I check which ones I have in the morning

I had to call a patient recently because I had to act fast and she had to come in the next day. I dreaded that call, but for a different reason of course.

It was bad, heavy news, and that is always harder over the phone

The expectations of patients from phone consults can differ very strongly, from patient to patient

The empathic bond between me and a patient does not suffer from the phone format.

As for starting rituals, most are the same, but I have to get them to start talking in a different way. I can't make an opening gesture.

You have to steer the patient a bit more during a phone consult

My preparation for a phone consult is fairly the same.

All the info is on your screen. A phone call is easier in this case since you don't have to maintain eye contact and such and you can just scroll the document.

Building an empathic bond is not always needed.

if it's just about a test result or meds information then I'm not really thinking about the connection

It's not often I see someone exclusively over the phone.

I recently had a patient come by for something that could have been done over the phone

I don't mind that, I like the contact

Techniques to build up empathy, F2F you can touch someone if they're stressed

I don't think a lot about techniques over the phone

Ending phone calls, it goes well generally but sometimes I'm wondering how to close it well.

In a physical setting, I can turn my chair or something and get up to signal we're done

I can't do that on the phone. So I have to ask a closing question like "do you have any other questions?"

When you start as a GP, it feels very fake. But it becomes more real the more you do it

The bond can still feel real, even if you feel like you're just following the book

There's no aftercare for patients

It would cost us too much time for very little addition

Some larger GP corps have 'health specialists' that do this. A kind of care coach.

My feeling about the empathic bond with the patient does change over time

I sometimes wonder about this or that, if I could've done better

You should call back then, which I do.

I give them some extra attention

I very rarely have technical problems.

Often just a glitch, so we call again and then its fixed

Some patients are deaf, that can be a little extra trouble. But it's the same physically

All in all, I would to do more phone-consults, but i dread the extra work

older patients especially, they already struggle with the website, let alone a video-
or phone-call

If it costs us more time to set up than we save then why do it?

A.1.4 All Relevant Utterances Made by Participant D

I'm not a big fan of remote consultations

I feel like you can read a patient better in person

I miss the facial-expressions, the body language

That's more of a gut feeling than anything else

I feel we're social creatures and that has to do with direct contact

There's a hurdle for me

It's a synthetic something, that's build up by the medium

I feel empathy, human to human interaction is less at a distance

It's better than nothing, but it remains a crutch

It's just based on my gut feeling

I feel like there's more distance.

I doubt my patient more, because I cannot read the face properly

I can't hear their tone, their voice perfectly.

You have micro-expressions in the face that you can't see on the screen.

I feel like I get more information from someone in front of me

My effect on someone, my transference and counter-transference is better F2F

I simply don't believe you can help someone with depression or grief equally well
virtually

I refuse to do video-consultations, unless there is no other way

I'm very old-fashioned

I am less opposed to it with people I know. I know how they will react. I have a
foundation with them

With someone I don't yet know. I get less info

Video-consults are worse than physical consults

I know on the day of the teleconsult that I will have it. Probably in the morning

My preparation is actually quite similar for physical and virtual consults

I go through the file, look at the triage, test results

I translate starting rituals to videoconsults.

You greet them, ask how they're doing, etc. It's always the same.

It's a lot shorter, cause, someone doesn't walk in, they're just there. You're con-
fronted directly

You miss some info too, like, you can't see how someone walks

If someone comes with back or walking complaints, you watch how they move.

But you can't virtually, they're already seated. You miss info.

I'm more busy with building empathy in physical consults than teleconsults.

This practice is special because you see patients in a more to-go setting

Sometimes I think, you want to connect as little as possible since you won't see them again

If someone comes back for the 3rd 4th time then you want to try a little more. Move beyond the medical question.

I think I'd ask further sooner in a physical setting

I don't have a specific technique for building empathy.

You ask them not only something medically, but something personal
video-consults feel enclosed. Less like a personal 'onderonsje'. The setting itself feels less personal.

I end videoconsults like a kind of protocol.

In a physical setting I can be spontaneous, relaxed.

A physical consult has a more automatic, natural progression. Virtual feels like a different setting

Its constraining, less spontaneous.

There is no aftercare.

It takes time and more work. We don't have that

In general, a first impression is the only thing that matters for me.

My opinions doesn't change over time on the empathy

"you never get a second chance at a first impression"

I often have technical problems, headphones disconnect or camera position is bad, very annoying

I think it's important patients see your whole upper body.

You should also look professional

The way the patient looks gives me information and changes my opinion on their situation

