SSM - Qualitative Research in Health 8 (2025) 100604

Contents lists available at ScienceDirect

SSM - Qualitative Research in Health

journal homepage: www.journals.elsevier.com/ssm-qualitative-research-in-health

“I can’t show them on the phone so it’s what I say and I’m not saying a lot.” – The loss of nonverbal and visual cues during telephone consultations, equity of access and the impact on marginalised patients: a qualitative study

Ada Humphrey[a,*], Carl May[b], Steven Cummins[b], Fiona Stevenson[c]

[a] *Imperial College London, United Kingdom*
[b] *The London School of Hygiene and Tropical Medicine, United Kingdom*
[c] *University College London, United Kingdom*

ABSTRACT

Background: There has been an increase in the use of telephone consultations in General Practice in the UK during and since the COVID-19 pandemic. This results in a reliance on verbal communication alone due to the loss of non-verbal and visual cues. The consequences of this for inequities of healthcare in marginalised groups is underexplored.

This paper examines accounts of patients from marginalised groups of the impact of a loss of non-verbal and visual cues during telephone GP consultations and effects on experiences of care.

Design: and setting: Ethnography and interview study (n = 15) undertaken at three sites in London: a foodbank, a community development organisation, and a drop-in advice centre for migrants. Additionally, GPs (n = 5) working at practices in London, Digital Health Hub staff (n = 4) and staff at fieldwork sites (n = 3) were interviewed.

Method: Ethnographic observation (n = 84hrs) and semi-structured interviews (n = 27). Interviews were conducted in-person and over the phone and data were analysed through reflexive thematic analysis.

Results: Analysis identified challenges in effectively conveying information during telephone GP consultations as a result of language barriers, health literacy, and concerns around sensitive disclosure as a result of a loss of non-verbal and visual cues. Additionally, GPs reported mitigation techniques employed during telephone consultations including increased use of questioning, referrals for additional tests, and converting to face-to-face consultations in an effort to improve care.

1. Introduction

The 2019 NHS Long Term Plan, pledged to ensure that every patient is offered digital-first primary care by 2023/24 (NHS, 2019). However, uptake prior to the pandemic was slow despite political rhetoric around embracing digital. The demands posed by the COVID-19 pandemic in 2020 led to a notable increase in the utilisation of remote consultations, predominantly conducted over the telephone(Murphy et al., 2021). Telephone consultations, whilst not strictly ‘digital’ are part of a broader trend of physical distancing between patients and GPs, bridged by communication technologies often categorised as ‘digital’ due to their use of connectivity and digital devices such as smartphones (Greenhalgh et al., 2022). As such the pandemic can be seen to have triggered a technical and relational restructuring of GP consultations, with potentially significant consequences for marginalised groups for instance through lack of easy access to devices. These socio-technical forms of marginalisation, highlighted by the pandemic, persist, giving this case study ongoing relevance.

Nonverbal communication has long been recognised as a crucial aspect of GP consultations, not only to express symptoms but also as a means for patients to convey dissatisfaction or escalate concerns (Heath, 1984; Larsen & Smith, 1981; Little et al., 2015). Verbal communication refers to the use of words to convey information. Nonverbal cues include gestures such as pointing, expressions and, tone of voice indicating emotional state, as well as body language. Visual cues include visible symptomology e.g., appearance of a rash, and visual indicators of health such as weight loss.

Together, nonverbal, and visual cues constitute a significant portion

---

* Corresponding author. Imperial College London, United Kingdom.
E-mail addresses: a.humphrey@imperial.ac.uk (A. Humphrey), Carl.May@lshtm.ac.uk (C. May), Steven.Cummins@lshtm.ac.uk (S. Cummins), F.stevenson@ucl.ac.uk (F. Stevenson).

https://doi.org/10.1016/j.ssmqr.2025.100604
Received 17 February 2025; Received in revised form 7 July 2025; Accepted 8 July 2025

of communication, allowing GPs to gain valuable insights into a patient's health and well-being (Little et al., 2015). However, telephone consultations rely primarily on verbal communication alone.

A loss of nonverbal and visual cues during telephone consultations has previously been identified as leading to noticing and monitoring (Pettinari & Jessopp, 2001), and articulation work (Strauss et al., 1997). 'Noticing and monitoring work' is the obligation for patients to identify symptoms in order to report them. 'Articulation work' is the need to verbally communicate symptoms. The need to engage in these forms of work during telephone consultations is a form of 'responsibilisation' – whereby work is redistributed or redirected to the patient. 'Responsibilisation' (Miller & Rose, 1990; Nikolas & Miller, 2008) is a term which comes out of the governmentality literature (Foucault, 1979, 1988; Miller & Rose, 1990; Rose, 1999) and broadly refers to the way in which tasks are shifted from one actor – usually a state or agency – to individuals. The responsibilisation of patients during telephone consultations is consistent with broader trends under neoliberalism, where tasks traditionally managed by macro-level actors such as state agencies are redistributed to individuals. Governmentality, as theorised by Foucault, underscores this process, where power is exercised through the responsibilisation of individuals, aligning with the restructuring of state relations and the marketisation of public services (Foucault, 1988).

In this context, healthcare becomes a domain in which the burden of responsibility is transferred to individuals, who have varying levels of capacity such as access to technology or health literacy, framing them as active agents in their own care (Wilson, 2001). This shift may affect the capacity of marginalised populations to engage with essential services, with longer term consequences for their health and well-being over the life course. This shift is not unique to healthcare; similar shifts in responsiblisation are evident across other sectors such as education and social welfare (Peters, 2017), where individuals are increasingly required to manage their own welfare benefits through digital systems (Moynihan et al., 2015). In each case, responsiblisation reflects broader neoliberal attempts to decentralise governance and increase individual accountability, amidst stretched resources and increasing demands. By situating the findings within a broader socio-economic framework, this study aims to contribute to a nuanced understanding of healthcare access among marginalised groups.

This paper explores the communication challenges of GP telephone consultations. The concept of responsibilisation is used to examine accounts from marginalised people of the impact of telephone consultations on experiences of care.

2. Methods

An ethnographic study involving observation and interviews was employed between November 2021 and April 2022, involving in-depth semi-structured interviews and observation across four participant groups: (i) individuals facing socio-economic marginalisation (n = 15), at three fieldwork sites in London, UK —a food bank, a migrant drop-in centre, and a community development centre; (ii) staff at these fieldwork sites (n = 3); (iii) general practitioners operating in economically deprived areas of London (n = 4); and (iv) staff at Digital Health Hub sites across the UK (n = 4). Digital Health Hubs, established as part of the Widening Digital Participation Programme (2017–2020) by The Good Things Foundation in partnership with NHS Digital and NHS England, serve as venues for digital skills training and access to online services.

In addition to interviews, the study involved 84 h of observational work (Green & Thorogood, 2014) at the fieldwork sites. Observations focused on interactions between field site services and clients. For example assistance booking GP appointments either online or over the phone being given at the Community Development Hub, or help interpreting communication from GPs at the migrant drop-in centre. While observational data is not included in this paper, it informed the analysis by providing contextual insight into the barriers patients face when accessing remote services. These observations illustrated the types of support commonly requested from staff and how such support is negotiated in practice.

This study set out to understand the communication challenges of remote consultations specifically for those from marginalised populations – ultimately focusing on telephone consultations reflecting participant experiences. Additionally, it explores what effect the overlapping and compounding characteristics associated with marginalisation have on this communication.

Marginalisation can be classified in various ways depending on context and topic (Aldridge, 2014). Individuals can be grouped according to a common feature or outcome (e.g., low access to care) or by other characteristics that generate marginalisation (e.g., ethnicity or immigration status). In the UK, specific groups identified as inclusion health groups (NHS England) due to marginalisation include people who experience homelessness, people with drug and alcohol dependence, vulnerable migrants, Gypsy, Roma and Traveller communities, sex workers, individuals in contact with the justice system, and victims of modern slavery – all of whom may experience both overlapping and distinct barriers to engaging with healthcare services.

A fundamental cause theory approach (Link & Phelanm, 1995) was adopted for sampling, using socioeconomic status as a multidimensional concept that both reflects and produces marginalisation. This guided the selection of services catering to individuals experiencing socioeconomic marginalisation, including a food bank, and community development hub as fieldwork sites. To adopt a more intersectional lens that considers characteristics such as language and ethnicity, a third fieldwork site directly catering to migrants, asylum seekers, and refugees was included. Participant demographics can be found in Table 1.

The often-multilayered nature of marginalisation – meaning that an individual may face multiple overlapping and compounding challenges has been termed severe and multiple disadvantage (SMD). SMD refers to people with two or more of the following issues: mental health issues, homelessness, offending and substance misuse(Nottingham City Council, 2019). Other sources of disadvantage also considered include poor physical health, and for women, domestic and sexual abuse - and for Black, Asian and Minority Ethnic (BAME) people, community isolation. SMD leads to higher healthcare needs and poorer access to primary care (Huxley et al., 2015). Whilst not an inclusion criteria for participation in this study, many of those who were interviewed faced SMD thus reflecting a particularly excluded group of patients, often underrepresented in both research and wider policy decision making.

Recruiting individuals from these groups presents inherent challenges, including trust issues and access to suitable fieldwork sites (Murphy & Dingwall, 2001; Tully et al., 2021). Consequently, site selection was based on factors such as the likelihood of recruiting individuals on-site, logistical feasibility during the pandemic, and the ability to negotiate access. This opportunistic approach mirrors that of Kaihlanen et al. (2022), who examined challenges faced by vulnerable groups in utilising digital health services in Finland during the pandemic.

2.1. Recruitment

Participants were recruited in person by the researcher (AH), who observed interactions at the fieldwork sites and introduced the study to service users, providing an information sheet. At the food bank and migrant drop-in centre, AH directly recruited participants, while at the community development hub, a staff member facilitated access and introductions. Eligible participants included any users of the fieldwork site services. Due to recruitment challenges, opportunistic methods were initially employed, transitioning to purposive sampling during the final interviews to ensure demographic diversity.

Service staff (group ii) were recruited on-site, while GPs (group iii) were recruited via Twitter, and Digital Health Hub staff (group iv) through publicly available email addresses.

Table 1
Participant demographics, people experiencing marginalisation.

Sex	Age bracket	Ethnicity	Origin	Resident in the UK	Recruitment site	Other relevant information
M	40–50	White European	Eastern Europe	10–20 years	Foodbank	Recently moved from street homeless to hostel
F	30–40	Black British	UK	Since birth	Foodbank	Recently moved from psychiatric unit to community care
M	40–50	Asian	South Asia	20+ years	Drop-in centre	English second language
F	30–40	White British	UK	Since birth	Foodbank	
F	60–70	Black African	West Africa	20+ years	Drop-in centre	Refugee, illiterate
M	40–50	Asian British	Middle East	20+ years	Drop-in centre	Migrant, low literacy
F	40–50	White British	UK	Since birth	Foodbank	
F	30–40	Black African	East Africa	<1 year	Drop-in centre	Asylum seeker, English second language
F	60–70	Black British	UK	Since birth	Community Hub	Cyclically homeless with addiction issues (housed at time of interview)
M	60–70	Black British	UK	Since birth	Community Hub	Street homeless at time of interview, with ongoing addiction issues
M	40–50	Arabic	Middle East	<1 year	Drop-in centre	Asylum seeker
F	40–50	White British	UK	Since birth	Foodbank	
F	60–70	Black British	UK	Since birth	Community Hub	
M	60–70	White British	UK	Since birth	Foodbank	Resident in supported living
M	40–50	Black British	UK	Since birth	Community-hub	Recently came out of street homelessness

2.2. Data collection

Interviews with people experiencing marginalisation, lasting 1–1.5 h, were conducted in person in private rooms at the field site services. Interviews with fieldwork service providers, GPs, and staff at Digital Health Hubs were conducted online via Zoom, lasting 30 min to 1 h. Interview guides were developed (see Appendix) based on literature review, informational calls with fieldwork site staff, and input from academic researchers working across primary care, digital health, and healthcare focused research with marginalised communities.

Interview topics explored with people experiencing marginalisation included accessing primary care appointments, general health and wellbeing, use of digital devices, and experiences of telephone consultations. Interviews with other groups covered the impact of COVID-19 on service provision, access to healthcare services for marginalised groups, and the impact of digitalisation on welfare services. Interviews with people experiencing marginalisation were conducted first to foreground the experiences of marginalised individuals and inform subsequent questioning with other participant groups. Interviews with fieldwork service providers, GPs, and staff at Digital Health Hubs occurred concurrently after interviews with people experiencing marginalisation concluded. All interviews were audio recorded and transcribed verbatim by AH.

2.3. Analysis

The analysis presented in this article is based on interview material from across all participant groups. The data collected from participants was analysed using reflexive thematic analysis (TA) (Braun & Clarke, 2006, 2022), an iterative process that encourages the researcher to be reflexive throughout the analysis. Taking this approach meant we were able to develop an understanding of the participants' experiences in relation to the context alongside our wider understanding of the topic, enabling us to consider the interplay between us as researchers, the study (e.g., the sorts of questions asked), and the accounts given by participants.

The six stages of reflexive TA— familiarisation with the data, generating codes, constructing candidate themes, reviewing potential themes, defining and naming themes, and producing the report —were followed. Analysis was conducted by AH using NVivo (version 12).

The coding process began with open coding, where initial codes were derived from the data. This was followed by axial coding to group related codes into broader categories. The themes were then identified through an iterative review and refinement of the codes, considering the research questions and relevant literature. Themes were mapped using visual mind maps with findings from the literature review transposed over the top in order to gain an initial understanding of how the data related to existing concepts and theories which would later be used in the discussion.

To ensure reflexivity during analysis, a reflexive journal was maintained throughout the research process, documenting thoughts and reflections on how the researcher's background influenced the coding and theme development. For instance, the experience of doing the research itself, such as difficulties contacting research participants using contact details provided were reflected upon as part of the dataset itself, indicating the challenges of digital communication. Regular discussions within the research team also facilitated critical feedback and deeper insights into the data.

Interviews conducted with people experiencing marginalisation were analysed as one dataset, with all other interview groups analysed as a second dataset of service providers. This decision was made in order to structure the accounts given as either people on the 'receiving' end of GP telephone consultations, or those involved in providing GP consultations or supporting people from marginalised groups. This enabled a comparison of both patients accounts versus those of health care practitioners, but also a reflection on the other people and roles which might be involved in facilitating healthcare access for those experiencing marginalisation, for instance with digital access and appointment booking.

2.4. Ethics

Ethical approval for this study was granted by the LSHTM ethics committee (number: 26235).

3. Results

3.1. Sample characteristics

Study respondents from group i included individuals experiencing a wide range of characteristics associated with marginalisation often representing multi-marginalisation. Group i demographics can be found in Tables 1 and 2. Further information on the participant sample for service providers across groups ii, iii, and iv can be found in Table 3. Less information has been provided on service provider sample in order to limit identifiability.

3.2. Findings

3.2.1. The impact of a loss of visual communication during GP telephone consultations

One of the key areas of concern reported by patients was the necessity to engage in higher levels of articulation 'work' verbally during telephone consultations than in a face-to-face consultation during which non-verbal cues can be used to substitute communication. For some patients this came up against the boundaries of their interactional

Table 2
Group i participant demographics summary table.

Demographic characteristic	
Gender	Number of participants
Male	7
Female	8
Ethnicity	
White-British	4
White non-British	1
Non-White British	6
Non-White Non-British	4
Age	
30–40	3
40–50	7
50–60	0
60–70	5

Table 3
Service providers summary table.

Participant group	
Fieldwork service staff (ii)	**Population served**
	Foodbank: low socio-economic status Drop-in centre: Immigrants, refugees, asylum seekers Community hub: local community including people experiencing homelessness, and migrants
GPs (iii)	**Location of practice**
	Newham Tower Hamlets Tower Hamlets Tower Hamlets Lewisham
Digital Health Hub Staff (iv)	**Population Served**
	Older adults with disabilities Refugees and Asylum seekers Older adults Refugees and Asylum seekers

capacity, limiting their ability to engage effectively in a telephone consultation.

One reason why articulating needs verbally during telephone consultations was challenging was the impact of language barriers. Language barriers can cause issues as a result of both a loss of gestural cues which help to supplement language, as well as difficulty understanding the doctor and being understood without visual cues i.e., seeing visible symptoms. This led to patients who did not speak English as a first language feeling that their ability to communicate their needs with their GP was disrupted by having a consultation over the telephone.

For patients who have limited language to speak about their body, gestures can play an important role in communication. However, this communication tool is removed during telephone consultations, which hinders the ability to describe symptoms or needs:

> “Respondent (R): I think by phone very difficult to tell my problem because I not speak English well I don’t know my problem by English how can I say, so a little bit difficult for me
>
> Interviewer (I): And when its face-to-face?
>
> R: When its face-to-face I can say her by (*gestures by pointing)
>
> I: You can point at your body?
>
> R: I have problem this *points to body* and that *points to body* but by phone I can’t explain what I have a problem I think a little bit difficult.” [10, Female, Black African, refugee]

Study respondents compared face-to-face communication with phone conversations, describing the latter as more challenging due to language barriers and the lack of visual cues:

> “When I talk on the phone, sometimes it’s a little bit harder than you talk face-to-face and you talk on the phone. So, it’ll be, it will be really hard for the for the patient [other Afghan refugees] to express what they want to say, to openly talk to the doctor, what’s their problem, unless they see the doctor and show them how and where exactly they have the pain.” [13, Male, Arabic, refugee]

This underscores the crucial role of visual communication, and restrictions associated with telephone consultations which constrain communication to verbal expression alone.

Another factor making phone communication more difficult than in-person interactions is the challenge of speaking English with a strong accent:

> “Yes. I don’t know why but yeah, because their accent is not really good, and you if you don’t have a really good accent you can’t talk on the phone. Yeah, it’ll be really bad” [13, Male, Arabic, refugee]

These accounts highlight how multiple barriers can compound during telephone consultations. Patients with limited English proficiency may find it harder to communicate verbally over the phone, while also losing access to non-verbal and visual aids—such as pointing—that could help convey meaning. In response to these challenges, study respondents discussed relying on informal interpretation provided by family or friends who would help them to fulfil the articulation work being asked of them.

While GPs mentioned the use of telephone interpreters through services like Language Line, these were viewed as inadequate substitutes for in-person interpreters and advocates. One issue raised is the importance of non verbal communication when there are cultural and/or contextual differences between the GP and patient:

> “Being a sort of pale white male, there are things that I don’t pick up on that I think that I’m not sure whether I would pick up on them if I was face-to-face compared with if I was on the phone. But, if I had an advocate with me or a translator with me, I might ask them, “what do you think is going on here?” Or “is there anything I’m missing?” […] you can ask those questions on the phone, too, but I think, personally, I think, you know, face-to-face consultations are often more revealing in terms of some of those nonverbal activities.” [24 GP, Tower Hamlets]

Given these anticipated challenges, GPs may opt to bring patients in for face-to-face consultations when they foresee potential language barriers:

> “One of our Bengali ladies who doesn’t speak a word of English. Yeah, so for those patients, face-to-face with an advocate sitting down and exploring now, I might not do that might be one of my nurses doing that for the contraception, but, but it needs to be face-to-face” [25 GP, Tower Hamlets]

However, the decision to arrange an in-person consultation may depend on the GP already knowing the patient and understanding which consultation method will suit them best. Additionally, one GP expressed concern that patients with language needs might avoid booking consultations altogether, due to anxiety over communication difficulties on the phone and a lack of awareness about the availability of telephone interpretation services:

> “A lot of people were kind of concerned about ringing us because of translation, they felt that in a face-to-face setting, we’d have a

> translator, but for some reason on the phone, we might not have a translator.” [26 GP, Lewisham]

While language barriers to healthcare access are not exclusive to telephone consultation, respondents’ accounts emphasise how the absence of nonverbal and visual cues, which typically support communication, risks excluding certain population groups. Even when not entirely excluded, these patients may face an unfair disadvantage, due to limited capacity for interaction over the phone.

However, communication challenges during telephone consultations are not limited to non-native English speakers. Even for native English speakers, the need to rely solely on verbal communication to articulate needs, without the aid of nonverbal and visual cues, can create difficulties, notably here for those who have lower health literacy levels or struggle to express themselves. Some respondents expressed frustration with trying to explain their symptoms over the phone:

> “I haven’t got enough time to say what I can say and if it’s not enough I lose out and that’s it and that’s what I’ve been doing, losing out so many … I don’t know how to explain it that’s what I mean yeah” [12, Male, Black British, Experiencing homelessness]

When asked what would need to change to improve communication during telephone consultations the same respondent said:

> “I got to learn my … go back to school I suppose and learn all them big words and all them conditions and then I could put that across to them but I think I’m too old for that.” [12, Male, Black British, Experiencing homelessness]

This connection between education levels and the ability to communicate effectively with GPs highlights the importance of health literacy. Another respondent also noted this link between education and healthcare access:

> “I phone and I ask friends [about my health concerns] who are a bit more savvier and they will tell me look at this look at that type this in and see what it says so that’s how I do my read up on, you search you search but that’s only because like I said I’ve been studying for so long that I know that you have to research the word and the meaning and things then you get more broader information”[11, Female, Black British]

Here, "education" or "studying" serves as a euphemism for health literacy—the ability to communicate effectively with healthcare professionals using language related to health and the body. This underscores how power dynamics and social class inequalities can shape communication between patients and doctors and the relationship between verbal communication during telephone consultations, and marginalisation. The absence of nonverbal and visual cues, which often help bridge communication gaps, may exacerbate these inequalities, particularly for those with lower health literacy.

In addition to a loss of non-verbal cues that supplement verbal communication, telephone consultations also remove visual cues that can substitute for speech-forcing patients to articulate things which they may otherwise have relied on visual communication for. Patients reported that without the ability to use visual cues to communicate their symptoms they often felt unable to fully convey their needs to their GP, leading to concerns about receiving an accurate diagnosis.

One respondent spoke at length about his difficulties during telephone consultations, emphasising the challenge of not being able to visually communicate with his doctor:

> “When its face-to-face explaining certain things I don’t have to do a lot of talking I just show them you know so they get the full scenario then you know on the phone I can’t do that I can’t show them on the phone so it’s what I say and I’m not saying a lot.” [12, Male, Black British, Experiencing homelessness]

Some patients may rely more heavily on non-verbal and visual cues during consultations. However, during telephone consultations, communication depends entirely on their verbal skills, potentially leading to communication gaps. As in the example above, verbal communication often falls short of compensating for the loss of visual communication.

In addition to substituting for verbal communication, visual cues can also help patients feel their clinical concerns are taken seriously:

> “Nah, nah, being there face-to-face I could take it [shoe] off and show them you know what I mean and that’s when they’re more interested in what I’m talking about because I can’t explain certain things properly.” [12, Male, Black British, Experiencing homelessness]

This example indicates how visual communication can be crucial not only for diagnosis by removing the need for verbal articulation, but also for capturing the doctor’s attention, especially when patients struggle to verbally convey the seriousness of their concerns over the phone or have concerns about being seen as credible.

Patients not only want to feel understood by their doctor but also worry that without visual cues, an accurate diagnosis might be compromised:

> “My right leg is small, the left leg is quite big and very strong, they can’t, they can’t, if they’re not see me face-to-face they can’t they can’t tell me like how good I am how bad I am then obviously the face-to-face appointment I can explain much better.” [4, Male, South Asian, refugee]

This concern reflects the broader question of whether doctors can effectively diagnose over the phone, especially when patients struggle to articulate their symptoms verbally. One respondent described telephone consultations as being “treated blind” [Female, white British]. Interestingly, the term “treated blind” suggests a sensory loss for the GP rather than a communicative loss for the patient, indicating a belief that in-person consultations provide a more accurate diagnosis and better quality of care. Inherent within this statement about ‘blindness’ is a recognition of the reallocation of diagnostic work to the patient-who must verbally articulate to their doctor what they would previously have seen (face-to-face). GPs also acknowledged the potential for missed diagnostic information in telephone consultations:

> “I think clearly, you’re picking up a lot less. Not visual, you don’t get any visual cues. You know, it’s not as subtle as face-to-face consultations.” [23 GP, Tower Hamlets]

> “So from a doctor’s point of view, I think what we miss out in the telephone, and unless you know the patient well, what you miss out for some of those nonverbal cues.” [24 GP, Tower Hamlets]

Both quotes underscore how telephone consultations result in a loss of nonverbal and visual cues, along with the subtlety these provide. This observation aligns closely with patients’ experiences, suggesting that for those who struggle with verbal communication, the absence of visual cues may hinder effective diagnosis.

3.2.2. Challenges of managing mental health using telephone consultations

Respondents reported that a loss of nonverbal and visual cues during telephone consultations may impact effective mental healthcare delivery. Visual cues, they noted, are vital not only for physical health assessments but are equally critical in mental health contexts, despite the absence of specific physical symptoms which can be observed. The ability to see facial expressions, assess self-presentation, and establish an in-person connection emerged as important for fostering trust and encouraging disclosure. Without these elements, building rapport becomes more challenging, leading to reduced patient willingness to disclose personal information. This reluctance to share, compounded by a loss of visual cues, poses a considerable barrier to effective mental health consultations over the phone.

One respondent detailed the challenges she faced in communicating her mental health needs over the phone. She accentuated the importance of visual cues for accurate diagnosis and understanding the severity of her mental health crisis:

> "You could see me you would know … she's not she's probably struggling or whatever, she needs to talk, whatever is going on she needs to say it out loud and you would know because I feel like when I'm having an episode my speech is faster a lot faster, I think my eyes are … can look quite angry I think my face looks quite tense, even just simply things hair clothes how I conduct myself you could make a great urm diagnosis ….wouldn't say diagnosis but you could see how big a problem actually is […] if you saw me physically." [2, Female, 30s, black British, foodbank]

This excerpt illustrates how visual cues related to self-presentation, which could indicate a person's inability to care for themselves, are lost during telephone consultations. Such visual indicators of overall well-being may not be communicated verbally due to stigma or lack of awareness. The respondent also mentioned how telephone consultations might reduce the likelihood of honest disclosure about severe mental health issues:

> "Yeah, I think it's a risk to a lot of people because if someone wants to kill themselves they're not going to phone and say I feel like killing myself today, that's depression that's anxiety, that's feeling less than, someone has actually got that on their mind and actually contemplating to do that, you're not gonna see it via phone call or via typing in the computer because that person is not going to say I'm going to kill myself today." [2, Female, 30s, black British, foodbank]

In this description of contacting the GP for mental health concerns, the participant highlights how face-to-face interactions may support a fuller assessment of a person's mental state, for instance by making it possible to observe signs such as agitation or distress. While people do sometimes disclose suicidal ideation during telephone consultations, the loss of visual and embodied cues can make it harder for clinicians to assess risk over time, particularly in complex or escalating cases. As a result, telephone consultations may pose a safety risk for patients who have severe mental health difficulties, particularly where suicidal intent is not explicitly disclosed.

Other respondents noted that the lack of co-presence, which would allow them to observe the GP's listening and engagement, can also affect disclosure around mental health:

> "Because you can tell like when, someone's listening to you, you can sort of tell that they're listening and then they respond to whatever, on the phone you don't really get that, and you can't tell if someone's listening." [9, Female, 40s, white British, foodbank]

This example emphasises how telephone consultations can reduce connection and therefore rapport building, creating an obstacle to disclosure, particularly around mental health.

GPs also expressed concerns about the challenges of safeguarding during telephone consultations, substantiating the examples above of patients reporting concerns that their mental health challenges may not be properly noticed or addressed over the phone. One GP highlighted the issue of missing safeguarding opportunities without face-to-face contact, during a discussion referring to both mental health as well as identifying safeguarding concerns such as domestic violence:

> "I think they're going back to that lack of visual cues. I think that's been a real issue within lockdown and I think certainly local safeguarding teams have been worried that we've been missing the opportunities to identify safeguarding issues because of a lack of face-to-face contact. I think that's across the board." [24 GP, Tower Hamlets]

This concern aligns with previous points about the difficulty in identifying issues like neglect without visual cues, such as poor personal hygiene. The loss of nonverbal cues during telephone consultations also limits the ability to perceive signs of distress, making relational skills even more crucial for detecting warning signs:

> "Yeah, so there's a difference between safety netting and safeguarding, first of all, and sort of, again, I think that it comes from that sort of, you know, the training that you have before when to become a general practitioner to pick up those nonverbal cues, which you can lose both in the phone and digital." [20 GP, Newham]

Safety netting refers to management practices for dealing with uncertainty, and providing opportunities to access further support should it be needed. Whereas safeguarding focuses on protecting vulnerable people from harm. As indicated by this GP, both may be potentially at risk during telephone consultations as the cues used to enact safety netting and/or safeguarding can be lost.

Both patient and GP accounts highlight a shared recognition of how the absence of nonverbal and visual cues during telephone consultations can lead to missing important information regarding mental health. Patients report struggling to effectively communicate their needs, while GPs acknowledge the challenge in obtaining sufficient information from patients.

3.2.3. *Risk mitigation techniques to account for the loss of non-verbal and visual cues*

GPs reported having developed strategies to mitigate risks associated with telephone consultations, driven by the perception that these consultations carry a higher risk of misdiagnosis. One common adaptation for managing telephone consultations is increased questioning:

> "You would get more if you were there face-to-face with the person and you end up having to ask more and more questions and try asking questions in different ways to try and elicit more of a response from the person. And then safety netting becomes more of an issue as well, because generally, it is higher risk to do a clinical assessment over the phone." [26 GP, Lewisham]

However, increased questioning depends on patients' ability to communicate effectively. While this approach may work for some patients, as noted earlier, others may struggle to express themselves verbally. This approach also places additional responsibility on patients to be clear and provide the necessary information through engagement in 'articulation work'.

Another risk management strategy mentioned is converting telephone consultations to face-to-face appointments, particularly for cases where clinical symptoms are difficult to assess remotely or for sensitive mental health issues:

> "It's probably going to be much more efficient and safe for myself and the patient, to bring them in and examine them. So, it's especially … so if there are certain things like abdominal pain, you're not going to be able to examine the abdomen remotely." [25 GP, Tower Hamlets]

> "I was fortunate our practice only I think did that [fully remote] for about a month or two. And then we had leeway to be able to bring patients we wanted to bring in in. So that felt a much safer environment to be working in. I felt like I didn't have to make so many risky decisions." [26 GP, Lewisham]

Critically, the duplication of appointments converting to in-person consultations to mitigate for risks introduced by telephone consultations, suggests the potential for inefficiencies to be introduced to the system with attendant burdens for patients, and services. An alternative risk mitigation strategy to bringing in patients for face-to-face consultations is ordering additional investigations:

> "[The sonographer] was overwhelmed by sort of mediocre referrals from GP of, you know, which, for me sounded like these sort of risk mitigation type tests, you know, so I think there's general sort of, you know, investigation inflation." [23 GP, Tower Hamlets]

This strategy may serve as a workaround for the limitations of telephone consultations by enacting conservative risk management in response to concerns about missed or reduced diagnostic information.

A similar workaround is the use of photographs to substitute for in-person visual examination. One respondent described being asked to submit a photo of her daughter's throat during a remote triage for suspected tonsillitis. When the photo was deemed inadequate, she was refused an appointment and ultimately sought care through A&E, where the infection was found to be severe:

> "[My daughter] came down with tonsilitis during the lockdown ….I contacted the doctor and the doctor said take a photograph of her throat so we took a photograph … as far down the throat as I could get and…. they said that wasn't any good we need to see further down her throat and I said I can't it's just a phone camera … I had the light on and everything as well ….so the lady started getting a bit rude to us and saying basically we need a photo of her throat so I said listen I can't get a photograph of her throat so I said I need the appointment … we need to see a doctor so she said no sorry you can't see one so I said what do you mean we can't see one she said no, not with that we won't see her with a throat infection ….. I said no we really need to see somebody it's really bad she can't talk and all her glands had swelled up in her throat so her throat was like twice the size and she was actually having trouble breathing so I said she really needs to see someone so they said no we can't you haven't sent a photo properly and we can't see her so I said listen we definitely haven't got covid it's just a throat infection its tonsilitis, she needs some medication, no sorry there's nothing I can do, and put the phone down and we rang back and they didn't answer after that so I ended up having to take her to A&E and dropped her outside … she ended up being given extremely strong antibiotics for it really strong they said it had gone completely out of control they said it had just torn her tonsils apart urm yeah … the doctor literally point blank refused to see her and put the phone down which obviously was quite frightening" [5, Female, 30s, white British, foodbank]

In this case, the photo, intended as a risk mitigation strategy, acted instead as a barrier to care. No alternative solution was offered when the digital requirement could not be met, resulting in a potentially avoidable escalation. This example demonstrates how visual workarounds can introduce new forms of clinical risk, particularly for patients with limited digital access or support.

This example also highlights a potential tension which can emerge between pressure on the system, through 'inflation' of investigation rates, versus a need to mitigate for perceived risks during telephone consultations, again suggesting the potential for inefficiencies to be introduced as part of a risk mitigation strategy. The decision to convert to face-to-face consultations or order additional investigations may reflect GP's comfort with risk and clinical experience:

> "I think that's very dependent on the clinician as well, that the problem the clinician, and terms of their seniority, though, so you, you tend to find juniors tend to convert more and investigate more, where more experienced GPs and I would probably put myself in that, that group now are more comfortable handling risk and uncertainty." [20 GP, Newham]

This highlights a potential relationship between clinical experience and the ability to manage telephone consultations and risk. This could exacerbate existing disparities between experienced versus less experienced doctor's attitude towards risk - newer doctors generally being more risk averse, as well as exaggerating the effects of individual clinician's risk threshold. It may also underscore a potential need for more tailored training around when not to use telephone consultations and how to manage risk– given the increasing prevalence of this modality of consultation.

4. Discussion

This study has drawn out several key insights into how the loss of nonverbal and visual cues during GP telephone consultations can exacerbate inequities in care. The primary effects are a reallocation of articulation work to patients which may fall outside of their interactional capacities; a disruption to rapport which may lower willingness to disclose; and the introduction of risk mitigation techniques by GPs in order to account for the loss of non-verbal and visual cues.

The key factors which affect a patient's ability to communicate effectively during a telephone consultation include language proficiency, health literacy, and the ability and willingness to self-identify and report symptoms over the phone. The type of health concern being discussed can also affect the consultation as some conditions, e.g., challenges related to mental health may be exacerbated during telephone consultations.

The findings need to be contextualised within the existing literature on the role of non-verbal cues in healthcare, the challenges posed by telephone consultations, and the potential clinical risks associated with these shifts. Examining the historical context, Heath's (1984) work underscores the vital role of non-verbal communication in GP consultations, emphasising how patients use nonverbal cues as a "resource" to prompt doctors to attend more closely to their verbal expressions. The intricate connection between a speaker's discourse and the recipient's behaviour, as explored by Heath, goes beyond spoken words, highlighting the importance of pauses and the ability to see what is happening during the interaction.

However, the loss of these nuanced forms of non-verbal communication during telephone consultations, places the entire burden of expression on verbal means, increasing the importance of effective verbal communication. The concept of 'articulation work' or 'patient work' as defined by Strauss et al. (1997) and Langstrup et al. (2013), describes the tasks patients must undertake to express themselves effectively. Langstrup's research into home care for chronic heart failure patients highlights the new skills for both patients and professionals in the context of telemedicine. This paper on telephone consultations highlights the ways in which patient characteristics such as language, can impact on their capacity to fulfil the 'articulation work' asked of them.

Respondents reported difficulties in conveying information and a perception that their needs were not fully acknowledged, aligning with previous studies on patient credibility in remote healthcare (Atherton et al., 2013, 2018, pp. 1478–5242; Pettinari & Jessopp, 2001). This supports Heath's (1984) findings on the importance of nonverbal cues and the role of active listening in telephone consultations (Imlach et al., 2020). Without visual cues, patients may feel their concerns are not adequately heard or addressed which could have the knock-on effect of limiting further disclosures.

This study indicates a potential loss of diagnostic information during GP telephone consultations which can exaggerate clinical and safeguarding risks, a finding consistent with recent literature (Rosen et al., 2022, pii). Atherton and Ziebland's (2016) research on video consultations discusses the loss of physical diagnostic cues, which GPs in this study also recognised as a concern. Risk mitigation strategies such as increased questioning are employed to address these gaps, but place additional responsibility on patients to communicate verbally. The evidence presented throughout this paper indicates that patients facing marginalisation may face outsized challenges to communicating symptoms to their GP during telephone consultations. Therefore, risk mitigation strategies such as increased use of testing may be employed more regularly with this patient cohort who are harder to assess or deemed to have a higher background risk than other patients – increasing patient burden on a group who may also face additional barriers to attending in-person tests and appointments related to finances, mobility, and time. Recognition on the part of both patients and clinicians around the potential challenges of telephone consultations indicates that while individual level awareness by front-line clinicians is an important consideration, that the risks posed may be more widely structural. Although this study focused on telephone consultations within primary care, the challenges identified, particularly for marginalised patients, are likely to extend to other parts of the NHS where telephone-based interactions occur, including secondary care, highlighting the need for system-wide attention to structural risks.

The safeguarding risks, particularly in mental health assessments, are well documented (Dixon et al., 2022; Kilvert et al., 2020; Rosen et al., 2022, pii). This study builds on this evidence by demonstrating the ways in which telephone consultations may hinder mental health care through a loss of non-verbal and visual communication, and reduced disclosure due to concerns about being listened to properly. Mental health is often assumed to be well-suited to telephone consultations, given the lack of an overt need for physical examination. However, this assumption overlooks the importance of non-verbal cues, therapeutic presence, and environmental factors in supporting disclosure and assessment. This study, in line with others, highlights how such assumptions can obscure the real risks posed by telephone consultations in mental health contexts. These risks are potentially compounded by the loss of the confidential and 'safe' space of the GP consultation room during telephone consultations, which has also been shown to affect willingness to disclose information – particularly around mental health (Humphrey et al., 2025).

A major contribution of this study is its focus on patients from marginalised groups during the COVID-19 pandemic, a period of time during which care for patients across all demographics was primarily shifted to remote delivery – highlighting how consultations and the loss of non-verbal cues may be particularly challenging for these patients. There is an inverse relationship between the ability to complete the sort of verbal articulation work described, and marginalisation due to underlying factors such as health literacy (Cooper & Roter, 2003; Dixon et al., 2007; Dixon-Woods et al., 2006). Respondents reported that not being able to gesture and/or not being able to show the doctor a symptom may obstruct their ability to communicate effectively. Patients who struggle with language or health literacy may find telephone consultations particularly exclusionary. For those who do not speak English, telephone interpreters are available, but for individuals with limited English proficiency or health literacy, telephone consultations may exacerbate existing inequalities in often unanticipated and unaccounted for ways.

This is an interesting example of how some characteristics which are more absolute e.g., speaking no English might actually be less exclusionary than more hidden forms of marginalisation such as low health literacy, for which specialist services are not available in the same way.

The use of family or friends as informal interpreters raises well-documented safeguarding concerns as does use of local face-to-face interpreters, who may be embedded in the same local community as the patient(Department of Health and Social Care, 2018). Telephone consultations may lead to increased reliance on these informal interpreters to overcome communication challenges. However, the opportunity to use telephone interpreters, could come with advantages in terms of anonymity and therefore disclosure – an important avenue of research warranting further research.

Health literacy is strongly correlated with socioeconomic status (Svendsen et al., 2020), and a potential mediating factor by which socioeconomic status relates to poor health outcomes (Lastrucci et al., 2019). Respondents' comments about a need to gain more education in order to be able to speak with their doctor over the phone reflects this known relationship between health literacy and education levels(Jansen et al., 2018). The study's findings suggest that the demands on health literacy are heightened in telephone consultations, potentially exacerbating disparities in care. This can lead to clinical risks if GPs are unable to detect health symptoms that patients may not notice or articulate effectively.

This indicates that this relationship between health literacy and healthcare outcomes may be strengthened as the pressure to be health literate during telephone consultations is heightened due to the absence of nonverbal and visual cues. This has the potential to result in clinical risks if the doctor is unable to pick up on health symptoms patients themselves may not have noticed, or to gain sufficient information on symptoms if patients are unable, or less able, to articulate these.

A link is often made between digital healthcare, neo-liberal individualisation, and the self-management of healthcare (Fotopoulou & O'Riordan, 2017; Fox, 2015; Lupton, 2013a; Rich & Miah, 2014; Van Dijck & Poell, 2016). This process can be referred to as 'responsiblisation' – the process by which individuals are increasingly tasked with the responsibility of managing their own health (Lupton, 2013a, 2013b; May et al., 2014; Rose, 2009; Ruckenstein & Schüll, 2017). This might include for instance the responsibility to report symptoms (Pettinari & Jessopp, 2001) to a clinician over the phone, 'articulation work' (Strauss et al., 1997) – which has been demonstrated in this paper to lead to significant challenges for some patient groups.

It has been argued that being able to participate in healthcare is increasingly politicised, promoted to make patients active in a way that is "beneficial, first and foremost, for patients themselves, but also for 'the greater good' of the welfare state" (Nielsen & Langstrup, 2018, p. 276). The relationship between digital healthcare and responsibilisation is reflected within the NHS Long Term Plan (2019) which states "people will be helped to stay well, to recognise important symptoms early, and to manage their own health, guided by digital tools" (p. 92, emphasis added) reflecting this assumed relationship between digitalisation and self-management. Recent UK government reforms, such as the 2023 'New Deal for GPs'(Department of Health and Social Care, 2023a) and the plan to make it easier for patients to access GPs(Department of Health and Social Care, 2023b), represent a continuation this trend towards responsibilisation. These initiatives emphasise patient self-triage using digital tools, faster booking systems, and personalised remote pathways. While these policies aim to improve access, they risk deepening structural exclusions for those already facing barriers — particularly patients with low digital literacy, limited English, or intersecting marginalisation. Importantly, increased emphasis on triaging may further exaggerate the need for articulation work, not only during consultations, but in order to secure a consultation with a GP. These systemic shifts place increasing demands on patients, but they also reshape the role of GPs, who must manage risk and ensure care quality within these same constraints**.** A strength of this study lies in its illustration of the complex and often underacknowledged work undertaken by GPs to navigate clinical risk, patient safety, and access within constrained systems. Their recognition of limitations in remote consultations and efforts to mitigate these, often by adapting communication or arranging follow-up care, highlight a dovetailing of perspectives that bridges both the delivery and receipt of care.

Most pertinently this study shows that 'articulation work' makes up an important part of this self-management when it comes to telephone consultations. Crucially, patients who face obstacles to completing this articulation work as a result of barriers such as low health literacy or language barriers may be disproportionately negatively affected as they are tasked with communication demands which lay outside of their capacity.

4.1. Strengths and limitations

This research's strength is in its focus on perspectives from individuals facing diverse forms of marginalisation, highlighting their varied healthcare experiences. The recruitment of participants from outside traditional healthcare settings provides valuable insights into infrequent users of healthcare services, a group often underrepresented in research.

While the focus of this study is on a major urban centre, it is crucial to consider how these experiences may differ in other contexts, such as rural areas where access to healthcare resources and support services may be even more limited.

4.2. Future work

Future research should involve observation of telephone GP consultations from both the GP and patient perspectives to better understand how the loss of non-verbal and visual cues is negotiated in practice. Additionally, exploring the unique challenges faced by different subgroups, such as people experiencing homelessness, could provide a clearer picture of how barriers to care overlap and differ among marginalised populations and whether specific innovations and/or adaptations are necessary to ensure inclusivity across all groups.

4.3. Conclusion

In conclusion, this study highlights the urgent need to address the inequities introduced by telephone consultations, particularly for marginalised populations. The findings reveal how the loss of nonverbal cues reallocates articulation work to patients, particularly burdening those already facing challenges related to health literacy and language proficiency.

This shift aligns with the concept of responsibilisation illustrating how healthcare systems increasingly place the responsibility for effective communication on patients. While this approach encourages patient engagement, it risks deepening existing inequalities, as marginalised groups often lack the resources to meet these heightened expectations.

To mitigate these disparities, it is essential to ensure that consultations are adapted to patient's needs, with the option of in-person consultations for those who may struggle to engage in a telephone conversation. As well as flexibility of modality, future research and practice should explore strategies to enhance accessibility and accuracy in remote healthcare delivery.

Ultimately, addressing these dynamics is crucial for creating an equitable and efficient healthcare system that genuinely meets the needs of all individuals.

CRediT authorship contribution statement

Ada Humphrey: Writing – original draft, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Carl May:** Writing – review & editing, Supervision, Funding acquisition, Conceptualization. **Steven Cummins:** Supervision, Funding acquisition, Conceptualization. **Fiona Stevenson:** Writing – review & editing, Supervision, Methodology, Funding acquisition, Conceptualization.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

Ada Humphrey reports financial support was provided by National Institute for Health and Care Research. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

Thank you to all of the responders who took part in this study, and the services that kindly provided access to their sites for data collection. Thank you also to NIHR SPHR and ARC North Thames who provided funding for this study as well as training.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ssmqr.2025.100604.

References

Aldridge, J. (2014). Working with vulnerable groups in social research: dilemmas by default and design. *Qualitative Research, 14*(1), 112–130.

Atherton, H., Brant, H., Ziebland, S., Bikker, A., Campbell, J., Gibson, A., McKinstry, B., Porqueddu, T., & Salisbury, C. (2018). Alternatives to the face-to-face consultation in general practice: focused ethnographic case study. *British Journal of General Practice, 68*(669), e293–e300. https://doi.org/10.3399/bjgp18X694853

Atherton, H., Pappas Y Fau - Heneghan, C., Heneghan C Fau - Murray, E., & Murray, E. (2013). *Experiences of using email for general practice consultations: A qualitative study* (Electronic).

Atherton, H., & Ziebland, S. (2016). What do we need to consider when planning, implementing and researching the use of alternatives to face-to-face consultations in primary healthcare? *Digit Health, 2*, Article 2055207616675559. https://doi.org/10.1177/2055207616675559

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology, 9*(1), 3–26. https://doi.org/10.1037/qup0000196

Cooper, L., & Roter, D. (2003). Patient-provider communication: The effect of race and ethnicity on process and outcomes of healthcare. In B. D. Smedley, A. Y. Stith, & N. AR (Eds.), *Unequal treatment: Confronting racial and ethnic disparities in health.* Washington DC: National Academies Press, 2003. National Academies Press.

Department of Health and Social Care. (2018). Guidance for commissioners: Interpreting and translation services in primary care. https://www.england.nhs.uk/wp-content/uploads/2018/09/guidance-for-commissioners-interpreting-and-translation-services-in-primary-care.pdf.

Department of Health and Social Care. (2023a). New deal for GPs will fix the front door of the NHS. https://www.gov.uk/government/news/new-deal-for-gps-will-fix-the-front-door-of-the-nhs.

Department of Health and Social Care. (2023b). New plan to make it easier for patients to see their GP. https://www.gov.uk/government/news/new-plan-to-make-it-easier-for-patients-to-see-their-gp.

Dixon, S., Frost, L., Feder, G., Ziebland, S., & Pope, C. (2022). Challenges of safeguarding via remote consulting during the COVID-19 pandemic: A qualitative interview study. *British Journal of General Practice, 72*(716), e199–e208. https://doi.org/10.3399/BJGP.2021.0396

Dixon, A., Le Grand J Fau - Henderson, J., Henderson, J., Fau - Murray, R., Murray R Fau - Poteliakhoff, E., & Poteliakhoff, E. (2007). Is the British national health service equitable? The evidence on socioeconomic differences in utilization. *Journal of Health Services Research and Policy, 12*, 104–109, 1355-8196 (Print).

Dixon-Woods, M., Cavers, D., Agarwal, S., Annandale, E., Arthur, A., Harvey, J., Hsu, R., Katbamna, S., Olsen, R., Smith, L., Riley, R., & Sutton, A. J. (2006). Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. *BMC Medical Research Methodology, 6*, 1–13. https://doi.org/10.1186/1471-2288-6-35

Fotopoulou, A., & O'Riordan, K. (2017). Training to self-care: Fitness tracking, biopedagogy and the healthy consumer. *Health Sociology Review, 26*(1), 54–68. https://doi.org/10.1080/14461242.2016.1184582

Foucault, M. (1979). *Discipline and punish: The birth of the prison* (Trans A. Sheridan). Vintage.

Foucault, M. (1988). *Technologies of the self : A seminar with michel Foucault.* Tavistock.

Fox, N. J. (2015). Personal health technologies, micropolitics and resistance: A new materialist analysis. *Health, 21*(2), 136–153. https://doi.org/10.1177/1363459315590248

Green, J., & N, Thorogood., (2014). Qualitative Methods for Health Research. Third edition. Los Angeles: SAGE. Print.

Greenhalgh, T., Ladds, E., Hughes, G., Moore, L., Wherton, J., Shaw, S. E., Papoutsi, C., Wieringa, S., Rosen, R., Rushforth, A., & Rybczynska-Bunt, S. (2022). Why do GPs rarely do video consultations? Qualitative study in UK general practice. *British Journal of General Practice, 72*(718), e351–e360. https://doi.org/10.3399/bjgp.2021.0658

Heath, C. (1984). Participation in the medical consultation: The co-ordination of verbal and nonverbal behaviour between the doctor and patient. *Sociology of Health & Illness, 6*(3), 311–388.

Humphrey, A., Cummins, S., May, C., & Stevenson, F. (2025). GP remote consultations with marginalised patients and the importance of place during care: A qualitative study of the role of place in GP consultations. *BJGP Open, 9*(1). https://doi.org/10.3399/bjgpo.2024.0050. BJGPO.2024.0050.

Huxley, C. J., Atherton, H., Watkins, J. A., & Griffiths, F. (2015). Digital communication between clinician and patient and the impact on marginalised groups: A realist review in general practice. *British Journal of General Practice, 65*(641), e813–e821. https://doi.org/10.3399/bjgp15X687853

Imlach, F., McKinlay, E., Middleton, L., Kennedy, J., Pledger, M., Russell, L., Churchward, M., Cumming, J., & McBride-Henry, K. (2020). Telehealth consultations in general practice during a pandemic lockdown: Survey and interviews on patient experiences and preferences. *BMC Family Practice, 21*(1), 269. https://doi.org/10.1186/s12875-020-01336-1

Jansen, T., Rademakers, J., Waverijn, G., Verheij, R., Osborne, R., & Heijmans, M. (2018). The role of health literacy in explaining the association between educational attainment and the use of out-of-hours primary care services in chronically ill people: A survey study. *BMC Health Services Research, 18*(1), 394. https://doi.org/10.1186/s12913-018-3197-4

Kaihlanen, A. M., Virtanen, L., Buchert, U., Safarove, N., Valkonen, P., Hietapakka, L., … Heponiemi, T. (2022). Towards digital health equity - a qualitative study of challenges experienced by vulnerable groups in using digital health services in the COVID-19 era. *BMC Health Services Research, 22*(1), 188.

Kilvert, A., Wilmot, E. G., Davies, M., & Fox, C. (2020). Virtual consultations: Are we missing anything? *Practical diabetes, 37*(4), 143–146. https://doi.org/10.1002/pdi.2288, 2011.

Langstrup, H., Iversen, L. B., Vind, S., & Erstad, T. L. (2013). The virtual clinical encounter: Emplacing patient 2.0 in emerging care infrastructures. *Science and Technology Studies, 26*(2), 44–60.

Larsen, K., & Smith, C. (1981). Assessment of nonverbal communication in the patient-physician interview. *Family Practice, 12*, 481–488.

Lastrucci, V., Lorini, C., Caini, S., Florence Health Literacy Research, G., & Bonaccorsi, G. (2019). Health literacy as a mediator of the relationship between socioeconomic status and health: A cross-sectional study in a population-based sample in florence. *PLoS One, 14*(12), Article e0227007. https://doi.org/10.1371/journal.pone.0227007

Link, B. G., & Phelanm, J. (1995). Social conditions as fundamental causes of disease. *Journal of health and social behaviour, Spec No*, 80–94.

Little, P., White, P., Kelly, J., Everitt, H., Gashi, S., Bikker, A., & Mercer, S. (2015). Verbal and non-verbal behaviour and patient perception of communication in primary care: An observational study. *British Journal of General Practice, 65*(635), e357–e365. https://doi.org/10.3399/bjgp15X685249

Lupton, D. (2013a). The digitally engaged patient: Self-monitoring and self-care in the digital health era. *Social Theory & Health, 11*(3), 256–270. https://doi.org/10.1057/sth.2013.10

Lupton, D. (2013b). Quantifying the body: Monitoring and measuring health in the age of mHealth technologies. *Critical Public Health, 23*(4), 393–403. https://doi.org/10.1080/09581596.2013.794931

May, C. R., Eton, D. T., Boehmer, K., Gallacher, K., Hunt, K., MacDonald, S., Mair, F. S., May, C. M., Montori, V. M., Richardson, A., Rogers, A. E., & Shippee, N. (2014). Rethinking the patient: Using Burden of Treatment Theory to understand the changing dynamics of illness. *BMC Health Services Research, 14*(1). https://doi.org/10.1186/1472-6963-14-281, 281-281.

Miller, P., & Rose, N. (1990). Governing economic life. *Economy and Society, 19*(1), 1–31. https://doi.org/10.1080/03085149000000001

Moynihan, D., Herd, P., & Harvey, H. (2015). Administrative burden: Learning, psychological, and compliance costs in citizen-state interactions. *Journal of Public Administration Research and Theory: J-PART, 25*(1), 43–69. http://www.jstor.org/stable/24484941.

Murphy, E., & Dingwall, R. (2001). *Handbook of Ethnography*. SAGE Publications Ltd.

Murphy, M., Scott, L. J., Salisbury, C., Turner, A., Scott, A., Denholm, R., Lewis, R., Iyer, G., Macleod, J., & Horwood, J. (2021). Implementation of remote consulting in UK primary care following the COVID-19 pandemic: A mixed-methods longitudinal study. *British Journal of General Practice, 71*(704), Article e166. https://doi.org/10.3399/BJGP.2020.0948

NHS. (2019). The NHS long term plan. https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf.

NHS England. A national framework for NHS – action on inclusion health. Retrieved 21.11.2024 from https://www.england.nhs.uk/long-read/a-national-framework-for-nhs-action-on-inclusion-health/.

Nielsen, K. D., & Langstrup, H. (2018). Tactics of material participation: How patients shape their engagement through e-health. *Social Studies of Science, 48*(2), 259–282. https://doi.org/10.1177/0306312718769156

Nikolas, R., & Miller, P. (2008). *Governing the present: Administering economic, social and personal life*. Polity Press.

Nottingham City Council. (2019). Severe multiple disadvantage/multiple needs: Joint strategic needs assessment – children and young people. https://www.nottinghaminsight.org.uk/themes/health-and-wellbeing/joint-strategic-needs-assessment/children-and-young-people/severe-multiple-disadvantage-multiple-needs-2019/.

Peters, M. A. (2017). From State responsibility for education and welfare to self-responsibilisation in the market. *Discourse: Studies in the Cultural Politics of Education, 38*(1), 138–145. https://doi.org/10.1080/01596306.2016.1163854

Pettinari, C. J., & Jessopp, L. (2001). 'Your ears become your eyes': Managing the absence of visibility in NHS direct. *Journal of Advanced Nursing, 36*(5), 668–675.

Rich, E., & Miah, A. (2014). Understanding digital health as public pedagogy: A critical framework. *Societies, 4*, 296–315. https://doi.org/10.3390/soc4020296

Rose, N. (1999). *Powers of freedom: Reframing political thought*. Cambridge University Press. https://doi.org/10.1017/CBO9780511488856

Rose, N. (2009). Normality and pathology in a biomedical age. *The Sociological Review, 57*(2_suppl), 66–83. https://doi.org/10.1111/j.1467-954X.2010.01886.x

Rosen, R., Wieringa, S., Greenhalgh, T., Leone, C., Rybczynska-Bunt, S., Hughes, G. A.-O., Moore, L., Shaw, S. E., Wherton, J., & Byng, R. (2022). *Clinical risk in remote consultations in general practice: Findings from in-COVID-19 pandemic qualitative research*. LID - BJGPO.2021.0204 [pii] LID - 10.3399/BJGPO.2021.0204 [doi]. (2398-3795 (Electronic)).

Ruckenstein, M., & Schüll, N. D. (2017). The datafication of health. *Annual Review of Anthropology, 46*(1), 261–278. https://doi.org/10.1146/annurev-anthro-102116-041244

Strauss, A. L., Fagerhaugh, S., Suczek, B., & Wiener, C. (1997). *Social organization of medical work* (1 ed.). Routledge. https://doi.org/10.4324/9781315129679

Svendsen, M. T., Bak, C. K., Sørensen, K., Pelikan, J., Riddersholm, S. J., Skals, R. K., Mortensen, R. N., Maindal, H. T., Bøggild, H., Nielsen, G., & Torp-Pedersen, C. (2020). Associations of health literacy with socioeconomic position, health risk behavior, and health status: A large national population-based survey among Danish adults. *BMC Public Health, 20*(1), 565. https://doi.org/10.1186/s12889-020-08498-8

Tully, L., Spyreli, E., Allen-Walker, V., Matvienko-Sikar, K., McHugh, S., Woodside, J., … Kelly, C. (2021). Recruiting "hard to reach" parents for health promotion research: experiences from a qualitative study. *BMC Research Notes, 14*(1), 276.

Van Dijck, J., & Poell, T. (2016). Understanding the promises and premises of online health platforms. *Big Data & Society, 3*(1), Article 2053951716654173. https://doi.org/10.1177/2053951716654173

Wilson, P. M. (2001). A policy analysis of the expert patient in the United Kingdom: Self-care as an expression of pastoral power? *Health and Social Care in the Community, 9*(3), 134–142. https://doi.org/10.1046/j.1365-2524.2001.00289.x