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DOI:

[10.1111/1467-9566.13811](https://doi.org/10.1111/1467-9566.13811)

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*Document Version*

Publisher's PDF, also known as Version of record

*Citation for published version (Harvard):*

Rybczynska-Bunt, S, Byng, R, Spitters, S, Shaw, SE, Jameson, B & Greenhalgh, T 2024, 'The reflexive imperative in the digital age: Using Archer's 'fractured reflexivity' to theorise widening inequities in UK general practice', *Sociology of Health & Illness*. <https://doi.org/10.1111/1467-9566.13811>

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# The reflexive imperative in the digital age: Using Archer's 'fractured reflexivity' to theorise widening inequities in UK general practice

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## Funding information

Health Services and Delivery Research Programme, Grant/Award Number: 132807; NIHR School for Primary Care Research, Grant/Award Number: 594

## Abstract

'Reflexivity', as used by Margaret Archer, means creative self-mastery that enables individuals to evaluate their social situation and act purposively within it. People with complex health and social needs may be less able to reflect on their predicament and act to address it. Reflexivity is imperative in complex and changing social situations. The substantial widening of health inequities since the introduction of remote and digital modalities in health care has been well-documented but inadequately theorised. In this article, we use Archer's theory of fractured reflexivity to understand digital disparities in data from a 28-month longitudinal ethnographic study of 12 UK general practices and a sample of in-depth clinical cases from 'Deep End' practices serving highly deprived populations. Through four composite patient cases crafted to illustrate different dimensions of disadvantage, we show how adverse past experiences and structural inequities intersect with patients' reflexive capacity to

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self-advocate and act strategically. In some cases, staff were able to use creative workarounds to compensate for patients' fractured reflexivity, but such actions were limited by workforce capacity and staff awareness. Unless a more systematic safety net is introduced and resourced, people with complex needs are likely to remain multiply disadvantaged by remote and digital health care.

#### KEYWORDS

digital healthcare, disadvantage, fractured reflexivity, inequities, reflexive imperative, remote healthcare

## INTRODUCTION

### Widening inequities linked to remote and digital health care

Remote (e.g. telephone) and digital (e.g. video, chatbot and asynchronous electronic consultation) health care have expanded dramatically since 2020. Audits of both primary and secondary care services during the early months of the COVID-19 pandemic consistently demonstrated that marginalised populations (e.g. socioeconomically deprived, minority ethnic groups, the homeless, the elderly or those with disabilities or multi-morbidity) accessed remote services significantly less than other groups, leading to care that was delayed, suboptimal or which (in some cases) did not happen at all (Buis et al., 2023; Ganguli et al., 2023; Huang et al., 2022; Husain et al., 2022; Rodriguez et al., 2021). These observations affirmed studies undertaken pre-pandemic, which had already shown marked disparities in digital health access by age, socioeconomic status and ethnicity (Benda et al., 2020; Veinot et al., 2019).

Numerous explanations have been offered for why digitalisation may worsen health inequities, including various 'digital divides' (lack of technologies, lack of skills, lack of access to broadband and the system's lack of flexibility) (Benda et al., 2020; Lythreathis et al., 2022), low system literacy (Beauchamp et al., 2017), low digital capital—a concept which extends Bourdieu's theory of capital to embrace both ownership of technologies and the ability to use them to generate economic, social and cultural capital—(Ragnedda & Ruiu, 2020), poorly-designed online platforms (Helsper & Reisdorf, 2017), exacerbation of candidacy challenges (Dakin et al., 2024), loss of relational continuity (Ladds et al., 2023) and the increased cognitive load of digital services and pathways (Antonio et al., 2023).

Clinicians and researchers have sought to develop and implement measures to ensure that remote and digital services going forward are fair and equitable (Shaw et al., 2021; Veinot et al., 2019). Analysis of safety incidents and staff concerns relating to remote and digital encounters reveal the crucial importance of establishing rapport and gaining a clear and nuanced history (Payne et al., 2023; Rosen et al., 2022; Wieringa et al., 2022)—something clinicians and support staff find more difficult to achieve when there is social, cultural or linguistic

non-concordance or when the patient has complex needs or a condition affecting communication (Greenhalgh et al., 2024).

In the UK, policymakers who initially expressed enthusiasm for a 'remote by default' service following the disruptive innovation propelled by the pandemic (Hancock, 2020) subsequently declared that, for reasons of both safety and equity, all patients had the 'right' to request a face-to-face consultation (NHS England, 2021). This policy directive is playing out at a time when UK general practice is under unprecedented stress with high demand, understaffing and under-resourcing, and remote and digital modalities are being used for both triage and clinical consultations in attempts to improve efficiency (Payne et al., 2024). Whilst some patients find digital access acceptable and convenient, practices are concerned to mitigate the inequities described above. To do so, a deeper understanding is needed of the particular and varied needs of complex patients and the mechanisms through which they may come to 'slip through the net'. In the next section, we introduce a novel theoretical lens for this task.

## Fractured reflexivity—A novel perspective on health inequities

Archer (2007, p. 4) defined reflexivity as 'the regular exercise of the mental ability, shared by all normal people, to consider themselves in relation to their (social) contexts and vice versa'. Given constant innovation, uncertainty and risk in contemporary society, people must constantly exercise reflexivity in order to respond adequately (Archer, 2007, 2012).

Archer considered that individuals' reflexive response to social situations is mediated, in part, by meso-level fields of relations, notably those that occurred within their family as they were growing up. She proposed four broad dispositions:

1. **Communicative reflexives** seek confirmation and approval from others before they take action. Such individuals have generally had emotionally engaged family relationships in childhood, and tend to replicate family values and behaviours, forming strong interpersonal relationships in adulthood.
2. **Autonomous reflexives** reflect mainly using internal conversations and are less predisposed to seek advice from others before taking action. They are generally individuals whose parents were present during their childhood but may have been less emotionally attached; emotionally warm relationships with others are less of a priority for them
3. **Meta-reflexives** are critically reflexive about their own internal conversations, the advice of others and the value of potential actions. They are generally people who reject traditional and familial values in favour of adopting a broader set of ideas and lifestyle, including actively seeking information online.
4. **Fractured reflexives** find that their internal conversations generate dissonance and distress rather than leading to purposive courses of action which benefit them.

The widespread introduction of remote and digital modalities in general practice is a good example of the growing imperative for people to exercise reflexivity. Accessing and receiving health care are now highly complex social practices. During both the triage encounter (e.g. requesting an appointment and asserting one's right to care) and the clinical consultation (e.g. describing one's symptoms and responding to probing questions), patients construct—or are expected to construct—a coherent narrative linking their symptoms, concerns, health behaviours and desired outcomes. To achieve this requires an ongoing interplay between reflexivity

and the theory of mind (that is, the ability to discern, understand and respond to the mental states of others—for example, identifying that a person is upset, anxious or reluctantly following protocol and adjusting one's own responses accordingly (Frith & Frith, 2012)). Thus, all patients must strive to articulate their experiences effectively and dynamically while considering how the support staff member or clinician might be interpreting their words and actions.

Individuals differ in their ability to exercise such reflexivity. In the clinical consultation, for example, some patients may find it difficult to think about the problem as a whole, respond appropriately to questions, grasp how the clinician is responding to their own words and actions as the consultation unfolds and verbally articulate their experiences and needs in a way that serves their best interests. A person's capability to act strategically and have their needs met may be weakened either temporarily or permanently for various reasons.

Conditions which affect relevant aspects of cognition include autism (a neurological and developmental disorder that affects how people interact with others, communicate, learn, and behave—and which produces difficulty interpreting social cues and working out what others are thinking or feeling); specific learning difficulties, including developmental language disorder (difficulties understanding and using spoken language) and dyslexia (difficulty reading, writing and spelling); mental health conditions which impact cognitive function; congenital or acquired brain diseases (e.g. cerebral palsy, stroke, Alzheimer's) and conditions or substances which cause cognitive blunting (e.g. long Covid, medication, recreational drugs).

In addition, adverse social experiences, especially as they build up over time, can undermine a person's reflexive capability. For example, repeatedly failing to secure an appointment with a clinician when attempting to negotiate an online or telephone access system will reinforce a sense that the system is unnavigable and hostile. In some people, health-related adverse experiences will be compounded further by experiences with asylum or criminal justice systems, adverse childhood experiences, drug and alcohol problems and other kinds of social exclusion (Hughes et al., 2017).

Together, these influences (cognitive and social) may produce *fractured reflexivity*, which manifests when a person acts in a way that is counter to their own interests, when they fail to act because they are unable to (or do not realise they need to) or when there is a dissonance between their subjective concerns and how (or whether) they act (Archer, 2012).

Based on Archer's typology of different reflexive dispositions, it is possible to develop preliminary hypotheses about how different individuals might think, ponder, reflect back or plan (or not) when they encounter challenges in the healthcare system. Communicative reflexives, for example, are likely to value relational continuity, hence will be keen to see a clinician they know and be comfortable co-constructing an illness narrative and treatment plan with that person. Autonomous reflexives might view their relationship with their clinician (and the health service generally) in more transactional terms. Meta-reflexives are likely, in some circumstances at least, to actively challenge a clinician's advice, seek out and evaluate alternative options and strive to participate actively in their healthcare decisions. Each of these reflexive strategies may allow the individual to obtain an outcome that is in their own best interests.

But people with fractured reflexivity, who form the focus of this article, are likely to engage passively if at all with health services and make decisions that are neither strategically relational nor strategically transactional, but impulsive and counterproductive to their own health and welfare.

Fractured reflexivity has been depicted as a neglected social determinant of health (Scambler, 2013). Extending Archer's original typology, Scambler describes a subgroup of fractured reflexives who are especially vulnerable to poor health outcomes. These people are, he suggests

(page 310), ‘harangued by the lifeworld’ (that is, exhausted by the routines and demands of the private sphere or household), ‘ships without anchor’ (drifting because there is no core to who they are after circumstances have driven them down), ‘swayed by others’ leads’ (in need of rescue or guidance, but waiting for this with little hope or expectation) and ‘subservient to fleeting ephemera’ (prone to following fads and fashions but without conviction or commitment). They are also passive (lacking personal aspiration or ambition), alienated (lacking power, meaning or norms) and have low self-worth (including a tendency to self-stigmatise). These characteristics combine to produce what Scambler calls ‘disconnected fatalism’, which includes a tendency to engage in habits and behaviours that are injurious to health and to under-use health and social services.

## Aims and research questions

Our aim was to inform policies and interventions to reduce inequities in remote and digital health care by developing a richer theoretical model of how fractured reflexivity contributes to these inequities.

Our research questions were:

1. How are patients with fractured reflexivity responding to the introduction of remote and digital modalities for accessing and receiving care in UK general practice?
2. To what extent do efforts by general practices to accommodate patients with complex needs acknowledge and accommodate different aspects of their fractured reflexivity?
3. How might a theory-driven approach (specifically with regard to the reflexive imperative) inspire more effective approaches to reducing digital inequities in health care?

## METHODS

### Ethics and governance

The study described in this article was part of a wider research programme on remote and digital general practice, overseen by an independent advisory group with a lay chair and patient representation (Greenhalgh, Shaw, Alvarez Nishio, Booth, et al., 2022). An additional patient and public involvement group, with input from underserved groups (including those who were unemployed or precariously employed, homeless and with physical and mental health conditions), was convened for this particular sub-study of multiply-disadvantaged patients. Ethical approval was obtained from East Midlands—Leicester Central Research Ethics Committee and UK Health Research Authority and subsequent amendments (REC references 20/EM0128, May 2020, and 21/EM/0170, September 2021).

### Data sources and methods

The data sources and methodological approach are summarised in Figure 1 and described in more detail below.

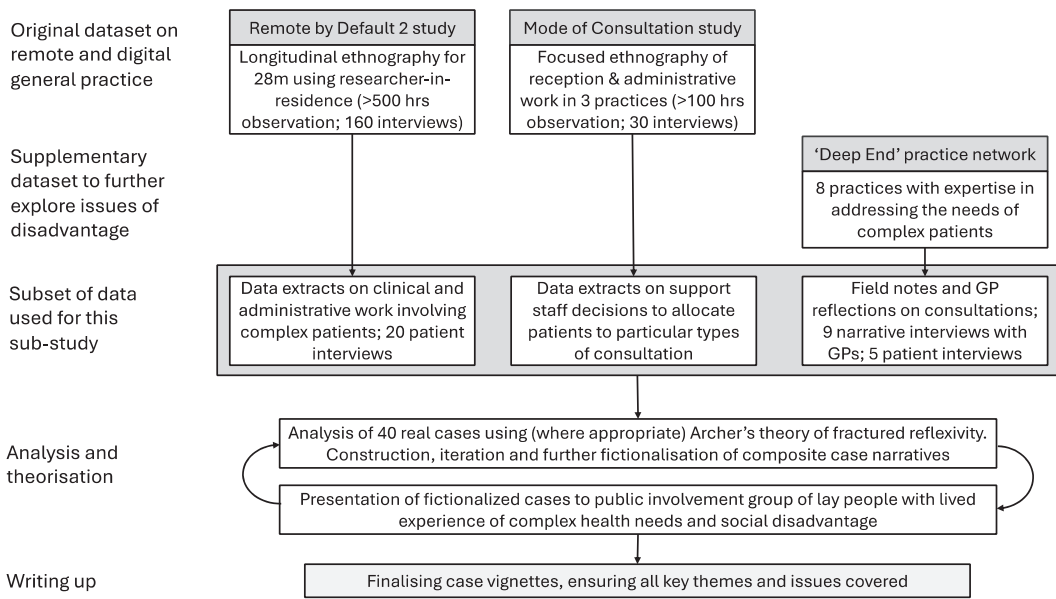


FIGURE 1 Summary of data sources and methods.

We combined an existing longitudinal dataset with a new set of interviews focused specifically on disadvantaged patients with complex health and social care needs. The longitudinal dataset came from two linked ethnographic studies. Remote by Default 2 ran from 2021 to 2023; it explored the changing patient and practice experience of remote and digital technologies in a maximum-variety sample of 12 general practices in England, Scotland and Wales (Greenhalgh, Shaw, Alvarez Nishio, Booth, et al., 2022; Greenhalgh, Shaw, Alvarez Nishio, Byng, et al., 2022). In a second ethnographic study, Mode of Consultation ('ModCons'), sited in three of the Remote by Default 2 practices, we undertook focused observation in reception and administrative areas to explore decision-making by support staff as they offered different consultation modalities (phone, video, e-consultations and in-person). In total, this dataset consisted of approximately 200 interviews covering practice staff, patients and policymakers, plus over 600 h of ethnographic observation and four online multi-stakeholder workshops, where findings were presented and policy implications discussed. For this study, we selected relevant field notes and interview excerpts, including examples of how clinical and practice support staff made accommodations for patient complexity.

To further explore how practices addressed the remote and digital access needs of multiply-disadvantaged patients, we built links with the 'Deep End' group of general practices in two socioeconomically deprived localities in England and Scotland. The lead author sat in on two general practice surgeries with such patients and interviewed the clinician afterwards to reflect on the patients seen. She also conducted nine narrative interviews with Deep End GPs in which the clinician was asked to reflect on cases from their patient lists over the previous 2 days, in which a remote or digital modality had been offered or used. We asked for examples of consultations that had gone well and ones that had not (e.g. due to technical, interactional or clinical challenges). Interviews were conversational in style and aimed to capture contextually rich descriptive data that we could use to construct composite case studies.



We also collected patients' own stories of attempts to access care. These consisted of 20 accounts from the longitudinal dataset as well as five new interviews with patients registered at the Deep End practices. Participants were interviewed in-person or remotely as they chose. Interviews followed up on experiences of a recent consultation (including the attempt to book it). Where the researcher had observed a consultation, an aspect of the interview was sensitively exploring differences between what the participant recalled and what had been observed and documented in field notes. For example, in one case the researcher observed a clinician attempting to validate the patient's experience of pain over the phone, but the patient's recollection was that the clinician had expressed little empathy. The researcher explored with the patient whether the consultation modality made it difficult to interpret the clinician's intentions.

## Data analysis

Data analysis began thematically with the longitudinal dataset from 12 general practices in Remote by Default 2 (3 of which had also been part of the Mode of Consultation focused ethnography). The research team met on several occasions to discuss issues pertaining to patients with health or social complexity, including access and triage, standard operating procedures, decision-making on consultation modality, staff discretion and quality of care. Through deliberation, we identified emerging themes and used these along with key excerpts from patient cases to develop composite cases (in which we drew on several actual cases to generate a fictitious one, thereby protecting anonymity while preserving key empirical findings [Willis, 2019]). As Willis emphasises, the composite narrative allows presentation of rich and interdependent findings in a format that is accessible and evocative, while also protecting the anonymity of participants, though it places a burden on the researcher to produce accurate and fully anonymised portrayals. We were particularly mindful of the 'double hermeneutic' (Giddens, 1984) where clinicians' interpretations of intersecting patient problems gave partial evidence, and of how perspectives compared across cases.

We followed established processes to bring academic rigour to the development of composite case studies, such as demonstrating how the narratives originated from key data sources. As with the creation of any fictional account, the production of these narratives was an imaginative process rather than a technical one, for which the key quality benchmark was one of verisimilitude—that is, whether the story we had created 'rang true'. Composite cases were iteratively refined and elaborated based on feedback from the wider research team and from our patient and public advisory group made up of people who had extensive lived experience between them of different health and social care complexities.

Our approach to making inferences in our composite cases departs in one aspect from the approach described by Willis (2019), who (in the context of producing composite narratives about politicians' views on a contested issue) warned against attempting to impugn motivations or feelings. Our starting assumption (in a very different context) was that reasoning abductively about the differing reflexive capacities of complex patient groups is essential to inform the planning of services for underserved populations. We acknowledge, however, that theories about underlying reflexivities behind observed or recounted behaviours are imperfect and rely on what Pawson (2013) describes as 'informed guesswork', where researchers eliminate competing theories and identify an interpretation that best fits with the available evidence within specific cases, and then across developing composite cases. The involvement of a



purposely selected patient advisory group here to discuss competing interpretations of what was going on in the person's mind was key.

Our dataset included some examples of patients who disengaged with health care. In these cases, we could only hypothesise about the unintended consequences that followed. We used our generic findings from interview data and stakeholder workshops and also drew from a wider evidence base to produce a fictional account of how the patient's story ended. For example, we linked disengagement to the well-documented tendency of underserved groups to avoid seeking care until they need emergency A&E treatment (Behrens et al., 2023), or the propensity for people with drug and alcohol misuse to relapse when care goes wrong (Sliedrecht et al., 2019).

We did not assume that all patients who initially found remote and digital modalities challenging would have fractured reflexivity. For some, the difficulties would be addressed by (for example) digital skills training or acquisition of the relevant technologies. But for those whose ability to reflect on, and respond to, their predicament was significantly impaired for any reason, we predicted that technologies and training would be insufficient and that such 'solutions' would do little more than create the illusion that the problem had been addressed.

## RESULTS

### Overview of findings

Overall, we obtained data on 40 patients who had complex needs (mostly, one or more medical conditions along with adverse social circumstances). These patients ranged from late teens to old age and were registered in 20 practices across the UK. The accounts covered attempting to get an appointment to see a clinician, the encounter itself and the person's subsequent actions.

Three prominent themes in our data were patients' frustration when attempting (often unsuccessfully) to access appointments, conflict with staff (typically resulting in actions that further reduced the person's access), and giving up (i.e. deciding that there was no point seeking care). Some practices had workarounds to accommodate certain patient groups such as the elderly who struggled with digital access, but these did little to improve access for patients with complex cognitive and social needs. Workarounds were often at the discretion of individual staff members and varied from practice to practice and depending on which person was on duty and how busy they were. From the patient's perspective, it was sometimes but not always possible to bypass the usual telephone triage process to obtain a face-to-face appointment. Such inconsistencies typically generated frustration and confusion for patients.

In the remainder of this results section, we present four composite cases of inequities that appear to have worsened as a result of introducing remote and digital services. For each case, we provide a narrative account before considering the patient's experiences and actions (or inactions) through the lens of fractured reflexivity. We also consider how an action by a staff member, patient or technology might negatively shape subsequent social and socio-technical relations, thereby creating a negative reinforcement of an adverse situation.

### Case 1: A homeless man seeking a repeat prescription

Amir, 45, moves to a new locality to escape some people he owes money to. He is 'sofa surfing' with a friend who helps him register at a GP practice, but Amir then

struggles to get an appointment to set up a repeat prescription for his asthma inhaler. Amir does not have enough credit on his phone to wait indefinitely on busy phone lines. When he finally gets through to a receptionist, he is advised to call the following day, since all of today's appointments are fully booked and there is no pre-booking. He does not do so. After a few weeks, he turns up in person but is told they do not book patient appointments at the reception desk. Amir's frustration comes across as aggression and he is asked to leave the building. Too embarrassed to return to the practice, Amir abandons his efforts to get an appointment and borrows his friend's inhaler when needed. Amir's friend says there is another practice where you ask for an appointment and the GP calls you back. He helps Amir register online as Amir does not own a computer or smartphone. When Amir phones to book an appointment, he is told to use the online platform; when he says he cannot, a receptionist offers to support him to complete the online request form over the phone. This takes a long time and Amir finds the questions repetitive and difficult to process. He feels embarrassed to have to keep asking the receptionist to repeat the options he needs to select from. Frustrated by the constant questioning, Amir ends the call without an appointment. Later, Amir and his friend have an argument and Amir loses both his accommodation and use of an inhaler. Several weeks later, helpers at the soup kitchen see that he is wheezing. They advise him to go to a general practice where staff are very good at fitting patients in when they turn up. Amir tries this; the receptionist checks with the duty doctor who, sadly, is overwhelmed and unable to see him that day. Amir goes to A&E in the hope that he will be prescribed an inhaler.

(Amir)

This case illustrates some 'gaps' that are well-described in the digital inclusion literature: Amir lacks digital devices and connectivity (a technology gap), and he requires help with online form-filling (a skills gap). A superficial analysis of this case would formulate solutions in terms of devices, training and digital navigator support.

But this analysis overlooks the mediating role of what we abductively reason to be Amir's fractured reflexivity in his escalating series of failed attempts to see a GP. At his first attempt, after expensively waiting his turn in the telephone queue, he is told he is too late and he must repeat the process again the next day but at an earlier hour. The receptionist assumes that, like most other patients, Amir will comply with this instruction. Instead, her advice seems to engender frustration and hopelessness, and results in inaction. Amir does not appear to mull over or learn lessons from what happens. He does not look for ways to shape his care-seeking behaviour to appeal to the practice, nor does he rehearse how he might adapt his approach at the next practice he tries to register with.

At his second access attempt (turning up in person), Amir finds it hard to process the message that he is not allowed to book this way. His reaction, interpreted by the receptionist as aggression, is against the rules (patients are expected to be mild-mannered); understandably, the staff member mobilises the practice's zero-tolerance policy. At Amir's third attempt (by phone), he is offered digital navigator support. Whilst the idea for this role assumes that staff with digital skills can support patients who lack such skills, this solution does not take account of the fact that Amir is unable to cope either cognitively or emotionally with the volume and complexity of the questions and their overly structured format (many items offering 'multiple choice' responses), even when someone reads them out to him. Indeed, the case illustrates the

problems of a system which expects a relatively low-grade staff member to mediate between a somewhat brittle algorithm designed to channel simple problems (e.g. one biomedically classifiable disease) into appropriate care pathways and a patient whose needs are complex, hard to articulate and not readily classifiable. Not only does Amir have limited ability to prioritise and articulate his problems, but the technology through which his request is mediated makes the tasks of prioritisation and articulation more difficult. Impulsively, he terminates the call.

The final practice was perhaps Amir's best hope of getting an appointment. They provide a turn-up-and-wait system designed for people like him, but demand is high and their capacity to deal with challenging patients is limited. We see no evidence that he has reflected on the reasons given for turning him away. Amir, who may, in Archer's classification, be a naturally autonomous reflexive (i.e. he uses internal conversations with himself as his main means of reflection), exhibits fractured reflexivity in these complex and stressful situations. Hence, he is unable to persist against access barriers in situations where more reflexive patients may find a way through the system.

## Case 2: A recovering drug user in a coercive relationship

Tracy, aged 23, turns up in crisis one Friday morning to a drug and alcohol service. She has previously defaulted from a methadone programme and her drugs worker has not seen her for several months. Tracy's relapse coincides with a relationship with a new partner who is also a substance misuser. Similar relapses have happened in the past. Tracy has few other relationships apart from a sister who refuses to see her when she is using drugs. Today, she explains to her drugs worker that on breaking up with her partner she's reconnected with her sister who is helping her to see that her partner was controlling and abusive. She is looking to rebuild her life and asks to be put back on her methadone script. The drugs worker confirms that she will email Tracy's GP to inform him of their discussion and ask for a prescription. The GP, who has a busy clinic, does not open the email until early afternoon but he is unable to reach Tracy by phone. This is because Tracy's ex-partner smashed her phone and she is now using her sister's old phone. Tracy's GP emails the drugs worker saying he will restart methadone once Tracy's contact details are updated. The drugs worker is in meetings and does not reply to the GP until later that day. Tracy waits at the pharmacy all afternoon—but the script does not arrive, so she goes home. By the time the script reaches the pharmacy, she is unable to get there before closing time. Feeling despondent, she meets with a friend (also a drug user) in the pub. By the end of the weekend, Tracy is back with her abusive partner and misusing drugs.

(Tracy)

On the surface, there appears to be a good digital set-up between Tracy's general practice and the specialist drug and alcohol service. GP and drugs worker communicate by email and work to a shared protocol, guided by legal restrictions on controlled drugs and professional norms around prescribing these. The asynchronous nature of email means that communication can occur between two busy people, each picking up messages in down time. But the procedure relies on another—weaker—digital link, namely that Tracy's telephone number must match the

one on the GP's system. People in coercive or abusive relationships may, for a variety of reasons, change their phone number frequently and without notifying their GP practice.

Fractured reflexivity is also evident in this case. Notice, for example, that Tracy did not contact her GP practice on finding that her script had not arrived at the pharmacy. Perhaps this option simply did not occur to her. Perhaps she lacked self-confidence to execute it. Perhaps, like Amir, she had had front-desk altercations with a member of support staff in the past and these had shaped her subsequent willingness to approach them.

Despite needing urgent opioid replacement, Tracy left the pharmacy before it closed even though she lived too far away to return quickly should her script arrive. Several explanations are possible. Perhaps she lacked the cognitive capability to work through the consequences of not getting her methadone today (withdrawal symptoms would likely drive her to seek another source of opioids). Perhaps, whilst she trusted her drugs worker (with whom she had a relationship and who had promised to help get the methadone), she did not understand or trust the wider socio-technical system, which involved asynchronous exchanges of emails, telephone calls and electronic transfer of a prescription. Perhaps she simply became frustrated and acted impulsively.

Practice staff are aware that emails and tasks might not be picked up straight away. Indeed, email communication is *designed* to be asynchronous, and interruptive technologies (such as alerts and the telephone going off) are stressful, intrusive and likely to make day-to-day work less efficient. Staff often use workarounds when faced with urgent issues—for example, sending screen messages to a doctor or placing a prescription request on the duty doctor list so it will be reviewed and actioned promptly. Had Tracy's drugs worker or the pharmacist called the practice, the receptionists may have been able to apply a formal organisational process or a workaround to escalate the opioid replacement request.

There are some hints in this case that Tracy may be what Archer would call a communicative reflexive—that is, she seeks to form relationships and build emotional ties with people. Continuity of care with her drugs worker holds some hope for Tracy's rehabilitation, but the work of caring for her is distributed across multiple professionals in different organisations and subject to logistical and technical glitches. The one group of people who understand the full implications of a delayed methadone script are other drug users; it is small wonder that when she seeks comfort and companionship, she re-enters their circle.

### **Case 3: A woman with complex health needs and a GP keen to 'de-prescribe'**

Maria, aged 43, managing atrial fibrillation (AF) alongside a history of depression, anxiety and attention deficit-hyperactivity disorder (ADHD), encounters frustration within her GP practice, which operates under a holistic 'collective care model' with both conventional and alternative practitioners. Recently, she submitted an online consultation asking about acupuncture for her frozen shoulder. A GP calls back, but Maria repeatedly finds herself fielding questions about her strong sedative medications. Maria cannot understand why the GP cannot just look at her medical record, sparing her from probing questions. The GP's well-intentioned attempt at opportunistic shared decision-making and gradual dose reduction of Maria's medication fails to align with her expectations of the consultation (which she assumed would be about the acupuncture request). Maria interprets the GP's plan as

indecisive, feeding into a narrative that he does not know what he is doing. Maria also feels frustrated that the GP does not acknowledge her ADHD diagnosis (this was made by a private clinician, who told her that proper management of her ADHD could potentially eliminate the need for sedatives). Maria feels unheard; she believes that if her GP persists in not acknowledging or managing her ADHD, she must continue with sedatives. On the telephone, she finds it difficult to gauge if the GP truly understands or cares for her. The GP's efforts to empathise and explain the practice's policy on shared care arrangements with private health care providers prove futile. Maria is zoning in and out of the phone call, finding it hard to concentrate on the GP's words. Her mind is preoccupied with formulating her next response. Recognising the impasse, the GP proposes to conclude the call and gives the go-ahead for acupuncture. Maria decides to switch to another practice which also uses a telephone-first approach but appears to allow repeat prescriptions for sedatives without frequent reviews.

(Maria)

Maria can express a broadly coherent narrative of the problems she is experiencing over the telephone. However, her deliberations are self-contained, and she finds it difficult to consider other perspectives—perhaps indicating that she is an autonomous reflexive exhibiting fractured reflexivity in this social situation. The GP's open-ended questions may have been an attempt to develop a shared understanding to support decision-making about optimising medication, but have inadvertently stirred up feelings of mistrust and eroded Maria's confidence in his clinical ability. The lack of visual cues in this telephone consultation may be contributing to Maria's difficulty in processing what is being said and her sense that the GP does not care. However, Maria's negative experience may also stem from concern that the GP could reduce her prescription medications. Indeed, remote care may be *more* acceptable to patients who seek largely transactional care when decisions meet their expectations. An in-person consultation may be more appropriate for appointments that are anxiety-inducing, such as when there are changes to the treatment plan or if the GP looks to encourage the patient to make health behavioural changes.

This case illustrates how questions posed by a clinician who does not know the patient personally may engender confusion and resentment in some patients. Lack of continuity of care, complex digital information flows and the limited time available for the clinician to familiarise themselves with the patient history all contribute to this.

#### **Case 4: A man with multiple vague symptoms and low health literacy**

Gary, aged 38, has felt generally unwell for a while. The health and safety of the warehouse where he works is of low standard and despite toxic fumes, no one enforces wearing protective masks. Gary struggles to make it into work on time and perform his duties, partly because he feels 'foggy', especially when at work. He resolves to call the practice after his employer gives him a formal warning after a near-miss incident while operating a fork-lift. Due to his shift hours, Gary can only call during scheduled breaks. While waiting on a busy telephone line, he intermittently hears an automated message directing him to 'the practice website to consult with a GP online'. Gary is not great with technology and does not feel he has the time or the

patience to work out an online platform during his lunch break. In addition, the staff area is noisy and distracting for filling out online forms. Gary eventually gets through to a receptionist but struggles to articulate all his symptoms. He explains that he feels rubbish, aches all over and that his shoulder is killing him. The receptionist puts Gary on the list for a telephone call back for shoulder pain. On this call, Gary does not mention that the shoulder pain radiates all down one side of his body. Gary struggles to elaborate on feeling rubbish. He is unable to pinpoint when the problem started despite the GP prompting him with 'is that in the last month or two months?' and replies with 'I dunno ... a while'. The GP then tries to use event markers to get to help identify the length of time he had been experiencing symptoms, but Gary cannot remember what he was doing at Easter. Midway through the consultation, Gary mentions a new symptom 'I think I have bowel issues; like, I can't hold it in'. The GP starts asking questions about faecal incontinence and Gary soon corrects the GP: it is going for a wee that is an issue. The GP then clarifies 'so you are struggling with holding your bladder?'. Gary replies 'I'm not sure, I don't know all these medical words'. The GP organises blood tests and books a face-to-face follow-up appointment for Gary. The consultation has already taken 20 minutes and the mental foginess and safety-critical incident at work have not been mentioned.

(Gary)

Shift work undoubtedly makes it difficult for Gary to make contact with his GP service. This access issue may not be insurmountable if he were able to negotiate with his employer for an extended break to allow time to wait on busy phone-lines, although we cannot be sure how accommodating the supervisor would be to this request. Gary shows limited reflexive deliberation when he is unable to get through to the reception desk. He passively resolves to wait to see if the problem gets worse. Difficulties in accessing his GP service and phone lines redirecting him online services appear to reinforce this passivity in dealing with his multiple health issues.

When Gary gets through to reception, he seems unable to process and prioritise information. He does not appear to have planned what to say either to the receptionist when he books or to the GP when he receives his call back. Gary demonstrates some agency in clarifying the confusion over bowel and bladder issues but seems unable to mull over his symptoms in their entirety and recognise and convey a pattern which could give a clue to a unifying diagnosis. Gary has not used online consulting platforms, but if he were to attempt to, he could end up in an algorithmic maze since his symptoms are vague, multiple and unique rather than clearly fitting a particular disease algorithm. In any case, Gary lacks a private space to be able to concentrate on learning how to use the online system and thinking through his symptoms.

Gary's limited capacity to articulate his problems despite the GP's attempts to help him do so may be partly due to his medical conditions—notably the undisclosed brain fog he is experiencing—and partly due to his low health and system literacy, which in turn could be traced back to structural inequities such as limited educational opportunities.

This case raises several issues, including how digital access routes might deter patients like Gary from seeking treatment, how limited prior information can make it difficult for clinicians to plan ahead of remote consulting and how telephone consultations may be inefficient for patients like Gary because multiple factors (lack of privacy, absence of visual and sensory cues to help clinical assessment, complexity of clinical need) mean that information gleaned will be limited. An in-person consultation will likely be both more efficient and safer.



## DISCUSSION

This article, which takes as its starting point the reflexive imperative—the need for human agents to exercise reflexivity constantly and effectively—in modern society, has presented an analysis of digital inequities through the lens of fractured reflexivity—that is, with a focus on people who are unable to exercise such reflexivity. Returning to our three research questions, we first consider how patients with fractured reflexivity appear to be responding to the introduction of remote and digital modalities in UK general practice. We then consider the efforts made by practices to support such patients. Finally, we reflect on how a theory-driven approach informed by fractured reflexivity might lead to more effective interventions and more equitable outcomes for such patients.

### The challenge of fractured reflexivity in healthcare access

Our data show how some patients with complex needs attempting to access and receive general practice care act against their own best interests and in a way that makes it hard for staff to accommodate their needs. In particular, we have identified a number of self-defeating tendencies. Some (though not all) patients with complex health and social needs may lack the ability to make telephone calls (either at all or in certain circumstances), use online platforms or information sources, process or follow access instructions (e.g. to call back at a different time or go online), provide a sufficiently clear account of their symptoms to enable safe triage, plan (e.g. make lists, prioritise) for consultations, narrativise their complaint in the clinical consultation, deal with multiple questions (which they may perceive as unrelated to the purpose of the encounter), engage with a clinician's attempts at shared decision-making, wait while information is shared and another party responds, cope with what they perceive as rejection or maintain an outward appearance of calmness and restraint when angry or upset.

As our cases reflect, fractured reflexivity in this context manifests in multiple ways. For those with impulsivity and an inability to self-censor, frustration with barriers to primary care appointments may manifest as angry outbursts. For others, difficulties in accessing services reinforces passivity and avoidance to address the presenting problem. What unites these different fractured presentations is an 'absence of any purposeful response' to the problem encountered (Archer 2012, p. 277).

Our study has shown that remote and digital technologies may compound the problems of fractured reflexivity, for several reasons. First, digitalisation of access routes in health and social care makes these sectors vastly more complex, uncertain and hard to navigate. Second, when a health-care encounter is technology-mediated, the patient must not only assess what the other party is thinking and saying (with few or no visual or sensory cues) but also divine the meaning of words and actions *produced by technologies*. Archer's theory of reflexivity considers both intra-subjective deliberation (reflecting on one's own position in a novel situation) and inter-personal deliberation (reflexively interacting with others in such situations) (Archer, 2012). As noted in the Introduction, the latter requires a theory of mind—that is, a means of understanding what the other human agent is saying and how they are acting (and why) (Frith & Frith, 2012). Extending this line of reasoning, reflexivity in a technology-mediated encounter *also* requires the patient to have a 'theory of technology'—that is, a means of understanding what technological actors are 'saying' or 'doing' and why. Finally, as Woolgar showed,

technologies ‘configure the user’—that is, they contain inbuilt assumptions about who will use them and how (Woolgar, 1990). The telephone, for example, is designed around an assumed user who can dial, wait for a response, converse without visual cues and convey their needs coherently in this medium. The online consultation request platform is designed for a patient who can prioritise from vague and multiple symptoms, answer a long list of questions that may appear disconnected and assess the urgency and progression of their condition. For all these reasons, a higher capacity for reflexivity is required for accessing and receiving remote and digital health care than for in-person encounters.

Our findings, which are drawn from primary health care but are likely to have implications across the health and social care sectors, suggest that fractured reflexivity may explain why digital inequities are so strongly patterned by markers of disadvantage and why one negative experience may shape long-term maladaptive health behaviours (notably, disengagement from general practice and a drift towards using emergency services for crisis encounters). It is also noteworthy that patients with fractured reflexivity generally lack the capacity to come together collectively to self-advocate (as has occurred among other groups who seek special adjustments in health care, such as clinically vulnerable patients campaigning for universal masking in health-care settings). In Archer’s (2008) own terminology, fractured reflexives typically remain stuck in ‘primary agency’ rather than articulating the kind of ‘corporate agency’ that would enable them to collectively demand the kind of modalities that would better meet their needs.

## Mitigating fractured reflexivity: Misplaced efforts

Participating practices in this study took various approaches to mitigating inequities. These were oriented to disadvantaged people generally, not specifically tailored to those with fractured reflexivity. One intervention that was almost universal in UK general practice by the end of our data collection (December 2023) was the ‘digital navigator’—an administrative staff member (often a receptionist with an extended role) who offered a human interface for those unfamiliar with technological platforms (Rodriguez et al., 2023; Williamson et al., 2024). Such staff were often able to mitigate other kinds of disadvantage—for example, assisting the patient who is visually impaired, elderly or low-literacy.

But the example of Amir above illustrates how solutions based on human intermediation may exacerbate the problem they are intended to solve because they make significant cognitive, emotional and social demands on the patient with fractured reflexivity—indeed, these solutions *require* the patient to exercise reflexivity. Ironically, the use of a human intermediary as a conduit to the final common pathway of ‘digital’ access may serve to obscure the obvious solution—namely, to provide a facility for patients to walk up and book an appointment *without* the need to use any technologies or engage in complex negotiations about their symptoms at the front desk.

Another approach to mitigation adopted by some of our participating practices was standardisation of triage protocols, perhaps using digital algorithms. However, our findings showed how these digital systems could be overly brittle, since they were generally designed around patients who were both less clinically and socially complicated *and* who could exercise reflexivity.

## Towards support for the fractured reflexive

If we place the problem of fractured reflexivity central to the challenge of mitigating digital inequities, some potential (albeit partial) solutions emerge. One such solution is procuring and co-designing digital systems which are intuitive and navigable for patients, so that at least some such patients will be able to use them autonomously despite their limited ability to exercise reflexivity. Some researchers have used co-design approaches to produce services that better meet the needs of people with fractured reflexivity (Bast et al., 2021).

Other partial solutions suggested by our findings include ensuring relational continuity with particular clinicians or support workers (Ladds et al., 2023). Providers can potentially code patient records to flag those that need more continuity or in-person consultations by default. However, if the identification of these patients is based on crude categorisation (i.e. diagnostic labelling), it may miss many patients with fractured reflexivity who struggle to self-advocate remotely, and could lead to stigmatisation. The NHS Constitution (Department of Health and Social Care, 2023, p. 312) places a legal duty on health-care providers not to unlawfully discriminate on the basis of specific protected characteristics such as race, disability or marital status. But patients with, for example, multiple co-morbidities, substance misuse, insecure housing, homelessness and poor mental health do not have the same legal protections and their needs may be variously unknown, underestimated, misunderstood or misclassified. As Scambler observes (2013, p. 312), '[v]ulnerable fractured reflexives ... only become visible when sought. They live their lives below the radar'.

Providers serving disadvantaged communities with a high proportion of patients with complex needs (some but not all 'Deep End' settings) may consider deprioritising 'modern' approaches based on digital solutions in favour of a more traditional service offering turn-up-and-wait options and continuity of care with a usual clinician (or a small buddy group within a larger practice). In such settings, a proactive approach to multiply-disadvantaged patients could include a high degree of staff discretion to be alert and responsive to individual needs and to work outside the technology's intended scripts to make concessions. But such discretion is costly in terms of staff time and would need to be resourced. Training and support for staff could embrace the judicious interpretation of 'zero tolerance' policies towards patients who vent their frustrations. More radically, some scholars who draw on Archer's work propose that a critical transformation of society (e.g. to reduce structural disadvantage) may be the only effective way to address the problem of fractured reflexivity (Collins et al., 2015).

## CONCLUSION

The literature on identifying and addressing access challenges in remote and digital health care has often used material metaphors such as 'barriers', 'gaps', and 'digital divide'. These conceptualisations, while useful up to a point, focus primarily on technical or technocratic solutions. The composite case studies presented here, theorised using Archer's notion of fractured reflexivity, show that a more comprehensive understanding of the issue is required, one that delves more deeply into the potential disorientation and inability to act that underlie inequities. This article has shed light on the pivotal intersection of fractured reflexivity with the structural and practical challenges faced by multiply-disadvantaged patients in a digital world. To address these challenges, we must transcend simplistic categorisations and develop nuanced, context-

sensitive interventions that take account of both the external structural realities people face *and* the internal realities that make up their human agency.

Further ethnographic research with groups at multiple disadvantage (and those who provide services and advocacy for them) is recommended to replicate and nuance the findings presented here. In particular, more research is needed to understand the tasks and skills needed to support navigation of contemporary health services and to investigate whether it is possible to develop or repair reflexivity in patients who struggle to self-report and self-advocate.

### AUTHOR CONTRIBUTIONS

**Sarah Rybczynska-Bunt:** Conceptualization (lead); data curation (lead); formal analysis (equal); investigation (lead); methodology (equal); writing – original draft (lead); writing – review & editing (equal). **Richard Byng:** Formal analysis (equal); funding acquisition (equal); writing – review & editing (equal). **Sophie Spitters:** Formal analysis (equal); investigation (equal); writing – review & editing (equal). **Sara E. Shaw:** Formal analysis (equal); funding acquisition (equal); investigation (equal); methodology (equal); writing – review & editing (equal). **Ben Jameson:** Investigation (equal); resources (equal); writing – review & editing (equal). **Trisha Greenhalgh:** Conceptualization (equal); formal analysis (equal); funding acquisition (equal); investigation (equal); methodology (equal); writing – original draft (equal); writing – review & editing (equal).

### ACKNOWLEDGEMENTS

We thank the participating organisations for cooperating with this study. We thank the research participants (patients, practice staff, policymakers, other informants) who gave generously of their time, and members of the study advisory group. Funding was from NIHR HS&DR grant no 132807 (Remote by Default 2 study) and NIHR School for Primary Care Research (ModCons study), grant no 594. The funders of this study had no role in study design, data collection, data analysis or data interpretation. The lead author had full access to all the data in the study and had final responsibility for the decision to submit for publication.

### DATA AVAILABILITY STATEMENT

Selected qualitative data will be made available to research teams with appropriate ethical approval on reasonable request to the corresponding author.

### ETHICS STATEMENT

Ethical approval was granted by the East Midlands—Leicester South Research Ethics Committee and UK Health Research Authority (May 2020, 20/EM0128 and September 2021, 21/EM/0170 and subsequent amendments). The Remote by Default 2 study was co-designed by patients and lay people; it includes a diverse patient panel. Oversight was provided by an independent external advisory group with a lay chair and patient representation.

### TRIAL REGISTRATION

Not applicable.

### PATIENT CONSENT STATEMENT

Patient participants in clinics were approached by the clinicians (without the researcher present), and gave verbal informed consent for a researcher to observe the consultation. If they consented, the researcher was then invited to sit in. A written record was made in field notes of

this verbal consent. It was impractical to seek consent from patients whose cases were discussed (usually with very brief clinical details) in reflective interviews. The four composite cases reported in the article do not bear any direct relationship to any real person, though they were informed by the real cases. All fictionalised cases were checked by our patient advisory group, which included people with experience of complex health and social needs, to check that they were plausible and captured key issues of importance to them.

## PERMISSION TO REPRODUCE MATERIAL FROM OTHER SOURCES

Not applicable.

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**How to cite this article:** Rybczynska-Bunt, S., Byng, R., Spitters, S., Shaw, S. E., Jameson, B., & Greenhalgh, T. (2024). The reflexive imperative in the digital age: Using Archer’s ‘fractured reflexivity’ to theorise widening inequities in UK general practice. *Sociology of Health & Illness*, 1–20. <https://doi.org/10.1111/1467-9566.13811>