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## RESEARCH ARTICLE

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# The impact of remote consultations on the health and wellbeing of first contact physiotherapists in primary care: A mixed methods study

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#### **Abstract**

**Background:** First Contact Physiotherapists (FCPs) were introduced to reduce demands on GPs by providing improving access to expert musculoskeletal care. FCPs experience similar workplace stressors to GPs and there is an emerging concern that remote consultations are causing further impacts to their wellbeing.

Aim: To explore the impact of remote consultations on FCPs.

Methods: A mixed methods sequential explanatory study with FCPs was conducted. An online survey measured the usage and impact of remote consultations. Semi-structured interviews explored the lived experiences of using remote consultations. Results: The online survey was completed by 109 FCPs. A key benefit of remote consultations was patient convenience; perceived challenges included IT issues, poor efficacy, FCP anxiety, isolation, and increased workload. FCPs viewed remote consultations as a 'challenge' rather than a 'threat'. Nearly two thirds of the FCPs had not received relevant training, yet over half were interested. Follow-up interviews with 16 FCPs revealed 4 themes: (1) Remote consultations provide logistical benefits to the patient; (2) Compromised efficacy is the key challenge of remote consultations; (3) Challenges for FCPs working in areas of high deprivation; and (4) Remote consultations impact the health, wellbeing and work satisfaction of FCPs.

Conclusions: Remote consultations offer a convenient alternative for patients, but may add to FCP stress particularly in areas of high socioeconomic deprivation. Further research is required to understand how remote consultations can be enhanced when communication barriers and lower levels of digital literacy exist. Continued monitoring of job satisfaction and resilience levels is important to ensure FCPs remain in their role.

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#### KEYWORDS

digital consultations, first contact physiotherapy, mental health, primary care, stress, telehealth, wellbeing

## 1 | INTRODUCTION

Staff health and well-being data from 2021 suggest 47% of NHS staff reported feeling unwell as a result of work-related stress (NHS England, 2021), an increase from the previous year (44%) and a steady increase since 2016 (36.8%; NHS England, 2020, 2016). General practice in particular is currently facing serious challenges, and the mental health and wellbeing of GPs has become a growing concern (Kinman & Teoh, 2018); more than four in 10 GPs have quit the NHS citing burnout as a factor (General Medical Council, 2020). A key stressor for GPs has been their unsustainable workload due to a high volume of patients and associated administration (e.g., Kavalieratos et al., 2017; Matheson et al., 2016). This stressor has been further impacted by the transient pressures resulting from COVID-19, with a reported 40% increase in use of mental health support services by NHS health professionals during the pandemic (British Medical Association, 2020).

First contact physiotherapy has been proposed as one way to help reduce the workload of GPs whilst improving access to expert musculoskeletal care (Goodwin et al., 2021) and has been widely implemented across the UK. First Contact Physiotherapists (FCPs) are expert practitioners who diagnose and treat patients on a first point of access basis in primary care; this provides timely specialist advice and reduces demands on GP time.

Although the strain and stress for GPs is widely acknowledged (e.g., Imo, 2017), there remains limited understanding of how the wellbeing of a FCP is functioning in this relatively new role in primary care. Initial data suggest that FCPs are experiencing similar stressors to GPs (Walsh et al., in progress) and are also displaying signs of burnout (Greenhalgh et al., 2020; Welford, 2018). They also experience unique stressors related to their role, such as isolation from other practice staff (Walsh et al., in progress; Zambo Anderson et al., 2015); limited understanding of their role from patients and other practice staff, and lack of mentorship and adequate supervision (Greenhalgh et al., 2020; Walsh et al., in progress).

A further potential stressor for FCPs has been the introduction of new remote or digital ways of working in primary care, including telephone and video consultations, and asynchronous text-based practitioner-patient communication via email or an online portal (e-consultation). These ways of working, initially imposed by the COVID-19 pandemic, will continue as the NHS Long Term Plan aims for patients to access 'digital first' primary care by 2023–2024 (NHS England, 2022). Few studies have investigated the impact of these new methods for FCPs, whose required job tasks (e.g., physically checking movement) may be compromised by the use of remote consultations. Australian physiotherapists have indicated just one in five felt adequately trained to provide remote consultations to

people with musculoskeletal disorders (Malliaras et al., 2021). This may be of particular concern in areas of high deprivation where consultations have more complexity (e.g., language and health literacy issues (Salisbury et al., 2020)).

## 2 | AIMS

The aim of this study was to explore the impact of remote consultations on FCPs.

#### 3 | METHODS

## 3.1 | Study design

A mixed methods sequential explanatory study was undertaken with two distinct stages: (1) a nationwide quantitative e-survey with FCPs and (2) qualitative interviews with FCPs. Ethical approval to proceed with the study was given by the University Faculty Research Ethics Committee (REC) on 15 December 2021 (Reference: HAS.19. 06.204).

## 3.1.1 | Procedure

A draft survey was developed and included open and closed questions regarding remote consultation use and its impact. This was piloted on an independent FCP who was asked to check the survey for clarity of meaning, relevance, and answerability. The survey was edited based on their feedback and subsequently formatted into an e-survey using Qualtrics, an online survey platform. A second pilot in Qualtrics was conducted with a Research Fellow to check the logic, routing, and timing of the survey. Minor changes were made to wording as a result of both pilots.

The e-survey targeted UK based FCPs and was distributed electronically via FCP networks, the Chartered Society of Physiotherapy FCP Special Interest Group, Twitter feeds and FCP training hubs. Personal contacts in the devolved nations were made aware of the survey and asked to highlight it within their local networks. Instructions at the beginning of the survey included a link to the participant information sheets (PIS) which included information on GDPR, right to withdraw and confidentiality. Participants were explicitly informed that responding to the survey constituted consent. Respondents were asked to provide a contact email if they wished to be interviewed in phase 2 of the study. The survey was open from 27 June 2022–1 August 2022.

Those that did respond to the qualitative interview invitation in the survey were contacted via email and provided with a PIS and consent form in advance of arranging. An interview discussion guide was developed and piloted within the team which included an academic physiotherapist. Interviews were conducted online between 7 July 2022–9 September 2022, digitally recorded in their entirety, and transcribed verbatim. The transcripts were double-checked for accuracy against the audio recording and anonymised before being imported into NVivo 1.6.1.

## 3.1.2 | Survey content

#### Work demographic measures

Work location (i.e., England, Scotland, Wales, and Northern Ireland), deprivation level of work location (high, medium, low, or mixed level of deprivation), Agenda for Change banding, length of FCP experience (in years), work capacity (number of sessions), employment model (e.g., by a PCN or a provider) and number of practices worked at were collected.

#### Remote consultation usage

Types of remote consultation used (i.e., telephone, video, and text) and estimated amount used for each type.

## Challenges and benefits of remote consultations

Participants rated their agreement with 19 attitude statements that related to either a challenge (e.g., "Digital ways of working have made me feel quite isolated from the other practice staff") or a benefit (e.g., Digital ways of working have been useful for me, at least with patients with acute presentations") of remote consultations on a five-point rating scale (1 = Strongly disagree, 5 = Strongly agree). The attitude statements were created from analysing transcripts from the FRONTIER study (Jagosh et al., 2022) and work investigating the impact of remote consultations on GPs (e.g., Murphy et al., 2021; Turner et al., 2022). Open-ended questions about both benefits and challenges of remote consultations were also included.

#### Stress appraisal

Two self-report items from the cognitive appraisal ratio were adapted to assess evaluations of task demands and personal coping resources towards remote consultations (Tomaka et al., 2018). Specifically, demand evaluations were assessed by the item 'In general, how demanding do you find digital consultations?', while resource evaluations were assessed by the item 'In general, how well do you cope with the demands of digital consultations?'. Both items were rated on a 6-point Likert scale anchored between 1 (not at all) and 6 (extremely). A stress appraisal score was calculated by subtracting demands from resources (range: –5 to 5), with zero and a positive score suggested to be reflective of a challenge state (i.e., coping resources match or exceed task demands), and a negative score representative of a threat state (i.e., task demands exceed coping resources). This stress appraisal scale has previously demonstrated

good factorial validity, reliability, and acceptable-to-good construct validity ( $\alpha = 0.77$  to 0.88; Tomaka et al., 2018).

## Workplace training

Training received and interest in accessing training related to remote consultations were measured. If participants expressed an interest in training, they were asked an open-ended question to describe the type of training of interest.

## 3.1.3 | Qualitative interview discussion guide

The semi-structured interviews incorporated questions that explored FCP experiences of using remote consultations including: implementation and usage; benefits and demands; impacts (on performance, health and well-being); coping responses; and training (past, current and level of interest). Figure 1 displays the interview discussion guide.

## 3.2 | Data analysis

Quantitative data were analysed descriptively in SPSS. The qualitative data were analysed using Braun and Clarke's (2006, 2021) sixphase reflexive thematic analysis. The first author read and re-read all of the data, made initial notes and generated codes in relation to the topic of this study by attaching codes as labels summarising interesting aspects of the data. The second author separately generated codes for three transcripts and discussed these codes with the first author to triangulate the data from multiple perspectives. Themes were generated by summarising patterns across the dataset, which included a deductive approach, utilising findings from the quantitative data to help name some themes and subthemes (e.g., perceived poor efficacy). Authors then worked together to review the themes, which were written up with accompanying illustrative participant quotes. Pseudonyms are used in this report to maintain confidentiality. Our approach to rigour and quality involved careful consideration of Tracy's (2010) key markers of quality.

## 4 | RESULTS

## 4.1 | Survey

# 4.1.1 | Participants

The survey was completed by 109 FCPs and took on average 7.33 min (SD = 3.96) to complete. Table 1 displays their work characteristics.

## 4.1.2 | Remote consultation usage

Of the 109 respondents who had used remote consultations in the last 2 years, most (62.4%, n = 68) were using them with less than 25% of

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Context of the interviews: Responses to the e-survey (for participants who completed it) will be read prior to the interview for context. While this document provides a guide to the questions asked in the interviews, it will likely differ depend on the flow of conversation in each interview.

#### 1. Background

Tell me a little about yourself and your work background. How long have you been an FCP? Are you full time or part time? What is your current position (Band 7, 8a or 8b)? Type of employment (by the surgery, by the PCN or by the Trust?) How long have you been with the current surgery? Are you the only physiotherapist at this surgery? Do you work in one surgery or multiple locations? Describe the level of deprivation where the majority of your patients live. Peer networks outside of the surgery(ies)? What is your previous work experience in physiotherapy?

#### 2. Explore use of remote/digital consultations

REMINDER OF DEFINITION: Remote or digital consultations involve remote primary care consultations, conducted by telephone, video, or through asynchronous text-based practitioner–patient communication via email or an online portal (e-consultation).

- How many digital consultations are you doing every week? How many of these are on the
  phone, how many are online how many are using text-based practitioner-patient
  communication (e.g., email/SMS)? How do these numbers compare to face to face
  consultations? Have these numbers changed since COVID-19?
- Please describe how a typical <u>phone consultation</u> would work in your practice. How do
  you find these types of consultations? (Explore fully different feelings here if required
  prompt: Do you enjoy them? Are they efficient?).
  - Do they have difficulties (if required prompt: How do they work with patients with language barriers and/or health literacy issues?). What has made coping with these challenges easier?
  - What are the benefits of using phone consultations?
  - How do they compare to F2F consultations?
- Please describe how a typical online consultation would work in your practice. How do
  you find these types of consultations? (Explore fully different feelings here if required
  prompt: Do you enjoy them? Are they efficient?).
  - Do they have difficulties (if required prompt: How do they work with patients with language barriers and/or health literacy issues). What has made coping with these challenges easier?
  - What are the benefits of using online consultations?
  - How do they compare to F2F consultations? How do they compare to phone consultations?
- (IF USING) Please describe how a typical <u>text-based practitioner-patient communication</u> would work in your practice. How do you find these types of consultations? (Explore fully different feelings here - if required prompt: Do you enjoy them? Are they efficient?).
  - Do they have difficulties (if required prompt: How do they work with patients with language barriers and/or health literacy issues). What has made coping with these challenges easier?
- What are the benefits of using these types of communications?
- How do they compare to F2F consultations/phone consultations/online consultations?
- Which is your preferred way of working with patients and why?

#### . Impact of remote consultations

Explore impacts of remote consultations for FCP and impact these have on them, their job, and their general lives (e.g., performance, productivity, workplace errors, health (physical and psychological), well-being, burnout, days off sick, etc)?

- What, if any, is the impact of digital consultations on you personally? And on your role, your job? If required, prompt: Do they cause any anxiety? Do they cause you any stress? Have they caused isolation (From other staff, GPs, from patients)? Do you suffer from mental strain/fatigue? Do you become frustrated? Are there any physical impacts to you as a result of using digital consultations (e.g., sore back, stiff neck, headaches, etc.)? Do you struggle with the IT involved? Do they add or lessen your workload?
- What do you do to cope with these impacts? If required, prompt different types of coping
  mechanisms (e.g., work strategy processes, education, lifestyle; problem, emotion,
  avoidance, approach coping etc). Are these strategies successful?

#### 4. Training and health and wellbeing support

- Have you received any training with regards to digital consultations? Please describe it, was it useful, would you attend further training?
- Would you be interested in accessing training in digital consultations? What would that look like? How often would you need training?
- Are you aware of 'Trailblazer' for GPs? Is this something you would be interested in accessing?
- Are you aware of any support for you (please describe if so)? Have you accessed any
  support (if so, was it successful or not?). Why is (or is not) successful? Is it widely used?
  How easy is it to access? How can it be improved? Are there waiting lists for support? Are
  there any barriers to help seeking within the FCP profession?

## 5. Is there anything else you would like to add?

Thank you and end. Remind all participants of support resources in participant information sheet.

## FIGURE 1 Interview discussion guide.

their patient consultations, with the majority of respondents (98.2%, n = 107) using telephone consultations. Table 2 displays respondents' overall digital usage and type of remote consultation and Table 3 displays respondents' usage by specific type (telephone, video, or text).

**TABLE 1** Survey participant (n = 109) work characteristics.

Characteristic	Count (%
Work location	
England	51 (46.39
Northern Ireland	9 (8.3%)
Scotland	43 (39.49
Wales	6 (5.5%)
Description of deprivation area	
High deprivation	30 (27.59
Middle deprivation	22 (20.29
Low deprivation	30 (27.59
Mixed deprivation	27 (24.89
Band level	
7	75 (65.19
8a	36 (33.09
8b	2 (1.8%
Length of time as an FCP	
Less than 6 months	3 (2.8%
6 months-1 year	11 (10.19
1-2 years	36 (33.09
2-5 years	45 (41.39
5-10 years	14 (12.89
Employment model	
Single GP practice	1 (0.9%
PCN	15 (13.89
NHS community service provider	48 (44.09
NHS acute service provider	32 (29.49
Other	11 (10.19
Don't know	2 (1.8%
Number of practices employed	
1	22 (20.29
2	43 (39.49
3	22 (20.29
4 or more	22 (20.29

#### 4.1.3 | Benefits of remote consultations

Most respondents agreed with the key benefits of the ease and flexibility of access of remote consultations for patients who find it difficult (64.2%, n=70), or prefer not (67.0%, n=73) to come into the practice. Table 4 displays respondents' level of agreement with all attitude statements concerning the possible benefits of remote consultations.

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# 4.1.4 | Challenges of remote consultations

Seven challenge themes in relation to remote consultations were measured: isolation, increased workload, anxiety, frustrations and job satisfaction, IT issues, mental strain, and physical impacts. Over half

TABLE 2 Remote consultation usage.

	Count (%)
Overall remote usage	
100%	2 (1.8%)
More than 50%	19 (17.4%)
25%-50%	20 (18.3%)
Less than 25%	68 (62.4%)
Remote consultation type previously used	
Telephone	107 (98.2%)
Video	60 (55.5%)
Text-based	31 (28.4%)

TABLE 3 Remote consultation usage by remote consultation type.

	Count (%)				
Usage	Telephone ( $n = 107$ )	Video (n = 60)	Text (n = 31)		
100%	21 (19.6%)	0	0		
More than 50%	36 (33.6%)	0	0		
25%-50%	14 (13.1)%	6 (1.7%)	1 (3.2%)		
Less than 25%	35 (32.7%)	53 (88.3%)	29 (93.5%)		
Don't know	1 (0.9%)	1 (1.6%)	1 (3.2%)		

of respondents agreed with most of the associated challenges of remote consultations, with 81% agreeing (n = 89) that stress was caused by technology not working correctly. Table 5 displays respondents' level of agreement with all attitude statements concerning potential challenges of remote consultations.

## Stress appraisal of digital consultations

Although respondents rated the demands of digital consultations to be fairly high (M = 3.45, SD = 1.21), they rated their coping resources to be higher (M = 4.33, SD = 0.82), therefore revealing a positive stress appraisal score (M = 0.88, SD = 1.63). This positive score suggests FCPs view digital consultations as a challenge-type stress (i.e., their coping resources exceed the required demands) rather than a threat-type stress (i.e., the task demands exceeded their coping resources).

## 4.1.6 | Training

Nearly two thirds (64.2%, n = 70) had not received training in remote consultations in the last 2 years and over half (55%, n = 60) were interested in receiving training.

#### 4.2 **Qualitative findings**

## 4.2.1 | Participants

Of the 109 survey respondents, 39 (35.8%) FCPs provided their details to be contacted for an interview. Sixteen FCPs (see Table 6) were interviewed, of which 15 were recruited from the survey and one from the research team's direct contacts. The sample size was

TABLE 4 Level of agreement with benefits of remote consultations.

	Count (%)				
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Been rewarding as they allow me to provide ease of access to patients who previously found it difficult to come into the practice	4 (3.7%)	10 (9.2%)	25 (22.9%)	65 (59.6%)	5 (4.6%)
Been satisfying as they enable me to provide a more flexible service as some people prefer not to come into the practice	3 (2.8%)	9 (8.3%)	24 (22.0%)	61 (56.0%)	12 (11.0%)
Been valuable to me as they have allowed me to see certain patients quicker as they would have to wait longer to see me face-to-face	, ,	19 (17.4%)	22 (20.2%)	44 (40.4%)	11 (10.1%)
Been useful for me, at least with patients with acute presentations	8 (7.3%)	20 (18.3%)	21 (19.3%)	51 (46.8%)	9 (8.3%)
Been gratifying as they are very popular with patients as many of them are pleased with the digital consultation	11 (10.1%)	30 (27.5%)	41 (37.6%)	24 (22.0%)	3 (2.8%)
Allowed me to be more productive than ever at work	20 (18.3%)	28 (25.7%)	36 (33.0%)	22 (20.2%)	3 (2.8%)

TABLE 5 Level of agreement with challenges of remote consultations.						
	Mean (SD)	Strongly disagree n (%)	Some what disagree n (%)	Neither agree nor disagree n (%)	Some what agree n (%)	Strongly agree n (%)
Isolation						
Made me feel quite isolated from the other practice staff	3.31 (1.18)	8 (7.3%)	21 (19.3%)	27 (24.8%)	35 (32.1%)	18 (16.5%)
Caused me to be more disconnected from my patients	3.39 (1.05)	4 (3.7%)	22 (20.2%)	23 (21.1%)	47 (43.1%)	13 (11.9%)
Increased workload						
Added to my workload as I have to spend additional time sending out resources to the patient	3.00 (1.19)	12 (11.0%)	31 (28.4%)	21 (19.3%)	35 (32.1%)	10 (9.2%)
Added to my workload because appointments take longer because I have to ask more questions or patients take longer to explain the problem	3.36 (1.14)	5 (4.6%)	24 (22.0%)	25 (22.9%)	37 (33.9%)	18 (16.5%)
Anxiety						
Caused me to feel anxiety over missing an important detail about the patient	3.41 (1.21)	8 (7.3%)	20 (18.3%)	21 (19.3%)	39 (35.8%)	21 (19.3%)
Caused me concern over patient privacy	2.33 (0.92)	20 (18.3%)	46 (42.2%)	31 (28.4%)	11 (10.1%)	1 (0.9%)
Frustrations and job satisfaction						
Been stressful because patients are frustrated with remote working and want to be seen face-to-face	3.68 (1,09)	3 (2.8%)	17 (15.6%)	18 (16.5%)	45 (41.3%)	26 (23.9%)
Have removed the enjoyable face-to-face contact that I expected to have with patients as part of my role	3.74 (1.06)	2 (1.8%)	13 (11.9%)	27 (24.8%)	36 (33.0%)	31 (28.4%)
Been frustrating as they are not as effective as face-to-face	3.72 (1.05)	3 (2.8%)	11 (10.1%)	28 (25.7%)	39 (35.8%)	28 (25.7%)
IT issues						
Been stressful when the technology does not work	4.17 (0.94)	2 (1.8%)	5 (4.6)	13 (11.9%)	41 (37.6%)	48 (44.0%)
Caused extra time pressures contacting patients (e.g., availability or IT issues)	3.37 (1.08)	3 (2.8%)	29 (26.6%)	14 (12.8%)	51 (46.8%)	12 (11.0%)
Mental strain						
Increased my mental fatigue as you are either on the phone or on a screen	3.52 (1.18)	7 (6.4%)	16 (14.7%)	24 (22.0%)	37 (33.9%)	25 (22.9%)
Physical impacts						
Have caused me to have physical aches and pains from being so desk bound	3.42 (1.25)	11 (10.1%)	18 (16.5%)	14 (12.8%)	46 (42.2%)	20 (18.3%)

monitored during data collection and thematic analysis and was considered sufficient as evidenced by no new codes being identified and no further development of codes occurring (Hennink et al., 2017). Interviews lasted for an average of 47.37 min (SD = 9.29).

# 4.2.2 | Themes

Four themes were identified in the analysis.

Theme 1: Remote consultations provide logistical benefits to the patient

Participants perceived remote consultations as logistically beneficial for patients. They were useful for patients requiring flexibility due to employment, mobility issues, COVID-19, holiday, or overall preference:

To me it's about them, not about me, it's what suits them, but lots of patients are really happy with a phone consultation because they don't have to take time off work.

Characteristic	Count (%)
Work location	
England	8 (50.0%)
Northern Ireland	5 (31.3%)
Scotland	1 (6.3%)
Wales	2 (12.5%)
Description of deprivation area	
High deprivation	6 (27.5%)
Middle deprivation	3 (18.8%)
Low deprivation	3 (18.8%)
Mixed deprivation	4 (25.0%)
Amount of consultations that are remote	
Less than 25%	9 (56.3%)
25%-50%	4 (25.0%)
More than 50%	3 (18.8%)
Remote Consultation usage	
Telephone, video and text	5 (31.5%)
Telephone only	6 (37.5%)
Telephone and video	1 (6.3%)
Telephone and text	1 (6.3%)
Missing data	1 (6.3%)

They can fit it in, it makes life a lot easier for them in lots of ways.

(Grace)

(Joanne)

Remote consultations were considered useful for 'simple' presentations (e.g.,' OA knee') and for certain stages of the pathway such as follow up, providing results, sending information through email and, in certain circumstances, screening. However, there was no consistent agreement about where remote consultations were best utilised in the patient pathway.

Fewer references were made about the benefit of remote consultations for the FCP. However, some participants agreed that they can offer efficiency in some circumstances:

> If I run over, it is not the end of the world for the telephone. I just feel there's not as much pressure on you with a telephone call, because you don't have somebody sitting there in the waiting room for their appointment time. It is more efficient, generally.

Other participants appreciated the increased control of the 'flow' of the conversation and questioning in remote consultations, allowing professional development:

There is some ease in being remote in that you have time....If you have a problem you don't know the answer to, you can say to somebody I need to go and ring and speak to somebody....It gives me time to go and do those things and come back. So, it's quite flexible to my needs as a developing FCP.

(Harriet)

Theme 2: Compromised efficacy is the key challenge of remote consultations

Perceived poor efficacy was a key challenge of remote consultations for the following reasons: problematic for certain patients; inability to perform tests; fear of missing red flags; and difficulty building rapport. Remote consultations were considered unsuitable for older adults. people with hearing difficulties, patients with 'complex' presentations, and patients who may be less open on the telephone. Many participants reported that face-to-face appointments were their preference in such circumstances, and avoided appointment duplication.

Participants discussed the inability to perform certain diagnostic tests in remote consultations to aid their decision-making and screening. Consequently, this left gaps in clinical reasoning that could reduce effectiveness and, in some cases, could lead to safety issues:

> You can't test for ligament integrity, or you can't fully assess muscle power remotely, it's just not possible, it was an educated stab in the dark sometimes and that didn't feel comfortable.

> > (Lucy)

Face-to-face consultations were considered important in providing an opportunity for the clinician to fully assess clinical signs with physiotherapy being viewed as a 'hands-on' profession.

Nearly all participants cited concerns about missing a diagnosis or 'red flag' using remote consultations due to constraints imposed by telephone and video communications. This was particularly concerning where patients were not considered effective 'historians'. This FCP was uncomfortable with relying solely on patients' descriptions:

> I suppose there's always that wondering if you've missed something sinister and important, when you are taking your patient's word for it, rather than being able to see anything.

> > (Joanne)

Whether on the phone or video, many experienced difficulty building rapport with the patient due to limited non-verbal cues. They argued that greeting patients in a waiting room to build rapport does not have a virtual equivalent. Once rapport was established, being in the same physical space also allowed clinicians to provide 'therapeutic touch' to demonstrate empathy or offer support:

They like you to just have a look at things, this therapeutic effect of actually just touching the site of their pain...A patient comes in...you put your finger on the exact site of the pain...and they think you're wonderful because you've got the site of the pain.

(Damian)

In addition to poor efficacy, inefficiency was also a frequent challenge of remote consultations. Duplicating appointments was discussed, with many FCPs choosing to have a face-to-face appointment following a remote-first appointment due to diagnostic uncertainty. This FCP described returning to a largely face-toface service after the COVID-19 restrictions after experiencing this issue of duplication:

> Each patient was having two consultations. We were doing the telephone call, and then thinking oh we'll just look at this face-to-face.

> > (Diane)

Theme 3: Challenges for FCPs working in areas of high deprivation Participants described additional challenges when working in areas of high socioeconomic deprivation including lack of access to technology, low digital literacy and communication barriers. Many patients did not have an appropriate device for remote consultations or had intermittent access to devices. In addition, these patients experienced data poverty, where they owned a device but were unable to afford the costs of mobile or broadband data required for a remote consultation. Many also did not have an email address, limiting opportunities to send follow-up information. Ultimately, lack of access to a device and data makes these patients very difficult to access remotely:

> There are definitely some of your more deprived patients as well that maybe don't have wi-fi at home, they're maybe just picking it up on their mobile data, so again the call quality can be very, very poor.

> > (Lucy)

FCPs explained that 'digitally literate' patients in deprived areas were 'few and far between' (Simon) and this impacted remote consultations. Some were unsure how to access the camera on handsets or were unable to open email attachments. Many patients in areas of high deprivation were also reported as non-English speakers. Consequently, participants used interpreters for face-toface consultations. If a face-to-face interpreter was unavailable, participants used telephone interpretation services for remote consultations. Despite this resource, many participants still described difficulties in remote consultations. They reported longer appointments and information becoming 'lost in translation'

(Maxine). This FCP described one difficulty of a conversation with a patient and interpreter:

> It's very, very difficult ... I think on a phone to interject... it's going on and on and-on-and forwards and backwards and forwards and backwards between the patient and interpreter, and I think it is it's much harder on the phone to say stop.

> > (Lucy)

Many participants described a lack of resources for these patients, as many information sheets were not translated.

Theme 4 - Digital consultations impact the health and wellbeing and work satisfaction of FCPs

Mental health. Mental health impacts included stress and anxiety and mental strain. Fear around missing red flags contributed to stress and anxiety. This FCP described this 'worry' and concern for lessexperienced FCPs:

> I think that's where my worry, sometimes, is that there are a lot of people within the role that don't have enough clinical experience to recognise that. And, probably why a lot of other FCPs get worried about missing red flags, and I think that can play on people from a stress point of view.

> > (Grace)

Difficulties with IT and in using the systems added further stress and anxiety. This extended to the patients' reactions to IT difficulties:

> There probably would be an anxiety kind of thing of "are things going to work today", and I guess anxiety in how the patients were going to react to it if it wasn't working well. Were they going to be upset, were they going to start getting angry, what was their level of expectation and just not having the confidence of being able to potentially manage and de-escalate situations virtually and remotely.

> > (Lucy)

Several participants noted that the combination of new roles of an FCP in primary care, the COVID-19 pandemic, and the demand of remote consultations created a 'perfect storm of ... stress' (Matt).

Mental strain was also a challenge for participants. Descriptions of remote consultations included 'mentally demanding' (Grace), 'exhausting' (Lucy) and some experienced feeling 'fuzzy' (Diane), 'mental fatigue', and 'brain fog' (Damian).

Many coping strategies were employed by participants to face these mental health impacts. Participants explained that they rely 'heavily' upon safety netting and having the face-to-face consultation as a back-up. In addition, different forms of support were sought out

by the participants which included from colleagues, peers, GPs, more senior FCPs or the practice staff in general. Finally, some participants relied upon self-reflective techniques to address some of their anxiety and stress. This meant acknowledging the level of risk involved in their role and being comfortable with being uncomfortable about that level of risk:

Trying to absolutely acknowledge how I felt about it which I think is really important and acknowledging to myself you know what, this is how you feel and absolutely it's completely valid to feel upset about these things, to feel anxious.

(Lucy)

Physical impacts. FCPs described physical consequences of remote consultations including headaches (screen-related and postural), eye deterioration, fatigue, hip pain, and tension and stiffness in the neck and back. Participants commented that they were not usually sedentary for long periods of time, so struggled to sit for long periods for remote consultations. They employed several coping strategies to address these issues, such as scheduling movement breaks, using a standing desk, wearing headsets to facilitate movement, and making time for exercise with colleagues during lunch breaks or after work.

Work dissatisfaction. Some staff expressed work dissatisfaction related to remote consultations in the form of frustration, isolation, lack of enjoyment, and increased workload. Frustration was raised as a result of patient difficulty describing symptoms or being asking to do inappropriate testing:

I remember saying to someone over the telephone with a sprained ankle, can you stand on one foot. It belittles our profession; it totally belittles our profession.

(Matt)

Participants explained that 'sitting in front of a screen all day' was 'very isolating' and several FCPs experienced feeling separated from both their colleagues and patients. Some participants described missing the 'fun' and the 'human' contact of face-to-face consultations:

I would find it very stressful....there are things that I love about my job.... I wouldn't be satisfied with my job if it was all digital.

(Anna)

Finally, increased workload was described as contributing to the participants' work dissatisfaction and as detailed earlier, many FCPs felt that remote consultations were inefficient.

## 5 | DISCUSSION

To our knowledge, this is the first study that provides evidence of the impact of remote consultations on FCPs. The UK government is promoting 'digital first' access to primary health care to all patients by 2023/24 (NHS England, 2022) and new data is available to the public on the mode of appointments at individual practice level (NHS Digital, 2022) allowing patients to make 'informed' choices on choosing a practice, adding further pressure to GPs and other primary care staff (Dowd, 2022). Concerns around remote consultations have been well documented for GPs (e.g., Goodchild et al., 2022), yet there is a paucity of research detailing their effects on FCPs. Our findings describe FCPs' usage of digital methods, their benefits and challenges, and impact on their health and wellbeing.

Remote consultations were not used for the majority of FCP appointments. However, when they were, telephone (rather than video) was the most readily used method, a pattern very similar to methods used by GPs (NHS Digital, 2022). Remote consultations were largely perceived as beneficial for the patient (rather than the FCP) in terms of providing them with convenience and flexibility. Previous research has found convenience to be a driver of patient satisfaction rates with remote consultations in primary care (Anderson et al., 2021; Imlach et al., 2020). Both the quantitative and qualitative components reported few benefits of remote consultations to the FCP directly.

The survey data revealed IT issues, perceived poor efficacy, anxiety over missing diagnostic details, isolation, and increased workload to be key challenges associated with digital consultations. This was certainly supported in the qualitative data where perceived poor efficacy was revealed as the key challenge resulting from the potential of missing red flags, usage difficulties for certain patients (e.g., older adults, people with disabilities), inability to perform physical tests and lack rapport with the patient. These issues have previously been documented for GPs using remote consultations (Goodchild et al., 2022; Rosen and Leone, 2022) and face-to-face has long considered to be the 'gold standard' treatment (Thiyagarajan et al., 2020). Our data show FCPs share the same belief and potentially put greater emphasis on the effectiveness of face-to-face than a GP due to their reliance on physical tests and viewing their profession as 'hands on'.

One other notable challenge revealed in the qualitative data and survey was their perceived inefficiency resulting in increased workload. Despite one of the aims of the 'digital first' approach being to speed up patient throughput, our data revealed that remote consultations resulted in a 'false efficiency' through the duplication of appointments and increased appointment times resulting from IT issues. Such challenges have also been experienced by GPs (e.g., Edwards et al., 2017; Salisbury et al., 2020) and debate is ongoing whether remote consultations will decrease workload.

The qualitative data revealed impacts on FCPs mental health (stress and anxiety over missing red flags and dealing with IT issues and mental strain); physical health (e.g., headaches, eye deterioration and back and neck pain) and their work satisfaction (frustration,

isolation, lack of enjoyment and increased workload). GPs have experienced similar impacts such as anxiety over diagnostic uncertainty via remote means, and are finding high volume telephone consulting to be mentally intense and tiring (Murphy et al., 2021; Turner et al., 2022). GPs are spending more time in their rooms processing online consultations, increasing isolation and reducing informal interaction between staff and have larger workloads as a consequence of new administration tasks (Turner et al., 2022).

Conversely, our survey data revealed that FCPs were viewing remote consultations as a 'challenge' (i.e., their coping resources exceed the required demands) rather than as a 'threat' (i.e., demands exceed coping resources). Despite the negative impacts to mental and physical health being detailed, FCPs were employing 'problem focussed' coping strategies (e.g., safety netting, seeking clinical support, regular movement breaks) which are considered to be more beneficial to mental health and wellbeing (Chang et al., 2007).

This study revealed additional challenges for FCPs working with patients living in areas of high socioeconomic deprivation. These challenges included lack of IT access, poor digital literacy, and communication barriers. Similar challenges exist for GPs in areas of higher deprivation who consequently report additional strain (O'Brien et al., 2011; Salisbury et al., 2020) and are twice as likely to burn out than GPs working in less deprived areas (Pedersen & Vedsted, 2014).

A recent report (Fisher et al., 2020) highlights that people living in the most socioeconomically deprived areas have the greatest health needs and digitalisation in primary care has increased socioeconomic inequalities for patients (e.g., Greenhalgh et al., 2022). Indeed, these high deprivation areas are the same locations with the lowest funding and staff recruitment and retention (Fisher et al., 2020). The Trailblazer scheme (Fairhealth, n.d.) has been set up in order to address these challenges for GPs and is offered to qualifying practices (top 20% by deprivation score) to help with recruitment and retention of GPs. The aim of the scheme is to develop the skills, knowledge, and experience in early career GPs so that they stay working in these challenging but rewarding environments. To date, there is no such support for FCPs and FCPs interviewed in this study were unaware of such support. The additional pressure associated with remote consultation may worsen the circumstances, impact staff wellbeing, and affect patient care. This is of particular relevance to FCPs where establishing their new role in itself poses a challenge, in addition to the pressure of remote working, and in areas where demand is higher associated with high deprivation levels.

#### 5.1 Methodological strengths and limitations

To our knowledge, this is the first study of the impact of remote consultations on FCPs. It is further strengthened by the multimethod approach which serves to improve the validity of the results (Korstjens and Moser, 2018). Further, despite potential bias being introduced by self-selection techniques for both the survey and the interviews (Norris, 1997), our UK nationwide approach did enable us to include viewpoints from England, Scotland, Wales, and Northern Ireland. Whilst each nation has separate policies for healthcare and FCPs, all experienced a shared challenge from remote consultations. However, we note our measure of socioeconomic deprivation in these areas was limited as this was a self-reported measure from FCPs rather than data provided from the area of their practice. Socioeconomic status (SES) involves multiple questions around occupation, educational attainment, and income, and even these come with challenges (Diemer et al., 2013). We were limited to a short survey and did not collect specific locations of FCPs in order to maintain their anonymity.

A further strength is that data were collected after restrictions from COVID-19 were relaxed and therefore we are able to present a more realistic approach towards decisions around appointments compared to clinicians being restricted only to remote consultations. However, we acknowledge that the cross-sectional methodology is only able to provide a snapshot in time that could guickly become outdated given the rapid changes of improved IT and updated NHS policies towards 'digital first' consulting.

#### 5.2 Implications for research and practice

This study has several implications for practice and future research. Firstly, our findings suggest several situations where FCPs remote consultations may not be effective. These include for certain patients (e.g., older adults, people with disabilities, patients in high deprivation areas) and certain complex presentations. However, FCPs are receiving little, if any, training to deal with these types of difficulties in remote consultations. Training could address these difficulties and focus on boosting IT skills and knowledge, relationship building, and therapeutic aspects of the interaction. In particular, less experienced FCPs should be provided with detailed guidance on how to spot red flags remotely. Furthermore, more research is required to understand how remote consultations can be enhanced when language barriers and lower levels of health literacy exist. Understanding patient perspectives of remote consultations will also lead to further service improvements and potentially the patient needs to be better educated via primary care in the use of remote consultations.

Finally, continued monitoring of stress, job satisfaction and resilience levels is important to ensure FCPs remain in their role. Stress has been shown to clearly carry a direct risk to clinical performance, but also increase the chance that a doctor will retire or leave the profession early, creating critical gaps in the workforce (McKinley et al., 2020). Research is still limited about the FCP's 'fit' in primary care and research has largely focussed on the health and wellbeing of GPs. FCPs are one of the more established groups of non-medical practitioners in primary care, therefore, investigating them and how they best work with patients will help inform workplace support for other emerging additional roles (e.g., community pharmacists, health and wellbeing advisors) proposed to solve the workforce shortage in general practice.

## **AUTHOR CONTRIBUTIONS**

Zoe Anchors and Nicola Walsh devised the study design with Nicola Walsh supervising the project. Zoe Anchors and Bethan Jones collected the data and carried out the data analysis and interpretation with discussion and support from Nicola Walsh to interpret the findings. Rachel Thomas assisted with project management. Zoe Anchors wrote the manuscript and was advised by Alice Berry. All authors reviewed and revised the manuscript.

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## CONFLICT OF INTEREST STATEMENT

None declared.

#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## **ETHICS STATEMENT**

Ethical approval to proceed with the study was given by the University Faculty Research Ethics Committee (REC) on 15 December 2021 (Reference: HAS.19.06.204). The study was conducted in accordance with the Declaration of Helsinki.

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