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# BMJ Open Online survey and interview evaluation to explore the use of video consulting among Allied Health Professionals during the COVID-19 pandemic

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#### **ABSTRACT**

in phone interviews.

Objectives Allied Health Professionals (AHP) consist of 13 different specialty roles in Wales, sharing the responsibility of promoting and supporting the health and well-being of the population. During the COVID-19 pandemic, there was a shift in care provision, with the increased use of online consultations, such as those using video consultation platforms. However, this shift was associated with uncertainty and hesitancy, and, thus, to understand the usage and reasons for using video consultations, this study aimed to capture the experiences of both AHP and their patients, while investigating each role individually. **Participants** A survey was distributed to and completed by n=8928 patients and n=4974 clinicians, all AHP were included except for orthoptists and paramedics due to ambiguities in the data. A further 86 clinicians participated

Results All professions had a high prevention of faceto-face with the use of video consultations (68.6% overall and 81.4% of clinicians reported the prevention). However, this was lower for certain professions such as podiatrists, potentially due to the specific patient needs, such as physical assessments. Also, a range of different appointment types were being conducted, and there was a high acceptance of these alternative methods among participants. The interviews with clinicians revealed five important aspects of video consultations: the perceived benefits, the perceived challenges, technology issues and necessary improvements, clinician preference and the future of video consulting. Specifically, the future of video consulting evidenced clinicians' desire for a blended approach to working, selecting the appropriate modality depending on the situation and patient-specific needs. **Conclusions** Integrating the traditional methods of service delivery (face-to-face), and novel, innovative ways, such as video consultations, can motivate positive transformations for the efficiency and efficacy of health and social care.

# INTRODUCTION

The COVID-19 pandemic impacted health and social care provision in numerous ways. For instance, the restrictions imposed by the Government resulted in alternative methods of providing consultations between clinician

#### STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This study is the first to explore the use of video consultations among Allied Health Professionals and their patients in Wales.
- ⇒ A large sample of participants were collected across health and social care services in Wales.
- ⇒ Both patients and clinicians are considered in the current study, providing a greater understanding of the use of video consulting.
- ⇒ The study does not consider the perceptions of those not using video consulting, and the experience of only one video consulting platform was explored.
- ⇒ The perspective of smaller groups of professionals could not be fully investigated.

and patient, with a shift from face-to-face to remote, using new innovations such as video consulting. Prior to the pandemic, the use of video consultations (VCs) was low, and some professionals held an overall scepticism of its use for healthcare purposes. However, this unexpected shift left no choice.

One set of professions, among many, who were impacted were Allied Health Professionals (AHP). In Wales, the AHP are 13 individual professions: art therapists, music therapists, drama therapists, dietitians, occupational therapists, orthoptists, orthotists, paramedics, physiotherapists, podiatrists, psychologists, prosthetists and speech and language therapists (SLT). AHP deliver strong, practical, solution-focused and lifeaffirming outcomes through a unique range of biological, psychological and social interventions that are particularly valuable in responding effectively to the complex, multidimensional needs of the population.

Due to the importance in the roles of each AHP in providing assessments, treatments and diagnoses to new and existing patients, the continuation of services was essential in order to prevent hospital admissions, reduce patient reliance on long-term care and encourage independence for as long as possible. However, the rapid implementation of virtual healthcare consultations and diversity of roles of each professional introduced a different 'new normal' for each, in which patients and clinicians alike had to adjust to rather quickly,<sup>3–5</sup> creating mixed opinions at first. (For definitional purposes throughout, the term 'clinician' refers to AHP providing care in the NHS and social care, and the term 'patient' refers to all those receiving care from these professionals).

High satisfaction for virtual methods is observed among patients, according to a meta-analysis, and patients express wanting to use virtual consultations in the future for appointments involving their health. This suggests that patients are supportive of digital alternatives for their healthcare appointments, although the literature does suggest limits to this acceptance, such as when appointments require more physical-based assessments or if an individual lacks confidence in using technology. More specifically, physiotherapy patients preferred a combination of virtual and face-to-face appointments, and only 2% of psychology patients reported unhappiness with the switch in service delivery during the pandemic, regardless of varying levels of awareness surrounding the use of technology.

Clinicians, on the other hand, may present with a higher level of hesitancy towards using technology for healthcare provision<sup>12</sup> and for multifaceted reasons, including those related to the clinician, service and patient (eg, James and colleagues<sup>13</sup>). AHP's roles are focused on when supporting, maintaining, promoting and encouraging the health and well-being of individuals within society, and VC may not be suitable for all aspects of this work. However, this unsuitability may differ between the professionals. Psychologists across Europe reported barriers<sup>14</sup> to use online consultations based on a model (Unified Theory of Acceptance and Use of Technology; Venkatesh et  $al^{15}$ ), such as lack of training and relational concerns, including a lack of eye contact, detriments to therapeutic relationships and rapport, and observations of non-verbal behaviour and emotions. Additionally, physiotherapists may be concerned with the costs of remote sessions, and patients may not be able to access these readily perhaps due to the availability of technology. <sup>16</sup> Also, dietitians may be unable to conduct certain assessments remotely, especially when video is not available 17 and a small number of SLT report not having access to digital technologies to conduct virtual consultations. 18

Despite the above challenges and apparent hesitancy, the literature also describes perceived benefits of using alternative methods to face-to-face. For telerehabilitation, the benefits extend to increased flexibility, accessibility and cost-effectiveness. <sup>16</sup> Within dietetics, one important aspect is being able to see patients' home environments as well as what type of food they keep, and VCs allow the professional to see within the cupboards of their patients without the need to travel far distances <sup>17</sup> a high proportion of dietitians (43.9%) find VC to be comparable to

face-to-face.<sup>19</sup> These findings may also extend to other professionals, such as occupational therapists, as these clinicians are concerned with preventing unnecessary hospital admissions and enabling individuals to remain independent for as long as possible, and, thus, having access to home environments (without the need for travel) could save time and provide similar outcomes to face-to-face.

Thus, due to the multifaceted roles of AHP within the NHS and social care, there does not seem to be a clear  $\tau$ view on if online, video or remote consultations work well for each AHP, and the impact that this would have on a large body of professionals moving forward beyond the pandemic. Also, there is limited literature that focuses on each AHP, as it tends to focus on individual professions, such as physiotherapists or psychologists. In one way, integrating VC into the functioning of services would increase flexibility and convenience for both patients and clinicians, and potentially minimise the case or workloads of professionals, due to, for example, reduced need for travel or time saved in clinic. 11 However, these methods do not seem to be suitable for all situations, and, thus, a 'one size fits all' approach cannot be applied. The aim of this study was to, therefore, explore the experiences of AHP and patients receiving care using VC from AHP across Wales during the COVID-19 pandemic. This was to gain an in-depth and clear understanding of how and why VCs were being used among each profession and overall, using these insights into guide independent, personcentred care provision moving forward.

# METHODS Survey

As part of the evaluation of an NHS-approved VC service, a survey was designed and administered at the end of each consultation to all users of the platform. One survey was provided to clinicians and one to patients (online supplemental material 1). These two surveys had both common and unique questions attached that asked users about their experiences with VC for their appointment. All participants provided the profession and specialty from which they had received care from (patients) or that they belonged to (clinicians). A series of 27 professions and 65 specialties were given to choose from, with the option for participants to state 'other' and specify a different choice in a free text box. These additional responses were analysed and placed into their corresponding profession/ specialty categories, if applicable. Clinicians who stated they were and patients receiving care from all AHP between August 2020 and August 2021 were extracted. However, orthoptists and paramedics were excluded due to small sample sizes and ambiguities in the data (such as patients reporting health-related conditions unrelated to these professions). Orthotists and prosthetists were classified under one category, thus were considered together, as well as podiatrists and chiropodists.

Table 1 The number of participants that completed the surveys (patients and clinicians) and the interviews (clinician only)

Allied Healthcare	Number of participants (survey data)		Number of participants (interviews)
Professional	Patient	Clinician	Clinician only
Art therapist	13	24	0
Dietitian	725	223	9
Drama therapist	5	1	0
Music therapist	7	5	0
Occupational therapist	596	503	9
Orthotist and prosthetist	22	15	0
Physiotherapist	5061	1103	22
Podiatrist and chiropodist	384	166	0
Psychologist	879	526	15
Speech and language therapist	1236	2408	29

Questions explored and analysed referred to participants' ratings of the VC quality, the type of health-related activity conducted, the prevention of face-to-face, patients' future use of the technology as well as whose choice it was to use it. Participants were first asked to rate the quality of their VC, on a scale of 1 (poor) to 5 (excellent). They were then asked to state the type of health-related activity that was conducted virtually, with the response options 'advice and support', 'first appointment', 'follow-up', 'discharge/ final appointment', 'therapy session', 'review', 'feedback/ outcomes' or 'other' (with the option to specify). Furthermore, respondents were asked if they believed that the use of VC prevented the need for a face-to-face appointment, they selected 'yes', 'no' or 'unknown' in response to this. Patients were additionally asked if they would consider using VC again for healthcare appointments, once again responding according to the following options: 'yes', 'no' or 'maybe'. Finally, patients were asked to state who made the choice to use VC, they chose from: 'given the choice and opted to use it', 'informed by service', 'VC was the only option' or 'unknown'. All questions were voluntary, leading to varying numbers of responses per question. At the point of analysis, the survey had been running for 12 months and had been assessed and developed from a previous version to address the changes in service provision at this time.

#### **Interviews**

During the period of November 2020 and February 2021, a total of 203 phone interviews were conducted with clinicians from a variety of different backgrounds providing care to patients. All clinicians had 1 year prior experience with one type of NHS approved VC service (attend

anywhere). The aim of these interviews was to gain an idea of the benefits, challenges and sustainability of VC from a professional and service perspective. Professionals registered their interest in participating by providing an email address at the end of the survey detailed above. These were contacted via email and the process was explained, clinicians responded if they remained interested, and the researcher organised a suitable time and date for the interview. Three trained research assistants (with no relation to any interviewees) conducted the interviews using a **T** semistructured interview schedule (online supplemental material 1), which asked questions, such as How do you feel about video consultations? and What do you use video consultations for in your line of work?. Other questions included participants' future use of VC in the long term, how much 8 they were using VC and the benefits and/or challenges associated with its use. The interview schedule was developed based on previous research evaluations on VC. For full analysis, see Johns et al.<sup>20</sup>

Full consent was obtained from all participants before completing the survey (integrated into the survey platform), and full verbal consent was provided by all interviewees at the beginning of their interview. Service evaluation approval and risk assessments for all evaluations conducted were obtained from Aneurin Bevan University Health Board Research & Development Department (Reference Number: SA/1114/20). Information regarding each interviewee was collected, including 5 contact details, name, profession and health board were collected on signing up for the interview. Once the interviewee had been contacted and interviewed, their interview was transcribed, and all personal information (name, contact details) were immediately deleted, and each transcription was given a unique identifier.

#### Patient and public involvement

Patients and/or public were not involved in the design, or conduct, or reporting or dissemination plans of this research.

# **Analysis**

The responses to the survey questions will be summarised in terms of percentages and frequencies per AHP and overall. No statistical tests were conducted due to the nature of the data and the varying group sizes, and, thus, minimal interpretation of the results will be given. Interviews were conducted, recorded and transcribed verbatim. Transcriptions were first coded using Microsoft 2 Excel, and then codes were arranged according to the themes and subthemes, if appropriate, using thematic analysis. Analysis was conducted by a trained researcher and was checked by the research lead (GJ) and national clinical lead (AA) for Wales. For the full analysis, see Johns et al.<sup>20</sup> For the purpose of this research, all participants who were AHP were extracted, and secondary analysis of the data was conducted. An overview of the themes will be given

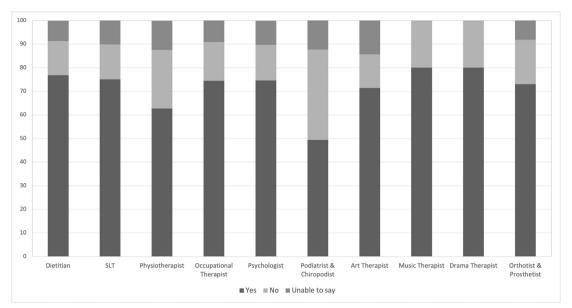


Figure 1 The percentage of responses for whether or not face-to-face was prevented, for each AHP, AHP, Allied Health Professionals; SLT, speech and language therapists.

# **RESULTS**

For the survey, there was a total sample of N=13902 (patients n=8928, clinicians n=4974). There were N=86 (42%) interviews with AHP. The numbers of each AHP is presented in table 1.

# Type of appointments conducted using VC

The type of appointments that were conducted using VC seemed to vary across the different AHP (as shown in online supplemental material 1). First, dietitians, podiatrists/chiropodists and orthotists/prosthetists were mostly conducting first appointments. However, SLT, physiotherapists, occupational therapists, psychologists, art therapists and drama therapists were using VC for therapy/treatment sessions. Follow-ups were also commonly reported by SLT, and first appointments for physiotherapists and dietitians. Dietitians stated they saw a higher proportion of patients for advice appointments compared with the remaining professionals.

# Prevention of face-to-face

Overall, 68.6% of respondents (N=13647) reported that VC had prevented the need to attend a face-to-face appointment. Specifically, 81.4% of clinicians stated face-to-face was prevented, compared with only 61.7% of patients. Figures 1–3 show the proportion of face-to-face prevention for each AHP, and for clinicians and patients separately. The findings were similar for the different

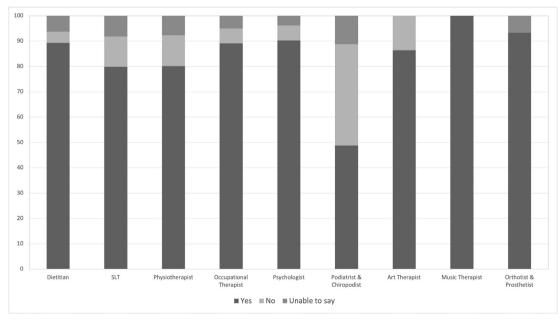


Figure 2 The percentage of responses for whether face-to-face was prevented for each AHP, according to clinicians. AHP, Allied Health Professionals; SLT, speech and language therapists.

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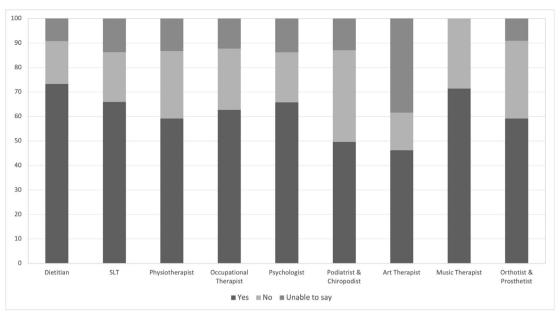


Figure 3 The percentage of responses for whether face-to-face was prevented for each AHP, according to patients. AHP, Allied Health Professionals; SLT, speech and language therapists.

professionals, except for physiotherapists, where respondents (particularly patients) believed face-to-face was not sufficiently avoided. Also, podiatrists/chiropodists had the lowest face-to-face prevention within the entire sample, and this was agreed between clinicians (48.8% prevented face-to-face) and patients (49.6%).

#### **Video quality ratings**

The VC platform was given a rating of 5 (excellent) by 42.8% of respondents. Patients were more positive in their experience than clinicians, with 55.9% rating 5, and only 6.1% rating a 1 (poor) or 2 (okay). This is compared with clinicians, where 19.2% of respondents rated 5, and 31.8% rated it a 1 or 2. This trend can be seen across all individual AHP (see table in online supplemental material 1). However, the most positive ratings were provided by music therapists, 58% of respondents rated the quality excellent, although there were only 12 responses. Physiotherapists, dietitians and orthotists/prosthetists were also positive, with over 50% of respondents also rating the quality as excellent. On the other hand, SLT, especially SLT clinicians were most negative (12.4% rated 5, 36.7% rated 1 or 2).

### Choosing to use video consulting

Patients were asked who had made the choice to use VC for their healthcare appointment. The majority (63.7%; N=8877) were informed by the service that their appointment would be held online or stated that it was the only option provided (14.2%), only a smaller proportion were given the choice to use it and had opted (20.8%). Small differences seemed to emerge between the AHP. Almost half of patients (42.6%; N=587) receiving care from occupational therapists were given the choice to use VC. SLT patients were least likely to report they were given the choice (12.3%; N=1225). The majority of patients in the

remaining AHP categories once again stated that they were informed by their service (range of 46.2%–90.9%).

# **Future use of video consulting**

Of 90.7% of patients (N=7081) stated they would use VC for future healthcare appointments. Only 52 (0.7%) would not, and the remaining 8.6% responded that they would 'maybe' consider using it again. Displayed in figure 4, podiatrist/chiropodist patients least commonly reported that they would use VC again (81.3%). Also, only 50% of art therapy patients responded that they would use again, although there were only 12 respondents in this category.

# Interview Analysis: AHP's experience of VC

Secondary analysis was conducted on pre-existing interview data with AHP, full analysis and an extensive overview of the data can be found in Johns et al.<sup>20</sup> These interviews were conducted with clinicians only. Five important aspects of using VC were revealed, these were the benefits of VC, the challenges, technology issues and necessary improvements, the preference to use VC and the future

the above themes across respondents.

Benefits of VC

To begin, professionals, during their interviews, referred to the advantages of using VC for appointments and patients. patients. These include the benefits of enhanced communication, flexibility, reduced travel, accessing patients' home environments and increased family involvement. For example, one occupational therapist stated it was an ...absolute added bonus because it's so portable, so accessible, it can fit around the patient. Additionally, a physiotherapist team leader reported the enhanced flexibility for staffing and working from home: As a leader in a team for my staff,

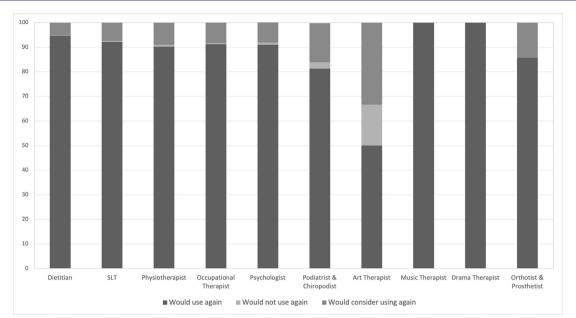


Figure 4 The percentage of patients that stated they would use, not use or consider using VC again. SLT, speech and language therapists; VC, video consultation.

I think it has allowed us to be more flexible for staffing for things like working from home. Therefore, the benefits apply to both the patient and clinician. Travel was a common topic across all AHP, including the time saved for those required to travel to patients (eg, psychologist: Given I work 70 miles away from where I live, it's a big thing) and patients travelling for their appointments (eg, physiotherapist: Probably more convenient for the patient not having to travel because they'd have to take a few hours out of work or whatever so they can probably just take an hour now).

#### Challenges of VC

However, although there are positive perceptions of VC, it is also important to consider the challenges, which were prominent and sometimes detrimental to appointments. Clinicians, especially physiotherapists, expressed the need for physical presence of a patient for examinations, with these being less accurate through a screen: 50% of the time it's physiotherapy related issues where you can't do a competent assessment really and Main issue is whether they have it to use it, sometimes a lot of the assessments require face-to-face things where you test the joints and sometimes you need to actually put your hands on and so it's limited because it doesn't give us that option over video. Other negatives include a lack of engagement (eg, children during SLT assessments: For a lot of our children, being on the other side of the screen, you don't really get them and they're not that interested), access to social cues as well as the chance of missing certain unobservable information. For example, 'Quite often, you need to see that visual information to be confident in the information you are getting from a person, and you really miss out on that when the visual aspect of VC is sub-optimal (psychologist), Video feels less personal, it's difficult to strike up a rapport (occupational therapist) and the body language is obviously delayed (dietitian). Also, staff well-being was highlighted as important, in that, clinicians felt like workload and feelings of isolation had increased during the pandemic, perhaps not directly because of VC, but exacerbated by its use. For example, an SLT stated: I don't get a lot of choice people put things in my diary about meetings and things, so I don't get a choice of how much I do. However, there were reports of fatigue and physical strain caused by using a computer, Everything I know about doing work with patients, I've had to adapt, and I am just exhausted. I do find myself having more headaches and neck pain even though I've tried the hardest to get the right posture and position (SLT).

# Technology issues and necessary Improvements

Technology issues were also common among professionals, such as video delays, audio and visual issues and a lack of internet connection sufficient to support VC (When I use it on a laptop that's connected to the WiFi, it's not been really problematic in terms of the signal, psychologist). This caused disruptions to patient-clinician contact and limited conversation and assessments: When I'm explaining something complicated to a patient, the last thing you want is for them to miss what you say because it's frozen (dietitian). These issues sparked insight into the improvements necessary to make VC more successful, including continued training sessions (A drop-in session would be good to ask the questions I have when they come up, physiotherapist) and access to appropriate equipment at the location of the consultation (Even when we are in the office, we can't always use it. Not only because we don't have the internet, but also because we don't have the equipment, psychologist). Also, raising awareness of its use among patients as well as other services that work with these patients would be beneficial (The big thing is getting that awareness out there from others other than medics, physiotherapist; Perhaps if anything more idea sharing across Wales or the UK in how people are doing it, and ways people are doing it, SLT).

#### Preference to Use VC

Clinicians held opinions of their modality preference when conducting healthcare appointments. In particular, most stated their choice to use VC over the telephone, due to the added visual element and other functions such as screen sharing: (the appointment) would have been really difficult to do that just with telephone calls, being able to share the screen and use resources has added a lot to that (SLT). However, there were also comments about using phone instead, and patient uptake of using the telephone for their appointments. As an example, one psychologist stated that some patients find video calls anxiety-provoking and would rather use a phone call, and one occupational therapist described the usefulness and ease of phone calls for catchups with patients.

#### **Future of VC**

Finally, when asked about the future use of VC beyond the restrictions imposed due to the pandemic, a blended approach to appointments was frequently reported, in that clinicians would prefer a mix of face-to-face, VC and telephone calls where they are deemed appropriate. For example, There would be certain patients I would be more than happy to review over video and some patients I wouldn't even contemplate seeing over video and would have to see face-toface (SLT) and I would love to keep using (video consulting). There's always going to be a time for face-to-face in clinics, but I think together they would work really well. Your first couple of appointments face-to-face and then follow-ups on VC would be amazing (occupational therapist). Positively, there was only comment about not adopting VC as a tool in the future, The majority of the team feel the same, we were a lot more keen for it when it was first implemented it was a big change, singing its praises but now we're getting fed up and want to be back face-to-face (Physiotherapist).

# **DISCUSSION**

This investigation aimed to capture an understanding of the use of (VCs and digital alternatives face-to-face among AHP in Wales (United Kingdom) during the COVID-19 pandemic. The findings revealed an overall perspective of AHP as well as moderate differences between the professions. First, from the responses on the survey, a range of different appointments were being conducted using VC, including first appointments, therapy/treatment sessions, follow-ups and for advice/support. There was a high prevention of face-to-face (traditional appointments), although patients were less likely to report this prevention, possibly due to confusion in definitions. For instance, patients may have thought that seeing their clinician over a screen constituted face-to-face. The VC platform was rated positively (especially by patients), and a very high percentage of patients stated they would use or consider using VC again in the future for health matters.

Of interest, dietitians, podiatrists/chiropodists and orthotists/prosthetists reported using VC most for first appointments, compared with therapy/treatment

sessions for other professionals (eg, psychologists, occupational therapists, SLT, physiotherapists). Perhaps this represents an interprofessional differentiation in the use of VC for specific tasks and patient-facing sessions based on the specific needs that clinicians provide. This does not particularly suggest an inappropriateness of VC for certain sessions (eg, to initially build rapport<sup>21</sup>) although it is important to consider VC may introduce these issues for some professionals.

Additionally, there was a similar perception of faceto-face prevention across the professionals, except for podiatrists/chiropodists, where this was low and agreed among clinicians and patients (below 50%). Tollafield<sup>22</sup> argues that podiatry consultations are best conducted 3 in the patients' home and expresses concerns with the ? shift from face-to-face to telemedicine. Pang et  $at^{23}$  found, however, that patients contacted via telephone or telehealth did not experience increased hospitalisation rates, suggesting, although VC may not be fully appropriate for assessments of conditions, they were sufficient methods in preventing such hospitalisations. Regardless, patients believed they should attend in-person clinics for foot-related issues, such as ulcers, and preferred this modality.<sup>23</sup> This is also supported by the current findings in that podiatry/chiropody patients gave the lowest responses for wanting to use VC again in the future (although this was still high, 81.3%). Asking participants about face-to-face prevention helps us capture an idea a of the ability of VC to act as an appropriate alternative, if VC was not appropriate, clinicians were advised to see patients face-to-face (on a patient-specific basis).

Interestingly, when considering choices, SLT patients were least likely to have been given the choice to use VC. This compares with professions like occupational therapy, where almost half of patients were provided the choice. Giving the choice to patients, where appropriate, may be beneficial in terms of convenience, flexibility and encouraging control over their own health and care. For instance, limiting time needed to take off work, reducing stress and eliminating the need for travel. <sup>24</sup>A report by Samuels et at al. <sup>25</sup> found that common reasons for not attending health-care appointments include transportation problems and being unable to take time off work, therefore giving patients the choice could aid in increasing appointment attendance. This proves beneficial to the patient, clinician and service as a whole.

Second, further exploration of narrative interviews with AHP revealed five important themes of VC use. Clinicians accept that there are benefits of using digital alternatives, such as enhancing communication, reducing the need for travel<sup>17</sup> and increasing involvement. However, it is also important to highlight the disadvantages, including a lack of patient engagement, missing unobservable information (which aids assessment)<sup>14</sup> as well as negative impacts on staff well-being and workloads. Technology also created a barrier<sup>16</sup> and respondents gave recommendations on how this could be improved moving into the future. However, it seemed that VC was preferred over

other methods that lacked a visual element, such as telephone calls. Beyond restrictions imposed due to COVID-19, a blended approach was suggested as best, whereby clinicians (with patients considered) can choose, where appropriate, to use face-to-face, VC and telephone.

#### Limitations

It is important to consider the current limitations. The survey was distributed to all patients and clinicians completing a VC using one NHS approved platform, and clinicians were interviewed after highlighting their interest on this survey, suggesting they were users of VC. Thus, the responses here do not consider those using other software or not using digital methods for health-care appointments. It would be interesting to capture the perceptions of those not using VC and explore any reasoning for this lack of use and comparing this to users, especially emerging from the pandemic. Also, the data were collected between March 2020 and August 2021, with the lift of restrictions in healthcare settings in 2022, this may be an outdated perspective.

Furthermore, there were more AHP belonging to certain professions than others. For example, there was a total of 6164 physiotherapists and physiotherapy patients in the survey, and 22 clinician interviews. This compares with only six drama therapists. It is possible that physiotherapy appointments are more common within the NHS and social care than drama therapy, or that these professionals were prioritised in the uptake of VC, explaining the discrepancy. Nevertheless, the perspective of the smaller groups is dampened. Also, the interviews did not include patients, meaning their perspectives cannot be qualitatively explored. Future research should aim to target these smaller professionals, as well as patients, to capture opinions and their use of VC to further aid in understanding, especially as the healthcare system evolves and develops as a result of the pandemic.

#### CONCLUSION

To conclude, VC seems to be appropriate for a range of different appointment types and activities for AHP. There was a high face-to-face prevention, and high-quality ratings were given for the VC platform. Also, patients were keen to use digital alternatives in the future. In addition, qualitative responses revealed benefits and challenges, technological limitations, necessary improvements, clinicians' preference as well as the need for a blended approach to healthcare consultations moving forward. This means that, at the clinician's discretion and with the needs of the patient considered, face-to-face, telephone and VC can be used to create a model of efficiency within NHS services. Regardless, there were some issues reported, especially by clinicians, such as low-quality VC ratings. Technology issues were prevalent, especially as reported in the clinician interviews, and there were reports that VC was not appropriate for all types of appointments (eg, building rapport with occupational therapists, fatigue and physical strain).

Moving to the future, and post-pandemic, organisations are keen to encourage the uptake of VC for health and social care purposes. Technology-enabled care (TEC) Cymru create detailed toolkits and infographics to aid in its use as well as produce informative videos and host workshops (TEC Cymru, accessible from https:// digitalhealth.wales/tec-cymru). Bvproviding and support, the experience of VC may be improved  $\tau$ significantly. The pandemic temporarily changed many aspects of health and social care, with the rapid implementation of new and innovative ways of care continuation. Emerging from the pandemic and considering the  $\xi$ adverse effects and outcomes over the last few years, these temporary changes can motivate positive and permanent transformations of the way professionals work and function in their roles, within AHP and multiprofessionally, optimising resource utilisation, while meeting the needs of the population.

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Contributors GJ and AA contributed to the main design of the study and development of the research questions. JW contributed to the main structure and write-up of the paper, and final amendments to the manuscript. JW and GJ analysed the data with the supervision of AA, SK and MO. All authors discussed and interpreted the data once analysed and helped structure the manuscript. AA, SK, KP and MO contributed to the clinical understanding of the findings and shaped the discussion, conclusions and recommendations. AA was responsible for overseeing the full development of the study design and data collection, the analysis and development and final sign-off of manuscript from a clinical and programme perspective. All authors contributed to proofreading and amendments of the final manuscript. GJ is the guarantor for this article.

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Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

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