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# Policy brief: Framework to guide Allied Health Professional telehealth patient consultation guidelines and training

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### Short Report

Keywords: Telehealth, Allied Health Professionals

Posted Date: January 13th, 2023

DOI: https://doi.org/10.21203/rs.3.rs-2442422/v1

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# Abstract

### Purpose

AHPs make up the third largest healthcare workforce in the UK NHS and with their wide range of skills make a significant contribution to the health and care of people using their services. Current telehealth guidelines and training programmes for AHPs are not sufficiently comprehensive and lack information on key telehealth aspects, meaning AHPs may not be adequately supported in the delivery of remote patient consultations. Therefore, a policy brief to guide the development of AHP telehealth patient consultation guidelines and training was developed to meet the needs of policymakers, AHP professional bodies, and clinical services.

The intended purposes of this policy brief are to: (1) present key telehealth domains that should be considered when designing telehealth guidelines for patient consultations, and (2) present areas in which AHPs should be trained prior to providing telehealth consultations.

This policy brief aims to provide guidance and facilitate further discussion on the essential components of telehealth guidelines and staff training, it is not an exhaustive list of recommendations. Recognising the diversity of telehealth applications and the differences between and within individual allied health professions, this policy brief is not profession specific and may require adaptation to the context of use and individual circumstances.

### Policy brief development

This policy brief was developed in four phases, which include: (1) a scoping review to synthesise available evidence; (2) a survey to explore the opinions of UK AHP clinicians and service managers on their telehealth service guidelines and training; (3) formulation of the draft policy brief; (4) consultation with stakeholders and formulation of the final policy brief. Patient users of telehealth were not involved in the development of this policy brief. However, the policy brief considers patient users' suitability, needs and requirements.

### Audience

This policy brief is intended to inform the development of telehealth consultation guidelines and training for AHP patient consultations. Therefore, the target audience includes policymakers, AHP professional bodies, AHP service managers, and professional societies involved in the planning and management of AHP training, clinical and academic staff involved in training AHPs, and independent AHPs requiring support in their telehealth patient consultations.

### Telehealth definition

Telehealth is defined by the World Health Organization (WHO) as "The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication

technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities" (1).

For this policy brief, telehealth was defined as a telephone or video consultation with a patient.

# **Executive Summary**

While entering a post-pandemic world, healthcare systems have engaged in a care delivery redesign process where telehealth appears to have the potential to become a mainstream modality of healthcare delivery. The UK National Health Service's (NHS) long-term plan is to offer a 'digital first' option for most outpatient appointments. However, most currently available allied health professional (AHP) telehealth guidelines are not sufficiently comprehensive to cover all considerations required to establish and operate telehealth patient consultations. Most focus on technical considerations neglecting other important considerations. Similarly, telehealth training programmes for AHPs mainly appear to have covered technological aspects, with insufficient attention being paid to implementation considerations.

These issues may reflect the rapid design of both AHP telehealth guidelines and upskilling training programmes at the start of the pandemic, resulting from the sudden digital transformation of AHP services. More comprehensive guidelines and training programmes are needed to support the effective implementation and long-term sustainability of telehealth in AHP services in a post-pandemic world.

We acknowledge that telehealth may not be used in the future to the same extent, as it was during the pandemic, across the allied health professions due to the different nature of their roles. Nevertheless, comprehensive and well-designed guidelines and training can have a significant impact on patients, AHPs and healthcare systems at large by: 1) reducing avoidable patient harm and suffering, health inequalities, any consequent disabilities or worsening of any existing health conditions and deaths; 2) enhancing better patient outcomes (preventing delayed interventions and reducing the burden of treatment); 3) reducing the risk of liability for clinicians, and 4) enhancing financial savings for healthcare systems worldwide.

This policy brief, based on research findings, presents the implementation, financial and technical considerations that should be considered while designing telehealth guidelines and, consequently, implementing telehealth consultations within a clinical service. In addition, it also presents a list of considerations for staff training, to ensure AHPs have the skills needed to provide telehealth consultations.

# Introduction

The COVID-19 pandemic has caused a rapid and sudden transition from face-to-face appointments to telehealth-mediated consultations in healthcare systems worldwide (2), including the UK NHS. This shift also affected AHP services, which had to quickly adapt to the restrictions imposed by the COVID-19

pandemic to ensure continuity of care. Although the use of telehealth was not new in the UK NHS services (3), the number of AHP services offering patient consultations via telehealth as part of their routine service program were in the minority in the pre-pandemic period (4), with telehealth being used to a greater or lesser extent across the various allied health professions. Therefore, the uptake and the large-scale implementation of telehealth as an alternative medium of delivering healthcare required a massive effort from AHP services, as AHPs are the third largest clinical workforce in the NHS, collectively delivering over four million patient contacts per week (5,6).

The digitalisation of healthcare continues to expand rapidly. The UK government has outlined its vision to embed digital technologies in routine healthcare use by 2025 and beyond (7), with the objective to provide better care and improved health outcomes for people. Similarly, the NHS is planning to offer digital first models of access to healthcare for most by 2029 (8), and the AHPs strategy (9) and the digital framework for AHPs (10) focusing on the utilisation of digital technology have recently been published. Telehealth is considered a valuable tool to improve access to healthcare services for people across the world, enabling equitable access to vulnerable and excluded populations (11).

Realising the full potential of telehealth demands comprehensive and multidimensional considerations (12). The increasing use of telehealth within AHP services is characterised by underlying challenges, such as the lack of adequate telehealth guidelines to support AHPs in the provision of remote consultations (13,14). The absence of comprehensive telehealth guidelines can pose barriers for healthcare professionals to provide care and can cause inequalities in access to healthcare services (15). Concerns about equity of access following the digitalisation of AHP services have been raised as telehealth may be considered incorrectly as a one-size-fits-all approach (16). On the contrary, digital strategies must embed personalised care approaches with shared decision making and the use of telehealth should be tailored to suit patients' abilities, medical conditions, needs, preferences, values, and technological skills as well as resources (17). It is recommended that people are offered a hybrid blend of in-person and remote consultations, based on individual needs and preferences, the purpose of the consultation and the available resources (18).

However, current AHP telehealth guidelines do not fully capture the complex care needs of population groups for which telehealth-mediated interventions may be neither safe nor effective (14). Therefore, AHPs may offer telehealth to patients for whom it is not suitable or may not adopt compensatory measures during telehealth to make their remote consultations fully accessible, safe, and effective for everyone in the absence of an alternative method of service delivery. On the other hand, AHPs may not offer telehealth as a first option due to unconscious bias; where they may make assumptions about a person's ability to utilise the technology based on a protected characteristic (e.g., age, disability or race). These issues may result in the provision of suboptimal care to people with complex needs, who may also be exposed to avoidable risks, or their unintended exclusion from telehealth consultations.

Additionally, many NHS AHP staff reported that they were not equipped with the skills necessary to deliver telehealth consultations (14). They reported to have received training mainly on telehealth

technology-related aspects (e.g., software and hardware) and indicated that more training on implementation considerations, especially telehealth safety-related aspects, was required (14). Insufficient training can lead to inadequate patient safety and potential exposure of patients to avoidable risks during telehealth consultations. As the lack of comprehensive guidelines and training programmes can lead to unintended consequences, including the exacerbation of health inequities and inadvertent harm to patients (19), comprehensive telehealth guidelines and training programmes are essential to mitigate these risks in the face of the increasing adoption of telehealth.

This policy brief presents three key domains of telehealth (implementation, financial and, technical considerations) which we recommend be considered when designing telehealth guidelines. The considerations within each domain, although not intended to be exhaustive, provides a list of possible subdomains that may need to be addressed while designing telehealth guidelines. A list of considerations for staff training, to ensure AHPs have the necessary skills to provide telehealth consultations, is also provided.

We draw on evidence from a scoping review of telehealth guidelines and a survey of UK-registered AHPs and AHP service managers (13,14). Although the policy brief has been developed mainly based on data from UK AHPs, service managers and AHP professional bodies it: 1) considered patient users' suitability, needs, and requirements; 2) has relevance in the global context; and 3) the framework can be adapted and applied in different contexts and healthcare systems to respond to individual circumstances.

# Methods

The development of the policy brief took place in four phases:

- 1. We conducted a scoping review in March 2021 of the international telehealth guidelines designed for the 14 NHS England AHPs (20) and compared them with the guidelines issued by the UK AHP professional bodies.
- 2. We conducted a survey, which remained open for six weeks during spring 2021, to explore the opinions of UK NHS AHP clinicians and service managers on their telehealth service guidelines and training. The survey was completed by 658 participants: 539 clinicians and 119 AHP managers, managing a total of 168 AHP services.
- 3. The findings from the previous two phases were aggregated to build an initial policy brief to guide the development of telehealth guidelines and training as well as the delivery of AHP telehealth consultations.
- 4. We consulted with stakeholders to refine the initial draft. Their feedback was incorporated in the final policy brief for telehealth consultation guidelines and training.

# Results

# **Results from scoping review**

Our working group led by Staffordshire University conducted a scoping review exploring telehealth guidelines for the 14 NHS England AHPs (14). The literature search was supplemented with the telehealth guidelines issued by the UK AHP professional bodies (up to March 2021). The findings revealed that there is a global lack of telehealth guidelines and that there is little/no guidance for some allied health professions with smaller workforces[1], which may be attributable to the different extent of use of telehealth between allied health professions, to the level of appropriateness of telehealth as a mean of service delivery for the different AHP professional groups and to potential inequities in personnel/resources between small and large AHP professional bodies.

The review extended on previous research which identified three telehealth domains (implementation, financial, and technical) that should be considered while implementing telehealth consultations (21). While reviewing the evidence, we also identified other relevant telehealth subdomains, for example, the purpose telehealth can be used for, patients' and AHPs' eligibility, limitations and barriers, and family as well as caregivers' roles.

Our review highlighted that existing telehealth guidelines present considerably variable levels of comprehensiveness, with implementation considerations less explored and having the largest areas of ambiguity. In contrast, technical considerations were more frequently explored and contained more detailed information. Technical considerations are necessary but not alone sufficient (22): successful telehealth consultations require the re-engineering of the clinical processes and an integrated approach to clinical management (23). We acknowledge that some regulatory institutions and professional organisations may have updated or are currently in the process of revising their guidelines, which may provide more comprehensive recommendations than those previously available. We recommend that future telehealth guidelines address all telehealth domains which would prevent guidelines from focusing on hardware and software and, consequently, neglecting people and processes (24), reducing telehealth clinical benefits and creating unintended risks to both patients and AHPs.

# **Results from our survey**

Our survey revealed that approximately 40% of NHS AHPs and AHP service managers believed that there was a lack of information within telehealth[2] service guidelines (14). Survey responses confirmed the findings of our review; the most deficient domain of current telehealth guidelines related to implementation considerations. AHPs and AHP service managers also identified areas of ambiguity and a lack of information in the current telehealth guidelines. One example was that many patients with complex needs, associated for example, with their disabilities, age, or language skills, may have been excluded from telehealth consultations or have received care inadequate to meet their needs. In these cases, there is the risk of widening health inequities and the potential telehealth benefits of sustainability, patient empowerment, and the reduction in the burden of treatment may be difficult to obtain (19). Respondents were asked to identify potential barriers to telehealth adoption, with these reported barriers

aligning with some of the telehealth considerations currently lacking in telehealth guidelines or requiring further clarification and information.

Regarding training, most clinicians reported that they had not received training in all telehealth aspects. The aspect that most clinicians had received training for was how to use the software required for telehealth consultations. Although this may be attributable to the fact that many AHP services implemented telehealth in a short timescale to ensure continuity of care during the surge of the COVID-19 pandemic, at the time the survey was conducted (more than one year into the pandemic), training was not yet adequately designed, and clinicians reported to lack training in certain telehealth aspects on which education and training were considered as necessary. These aspects included, for example, how to deal with an emergency during a telehealth consultation how to conduct a risk assessment before a telehealth consultation and how to get feedback from patients and their families. Most clinicians did not consider that training was necessary for some other telehealth aspects, such as how to provide a treatment intervention or conduct an assessment via telehealth and how to use the hardware required for telehealth consultations. However, AHP services may have different levels of digital maturity and digital literacy, technology competence and previous telehealth experience may vary greatly from one clinician to another. Therefore, comprehensive training, tailored specifically to meet the needs of the AHP staff of each service, is essential for ensuring a successful long-term implementation of telehealth.

[1] These include art therapists, dietitians, orthoptists, osteopaths, prosthetists and orthotists, chiropodists/podiatrists, dramatherapists, music therapists, operating department practitioners, paramedics, and radiographers.

[2] For the purposes of this survey, telehealth was defined as a telephone or video/virtual consultation with a patient.

# Recommendations

# Framework of guiding principles for Allied Health Professional (AHP) telehealth consultations

Realising the full potential of telehealth demands comprehensive and multidimensional considerations. Telehealth implementation and financial and technical domains come together to influence the successful establishment and delivery of telehealth consultations. Our working group presents a guiding framework for telehealth guidelines with these three overarching domains, with each domain comprising multiple subdomains (see Table 1):

- **Implementation considerations** include factors influencing clinical decision-making in remote consultations, organizational infrastructures, which comprise human elements (e.g., service users, their families, and telehealth healthcare teams), routines (e.g., documentation and checklist) as well as formal processes.
- Financial considerations incorporate costs, reimbursement, and insurance coverage.

• **Technical considerations** incorporate considerations of how technical infrastructures, including both telehealth material (e.g., physical and virtual space characteristics) and immaterial features (e.g., training), influence key issues such as privacy, risk, and safety when consulting remotely.

An infographic containing a summary of the framework for AHP telehealth guidelines is available in Figure 1.

# Considerations for staff training for telehealth consultations.

A list of considerations, including both implementation (e.g., how to assess a patient's suitability for telehealth, how to conduct a risk assessment prior to starting a telehealth consultation), and technical considerations (e.g., telehealth software and hardware). Staff training for telehealth consultations, is provided in Table 2. This list of training domains is not intended to be exhaustive, and we recommend that training is aligned with the needs of individual AHP.

### Conclusion

This policy brief, though not exhaustive, should serve as a basis for designing comprehensive guidelines and training for AHP telehealth consultations. A multidimensional telehealth framework for AHP consultations offers the opportunity to move toward a more integrated model of care, rather than merely focusing on tools and technologies. We propose that the use of this policy brief in the design of future telehealth guidelines and training and, consequently, in the delivery of AHP telehealth consultations may reduce digital exclusion and health inequities. It may also lead to reductions in the burden of treatment, telehealth barriers, and wider inequities between allied health professions and nations, thereby ultimately facilitating the successful implementation of healthcare digital transformation.

### **Abbreviations**

AHP	Allied Health Professional
UK	United Kingdom
NHS	National Health Service
COVID-19	Coronavirus diease 2019

# Declarations Funding

The research conducted to support the development of the policy brief was part funded by Public Health England through the British Association of Prosthetists and Orthotists (BAPO) [Ref: 6719098]. The policy brief development was supported by Policy Impact Acceleration funding from Staffordshire University.

Conflicts of interest: The authors declare no conflicts of interest.

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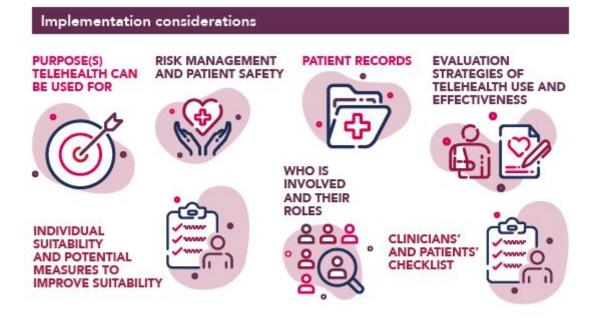
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# Tables

Tables 1 to 2 are available in the Supplementary Files section

### **Figures**



Financial considerations



#### **Technical considerations**



Figure 1

Infographic summary of the framework for the development of AHP telehealth consultation guidelines

# **Supplementary Files**

This is a list of supplementary files associated with this preprint. Click to download.

• Tables.docx