Telehealth patient consultation guidelines and **training**

Framework to guide Allied Health Professional telehealth patient consultation guidelines and training

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This policy brief is endorsed by:

Allied Health Professions Federation

British and Irish Orthoptic Society

British Association for Music Therapy

British Association of Art Therapists

British Association of Dramatherapists

British Association of Prosthetists and Orthotists

British Dietetic Association

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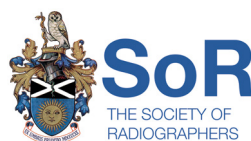**Institute of Osteopathy**

Royal College of Occupational Therapists

Royal College of Podiatry

Royal College of Speech and Language Therapists

The Society of Radiographers

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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
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.

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.
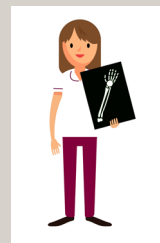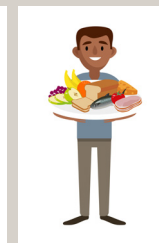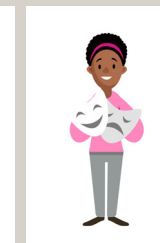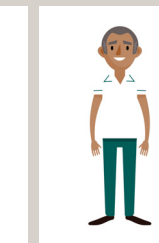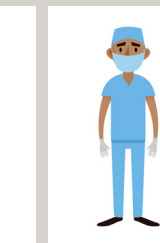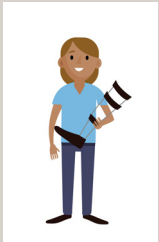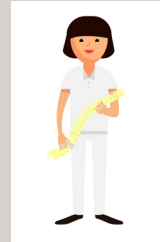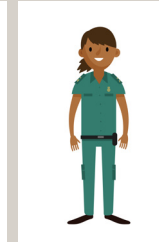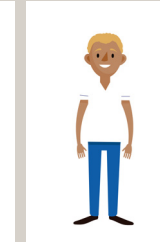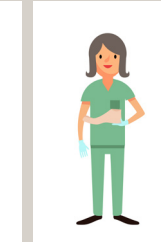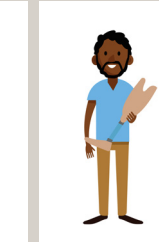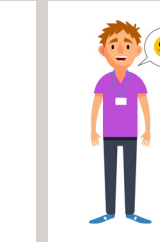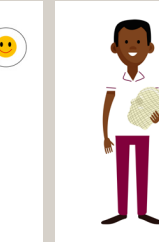
List of abbreviations

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

Funding

Allied Health Professions

Art Therapist | Diagnostic Radiographer | Dietitian | Drama Therapist | Music Therapist | Occupational Therapist | Operating Department Practitioner | Orthoptist

Orthotist | Osteopath | Paramedic | Physiotherapist | Podiatrist | Prosthetist | Speech & Language Therapist | Therapeutic Radiographer

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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 (14). 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 ethnicity). 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 , 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 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.

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):

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.
2	**Financial considerations** incorporate costs, reimbursement, and insurance coverage.
3	**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.

Table 1: A framework of guiding principles for Allied Health Professional (AHP) telehealth consultations with examples.

Implementation considerations	Descriptions
Purpose(s) telehealth can be used for	• Type of services telehealth can be used for (e.g., triage, advice provision, assessment, intervention, provision of a piece of equipment, patient education, service evaluation, staff supervision, staff support, collaboration within multidisciplinary teams and between organisations) • 'Red flags' indicating a need for a face-to-face consultation

Suitability of telehealth solutions for each individual; and potential measures to improve suitability	**Patient's characteristics to take into account to determine suitability of telehealth for individual/adopt measures to improve suitability, such as:**
	
	• Diagnosis
	• Urgency of care
	• Language skills and cultural background
	• Speech and communication capacity
	• Hearing and visual abilities
	• Physical function
	• Cognitive function
	• Mental health status
	• Technological skills
	• Availability of technology devices and access to the internet
	• The geographical location of the patient
	• Adequate home setting
	• Willingness to participate in remote consultations
	• Safeguarding issues
	• Family's and/or caregiver's availability to provide support and facilitate consultations if needed
	• Type of assessments and treatments (e.g., physical examination, hands-on interventions)
	
	Share decision-making about telehealth use for consultations, which includes:
	
	• Manage patient expectations about telehealth consultations
	• Consideration of patient preferences and priorities
	• Consideration of flexible hybrid consultation approach
	• Inform patients about:
	  • Telehealth consultation purpose
	  • Telehealth possible benefits
	  • Telehealth risks (e.g., privacy, confidentiality and security)
	• Telehealth limitations and barriers (e.g., limited assessment options, limited hands-on treatment, patient-clinician communication, and relationship)
	• Differences and similarities between telehealth and face-to-face consultations
	• Other telehealth general characteristics (e.g., consultation length, consultation instructions, required level of commitment, privacy as well as confidentiality measures and costs)
	• Possible alternative consultation options (e.g., face-to-face appointments)
	• Possible compensatory measures/additional support needed to participate in telehealth

Risk management and patient safety	• Assessment of risks that may arise from the patient's participation during the consultation (e.g., emotional distress, physical injuries) • How to manage risks and unexpected events during the consultation (e.g., steps to follow in case of an emergency during the consultation) • Emergency information (e.g., patient's personal contact, alternative communication means, the physical location of the patient)

Patient records	Obtain consent:
	  • Nature of consent (e.g., verbal, written or implicit consent by accepting to join the telehealth consultation)
	  • How to record consent
	• How to document telehealth consultations (e.g., Subjective, Objective, Assessment/Action, and Plan (SOAP) format)
	• Type of information that needs to be documented (e.g., consent; subjective information, and clinical outcomes; safeguarding issues; equipment used during the consultation; People that participated in the virtual consultation; resources provided to the patient; additional information received from the patient (e.g., images, audio, or video recordings); limitations encountered during the consultation, such as assessment and treatment limitations; adverse events occurred during telehealth consultation, subsequent actions taken and following outcome and plan; technology limitations and safety limitations)
	• Measures to keep patient records confidential

Who is involved in telehealth consultations and their roles	**Patient** **Healthcare professionals** • Professionals involved in the telehealth multidisciplinary team • AHP students on placement • Telehealth service coordinator and AHP team leader • Support teams (e.g., triage team)	• Administrative and IT teams offering logistic and technical support (e.g., booking system, technical failure management) **Family and caregivers** • Family's and/or caregiver's role in supporting telehealth consultations
Evaluation strategies of telehealth use and effectiveness	• Continuous monitoring process (e.g., objective and patient-reported outcome measures, outcome measures about staff wellbeing, evaluation of impact across the local healthcare system) • Use of quality improvement strategies (e.g., online questionnaire, patient's and their family's feedback, service improvement initiatives) • Using up-to-date evidence-based knowledge while providing telehealth patient consultations • Using up-to-date evidence about the use of telehealth with particular client groups • Continuous monitoring of health inequalities	
Clinicians' and patients' checklist	**To follow before, during and after a telehealth consultation:** • Checklist with items clinicians should meet before, during and after a consultation (e.g., risk evaluation, how to set up the environment, instructions on how to proceed in case of technical failure, equipment needed for assessment/treatment, feedback on the telehealth session, information to record) • Checklist with items patients should meet before, during and after a consultation (e.g., equipment needed, how to set up the environment, instructions on how to proceed in case of technical failure, cost details, feedback on the consultation)	

Financial considerations	**Descriptions**	
Costs, reimbursement and coverage	• Telehealth consultation costs • Information about the reimbursement process within and across nations/states • Insurance coverage for telehealth • Information about insurance coverage within and across nations/states • Cost of setting up and maintaining service (e.g., equipment, training, administration)	

Technical considerations	**Descriptions**	
Patients' and AHPs' telehealth training	**Patient's telehealth training** • Information sheet explaining telehealth • Telehealth trial • Training to respond to technical disruption **AHPs' telehealth training** • Family's and/or caregiver's role in supporting telehealth consultations • Training to respond to technical disruption • Training to manage adverse events • Training to respond to an emergency during a telehealth consultation (e.g., patient cardiac arrest) • Safeguarding training • Continuing professional development training programmes	
The session, room and technical requirements	**Session requirements** • Consultation length • Characteristics of internet connection (e.g., bandwidth and speed) • Telehealth platforms allowed • Measures to protect patient confidentiality during/after patient consultation **Room requirements** • Room characteristics (e.g., private and quiet room, good lighting, minimal distraction, adequate space to conduct a physical assessment/treatment)	**Technical requirements** • Technical equipment needed for consultations (e.g., camera, headphones, external microphone, external sound cards) • Other equipment needed to deliver the assessments and/or interventions (e.g., gym ball) • Technical procedures to follow to ensure patient's privacy and information security during data access, transmission and storage (e.g., password and authentication procedures)
Legislation, legal and ethical aspects	• AHPs' licensure and registration requirements to practice within and across nations/states • AHPs' regulation and scope of practice • Relevant local, national, institutional,	• and professional regulations and policies governing telehealth • Laws regulating telehealth • Telehealth code of ethics • Information governance

Figure 1: Infographic summary of the framework for the development of AHP telehealth consultation guidelines.

Implementation considerations

PURPOSE(S) TELEHEALTH CAN BE USED FOR

RISK MANAGEMENT AND PATIENT SAFETY

PATIENT RECORDS

EVALUATION STRATEGIES OF TELEHEALTH USE AND EFFECTIVENESS

INDIVIDUAL SUITABILITY AND POTENTIAL MEASURES TO IMPROVE SUITABILITY

WHO IS INVOLVED AND THEIR ROLES

CLINICIANS' AND PATIENTS' CHECKLIST

Financial considerations

CONSULTATION COSTS, REIMBURSEMENT PROCESSES, AND INSURANCE COVERAGE

Technical considerations

TELEHEALTH TRAINING FOR PATIENTS AND AHPS

SESSION, ROOM AND TECHNICAL REQUIREMENTS

LEGISLATION, LEGAL AND ETHICAL ASPECTS

Table 2: Considerations for staff training for telehealth consultations.

Implementation considerations	How to assess a patient's suitability for telehealth
	How to promote shared decision-making and ensure personalised care
	How to prepare patients for telehealth consultations
	How to conduct a risk assessment prior to starting a telehealth consultation
	How to conduct a clinical assessment via a telehealth consultation
	How to provide a treatment intervention via a telehealth consultation
	How to ensure patient confidentiality when conducting telehealth consultations
	How to deal with distressing conversations during a telehealth consultation
	How to deal with an emergency during a telehealth consultation
	How to get feedback from patients and their families about telehealth consultations
Technical considerations	How to use the software required for conducting telehealth consultations
	How to use the hardware required for conducting telehealth consultations

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.

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