

Introduction

Telemedicine involves utilizing telecommunications and technology to deliver healthcare - including diagnosis, consultation, education, care management, and patient self-management - to populations with otherwise limited access to care. It offers a broad-range of benefits, including increased care accessibility, improved continuity of care, and decreased healthcare costs, without sacrificing patient satisfaction. However, telemedicine requires unique skills and approaches, unfamiliar to many physicians. We conducted a rapid review of research-validated techniques, across multiple subspecialties, for maximizing synchronous telemedicine appointments.

Aims and Objectives

The objective of this capstone project is to identify practical, evidence-based strategies for healthcare providers to implement for more successful telehealth encounters.

This project aims to conduct a rapid review of research-validated techniques, across multiple subspecialties, for maximizing synchronous telemedicine appointments. This project also aims to facilitate a successful transition to remote healthcare by synthesizing a comprehensive list of features of successful telemedicine programs for incorporation into future telemedicine programs.

Methods

The methodology for this rapid review project involved a comprehensive search of PubMed (via MeSH searching) and Google Scholar to identify available research on this topic. Articles were selected that address telehealth strategies in various settings by a single-reviewer, initially by title and abstract screening and secondarily by full-text screening. In summary, 149 studies were screened with 97 reports excluded (10 published before 2005, 22 not available in English, 4 articles were not free. Then, 112 papers were retrieved with a final 52 included in the qualitative synthesis (6 gray literature, 55 not focusing on the area of interest). Article selection is visualized in Figure 1. Findings were organized into an appendix with key findings from each article. These were then synthesized into a concise list of practical and realistic strategies for successful telehealth.

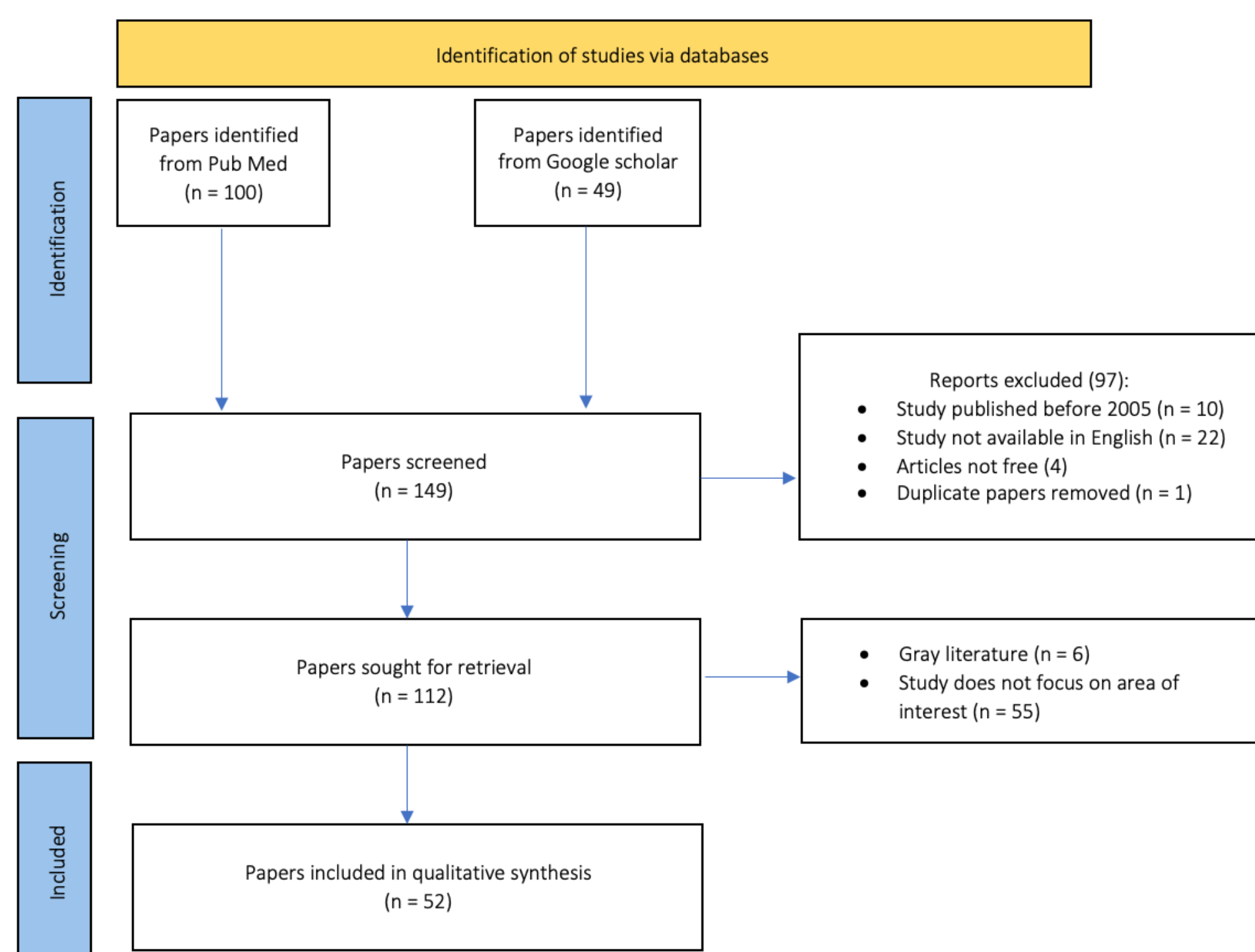


Figure 1. Identification of Studies

Results

This article review sought to identify research-validated techniques for maximizing telemedicine appointments, synthesized in a comprehensive list, in order to support clinicians in modern healthcare settings. Ultimately, 52 articles were included across several subspecialties with three major themes emerging, including good practices for any telehealth appointment, strategies for a successful telemedicine implementation, and telemedicine strategies for clinicians. These findings are summarized in Table 1.

Table 1. Concise Summary of Findings

Good practices for any telehealth appointment:

- Familiarize yourself with the technology and ensure it is working properly
- Ensure an appropriate setting
- When starting the appointment, confirm the patient's identity by confirming their name and date of birth, particularly if it is one's first time meeting a patient
- Introduce yourself and others on the call and/or in the room; Encourage patient chaperones as they prefer
- Ensure you and the patient can hear and/or see each other; adjust as necessary
- Use diagrams, videos, and infographics as appropriate/available. Consider this a valuable opportunity to highlight reputable online resources
- Further, consider sharing patient results (ie, images) on the screen when explaining pathology
- Inform the patient when taking notes or looking away from the screen
- Ensure patient's contact details and preference for follow-up is recorded and available in case there are connection disruptions

Strategies for Successful Telemedicine Implementation -

- Utilize a needs assessment before launching a telemedicine program to evaluate service availability, expressed needs, perception, and affordability, with careful consideration for prevailing social, economic, and cultural dynamics of the community
- Commit to an institutional investment in HIPAA-compliant technology
- Address major barriers to technology - lack of knowledge, skills, and training for users
- Strive for accessibility and inclusivity, including marginalized populations, isolated patients, and patients with disabilities
- Develop workflow procedures and protocols for conducting telehealth appointments among clinical staff
- Consider the diverse spectrum of telehealth applications
- Engage in regular, systematic service evaluation to identify areas for potential improvement and maintain flexibility

Telemedicine Strategies for Clinicians -

- Accept and embrace telemedicine as a part of modern clinical practice
- Always ascertain the patient's preferences for in person versus virtual appointment
- Identify appropriate telemedicine candidates and consider these characteristics when scheduling appointments
- Utilize remote patient monitoring and wearable technology to augment the telemedicine assessment
- Video visits may provide a unique opportunity for providers to observe and learn about the patient's home environment, which may reveal relevant medical information
- Adopt collaborative care models and develop interdisciplinary teams as an opportunity to expand primary care capacity, improve care outcomes, and promote physician growth

Conclusions

In conclusion, several evidence-based and practical suggestions for successful telemedicine were identified. For all telehealth appointments, physicians should be prepared and proficient at utilizing the required technology. On a systemic level, engaging stakeholders and future users, with regular, systematic re-evaluation can increase program adoption success. Individually, clinicians should consider appropriate telehealth candidates and opportunities to augment the virtual experience.

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A complete list of references is available from the first author.

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