

IMPACT OF TELEMEDICINE ON PATIENT OUTCOMES IN RURAL HEALTHCARE SETTINGS:

A SCOPING REVIEW

FAMH4012A Research Methodology

GROUP 1

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OVERVIEW

- Background
- Rationale
- Objectives
- Research Question
- Inclusion & Exclusion Criteria
- Search Strategy
- Ethical Considerations
- Conclusion
- Reference

BACKGROUND

Patient burdens and difficulties, such as transportation concerns while seeking specialized care, can be lessened or eliminated in rural areas by using telehealth to provide and support the delivery of healthcare services (RHIhub, n.d). Geographical and logistical obstacles frequently restrict access to in-person care in rural areas, where telemedicine has emerged as a viable way to alleviate healthcare inequities. Despite the growing adoption of telemedicine, there remains a need for robust empirical evidence to evaluate its effectiveness in improving patient outcomes in these rural areas.

RATIONALE

There is a gap in the effectiveness and design of technological interventions for illness treatment and addressing patient outcomes in rural communities because of a lack of resources and lack of knowledge about technology.

OBJECTIVES

- To evaluate how well telemedicine works in rural areas to improve patient outcomes and access to healthcare.
- To point out gaps in the existing research on the efficacy of telemedicine in rural healthcare settings and make recommendations for future studies.

RESEARCH QUESTION

PCC Framework

Population: Rural patients

Concept: Effectiveness of telemedicine

Context: Healthcare access and patient outcomes in rural healthcare settings.

Research Question

What is the effectiveness of telemedicine in improving healthcare access and patient outcomes for rural patients in rural healthcare settings?

INCLUSION AND EXCLUSION CRITERIA

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none">• Studies on rural patients residing in geographically remote areas where in-person healthcare access is limited or unavailable.• Studies on patients who have used telemedicine services for consultation, diagnosis, treatment or follow-up care in rural healthcare settings.• Studies that examine the effectiveness of telemedicine interventions in rural settings.• Studies that report on the technology used for telemedicine	<ul style="list-style-type: none">• Studies on patients not residing in rural areas.• Studies focusing on populations with specific conditions unrelated to rural healthcare settings.• Studies not examining the impact of telemedicine on healthcare access or patient outcomes in rural settings.• Studies with insufficient data on rural patient outcomes, healthcare access, or telemedicine interventions..

METHODOLOGY

Databases:

PubMed , Scopus & EbscoHost

Keywords:

- Telemedicine
- Rural healthcare
- Healthcare access
- Rural patients
- Patient outcome (s)
- Rural areas

METHODOLOGY

Screening strategy:

Step 1: Title and abstract screening
- using inclusion criteria

Step 2: Full review of articles selected from first screening

METHODOLOGY

Quantiative Approach

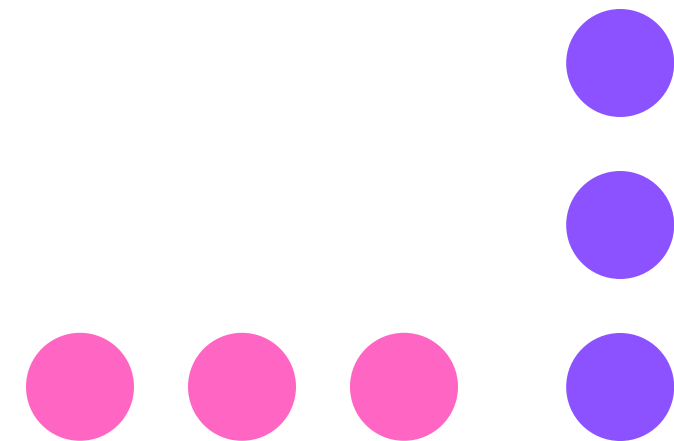
Variables to be extracted:

- Patients who have used telemedicine
- Patients who have not used telemedicine
- Effectiveness of telemedicine
- Patient outcomes pre and post use of telemedicine

METHODOLOGY

Data charting and Analysis

- Extracted data will be presented in tables using Excel
- Descriptive tables
- The tables will include: author, publication year, extracted numerical data, country where study was conducted , objective that relates to the key findings



ETHICAL CONSIDERATIONS

Transparency:

Note articles that were excluded throughout the search strategy and reason for exclusion. PRISMA can be used to develop a flow chart (Pham et al,2014)

Bias:

Bias is mitigated by strictly adhering to defined inclusion and exclusion criteria

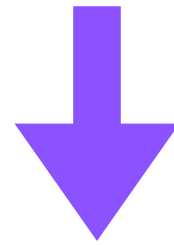


TIMELINE

Phase 1:

+/- 1-2 months

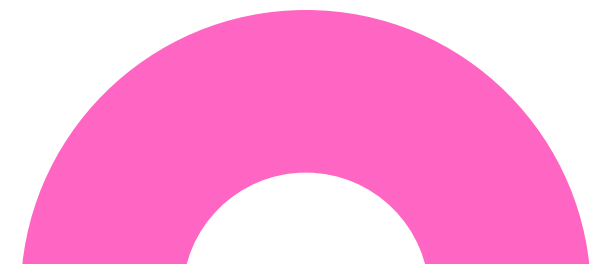
Includes: Title, background & rationale, define objectives, define research question, determine inclusion and exclusion criteria



Phase 2: +/- 4-5 months

Includes: Screening, data extraction, data charting and data analysis

(Pham et al, 2014)



REFERENCE

- Pham, M. T., Rajić, A., Greig, J.D., Sargeant, J.M., Papadopoulos, A., McEwen, S.A. (2014) A scoping review of scoping reviews: advancing the approach and enhancing the consistency. Research synthesis methods. [Online] 5 (4), 371–385.
- RHIhub., (n.d). Telehealth and Health Information Technology in Rural Healthcare. Rural Health Information Hub. Available at: <https://www.ruralhealthinfo.org/topics/telehealth-health-it>



Thank You

For your attention

