











REVIEW

Telenursing practice for independence and economic value: a scoping review protocol

Práctica de teleenfermería para la independencia y el valor económico: un protocolo de revisión del alcance

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ABSTRACT

Introduction: telenursing is a form of health technology, can be used to save costs, facilitate communication and shorten time. This study aimed to examine benefit telenursing for independence and economic.

Method: this study used the scoping review method. The search strategy involved keywords relevant to telenursing in online database such as PubMed, Science Direct, Scopus, ProQuest.

Results: Nine (9) article found later in the review and telenursing as a technology that significantly aids nurses in meeting patients' needs, especially during the COVID-19 pandemic and solution for reducing healthcare costs while improving patient clinical outcomes.

Conclusions: telenursing in promoting both patient independence and cost-effectiveness.

Keywords: Telenursing; Electronic Health Record; Scoping Review.

RESUMEN

Introducción: la teleenfermería es una forma de tecnología sanitaria que puede utilizarse para ahorrar costes, facilitar la comunicación y acortar el tiempo. Este estudio tuvo como objetivo examinar los beneficios de la teleenfermería para la independencia y la economía.

Método: en este estudio se utilizó el método de revisión de alcance. La estrategia de búsqueda implicó palabras clave relevantes para la teleenfermería en bases de datos en línea como PubMed, Science Direct, Scopus y ProQuest.

Resultados: nueve (9) artículos encontrados más adelante en la revisión y la teleenfermería como una tecnología que ayuda significativamente a las enfermeras a satisfacer las necesidades de los pacientes, especialmente durante la pandemia de COVID-19 y una solución para reducir los costos de atención médica al tiempo que mejora los resultados clínicos de los pacientes.

Conclusiones: la teleenfermería como herramienta para promover la independencia del paciente y la rentabilidad.

Palabras clave: Teleenfermería; Historial Médico Electrónico; Revisión del Alcance.

INTRODUCTION

The development of nursing science today aligns with the evolving times and the changing needs of patients. ⁽¹⁾ This progress is accompanied by advancements in skills, knowledge, and evidence-based practices. ^(2,3,4) Moreover, there is an increasing prevalence of healthcare technologies that support nurses' activities in various healthcare settings. These technologies are digital, easily accessible, and enhance the quality of care delivery. ⁽⁵⁾ One example of technology in nursing is telenursing. This technology facilitates the transmission of health data and enables the provision of indirect care to patients. ⁽⁶⁾ Telenursing is part of telehealth, operating through the process of data transmission, service management, and coordination using telecommunication technology within the domain of nursing. ^(7,8) The use of telenursing has expanded globally and has been widely utilized by nurses and patients, particularly during the COVID-19 pandemic. ^(9,10) Despite its growing adoption, telenursing faces several challenges that need to be addressed to optimize its potential and meet the future demands of nursing technology. Telenursing is also claimed to be a cost-effective and time-saving strategy. ^(11,12) It facilitates communication through text-based interactions, which enhances accessibility and convenience. In the United States, a study ⁽¹³⁾ demonstrated that telecare technology significantly benefited postpartum mothers, helping to reduce costs while simplifying care.

Globally, extensive research has been conducted on telenursing, which continues to refine healthcare service concepts through digital technology. ⁽¹⁴⁾ Telenursing has been consistently applied in healthcare services, providing notable advantages to patients, nurses, and healthcare systems alike. As a digital technology, telenursing heavily relies on network frameworks. For example, nurses can use telecommunication tools such as phones to address patients' needs after assessing the urgency of their condition. ⁽¹⁵⁾ As a digital technology, telenursing heavily relies on network frameworks. For example, nurses can use telecommunication tools such as phones to address patients' needs after assessing the urgency of their condition. ⁽¹⁶⁾ Aimed this study is synthesize evidence on the benefits of telenursing especially in patient independence and increasing its economic value.

METHOD

The method employed in this study follows a framework of five steps, ⁽¹⁷⁾ further refined by ⁽¹⁸⁾ :

Step 1 is that identify the research question: What models of mHealth or telenursing are needed for nursing practice?

Step 2 is that identify relevant studies: Evidence was sourced from databases including PubMed, Scopus, ScienceDirect, and ProQuest. Research questions were formulated using the Population, Concept, and Context (PCC) framework ⁽¹⁹⁾ (table 1). All reference sources were imported into EndNote for systematic organization. The study also adhered to the reporting guidelines of the PRISMA Extension for Scoping Reviews (PRISMA-ScR), incorporating a flow diagram for the study selection process. ⁽²⁰⁾

Population	Concept	Context
advanced nursing, and practitioners	practice nursing Digital telenursing Digital Health, electronic health records, machine learning, virtual reality	Language limit: English, Indonesia Time Limit: 2014-2024

Step 3: Study Selection

Each author independently reviewed the titles and abstracts of the studies selected and exported them into the EndNote application. In cases of disagreement, a third author acted as an arbiter to resolve differences.

Step 4: Data Mapping

This step involved creating charts that included both general and specific information about the references or literature reviewed, as well as additional suggested references. ⁽¹⁷⁾ Data were mapped based on the authors' names, year of publication, country, objectives, methods, sample size, and a summary of the main findings.

Step 5: Organizing, Summarizing, and Reporting Data

Data were organized, interpreted, and reported in alignment with the framework. ⁽²¹⁾ The results are presented in table 2, providing a structured overview of the findings.

Table 2. Summary table

Author	Methods	Country	Title of Paper	Aim	Sample	Result
Fothergill ⁽²²⁾	Qualitative research	UK	Understanding the Value of a Proactive Telecare System in Supporting Older Adults' Independence at Home: Qualitative Interview Study Among Key Interest Groups	To explore the perceptions of different stakeholder groups to understand how proactive telecare services can support older adults' independence.	30 Participants	Older adults emphasized the importance of telecare in maintaining independence, ensuring safety, and providing emotional reassurance.
Allison et al ⁽²³⁾	Mixed-Methods	US	Adolescent and parent perception of telehealth visits: a mixed-methods study	To explore adolescents' and parents' perceptions of privacy, confidentiality, and therapeutic value during telehealth video visits.	162 participants (adolescents and parents)	Adolescents and parents described telehealth as convenient, beneficial, private, and supportive of adolescents' autonomy and independence.
Dixon ⁽²⁴⁾	RCT	UK	Cost-effectiveness of telehealth for patients with raised cardiovascular disease risk: evidence from the Healthline randomized controlled trial	To investigate the cost-effectiveness of telehealth interventions for primary care patients at increased risk of cardiovascular disease (CVD).	641 participants	Evidence suggests telehealth interventions via Healthline are likely cost-effective if the cost threshold is £20,000 per QALY.
Dixon ⁽²⁵⁾	RCT	UK	Cost-effectiveness of telehealth for patients with depression: evidence from the Healthlines randomised controlled trial	To evaluate the cost-effectiveness of Healthlines telehealth interventions for patients with depression.	609 participants	The intervention is unlikely to be cost-effective under current circumstances.
Taraldsen et al ⁽²⁶⁾	RCT	Norway	Digital Technology to Deliver a Lifestyle Integrated Exercise Intervention in Young Seniors-The Prevent IT Feasibility Randomized Controlled Trial	To assess the feasibility of implementing a lifestyle-integrated functional exercise program and delivering interventions using digital technology (eLiFE).	180 participants	To assess the feasibility of implementing a lifestyle-integrated functional exercise program and delivering interventions using digital technology (eLiFE).
da Silva Schulz et al ⁽²⁷⁾	RCT	Brazil	Telephonic nursing intervention for laparoscopic cholecystectomy and hernia repair: A randomized controlled study	To assess the feasibility of implementing a lifestyle-integrated functional exercise program and delivering interventions using digital technology (eLiFE).	22 participants	The experimental group showed significant outcomes, demonstrating the effectiveness of telephonic nursing interventions for these surgical patients.
Sefidi et al ⁽²⁸⁾	RCT	Iran	Evaluating the effects of telenursing on patients' activities of daily living and instrumental activities of daily living after myocardial infarction: A randomized controlled trial study	To assess the impact of telenursing on patients' daily living activities and instrumental activities of daily living (ADLs and IADLs) post-myocardial infarction (MI).	95 patients	Telenursing interventions improved patients' ADLs and IADLs after MI, enhancing their independence.

Green et al ⁽²⁹⁾	RCT	AUS	Prostate Cancer Survivorship Essentials for men with prostate cancer on androgen deprivation therapy: protocol for a randomised controlled trial of a tele-based nurse-led survivorship care intervention (PCEssentials Hormone Therapy Study)	To evaluate the implementation of PC Essentials and its outcomes, including cost-effectiveness compared to standard care, acceptability, adoption, and sustainability.	236 orang	Cost-utility analysis provided critical economic evaluation data. Remote interventions were highly acceptable for geographically dispersed and vulnerable populations.
Bashir & Bastola ⁽³⁰⁾	Case study	US	Perspectives of Nurses Toward Telehealth Efficacy and Quality of Health Care: Pilot Study	To examine whether telehealth technology impacts nurses' perceptions of service quality in telehealth organizations.	205 patients	Results showed overall positive perceptions of service quality (0,05332), indicating satisfaction with telehealth nursing service quality (TNSQ).

RESULTS

General Characteristics of the Included Articles

We identified articles from four databases: PubMed, Science Direct, Scopus, and ProQuest, spanning the years 2014-2024. The articles originated from several countries, including the US (n = 3), the UK (n = 1), Iran (n = 1), Australia (n = 1), Brazil (n = 1), and Norway (n = 1). These are presented in the PRISMA Chart below.

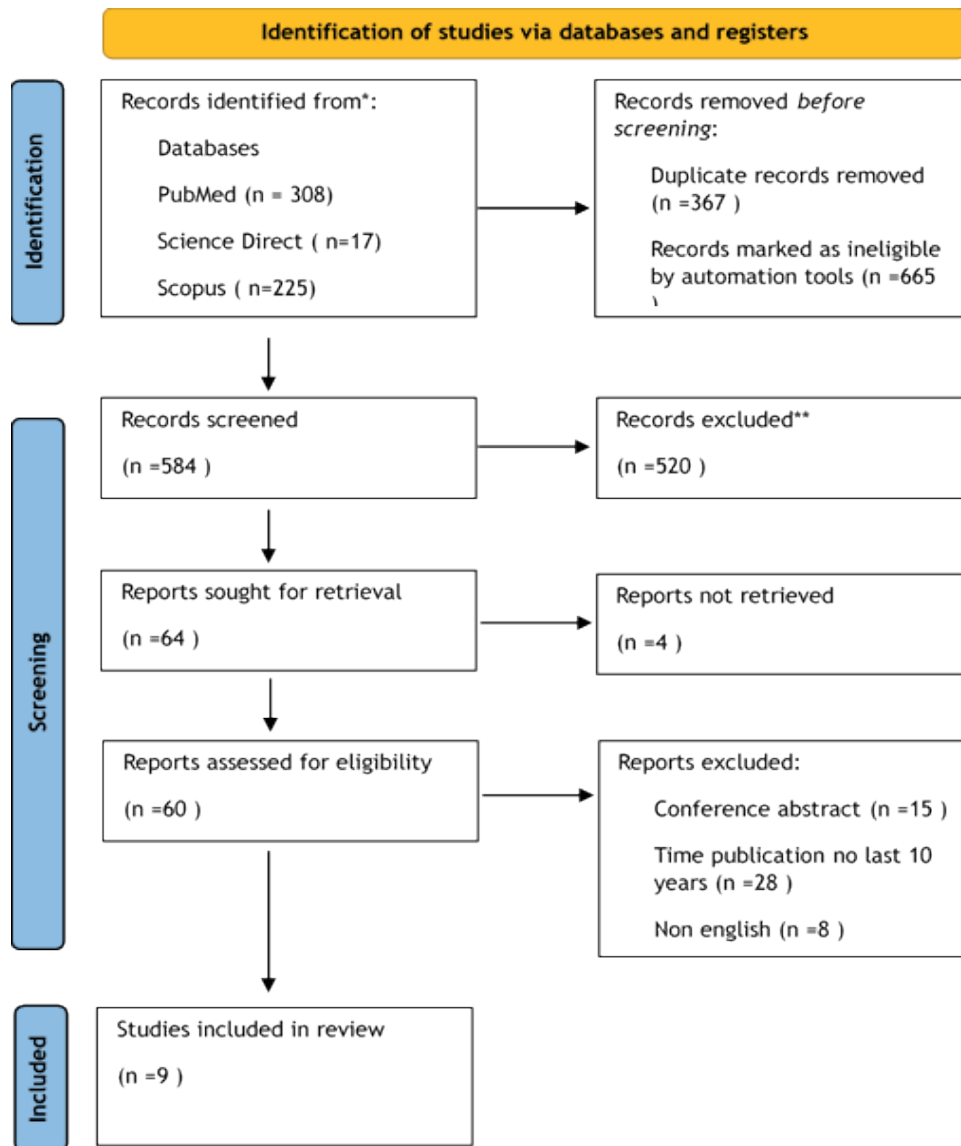


Figure 1. Prisma Flow Chart

DISCUSSION

Telenursing for Patient Independence

The *Oxford Learner’s Dictionary* defines independence as the freedom to organize oneself and make decisions independently, with or without external assistance.⁽³¹⁾ Telenursing has emerged as a technology that significantly aids nurses in meeting patients’ needs, especially during the COVID-19 pandemic.^(32,33,34) Research by Sefidi, Schulz and Taralde^(26,27,28) highlighted that telenursing is effective in managing patients’ daily activities, including activities of daily living (ADL)⁽³⁵⁾ and instrumental activities of daily living (IADL). Similarly, a study by Fothergill, Holland⁽³⁶⁾ and Fothergill⁽²²⁾ found that telenursing plays a crucial role in supporting older adults’ independence and ensuring their safety and Adolescents supportive of autonomy and independence for adolescents.⁽²³⁾

Additionally, the use of mobile health (M-Health) for patients recovering from myocardial infarction was shown to enhance emotional resilience and strength in older adults after hospital discharge.⁽³⁷⁾ This is particularly critical as a recent World Health Organization (WHO) survey estimates that the global population aged 60 and older will soon surpass the number of younger individuals⁽³⁸⁾ and Majority of patients are satisfied with telehealth-based services.⁽³⁰⁾

The urgency of telenursing in fostering patient independence is increasingly evident in today's era.

Telenursing for economic value (Cost effectiveness)

Telenursing services are anticipated to serve as a solution for reducing healthcare costs while improving patient clinical outcomes.^(24,25,39) Acting as a bridge between healthcare providers and patients, telenursing can lower expenses due to its short interaction times and the elimination of travel costs.^(29,40)

The mechanism of telenursing often involves installing health facilities or medical devices at the patient's home to monitor physiological parameters, which can be performed by doctors and nurses. Additionally, technologies such as telephones and video conferencing can be utilized.^(41,42)

Telehealth systems based on PCA-PERP have demonstrated significant cost savings, particularly in reducing transportation costs for healthcare providers who would otherwise need to visit patients in person.⁽⁴³⁾ Similarly, research by Comans, Mihala⁽⁴⁴⁾ on web-based multimodal therapy highlights its cost-effectiveness. However, Benger, Noble⁽⁴⁵⁾ that non-face-to-face consultations can sometimes be less effective, requiring longer communication times.

Further cost savings can also be achieved by reducing hospital administrative expenses.⁽⁴⁶⁾ In cases where patient medication monitoring is required, telenursing solutions such as monitoring-based systems, most notably the globally recognized *Project Extension for Community Healthcare Outcomes (Project ECHO)*, can be utilized.⁽⁴⁷⁾ Despite these benefits, long-term use of telehealth and telenursing is not always recommended.^(48,49)

CONCLUSIONS

This scoping review examines how technology, specifically telenursing, has evolved into an intermediary medium that enables healthcare providers to communicate with patients without direct face-to-face interactions. The findings highlight the role of telenursing in promoting both patient independence and cost-effectiveness. By leveraging telenursing technology, healthcare professionals, including doctors and nurses, can bridge physical distances and reduce hospital costs such as administrative fees, and expenses related to doctor and nurse visits. At the same time, telenursing ensures patients continue to receive critical information about their health conditions through various technological platforms.

REFERENCES

1. Fukada M. Nursing Competency: Definition, Structure and Development. *Yonago Acta Med.* 2018;61(1):1-7.
2. Melnyk BM, Gallagher-Ford L, Zellefrow C, Tucker S, Thomas B, Sinnott LT, Tan A. The First U.S. Study on Nurses' Evidence-Based Practice Competencies Indicates Major Deficits That Threaten Healthcare Quality, Safety, and Patient Outcomes. *Worldviews Evid Based Nurs.* 2018;15(1):16-25.
3. O'Shea ER, Mager D. End-of-life nursing education: Enhancing nurse knowledge and attitudes. *Appl Nurs Res.* 2019;50:151197.
4. Rebueno MC, Tiongco DD, Macindo JR. A structural equation model on the attributes of a skills enhancement program affecting clinical competence of pre-graduate nursing students. *Nurse Educ Today.* 2017;49:180-6.
5. Huter K, Krick T, Domhoff D, Seibert K, Wolf-Ostermann K, Rothgang H. Effectiveness of Digital Technologies to Support Nursing Care: Results of a Scoping Review. *J Multidiscip Healthc.* 2020;13:1905-26.
6. Barbosa IA, Silva M. Nursing care by telehealth: what is the influence of distance on communication? *Rev Bras Enferm.* 2017;70(5):928-34.
7. Glinkowski W, Pawłowska K, Kozłowska L. Telehealth and telenursing perception and knowledge among university students of nursing in Poland. *Telemed J E Health.* 2013;19(7):523-9.
8. Kamei T. Telenursing and artificial intelligence for oncology nursing. *Asia Pac J Oncol Nurs.* 2022;9(12):100119.
9. Kord Z, Fereidouni Z, Mirzaee MS, Alizadeh Z, Behnammoghadam M, Rezaei M, et al. Telenursing home care and COVID-19: a qualitative study. *BMJ Support Palliat Care.* 2021.
10. Heidari M, Hosseini M, Vasli P, Nasiri M, Hejazi S, Fasihi M. Comparison of the Effect of the Person-Centered and Family-Centered Training via Telenursing on the Quality of Life in COVID-19 Patients. *Int J Prev Med.* 2023;14:12.

11. Grustam AS, Severens JL, De Massari D, Buyukkaramikli N, Koymans R, Vrijhoef HJM. Cost-Effectiveness Analysis in Telehealth: A Comparison between Home Telemonitoring, Nurse Telephone Support, and Usual Care in Chronic Heart Failure Management. *Value Health*. 2018;21(7):772-82.
12. Souza-Junior VD, Mendes IA, Mazzo A, Godoy S. Application of telenursing in nursing practice: an integrative literature review. *Appl Nurs Res*. 2016;29:254-60.
13. Hannan J. APN telephone follow up to low-income first time mothers. *J Clin Nurs*. 2013;22(1-2):262-70.
14. Abdolkhani R, Petersen S, Walter R, Zhao L, Butler-Henderson K, Livesay K. The Impact of Digital Health Transformation Driven by COVID-19 on Nursing Practice: Systematic Literature Review. *JMIR Nurs*. 2022;5(1):e40348.
15. Chang M-Y, Kuo F-L, Lin T-R, Li C-C, Lee T-Y. The Intention and Influence Factors of Nurses' Participation in Telenursing. *Informatics*. 2021;8(2):35.
16. Mataxen PA, Webb LD. Telehealth nursing: More than just a phone call. *Nursing*. 2019;49(4):11-3.
17. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology* 2007;8(1):19-32.
18. Peters MD, Godfrey CM, Khalil H, McInerney P, Parker D, Soares CB. Guidance for conducting systematic scoping reviews. *Int J Evid Based Healthc*. 2015;13(3):141-6.
19. Briggs J. *Methodology for JBI Scoping Reviews: The Joanna Briggs Institute*; 2015.
20. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med*. 2018;169(7):467-73.
21. Colquhoun HL, Levac D, O'Brien KK, Straus S, Tricco AC, Perrier L, et al. Scoping reviews: time for clarity in definition, methods, and reporting. *J Clin Epidemiol*. 2014;67(12):1291-4.
22. Fothergill L, Holland C, Latham Y, Hayes N. Understanding the Value of a Proactive Telecare System in Supporting Older Adults' Independence at Home: Qualitative Interview Study Among Key Interest Groups. *J Med Internet Res*. 2023;25:e47997.
23. Allison BA, Rea S, Mikesell L, Perry MF. Adolescent and Parent Perceptions of Telehealth Visits: A Mixed-Methods Study. *Journal of Adolescent Health*. 2022;70(3):403-13.
24. Dixon P, Hollinghurst S, Edwards L, Thomas C, Gaunt D, Foster A, et al. Cost-effectiveness of telehealth for patients with raised cardiovascular disease risk: evidence from the Healthlines randomised controlled trial. *BMJ Open*. 2016;6(8):e012352.
25. Dixon P, Hollinghurst S, Edwards L, Thomas C, Foster A, Davies B, et al. Cost-effectiveness of telehealth for patients with depression: evidence from the Healthlines randomised controlled trial. *BJPsych Open*. 2016;2(4):262-9.
26. Taraldsen K, Mikolaizak AS, Maier AB, Mellone S, Boulton E, Aminian K, et al. Digital Technology to Deliver a Lifestyle-Integrated Exercise Intervention in Young Seniors-The PreventIT Feasibility Randomized Controlled Trial. *Front Digit Health*. 2020;2:10.
27. da Silva Schulz R, Santana RF, Dos Santos CTB, Faleiro TB, do Amaral Passarellas DM, Hercules ABS, do Carmo TG. Telephonic nursing intervention for laparoscopic cholecystectomy and hernia repair: A randomized controlled study. *BMC Nurs*. 2020;19:38.
28. Sefidi N, Assarroudi A, Zandi Z, Malkemes SJ, Rakhshani MH, Abbaszade A, Sahebkar M. Evaluating the effects of telenursing on patients' activities of daily living and instrumental activities of daily living after myocardial infarction: A randomized controlled trial study. *Geriatr Gerontol Int*. 2022;22(8):616-22.

29. Green A, Newton RU, Smith DP, Tuffaha H, Galvão DA, Heathcote P, et al. Prostate Cancer Survivorship Essentials for men with prostate cancer on androgen deprivation therapy: protocol for a randomised controlled trial of a tele-based nurse-led survivorship care intervention (PCEssentials Hormone Therapy Study). *BMJ Open*. 2024;14(3):e084412.
30. Bashir A, Bastola DR. Perspectives of Nurses Toward Telehealth Efficacy and Quality of Health Care: Pilot Study. *JMIR Med Inform*. 2018;6(2):e35.
31. Oxford. How is defining Independence? : Oxford Learner Dictionaries; 2024 [Available from: https://www.oxfordlearnersdictionaries.com/definition/english/independence_1?q=independence].
32. Hidayah N, Kristan K, Supu NM, Latief AI, Amir H. Telehealth Model in Improving Health Service During COVID-19 Pandemic. *Gaceta Medica De Caracas*. 2022;130(4):873-8.
33. Topal Hançer A, Demir P. Postoperative Telenursing During the COVID-19 Pandemic: Improving Patient Outcomes. *J Perianesth Nurs*. 2023;38(4):622-8.
34. Mamom J, Daovisan H. Telenursing: How do caregivers treat and prevent pressure injury in bedridden patients during the COVID-19 pandemic in Thailand? Using an embedded approach. *J Telemed Telecare*. 2024;30(3):589-96.
35. Widayanti T, Rahayu BA. Use of Information Technology by the Elderly to Support Activities of Daily Living. *An Idea Health Journal*. 2024;4(01):25-31.
36. Fothergill L, Holland C, Latham Y, Hayes N. Understanding the Value of a Proactive Telecare System in Supporting Older Adults' Independence at Home: Qualitative Interview Study Among Key Interest Groups. *J Med Internet Res*. 2023;25:e47997.
37. Salarvand S, Farzanpour F, Gharaei HA. The effect of personalized mobile health (mHealth) in cardiac rehabilitation for discharged elderly patients after acute myocardial infarction on their inner strength and resilience. *BMC Cardiovasc Disord*. 2024;24(1):116.
38. WHO. Ageing and health: World Health Organization; 2020 [Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>].
39. Clarke M, Fursse J, Brown-Connolly NE, Sharma U, Jones R. Evaluation of the National Health Service (NHS) Direct Pilot Telehealth Program: Cost-Effectiveness Analysis. *Telemedicine and e-Health*. 2017;24(1):67-76.
40. Snoswell CL, Taylor ML, Comans TA, Smith AC, Gray LC, Caffery LJ. Determining if Telehealth Can Reduce Health System Costs: Scoping Review. *J Med Internet Res*. 2020;22(10):e17298.
41. Clarke M, Shah A, Sharma U. Systematic review of studies on telemonitoring of patients with congestive heart failure: a meta-analysis. *J Telemed Telecare*. 2011;17(1):7-14.
42. Ignatowicz A, Atherton H, Bernstein CJ, Bryce C, Court R, Sturt J, Griffiths F. Internet videoconferencing for patient-clinician consultations in long-term conditions: A review of reviews and applications in line with guidelines and recommendations. *Digit Health*. 2019;5:2055207619845831.
43. Kovács G, Somogyvári Z, Maka E, Nagyjánosi L. Bedside ROP screening and telemedicine interpretation integrated to a neonatal transport system: Economic aspects and return on investment analysis. *Early Hum Dev*. 2017;106-107:1-5.
44. Comans T, Mihala G, Sakzewski L, Boyd RN, Scuffham P. The cost-effectiveness of a web-based multimodal therapy for unilateral cerebral palsy: the Mitii randomized controlled trial. *Dev Med Child Neurol*. 2017;59(7):756-61.
45. Bengler JR, Noble SM, Coast J, Kendall JM. The safety and effectiveness of minor injuries telemedicine. *Emerg Med J*. 2004;21(4):438-45.

46. Greving JP, Kaasjager HA, Vernooij JW, Hovens MM, Wierdsma J, Grandjean HM, et al. Cost-effectiveness of a nurse-led internet-based vascular risk factor management programme: economic evaluation alongside a randomised controlled clinical trial. *BMJ Open*. 2015;5(5):e007128.

47. Zhou C, Crawford A, Serhal E, Kurdyak P, Sockalingam S. The Impact of Project ECHO on Participant and Patient Outcomes: A Systematic Review. *Acad Med*. 2016;91(10):1439-61.

48. Ndabwe H, Basu A, Mohammed J. Post pandemic analysis on comprehensive utilization of telehealth and telemedicine. *Clinical eHealth*. 2024;7:5-14.

49. Hetrianto ND, Pratiwi Putri DU, Arisandi W. Effectiveness of Using E-Puskesmas Application in Public Health Centre in the Work Area at Public Health Office. *An Idea Nursing Journal*. 2024;3(02):27-32.

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CONFLICT OF INTEREST

The authors report that they have no conflicts of interest for this study.

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