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# An Integrative Literature Review on Older Adults, Their eHealth Literacy and Use of Telehealth

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**Abstract.** Healthcare is challenged by providing high-quality, equitable and timely access to care for older adults. Telehealth can address these challenges, however, a level of eHealth literacy is required. This integrative literature review sought to understand the experiences of older adult patients with poor eHealth literacy who use telehealth. Results include that older adults with less eHealth literacy have many concerns engaging with telehealth and irrespective of their eHealth literacy, most need support to use telehealth.

Keywords. Older adults, telehealth, eHealth literacy

# 1. Introduction

Healthcare systems are currently faced with challenges to meet the increasing demands for high-quality, safe and timely access to healthcare services and telehealth is one option to achieve this. The World Health Organisation (WHO) [1] describes telehealth as when telecommunication and virtual technology are used to deliver health care outside traditional health-care facilities. Additionally, WHO define health literacy as the social and cognitive skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health. Expanding from health literacy is eHealth literacy, which was first defined by Norman and Skinner as the "ability to seek, find, understand, and appraise health information from electronic sources and apply knowledge gained to addressing or solving a health problem [2]." Issues with eHealth literacy can be rectified by using ICT to enable support of different age groups, especially older adults, whose cognitive skills and physical capabilities may be affected by the normal ageing process [3,4].

### 2. Methods

This literature review seeks to understand the experiences of older adult patients who use telehealth when they are challenged by eHealth literacy using the Whittemore and Knafl

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approach [5]. A search was conducted using the key terms "patient experience," "telehealth" and "eHealth literacy". Publications were limited to 2015-2019, written in English, where older adults were defined as those over 65 years. Excluded were studies that explored perceptions of healthcare staff or family; or patients diagnosed with a mental health condition. Four stages of screening: removing duplicates, screening against inclusion and exclusion criteria, including or rejecting studies based on titles and abstracts, then quality checks using the John Hopkins Nursing Practice Evidence Appraisal tools [6], identified ten final articles for inclusion in this review.

# 3. Results

The main result was that older adults who are challenged with their eHealth literacy had many concerns engaging with telehealth. All of the studies indicated that skills were needed to access, use and evaluate online health-related information, and that older adults need support to be confident in their use of telehealth. Three major interrelated themes were identified: Patient characteristics with two subthemes of socio-demographics and the user's ability to obtain and evaluate health information; use of telehealth, with two subthemes of digital devices and online portals, and support that may be needed; and patient engagement, with two subthemes of patient motivation, and security and trust.

# 4. Conclusion

Telehealth has the potential to empower older adults, promote self-management and independent living. However, there are few studies that have looked into the older adult's experience of using telehealth and only ten articles were identified. A recommendation from this review, given the ageing population and increasing longevity, is for further research into the development of an eHealth literacy assessment tool focused on older adults.

# References

- [1] World Health Organisation. Telehealth, 2019, http://www.who.int/sustainable-development/health-sector/strategies/telehealth/en/.
- [2] Norman CD, Skinner HA. eHealth literacy: Essential skills for consumer health in a networked world. Journal of Medical Internet Research 8, (2006), e9.
- [3] Albert NM, Dinesen B, Spindler H et al. Factors associated with telemonitoring use among patients with chronic heart failure. Journal of Telemedicine and Telecare 23, (2017), 283-291.
- [4] Murman DL. The impact of age on cognition. Seminars in Hearing 36, (2015), 111-121.
- [5] Whittemore R, Knafl K. The integrative review: Updated methodology. Journal of Advanced Nursing 52, (2005), 546-553.
- [6] Dearholt SL, Dang D. Johns Hopkins nursing evidence based practice model and guidelines. 2nd ed, Sigma Theta Tau International, Indianapolis, IN, 2012.