

Digital Literacy Training Supports for Older Adults with Cardiovascular Disease Using Health Technologies

Dr. Cherisse Seaton, Dr. Kathy Rush, Rowan Ross, Robert Janke
University of British Columbia, Okanagan Campus

INTRODUCTION & AIM

Digital technologies present new possibilities for cardiovascular disease (CVD) self-care, yet little is known about older adults' digital literacy training (DLT) needs.

Aim: To synthesize evidence about the impacts of training on health technology use among older adults with CVD and explore their learning experiences.

METHOD

Multiple databases were searched for articles reporting DLT with adults age 60+ years with CVD published up to March 31, 2025.

Older adults with CVD, from three outpatient cardiac clinics (Fig. 1) in British Columbia, Canada were recruited by a nursing student research assistant

Responses were thematically analyzed and triangulated with review findings.

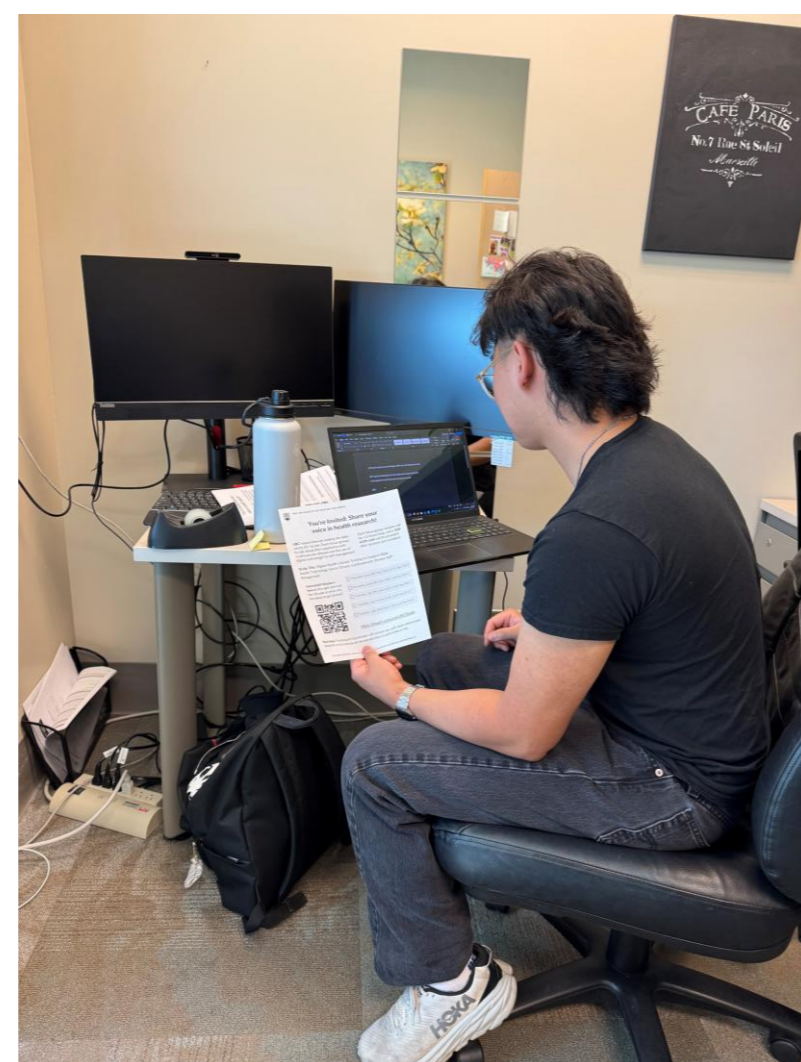
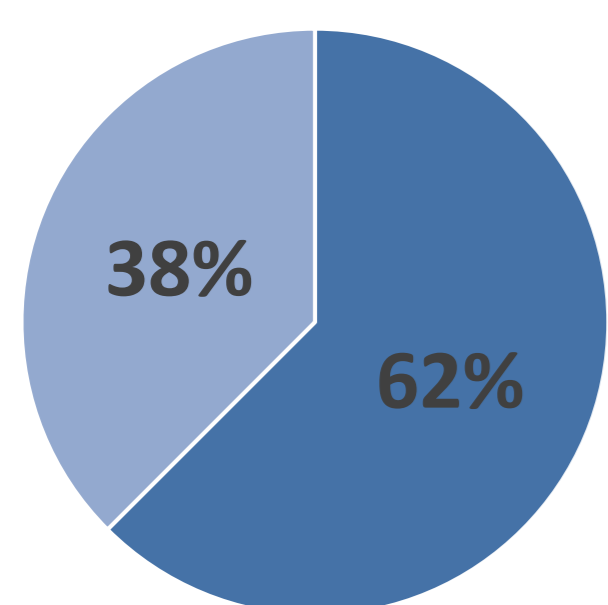


Fig. 1

Characteristics of 56 reviewed studies



- High Quality (≥4/5)
- Lower Quality (≤3/5)

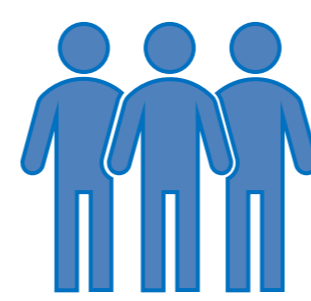
- Years **2009-2025**
- Mean age **68** years

Focus group sample characteristics

- **32** patients (50% men) with atrial fibrillation, hypertension, and/or heart failure
- Mean age **73** years (range 63-85)

RESULTS & DISCUSSION

Findings from DLT literature



- The majority of studies reported **positive** technology-related outcomes (e.g., technology confidence, acceptance, literacy).
- **Feedback** from participants affirmed the need for training and usefulness of personalized “helpline” support.

What did we learn from focus group participants?

- Learning experiences varied – some with lifelong engagement, others less inclined.
- Diverse resources available (e.g., family/friends, library, online tutorials)
- Provider receptivity had an influence, with some looking to providers for support.
- Deciphering information provided by devices was an expressed need.

“I'd like to see a lot more opportunity for education. If I was to look at the [smartwatch] ECG myself, I'd like to feel confident that I know when something's up, so I can alert my doctor.”

In interventions, DLT is largely provider-driven, but in everyday practice not always feasible.

Differing levels of technology competence warrant differing support approaches.

CONCLUSION

Together, these findings highlight the role of DLT for encouraging older adults with CVD to use health technologies and suggest the importance of understanding support needs.



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