

Usability and Acceptability of a Palliative Care Mobile Intervention for Older Adults with Heart Failure and Caregivers: Observational Study

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Background

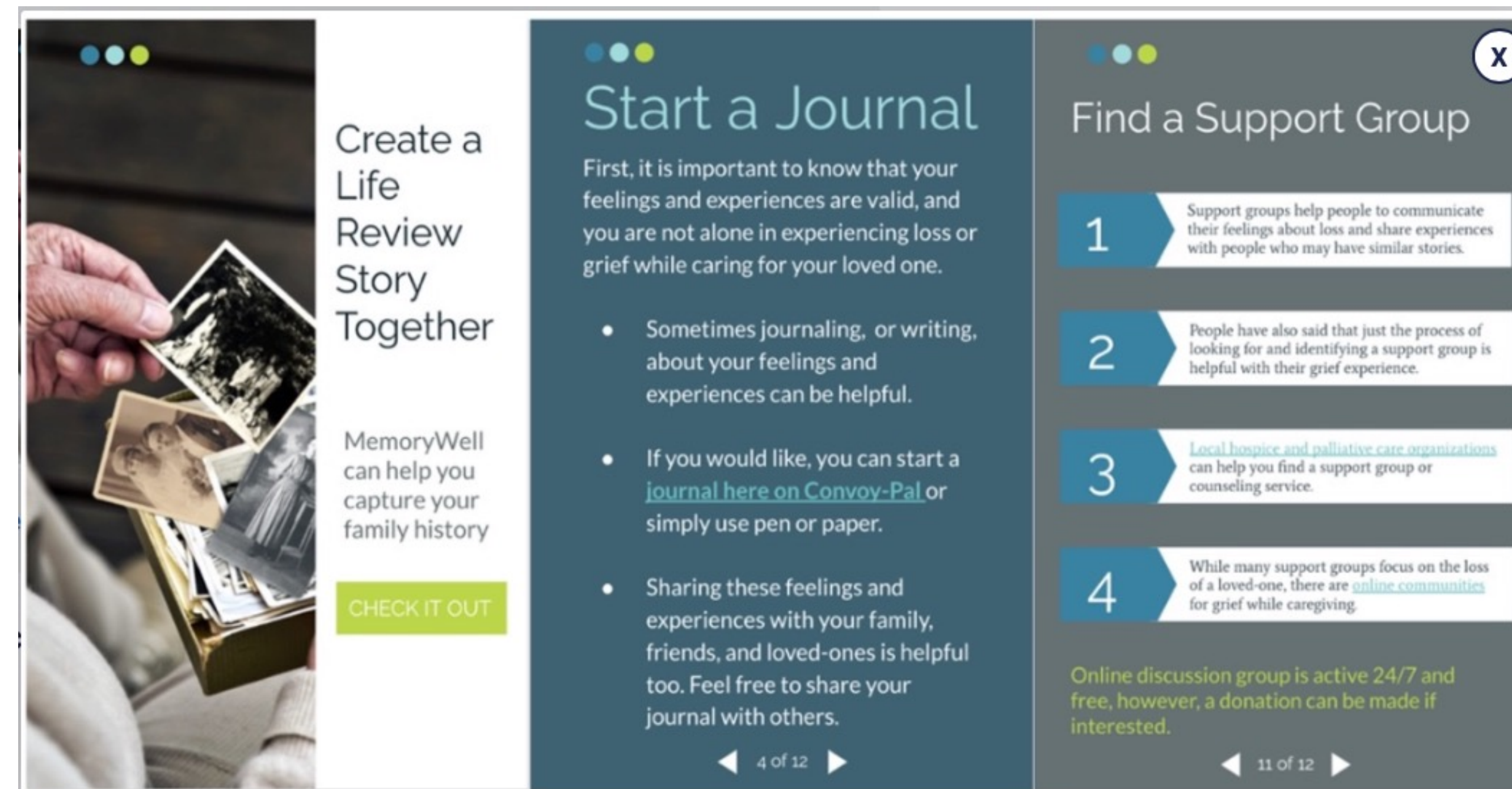
Heart failure is a leading cause of death among older adults. Digital health can increase access to and awareness of palliative care for patients with advanced heart failure and their caregivers. However, few palliative care digital interventions target heart failure or patients' caregivers, family, and friends, termed here as the social convoy. To address this need, the Social Convoy Palliative Care (Convoy-Pal) mobile intervention was developed to deliver self-management tools and palliative care resources to older adults with advanced heart failure and their social convoys.

Objective

The goal of the research was to test the acceptability and usability of Convoy-Pal among older adults with advanced heart failure and their social convoys.

Methods

Convoy-Pal includes tablet-based and smartwatch tools facilitating self-management and access to palliative care resources. Older adults and social convoy caregivers completed an acceptability and usability interview via Zoom, including open-ended questions and the Mobile Application Rating Scale: User Version (uMARS). Descriptive analysis was conducted to summarize the results of open-ended feedback and self-reported acceptability and usability.



Results

A total of 26 participants (16 older adults and 10 social convoy caregivers) participated in the interview. Overall, the feedback from users was good (uMARS mean 3.96/5 [SD 0.81]). Both older adults and social convoy caregivers scored information provided by Convoy-Pal the highest (mean 4.22 [SD 0.75] and mean 4.21 [SD 0.64], respectively). Aesthetics, functionality, and engagement were also perceived as acceptable (mean >3.5). Open-ended feedback resulted in 5 themes including improvements to goal setting, monitoring tools, daily check-in call feature, portal and mobile app, and convoy assessment.

Conclusions

Convoy-Pal was perceived as acceptable with good usability among older adults with heart failure and their social convoy caregivers. With good acceptability, Convoy-Pal may ultimately lead to increased access to palliative care resources and facilitate self-management among older adults with heart failure and their social convoy caregivers.

Table 3. Participant feedback (N=23)

Theme	Sub-Themes	Representative Quote
Goal Setting	Obtainable Goals	"Questions should be addressed monthly not weekly"- 72 Year Old Participant
	Comment Section	"Provide fill-in the blank options"- 75-Year-Old Participant
Monitoring Tools	Added Features	"Would like to see prompting feedback if things are not okay" - 84 Year Old Participant and "add ways to detect falls ex: stroke and falls down the stairs" - 74-Year-Old Participant
Reminders	Checklist	"design a checklist of all of the medication a person takes for specific medication notifications versus getting general messages"- 71-Year-Old Participant
Portal and Mobile App	Thresholds	"Would like to see thresholds on the graphs to determine who should be consulted" 74-Year-Old Participant
Assessing the Convoy	Wrong Approach	"if (a caregiver) is in crisis mode they will not fill out the questions...this is not beneficial for patients who need extra help and support"-72 Year Old Participant, and "they would not answer those questionnaires truthfully because they were not raised to share emotions growing up" - 78-Year-Old Participant