

Reconnecting with GENIE: Evaluating the Impact of a Telecommunications Portal on Social Isolation in Long-Term Care

Summary

- Maintaining social relationships improves mental health while helping combat feelings of social isolation. However, older adults living in long-term care (LTC) often face challenges connecting to family members, especially family who live far away.
 - Scheduling conflicts between family members, LTC residents, and LTC staff make it difficult to coordinate real-time in-person and virtual visits. Older adults in LTC may also experience barriers to navigating virtual communications platforms due to lack of familiarity with technology or challenges with hand and finger coordination.
- This pilot project introduced a standalone communications platform in LTC facilities to help address older adults' feelings of social isolation. The platform, known as GENIE, was specifically designed in collaboration with older adults to ensure ease of independent use. Because it is asynchronous (non-simultaneous), GENIE allows users to exchange messages, videos, and photos with family members and friends at convenient times for older adults and LTC staff.
- The goal of the evaluation was to assess the impact of GENIE on older adults' social isolation, loneliness, mood, emotional wellbeing, and sense of belonging.
 - Expected outcomes included improved mental and emotional health status and decreased rates of social isolation, loneliness, and depression in older adults living in LTC.
 - It was also anticipated that family members would experience lower levels of stress and worry about their loved ones, older adults and family members would report satisfaction with the platform, and LTC staff would report satisfaction with the platform and reduced burden at work.
- To assess GENIE's impact, the platform was implemented at 5 LTC homes in rural and urban locations across New Brunswick (intervention (TX) group). 5 additional facilities did not use GENIE (control (CTRL) group). At the end of the project, health outcomes were compared for GENIE users over time as well as between the TX and CTRL groups.
 - The TX group constituted GENIE users (i.e., sent >10 messages on GENIE over 3 months) and included 14 older adults (average age 88 years; 9 females and 5 males). The CTRL group included 14 non-GENIE users (average age 83 years; 9 females and 5 males). Data was also collected from 5 staff members and 15 family members at the intervention sites.

HSPF Focus Area

Increasing independence, quality of life, and promoting healthy lifestyles

Project Start & End Date

August 1, 2021 – March 31, 2024

Organization/Agency

Centre for Innovation and Research in Aging (CIRA)

Location

Fredericton, Moncton, Saint John

Principal Investigator(s)

[Justine Estey](#)

Indicator	Impact / Outcome / Result	Quote
<p><i>Full findings are described in project reporting but are not presented as part of this summary. Please contact the project principal investigator for more information.</i></p>		
Social Isolation	<ul style="list-style-type: none"> • After using GENIE for 3 months, there was no significant difference in older adults' perceived level of social connections or satisfaction with their social connections/networks. • Observational evidence that was collected from the project team and a small number of LTC staff suggests that GENIE had a positive impact on older adults' engagement with family members. 	<p>GENIE was "life-changing" for one older adult participant because it was the only way they could stay in touch with their family members; they expressed feeling a shift from being distanced and unable to engage in discussion to feeling engaged and active in their loved ones' lives.</p>

Indicator	Impact / Outcome / Result
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Mental Health	<ul style="list-style-type: none">• After 3 months of GENIE use, there was no significant difference between GENIE users and non-GENIE users' mental health outcomes (i.e., feelings of loneliness and depression), as measured by survey responses to the UCLA Loneliness Scale and Geriatric Depression Scale.• However, after using GENIE, older adults' self-reported emotional wellbeing was significantly higher than the CTRL group (who did not have access to GENIE), as measured by responses to the RAND 36-Item Health Survey.
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Methods and Comparison

The impact of GENIE on older adults' mental and emotional health was assessed using surveys, observational data, and interviews. Outcome comparisons for GENIE users (TX group) were made before and after three months of GENIE use as well as between GENIE users (TX) and non-GENIE users (CTRL).

Conclusions and Lessons Learned

- Observational data suggests that GENIE had a positive impact on the mental and emotional health of the small sample of older adults who participated in the study. However, these findings should be interpreted cautiously due to the subjective nature of observational data. There was also a large amount of missing data and only a limited number of statistically significant results (which is perhaps due to the small sample size of the study). Altogether, these findings indicate that further research is needed to assess GENIE's impact on older adults.
- Due to physical and/or cognitive limitations, most older adults who participated in the study were unable to navigate GENIE on their own.
- Internet stability, family dynamics, family users' access to and comfort with smart technology, LTC staff members' workload, and older adults' cognitive status were key barriers that limited older adults' engagement with GENIE.
- GENIE may not be suitable for all older adults in LTC considering high rates of cognitive decline and LTC staffing shortages. Instead, GENIE may be better suited for more independent older adult populations.
- Some validated measurement scales may not be appropriate for all older adult populations, especially those living in LTC facilities. Research tools that require recollection may not be appropriate for participants who experience cognitive decline.

Recommendations

- Implement GENIE with more independent older adult populations.
- The project team has developed a "Best Practices Guide" based on lessons learned from the pilot project. This guide clearly outlines family member and LTC staff roles and responsibilities and should be used to guide any future implementations of GENIE.
- To ensure accurate and high-quality data, research tools and measurement scales should be adapted to the population being studied (e.g., using measurement scales that are appropriate for adults living in LTC and incorporating more comprehensive observational analysis).

Next Steps

- The 10 LTC sites that participated in the pilot project are interested in continuing to use GENIE with their residents.
- Reconnecting with GENIE has applied for, but not yet secured, scale-up funding to implement GENIE in communities with more independent older adults (e.g., adult day programs and independent living environments). One LTC site is interested in participating in the next phase of the project if funding is secured.

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