

ABSTRACT

Title: Which are the evidence-based technologies for home support in community-dwelling older adults and their family caregivers? Preliminary results of a systematic review of the literature

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Background: The pandemic has highlighted the importance of home care in older adults. Technology-based solutions are an excellent option to support seniors living at home. With different options available and limited resources, it is important to increase our knowledge on the evidence-based technologies for home support in community-dwelling older adults (CDOA) and their family caregivers (FC).

Objective: This systematic review of the literature aims to provide a comprehensive description of evidence-based technologies used for home support targeting CDOA without neurocognitive impairment and their FC in the past five years.

Methods: With the help of two independent librarians specializing in Geriatrics and Psychology, 2120 references from 2016 were identified on databases (CINAHL, Medline, PsycINFO, AgeLine, and Web of Science) using different keywords (e.g., Gerontechnology, Home support). We included research articles showing evidence of the use of technology for home support in CDOA, tested in participants older than 65, without evidence of neurocognitive impairment, and mentioning a FC.

Results: After excluding 679 duplicates using COVIDENCE software for systematic review management, three independent reviewers with a background in Engineering and Psychology screened 1329 references, and the principal investigator resolved the conflicts. A total of 112 full-text records were screened with 16 articles meeting inclusion criteria.

Conclusion: Most of the technologies included sensors to monitor the CDOA's behavior. The studies included qualitative, quantitative, and mixed designs. Most of them were tested in the US and Europe. The use of these technologies for CDOA and FC needs further development and research.