Methods and Practices for Engaging Older Adults in Technology Research, Design and Development: Scoping Review Findings.

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It is considered best practice to engage older adults (OAs) in technology research, design and development. In order to formulate best practice guidelines and facilitate effective OA engagement, we explored current practices of conducting technology research and development. The scoping review examines best practice guidelines for effectively engaging OAs in research. Our literature analysis summarizes methods used for involving OAs and highlights their applicability of participants depending on their health status and age-related limitations.

We searched six databases and independently assessed the articles for inclusion. Data collected included: method, age, cognitive ability, disease/condition, technology type, who participated and in what capacity, and evaluation of the research process, including barriers and facilitators.

A total of 56 articles met the inclusion criteria. The number of OA engagement methods used in these studies ranged from 1-12, with an average of 4 methods. They included vignettes, visualizations, logging emails/phone calls, photos, drawing house plans, scrapbooks, storyboards, cartoons and cards. Recommendations for cognitively and physically impaired OAs included shorter interviews, home visits and observations of daily activities. Several studies highlighted the need for an ongoing consent. For OAs, the social aspect of research engagement was equally important for OAs as the tasks. Ensuring flexible, interest based tasks/activities benefited the OA engagement. In terms of OA training, the studies show a preference to have multiple (paper), take-home sources which explain the details of the study and technology.

In summary, involving OAs in research exists on a continuum, from conceptualization and development to user testing. Research processes can be demanding and time-consuming; giving OAs choices of method is optimal.