Older Adults’ Acceptance of Virtual Doctors: A Preliminary Investigation
Extended Abstract

The use of virtual doctors is increasing; yet, we have not fully studied their impact and how they are perceived by the public, especially by digitally-marginalized users such as older adults. We also do not know how virtual doctors compare to other technology-mediated alternatives, like traditional telemedicine. More broadly, the factors leading to older users’ adoption of virtual doctors are not well understood. In other similar fields, users’ perceptions of early generations of conversational interfaces have been extensively studied. This raises the question of how virtual agents’ fidelity (e.g. video vs. speech-only) and agency (e.g. human vs. machine) influence confidence, comfort, and ease of use in target groups like older adults. To fill these knowledge gaps, I have conducted a mixed-methods study with older adults in which they engaged with different versions of telemedicine setups. The versions varied along the dimensions of fidelity and agency. Analysis of interview and survey data shows that older adults were most confident and comfortable with speech-only machine-powered interfaces for general healthcare information, and with video-based link with human doctors for specific healthcare information. The findings also show that in order for virtual doctor systems to be accepted by older adults, they need to do the following: complement older adults’ visits to their existing doctors, fit their existing information practices for gathering healthcare information, and have perceived value compared to their currently available alternatives.