long-term mobility disabilities. This population experiences substantial barriers in attending such programs in person, including lack of transportation to classes, inaccessible buildings where classes are held, and lack of appropriate modifications offered for this population of older adults. It is critical to overcome such barriers to ensure this population has an opportunity to receive the benefits of evidence-based programs. In this study we are translating an in-person evidence-based tai chi intervention, Tai Chi for Arthritis, to an online platform using videoconferencing software for those aging with long-term mobility disabilities. We will describe our approach of including users from the target population and industry representatives (videoconferencing software developer, Tai Chi for Arthritis program developer as well as local master trainer) in the adaptation of the intervention and present the key findings from doing so.

DIGITAL HOME ASSISTANT HEALTH APPLICATIONS FOR OLDER ADULTS WITH LONG-TERM MOBILITY DISABILITIES

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The aim of the current study was to evaluate the feasibility, usability, safety, and efficacy of digital home assistant health applications (e.g., meditation applications, medication reminders, hydration management) for older adults with mobility disabilities. We used a multi-pronged approach. First, we compiled, categorized, and assessed a list of commercially available health applications compatible with Amazon Alexa devices. We reviewed data from the National Health and Aging Trends Study and the ACCESS study to identify challenges that older adults with mobility disabilities face within the home. We also reviewed the literature on the acceptance and use of digital home assistant health applications by older adults. Lastly, we conducted user testing in a laboratory and in a home-simulation environment to assess usability of different health applications. Our results provide guidance for the implementation of digital home assistant health applications to support older adults with long-term mobility disabilities.

IDENTIFYING ACTIVITY SUPPORT NEEDS FOR INDIVIDUALS AGING WITH DISABILITY: SUBJECT MATTER EXPERT INTERVIEWS

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Technology designed to support aging-in-place for people with long-term disabilities begins with understanding the specific tasks that need support, and individual abilities, preferences, cultural practices, and privacy concerns. Such understanding is best achieved through a multi-method approach that includes direct, detailed assessments of representative users as well as individuals who work with or care for them. Our target users are people who identify as having a sensory or mobility impairment prior to the age of 50, including individuals aging with multiple sclerosis, late-onset hearing loss, and late-onset vision loss. In the present study, we are interviewing Subject Matter Experts (SMEs) to identify the scope of the challenges that should be explored in more depth. The SMEs include caregivers and medical professionals to identify challenges that the target populations experience in their everyday activities, advice about research adaptations, and recruitment ideas.

CREATING INCLUSIVE DESIGN EXPERIENCES THROUGH ENGAGING SENIORS WITH DISABILITIES IN STUDENT HACKATHONS

Jon Sanford, *Georgia Tech, Atlanta, Georgia, United States*

Although voice-activated assistants (e.g., Amazon Alexa) have become smarter, faster, more personalized, and more ubiquitous, little is known about their potential to promote aging in place for people with disabilities. Partnering with Amazon's Alexa team, a 2-month long design competition and hackathon was conducted to inspire college students to develop innovative voice-activated solutions to support successful aging with disabilities. This presentation will cover the specific inclusive experiences used to immerse student teams in the daily lives of the target population to ensure that design solutions responded to real needs of real people in real environments. These included: lectures on current research findings about the everyday needs and challenges of the target users as well as universal design approaches to solving those problems; a survey of individuals currently using voice-activated assistants to understand their benefits and potential uses; and providing target with Alexa-enabled devices and embedding them into the hackathon teams.

SESSION 5635 (SYMPOSIUM)

INTERDISCILPLINARY PERSPECTIVES ON AGING AT HOME ALONE WITH NEUROCOGNITIVE IMPAIRMENT

Chair: Laura Girling
Discussant: Patrick Doyle

Nearly 48 million individuals worldwide have a neurocognitive disorder with projections estimating that as many as 75 million may be afflicted by 2050.Although approximations vary, a substantial portion of those affected live in the community alone, accounting for up to one-third of cases. The true proportion of persons with neurocognitive disorders living alone in the community may be underestimated as dementias are often underdiagnosed and underreported. As the baby boom generation ages and trends towards nuclear families, geographic dispersion of families, and fewer children continue, the number of live-alone persons with neurocognitive impairment is anticipated to rise; creating increased potential for difficult, ambiguous circumstances involving the rights and needs of this population. Despite these trends, available information about this population remains limited. This symposium represents papers from social gerontology, bioethics, and policy; offering unique, but complimentary perspectives on live-alone persons with neurocognitive impairment. The four