

open for these individuals often rely on capacity evaluations conducted by a clinician to facilitate legal assignment of a surrogate decision maker. Despite this growing need, the number of physicians willing and capable of performing them is limited. Barriers reported by physicians reportedly impair their ability to conduct these evaluations include absence of relevant case information and lack of knowledge about the process itself. Geriatricians and related clinicians often perform these assessments. Sharing best practices with internists and family physicians may help overcome these barriers. A survey of geriatric medicine providers was conducted to identify essential components and questions necessary in the assessment of general decision making capacity. Twenty-nine providers at 6 academic institutions in Ohio responded to the survey and its follow-up inquiries. Though variability existed in evaluation styles and content between providers, a uniform set of recommendations was able to be generated. A total of 13 different summary recommendations were generated from this survey. Necessary components to these evaluations include (1) performance of cognitive testing (2) obtaining collateral information regarding functional status from another trusted individual (3) assessing the individual's insight into any reported functional impairments or safety concerns by explaining discrepancies between that individual's own observations and reported concerns from the trusted individual, and (4) using hypothetical situations to assess a person's judgment and reasoning in addressing any gaps in care or safety concerns raised during the interview.

DAILY ALCOHOL USE COVARIES WITH DAILY CONCENTRATION PROBLEMS ACROSS THE LIFESPAN: FINDINGS FROM THE MIDUS REFRESHER

Jacqueline Mogle,¹ Ashley Linden-Carmichael,² Sara Miller,³ and David Almeida,³ 1. *Penn State University, University Park, Pennsylvania, United States*, 2. *Penn State University, State College, Pennsylvania, United States*, 3. *Pennsylvania State University, University Park, Pennsylvania, United States*

Alcohol use is typically associated with impaired cognitive functioning on tasks related to attention and concentration. However, it remains unclear whether these impairments persist across days in ways that are noticeable to the individual. We examined this using the daily diary project of the Midlife in the United States Refresher cohort. Participants ($n=710$; $Mage=50.5$; range 25-75) completed 8 nights of telephone-based diaries ($Mdiaries=6.87$) that included questions about daily alcohol use ("how many drinks did you have today?") and five items assessing concentration (e.g., "today, did you have difficulty concentrating?") rated on a scale (1=none of the time to 5=all of the time). Using autoregressive multilevel models, we examined how same and previous day alcohol use related to perceived difficulties with concentration. Greater total alcohol use over the diary period was related to reports of concentration problems ($b=.31$, $SE=.10$, $p=.002$) though current day ($b=-.03$, $SE=.04$, $p=.49$) and previous day alcohol use ($b=.05$, $SE=.04$, $p=.23$) were not. The association between previous day use and concentration problems was qualified by an interaction with total alcohol use ($b=-.07$, $SE=.03$, $p=.002$). Individuals who drank less alcohol in general, experienced greater perceived concentration problems following the days on which they did drink ($b=.14$,

$SE=.07$, $p=.03$) relative to those who drank more alcohol across the diary period ($b=-.04$, $SE=.04$, $p=.36$). This relationship did not vary based on age, sex, or education. These results suggest that daily alcohol use could impair concentration across days, particularly for those adults who tend to consume less alcohol.

DAILY COGNITIVE DIFFICULTIES AND SOCIAL EXPERIENCES AMONG OLDER ADULTS

Ruixue Zhaoyang,¹ Jacqueline Mogle,² Karra Harrington,¹ and Martin Sliwinski,¹ 1. *The Pennsylvania State University, University Park, Pennsylvania, United States*, 2. *Penn State University, University Park, Pennsylvania, United States*

Self-reported cognitive difficulties are common in older adults and may be an early indicator of future cognitive decline or dementia. In past retrospective reports, cognitive difficulties have been linked with differences in social engagement or social relationships among older adults. However, little is known about how self-reported cognitive difficulties in daily life, such as memory lapses, relate to older adults' daily social experiences. This study examined how self-reported cognitive difficulties were related to older adults' daily social interactions and loneliness. Data were drawn from 312 community-dwelling older adults (aged 70 to 90 years) who reported their social interactions and loneliness throughout the day (five times) as well as cognitive difficulties (e.g., memory lapses, problems with attention) at the end of each day for 14 days. Multilevel models revealed that participants reported fewer memory lapses on days when they reported more frequent interactions with family members ($p=.041$). Higher levels of disruptions to daily activities caused by cognitive difficulties, in turn, predicted higher levels of loneliness the next day ($p=.006$), but not changes in social interactions the next day. At the between-person level, more memory lapses in daily life were associated with less frequent social interactions with friends, but more frequent unpleasant social interactions and higher levels of loneliness on average. These results suggest that older adults' self-reported cognitive difficulties were dynamically associated with their social interactions and loneliness at the daily level and played an important role in older adults' social life and well-being.

DEVELOPMENT AND EVALUATION OF TREATMENT ADHERENCE INTERVENTIONS FOR OLDER ADULTS WITH MCI USING IOT DEVICES

Jinhee Shin,¹ Eunhee Cho,¹ Gwang Suk Kim,¹ Heejung Kim,² Byoung Seok Ye,² and Chang-Gi Park,³ 1. *Yonsei University College of Nursing, Seoul, Seoul-t'ukpyolsi, Republic of Korea*, 2. *Yonsei University, Seoul, Seoul-t'ukpyolsi, Republic of Korea*, 3. *University of Illinois at Chicago, Seoul, Illinois, United States*

For older adults with mild cognitive impairment (MCI), treatment adherence is essential to prevent and delay dementia. Older adults with MCI should maintain treatment for chronic diseases, exercise regularly, and adhere to treatment to maintain health status. There is a lack of comprehensive interventions to promote treatment adherence (medication adherence and physical activity) for older adults with MCI. The purpose of this study was to develop an internet of things (IoT)-based real-time treatment adherence

for old adults with MCI and examine the effectiveness of the program. This study was a randomized controlled trial. The patients were enrolled from the neurology outpatient department clinic at a hospital in Korea. The subjects were 18 in the experimental group and 20 in the control group. This study intervention was IoT-based medication adherence device and real-time monitoring sever plus wrist wearable device. The study consists of a 10-week intervention period. The intervention program was provided for only the experimental group and the control group with a wearable device and usual care. Assessments were conducted at baseline, 6 weeks, and 10-weeks. A mixed-effects model was used in the analysis to evaluate the program. The IoT-based treatment adherence intervention was effective in improving medication adherence over time ($\beta = 11.465$, $p < .001$), physical activity (K-PASE) ($\beta = 27.376$, $p < .001$) and average the number of steps per week ($\beta = 3202.53$, $p < .001$). Health care providers can use this program to improve treatment adherence for chronic disease management and dementia prevention of older adults with cognitive impairment.

DEVELOPMENT OF A LOCATOR DEVICE USABILITY SCALE FOR PERSONS WITH DEMENTIA AT RISK OF GETTING LOST

Noelannah Neubauer,¹ Christa Spenrath,² Serrina Philip,¹ Christine Daum,³ Lili Liu,¹ and Antonio Miguel-Cruz,²
 1. *University of Waterloo, Waterloo, Ontario, Canada*, 2. *University of Alberta, Edmonton, Alberta, Canada*,
 3. *University of Waterloo, Edmonton, Alberta, Canada*

There is an increasing number of persons living with dementia who live alone. Recent COVID-19 pandemic restrictions have resulted in more persons receiving care remote through information and communication technologies. Locating technologies can be a tool to help care partners monitor their loved ones living with dementia. These devices can also mitigate risks associated with going missing, by reducing time for search and returning the lost person home safely. However, there is no clear, standardized approach to assess the usability of these devices. The purpose of this study was to develop a locator device usability scale for persons living with dementia at risk of getting lost. A two-phase study that utilized a multi-method design and included participatory and iterative strategies was conducted. In the first phase, an item pool was generated through online focus groups with service providers, technology developers, care partners and persons living with dementia. The second phase refined the item pool using an online survey and online focus groups with the same stakeholder groups. Five overarching categories were identified as important for the usability of locating device: features, inclusivity, simplicity, aesthetic appeal, and ethics. Participants identified the need for multiple versions of the usability scale including one specifically for persons living with dementia. The newly developed locator device usability scale can enhance the acceptance of these devices, thereby supporting remote caregiving and promote the safety and autonomy of persons living with dementia.

FACTORS THAT INFLUENCE THE EMOTIONAL IMPACT OF MEMORY PROBLEMS IN OLDER ADULTS: A MIXED-METHODS STUDY

Emily Bratlee-Whitaker,¹ Nikki Hill,¹ Jacqueline Mogle,¹ Rachel Wion,² Caroline Madrigal,³ and Sakshi Bhargava,¹

1. *Penn State University, University Park, Pennsylvania, United States*, 2. *Indiana University, Indiana University, Indiana, United States*, 3. *Providence VA Medical Center, Providence VA Medical Center, Rhode Island, United States*

Older adults' experiences with memory problems may be an important indicator of current and future well-being; however, these experiences and their impacts are poorly characterized, particularly in those with co-occurring affective symptoms. The purpose of this mixed-methods study was to examine how the experience of memory problems influences emotional well-being in older adults without dementia, and whether this differs based on cognitive status and current depressive symptoms or anxiety symptoms. A convergent parallel mixed methods design was used in which quantitative and qualitative data were collected simultaneously, analyzed separately, and then integrated to determine how participants' experiences differed. Community-dwelling older adults ($n=49$, Mage = 74.5, 63% female) without severe cognitive impairment completed study questionnaires and two individual, semi-structured interviews. Five themes were identified that described the influence of memory problems on emotional well-being: Evoking Emotions, Fearing Future, Undermining Self, Normalizing Problems, and Adjusting Thinking. The extent to which memory problems impacted emotional well-being depended on multiple factors including current affective symptoms (primarily anxiety), characteristics of the experience (such as judgments of its importance), as well as personal experience with dementia. Notably, there were no thematic differences in the emotional impact of memory problems between older adults with normal cognition and those with evidence of mild cognitive impairment. Our findings suggest that thorough assessment of reports of memory problems, regardless of cognitive testing outcomes, should consider co-occurring subsyndromal affective disorders as well as older adults' evaluations of how memory problems influence their daily lives and well-being.

FALL PREVENTION IN ADULTS WITH COGNITIVE IMPAIRMENT: SYSTEMATIC REVIEW AND META-ANALYSIS

Megan Racey,¹ Maureen Markle-Reid,¹ Muhammad Usman Ali,¹ H el ene Gagn e,² Susan Hunter,³ Jenny Ploeg,¹ Richard Sztramko,¹ and Diana Sherifali,¹
 1. *McMaster University, Hamilton, Ontario, Canada*, 2. *Ontario Neurotrauma Foundation, Toronto, Ontario, Canada*, 3. *Western University, London, Ontario, Canada*

Cognitive impairment increases an individual's risk of falls due to the role cognition plays in gait control. Older adults with dementia fall 2-3 times more than cognitively healthy older adults and there is a lack of evidence for effective fall prevention interventions for community-dwelling cognitively impaired adults. We conducted a systematic review and meta-analysis to investigate the effectiveness of fall prevention interventions in improving falls, perceived risk of falls, gait, balance, and functional mobility. We searched 7 databases for interventions involving community-dwelling adults ≥ 50 years with mild to moderate cognitive impairment. Reviewers screened citations, extracted data, assessed risk of bias and certainty of evidence (GRADE). We performed a meta-analysis of 509 community-dwelling adults (mean age 67.5 to 84.0 years) with mild to moderate