

M.L. FANG, K. COATTA, M. BADGER, S. WU, M. EASTON, L. NYGÅRD, A. ASTELL, A. SIXSMITH. **Scoping understandings of mild cognitive impairment for older adults: Political, ethical and technological implications.** *Gerontechnology* 2016;15(suppl):35s; doi:10.4017/gt.2016.15.s.682.00 **Purpose** Older adults, while diverse and generally healthier than previous generations, are at risk of developing some form of cognitive impairment as they enter into later life. While a small minority of older individuals (~1%)¹ will continue to age without experiencing any cognitive deterioration, current estimates suggest that nearly 15% of Canadians (65+) currently experience some form of cognitive impairment (including dementia)². Advancements in MCI (Mild Cognitive Impairment) interventions are often limited by extensive variability in the conceptualization and definition of MCI, its subtypes, and relevant diagnostic criteria within the neurocultural, pharmaceutical, and gerontological communities³. This research is part of a larger multidisciplinary and international initiative: Ambient Assistive Living technologies for Wellness, Engagement and Long Life (AAL-WELL) and aims to explore the conceptual development of MCI and the resulting impact on the ethical, political and technological implications for older adults with MCI. The research question that informed the scoping review⁴ queried: What is known about MCI in relation to: (i) the way it has been conceptualized and defined in the literature and (ii) the needs of older persons living with MCI? **Method** A comprehensive search was conducted between January-April 2013 to identify English-language peer-reviewed articles published between 1999-2013. An initial environmental scan alerted the researchers to various parameters (such as keywords) within the literature that guided subsequent searches. Subsequently, combinations of keywords 'mild', 'cognitive', 'impairment', 'MCI', 'dementia', 'police*', 'ethic*', 'need*', 'functional impairment', 'cognitive decline', "technology*" were entered into the databases and searched in the 'title' and 'abstract' fields. By means of working through the scoping review process, we were able to systematically review and categorize a substantial volume of peer-reviewed literature. **Results & Discussion** Despite limitations, this scoping review presents several promising directions for future research and development which emphasize the need for: longitudinal analyses of the MCI trajectory; increased lifestyle interventions to slow and ultimately prevent progression from MCI to dementia; clear descriptions of cognitive correlates associated with specific functional abilities and the differential impacts of MCI subtypes on IADL; further understandings of MCI coping mechanisms from persons with MCI and their caregivers; explorations on perspectives of MCI and technology from persons with MCI and their caregivers; developments in comprehensive AAL systems that address the multifaceted needs of the MCI population; examinations into the effectiveness of AAL technologies in supporting daily living and quality of life; and lastly understanding and addressing the barriers of AAL technology uptake. Reflections on the conceptual, ethical and policy responses in conjunction with the identification of the needs of older adults with MCI highlight significant opportunities for technological interventions to effectively re-position MCI in the aging care discourse.

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