Dementia and Technology

WhatMatters: a digital app to advance person-centred dementia care in hospitals L. Hung, J. Wong, Y. Zhao, K. L. Y., Wong, G. Kendre, D. Roy, D. Shao, Y. Ohno, J. Mann. *Gerontechnology* 25(s)

Purpose: Hospital stays are often stressful for patients with dementia, particularly in unfamiliar settings. To address this, our team co-developed WhatMatters, a digital app created with patients, families, and hospital staff to share personalized information that supports person-centred care (1). This study explores early implementation experiences, highlighting facilitators and barriers. **Method:** A non-randomized controlled trial began in July 2025 at an acute hospital in Vancouver, Canada. Fifteen patients in the intervention group engaged with WhatMatters three times per week over two weeks, accessing pictures, music, and videos uploaded by families. A control group with fifteen patients in another unit received standard care. Outcomes include Quality of Life (QUALIDEM) and the Neuropsychiatric Inventory (NPI), complemented by pre- and post-intervention staff focus groups and interviews. **Results and Discussion:** Fourteen multidisciplinary staff members participated in preliminary discussions. Anticipated facilitators included user-friendly features, staff awareness and buy-in, personalized and culturally relevant content, and tailored implementation planning. Staff emphasized that the WhatMatters app is easy to use and suggested improvements such as adding a portable charger and wheels, providing App Store access, offering a Wi-Fi-free option, and allowing projection onto a larger screen. They noted that familiar and culturally relevant content could help reduce responsive behaviours and potentially decrease reliance on antipsychotic medications. After viewing the demo, staff valued the music module and saw potential for information sharing across facilities to support continuity of care. They also felt the app could capture patients' attention and enhance their abilities. Staff highlighted the need to tailor implementation to each facility and suggested supports such as printed guides, training sessions, and adequate equipment (e.g., multiple iPads). Barriers included limited staff familiarity with technology and difficulties adapting the app to patients' diverse sensory needs and attention spans. Staff reported difficulties engaging patients with vision or hearing impairments, short attention spans, or cognitive limitations, and suggested using a projector to improve engagement. They also expressed that limited technological confidence could impede successful implementation unless supported by training and hands-on experience. Because the project is still ongoing and the current sample size is limited, comparative analyses between the intervention and control group (e.g., QUALIDEM and NPI outcomes) cannot yet be provided. WhatMatters offers an innovative, non-pharmacological approach to enhancing dementia care in hospitals. Early insights have informed implementation strategies, and ongoing evaluation will assess their effectiveness between intervention and control groups.

References

1. Sakamoto M, Guo YP (Ellen), Wong KLY, Mann J, Berndt A, Boger J, et al. Co-design of a digital app "WhatMatters" to support person-centred care: A critical reflection. Int J Geriatr Psychiatry. 2023 Oct 12;38(10).