

## **Abstract for ICG2021**

**Sub-theme:** Application of technology in geriatric care

**Conference topic:** Adoption of gerontechnology for enhancing the care for the older adults

**Preference:** Oral presentation

**Title:** Gerontechnological Aids Prescription System to Empower Elders with Dementia and their Carers for Ageing in Place

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### **Background**

Caring elders with dementia especially those with Behavioral and Psychological Symptoms of Dementia (BPSD) are challenging and often resort to unwanted institutionalized care with deprived quality of life for the elders and emotional distress for their carers. With advancement in gerontechnology, many assistive devices are available as non-pharmaceutical remedy for dementia care. Nevertheless, inadequate accessibility, guidance and monitoring hinder the application.

New Territories West Cluster under Hong Kong Hospital Authority developed the “Memory Inspiration Network for Dementia (MIND)” programme in 2020 which serves as a hub for expertise consultation, gerontechnological aids prescription, community resources sharing and carer education in dementia and home safety management by Occupational Therapists.

### **Objective**

This pilot study aims at investigating the effectiveness of MIND programme in resolving predefined risky behaviors of elders with dementia and in relieving carer distress with gerontechnology.

### **Methods**

A prospective pretest-posttest quasi experimental design with convenience sampling was adopted. The programme included consultation by Occupational Therapist on assistive devices for risky behaviors (e.g. home monitoring systems, GPS tracking device, object finder), group education and follow-up by telecare and/or home visit. Aids suppliers/manufacturers’ input would be solicited if necessary. Outcome measures with standardized assessments and self-designed questionnaires were retrieved from elders and their carers.

### **Results**

A total of eight elders and their carers completed phase 1 of this study. All demonstrated enhanced understanding to dementia and home safety management, relieved carer distress ( $Z=2.383$ ,  $p=0.017$ ) and reduced got-lost incidence ( $Z=2.121$ ,  $p=0.034$ ), household fire accidents ( $Z=2.041$ ,  $p=0.041$ ) and medication adherence clumsiness ( $Z=2.023$ ,  $p=0.043$ ).

### **Conclusion**

This structured collaborated programme made gerontechnology more accessible and empowered elders and their carers to better apply gerontechnology in home care and community living, enhancing their functional independence and community reintegration in a safe and optimal way for ageing in place.