

Aging and Disability

Tech-to-Care: A One-stop Gerontechnology Service for Patients in a Hong Kong Hospital Setting C. H. Jim, L. M. K. Sit, S. H. U. Fan, L. M. Tang, K. Y. Yip, P. M. Li, W. H. Chan, C. H. Chow, Y. Y. Ip, C. K. A. Tong, Y. H. So, W. K. Chow, T. N. Kwong, K. Y. Tse, C. K. Cheung, H. Y. C. Cheuk, C. M. Ho. *Gerontechnology* 25(s)

Purpose As Hong Kong's population ages, the convergence of aging and disability presents escalating healthcare challenges, necessitating technology-integrated care models to enhance the quality of life for older adults. Led by occupational therapists, the "Tech-to-Care" service builds on a pilot gerontechnology education project by Jim et al. [1] to facilitate hospital-to-community transitions for patients through a comprehensive model. Informed by findings from the pilot, hands-on product trials were incorporated to address persistent gaps in gerontechnology awareness, acceptance, and adoption. **Method** Patients aged ≥ 40 with potential gerontechnology needs at Tai Po Hospital, Hong Kong were recruited. The original service comprised: (1) individualized assessment and product matching; (2) education on foundational (e.g., definition and benefits of gerontechnology) and applied knowledge (e.g., product selection); and (3) purchase facilitation. An additional component, product trials, was incorporated following education where operationally feasible. Accordingly, all participants received the original service components, with some receiving education and others receiving education with product trials. The inclusion of "pre-elderly" individuals (aged 40–59) was based on pilot data indicating greater knowledge acquisition among younger patients, suggesting potentially better service outcomes. Pre- and post-service surveys (0–10 scale) evaluated changes in self-perceived knowledge and acceptance. Two hypotheses were tested: (H1) combined education and product trial would yield greater improvement in knowledge and acceptance than education alone; (H2) pre-elderly participants would show greater knowledge gains than elderly participants (aged ≥ 60). **Results and Discussion** Between December 2023 and September 2025, 313 participants were recruited. Of these, 83% ($n = 261$) completed both education and product trial interventions, while 17% ($n = 52$) received education only. The sample included 38% pre-elderly ($n = 119$) and 62% elderly ($n = 194$). Significant improvements were observed in foundational knowledge ($Z = -14.42$, $p < .001$), applied knowledge ($Z = -13.78$, $p < .001$), and acceptance, indicated by increased readiness for product purchase ($Z = -10.70$, $p < .001$), across all participants. Those receiving both interventions showed greater gains than the education-only group (foundational knowledge: $Z = -3.32$, $p < .001$; applied knowledge: $Z = -3.17$, $p = .002$; acceptance: $Z = -2.09$, $p = .037$), supporting H1 and highlighting the value of hands-on trials. H2 was partially supported as the pre-elderly group showed significantly greater improvement in applied knowledge ($Z = -2.38$, $p = .017$) than the elderly group, but not in foundational knowledge. With similar acceptance gains across age groups, the service demonstrated broad effectiveness for all ages with added benefits for younger patients. Despite positive outcomes, few participants pursued purchase facilitation. Some explored market alternatives independently, indicating the service's empowerment in decision-making. Others reported adoption barriers such as low perceived ease of use, limited perceived need, and caregiver reliance, consistent with existing literature (e.g., Tham et al. [2]). Post-discharge adoption was further constrained by inadequate community support. Future efforts should incorporate public awareness campaigns and community partnerships to support product utilization. To conclude, this service model demonstrates strong potential for multi-hospital expansion within the Hong Kong healthcare system and adaptation to other regions, thereby advancing broader gerontechnology integration.

References

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