



RESEARCH BRIEF

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Effects of a Geriatric Services Hub care model on functional status, patient activation and quality of life

Research article: Patient outcomes of a frailty management program for community-dwelling older adults in Singapore: A cohort evaluation. *Published in Journal of Frailty & Aging in May 2025. Click [here](#) to view the published article online.*

Authors: Dr Ze Ling Nai, Mr Robin Choo, Dr Grace Sum Chi-En, Ms Siew Fong Goh, Associate Professor Yew Yoong Ding, Associate Professor Wee Shiong Lim, Dr Woan Shin Tan & the Geriatric Services Hub Programme Group.

Research brief written by: Dr Benedict Pang, Research Fellow, GERI.

KEY FINDINGS

1. Functional status was maintained at 3- and 6-month follow-ups, while patient activation increased slightly after 3 months but reverted to baseline levels after 6 months.
2. Significant improvements were observed in both health-related and emotional-related quality of life (QoL) at 3-month follow-up, which were sustained after 6 months.
3. Very mild and mildly frail participants showed improvements in patient activation and QoL, while moderate-severe participants reported maintained QoL and activation levels.

IMPLICATIONS AND SIGNIFICANCE OF FINDINGS

1. Functional status remained stable over 6 months post-GSH. As a holistic care model, the GSH aimed to help patients manage their overall needs (physical and psychosocial), which could have led to a lack of focus on improving functional status, usually driven by intensive resistance training. Participants also had relatively robust baseline functional status, creating a ceiling effect that precludes further improvements.
2. Patient activation improved at 3 months, suggesting better self-efficacy in health management, which reverted after 6 months. This suggests the programme might not be able to support the internalisation of health management behaviours and lasting change. Future iterations of similar programmes may require relationship-based care, psychosocial services, motivational training and behavioural interventions to bring about sustained improvements in patients' health behaviours.
3. Both health-related QoL (specifically, pain and discomfort, anxiety and depression) and emotional-related QoL (specifically, autonomy and pleasure) improved, likely attributable to GSH addressing previously unmet needs identified through comprehensive geriatric assessments. Future programmes can also consider assessing changes in QoL over the longer term.
4. Subgroup analyses indicate that the GSH model may preferentially benefit those identified with very mild and mild frailty statuses (CFS 4-5) compared to those with moderate-severe frailty (CFS 6-7), suggesting that older adults who are less frail may have a better ability to follow programme recommendations.

BACKGROUND

Frailty is associated with poorer functional status, QoL and increased healthcare costs. While manageable and even reversible if caught early, evidence for effective frailty management programmes is limited, particularly in the Asian context. With frailty often identified in later stages in hospital settings, this highlights the need for better community-based detection and management of frailty. The GSH has emerged as a promising solution to address this need.

GSH is a multidisciplinary care model in Singapore that aims to identify and manage frail older adults in the community and improve their access to geriatric services. Piloted across five acute hospitals, the programme partners with primary care and health and social service providers to deliver frailty screening, comprehensive geriatric assessments, multidisciplinary care planning, referrals and capability building. This complex intervention design allows for local adaptation while maintaining the programme's core functions, and utilises mixed methods to evaluate its implementation and effectiveness through patient outcomes and healthcare utilisation.

FOCUS OF PROJECT

This study aimed to evaluate the effectiveness of GSH on improving functional status, patient activation, health- and emotional-related QoL. Additionally, its differential effects across frailty statuses were investigated. The findings contributed to our understanding of improved programme customisation for frailty management.

PARTICIPANTS

Participants were community-dwelling older adults aged 65 years and older with a Clinical Frailty Scale score of 4-7, recruited from four acute hospital sites between October 2020 and March 2022. A total of 927 individuals were assessed for eligibility, of which, 218 were recruited for the study with 191 included in the analyses.

STUDY DESIGN

This study employed a prospective single-arm pre-post design without controls to analyse the effect of GSH on patient outcomes. Surveys were administered through in-person interviews lasting 90-120 minutes at three time points: baseline, 3-months, and 6-months after, allowing researchers to assess both early and mid-term outcomes.

AUTHOR AFFILIATIONS

Geriatric Education & Research Institute, Singapore

Dr Ze Ling Nai, Mr Robin Choo, Dr Grace Sum Chi-En, Ms Siew Fong Goh, A/Prof Yew Yoong Ding, A/Prof Wee Shiong Lim, Dr Woan Shin Tan

Department of Geriatric Medicine and Institute of Geriatrics and Active Ageing, Tan Tock Seng Hospital, Singapore

A/Prof Wee Shiong Lim, A/Prof Yew Yoong Ding

Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore

A/Prof Wee Shiong Lim, A/Prof Yew Yoong Ding

Geriatric Services Hub Programme Group

