

00082 Development of a Sustainable Program for Frailty Identification and Intervention Through Nutrition and Exercise (FINE) in Eastern Singapore

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Aims: The aims are to develop (I) a systematic framework to identify and assess pre-frail and mildly frail seniors in Eastern Singapore; (II) a coordinated system of program enrolment; (III) an effective, consistent, sufficiently intensive and progressive frailty prevention exercise program which would be sustainable and scalable; and to evaluate (IV) the effectiveness of the program in reducing frailty states and other outcomes.

Methodology: Phase 1 (design/"Proof-of-concept") consists of 15 participants in a twice weekly computer enabled HUR gym equipment based program, enhanced by aerobic, balance and cognitive components (Gym Tonic Plus/GTP) and 15 participants in a novel community based Structured Exercise Program (SEP) for 12 weeks. In Phase 2 (development /"Proof-of-Value"), 360 participants would be randomized into 2 intervention groups-GTP and SEP; and third control group given general health and exercise advice. In the final Implementation Phase, 1050 participants would be randomized into each of the 3 arms. Each phase includes: Initial case-finding and enrolment by community partners and outreach initiatives; screening and assessments done in the community including medical, dietary and physical performance assessments. Effectiveness of SEPs in improving grip strength & gait speed among other outcomes; cost-effectiveness and quality of SEPs, as well as enrolment, participant compliance and participant/provider satisfaction rates would be studied.

Result: The multi-disciplinary study team was formed from multi-centre engagements and collaborations with partner organisations including our local Sports body, with support of our National Health Promotion Board. A novel Structured Exercise Program and frailty-targeted Medical and Dietary assessment protocols were also designed by the study team prior to the pilot phase.

Conclusion: With the ongoing partnerships and collaborations, we plan to establish a well-coordinated system of identifying the pre-frail and mildly frail seniors who could be enrolled into an effective, sustainable and scalable frailty intervention program.