

CHI Learning & Development (CHILD) System

Project Title

SUPER SENIOR Class —a new model of Community Rehabilitation

Project Lead and Members

Project lead: Alex Tham

Project members: Su Htet Htet Aung, Jeny Cataina Macapulay,

Jennifer Ho, Anita Yiu, Michelle Lew

Organisation(s) Involved

Kwong Wai Shiu Hospital

Healthcare Family Group(s) Involved in this Project

Allied Health

Applicable Specialty or Discipline

Physiotherapy, Rehabilitation Therapy

Project Period

Start date: -

Completed date: -

Aims

SUPER SENIOR, a new model of community rehabilitation for fall prevention will be designed and implemented with the aim:

- 1. to improve Berg's Balance Score (BBS) of at least 20% relative to preimplementation score.
- 2. to prevent deterioration of Modified Barthel Index (MBI) of not more than 5% relative to pre-implementation score.
- 3. achieve at least 90% of satisfaction and motivation after 16 sessions.



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Background

See poster appended/below

Methods

See poster appended/below

Results

See poster appended/below

Conclusion

See poster appended/below

Project Category

Care Continuum

Outpatient Care

Rehabilitative Care

Keywords

Rehabilitation model, Recuperation, Fall Prevention, Berg's Balance Score (BBS), Modified Barthel Index (MBI), Active Rehabilitation, Maintenance Rehabilitation, Senior Engagement, Health Ownership, Physiotherapy, Rapport building

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SUPER SENIOR Class – a new model of Community Rehabilitation Kwong Wai Shiu Hospital



Alex Tham, Su Htet Htet Aung, Jeny Cataina Macapulay, Jennifer Ho, Anita Yiu, Michelle Lew

Introduction/Background

- Kwong Wai Shiu Care @ St George offers a Community Rehabilitation Programme for outpatient seniors.
- Traditionally, these outpatient clients will be administered 6 months of active rehabilitation before step-down to maintenance rehabilitation, depending on their prognosis.
- An extension of the Rehabilitation model was sought to enhance and sustain the recuperation of clients.

Goal/Objective

SUPER SENIOR, a new model of community rehabilitation for fall prevention will be designed and implemented with the aim:

- 1.to improve Berg's Balance Score (BBS) of at least 20% relative to pre-implementation score.
- 2.to prevent deterioration of Modified Barthel Index (MBI) of not more than 5% relative to pre-implementation score.
- 3.achieve at least 90% of satisfaction and motivation after 16 sessions.

Problem Analysis

- The dropout rate of clients was found to be highest after 6 months upon step-down to Maintenance Rehabilitation This is as they had found the programme to be stagnant and repetitive with no advancements in their goals.
- This delinquency resulting in a return to a sedentary lifestyle, greatly increases the risk of falls and related injuries.
- SUPER SENIOR was curated with a 1:3 staff-to-client ratio for a more rigorous and intensive regime, with added engagement between one another and the rehab care staff, for clients to take ownership of their rehabilitation outcomes.

Implementation Plan

Deming PDCA Methodology was used

PLAN – conducted over 4 week period

- Identify suitable seniors for the programme with baseline outcome measurements screened.
- Plan out the feasible timing, additional charges and liaise with Centre Executive and the next-of-kin.
- Redesign the current rehabilitation programme including floor plan, equipment and manpower required, outcome measurement and pain management techniques employed.
- Physiotherapist-in-charge planned and designed 'fun' programs.
- Rehab Care Assistants trained to lead the fun exercises.
- 3 senior clients recruited shared their common goal and inspirations among themselves and the project team to establish better mutual rapport and support.

DO

- SUPER SENIOR implemented with physiotherapist-in-charge overseeing the prescribed exercises.
- Seniors monitored with rehabilitation assessment tools throughout project – namely MBI (Modified Barthel Index) and BBS (Berg Balance Scale).

Implementation Plan

CHECK

- 3 clients recruited had progress reviewed after 1st 3 sessions.
- Review of operational needs and feedback / commentary from clients.
- Clients were given the autonomy to redesign the programmes in collaboration with the physiotherapist-in-charge according to their preferences.

ACT

- Proceeded to implement modifications in tandem with clients" preferences highlighted.
- Rollout of 16 sessions, once per week on Thursdays
- Outcome reviewed with HUR Smart Touch, with postimplementation MBI and BBS scores tracked.

Benefits/Results

All 3 recruited clients demonstrated progress generally in line with the project objectives after 16 sessions

	BBS Pre	BBS Post	BBS Change	MBI Pre	MBI Post	MBI Change
Client 1	42	55	+13 (+30.9%)	89	100	+11 (+12.4%)
Client 2	43	45	+2 (+4.7%)	95	92	-3 (-3.16%)
Client 3	30	48	+18 (+60%)	79	90	+11 (+13.9%)

Table 1. Pre and Post implementation MBI and BBS score for recruited clients, including measuring of progress

While the BBS improvement of \geq 20% relative to pre-implementation score was not achieved for Client 2, all clients were either able to improve their MBI or prevent deterioration beyond 5%.

All clients revealed that they are competent to manage the pain symptoms and gave 100% satisfaction and motivation ratings. This was thanks to the opportunity they had in co-designing the programme with the Physiotherapist-in-charge in accordance with their preferences and the group buddy system.

Sustainability & Reflections

Lessons Learnt

 With shared goals, buddying and befriending fellow clients and the empowerment to co-develop their exercise regime at a suitable pace / level, even rehabilitation can be a fun and appealing experience.

Sustainability

- A new protocol has been formulated for the centre for SUPER SENIOR as part of everyday workflow with equipment use, timing, and exercise plan as details.
- Kwong Wai Shiu Care @ St George is actively recruiting new seniors to join.

Future Plans

- To select our experienced Rehabilitation Care Assistants / Associates to lead and oversee the program beyond Registered Physiotherapists.
- To increase the programme duration to 2h weekly and expand its scope to also include Occupational Therapy activities while accounting for special medical conditions (e.g. Parkinson's / Stroke).