

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

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### 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 1<sup>st</sup> 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 post-implementation 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).