

Project Title

Mobile Horticulture Improves Well-being of Elderly Patients in the Hospital

Project Lead and Members

Project lead: Ms. Giang Thuy Anh, Senior Occupational Therapist Project members:

- A/Prof Philip Yap, Senior Consultant
- Ms. Jane Sim, Principal Occupational Therapist
- Mr. Mark Lim, Senior Executive
- Ms. Rosalind Tan, Senior Executive
- Ms. Lim Yun Yi, Senior Executive

Organisation(s) Involved

Yishun Health: Khoo Teck Puat Hospital

Project Period

Start date: 2018

Completed date: Ongoing

Aims

To make horticulture more accessible to all patients and staff in geriatric wards to improve the activity engagement and well-being of the elderly patients.

Background

See poster attached/ below

Methods

See poster attached/ below



Results

See poster attached/ below

Lessons Learnt

1. Patient-centric vision

Keeping the patients as the heart of our work guides our team's vision and mission at work. The question we always ask ourselves is how can we can love and care for our patients better? This drives us to always innovate and come up with better prototype to improve the care and experience for our patients

2. Team work

The common challenge in most of the innovative project is how to sustain the initiative and influence the positive change to the organisational level. Our team needs to continue to work closely with one another, small improvements are needed regularly to ensure the initiative can sustain and become a ward practice and culture.

Conclusion

See poster attached/ below

Project Category

Care & Process Redesign

Keywords

Care & Process Redesign, Value Based Care, Elder Care, Rehabilitation Therapy, Occupational Health, Geriatric Medicine, Khoo Teck Puat Hospital, Mobile Horticulture, Menorah Park Engagement Scale, Apparent Affect Rating Scale, Mobility

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Mobile Horticulture Improves Well-being

of Elderly Patients in the Hospital

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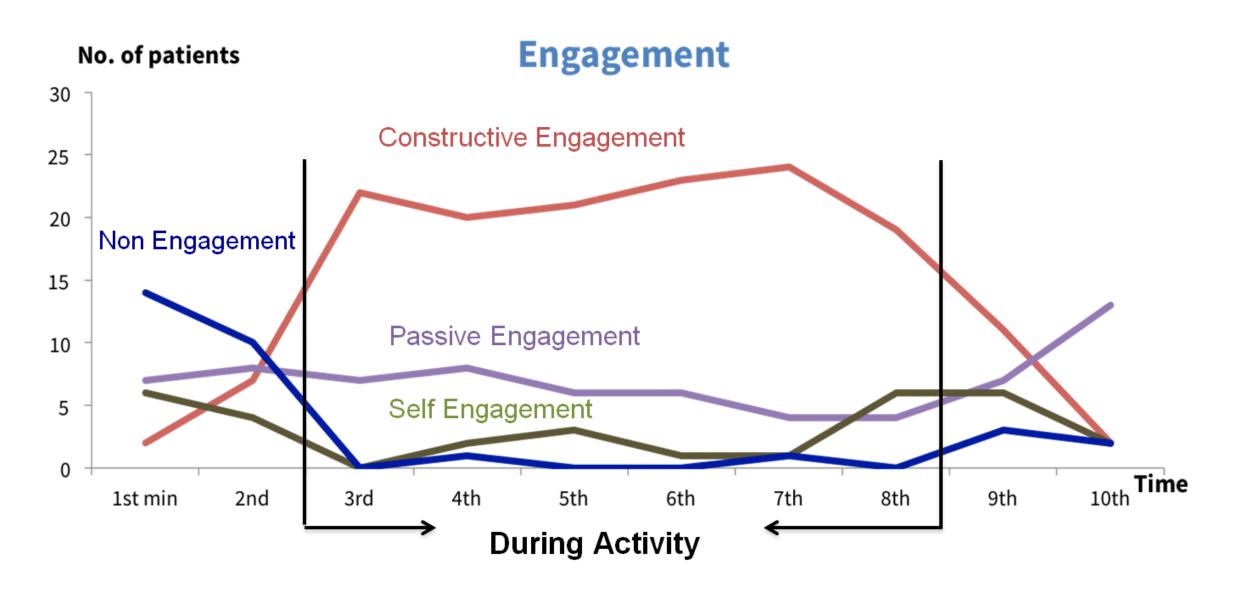
Background

Though the therapeutic effects of horticulture have shown promising results in improving the health and wellbeing of the elderly, and Khoo Teck Puat Hospital (KTPH) is a green, biophilic designed hospital, there was a severely limited use of horticulture in therapy and activity engagement for elderly patients in the hospital. A survey in 2017 with our inpatient occupational therapists (OTS) showed either none of the OTs used horticulture, or if they used, its only 0.072% of the time.

Measurement and Effects of Change

An independent assessor performed data collection & data analysis

30 participants receiving mobile horticultural activities were randomly chosen from Occupational Therapists' review list by the assessor for measurements



Aims

To make horticulture more accessible to all patients and staff in geriatric wards and to improve the activity engagement and wellbeing of the elderly patients.

Assessment of Problem and Analysis of Its Causes

Fish-bone analysis

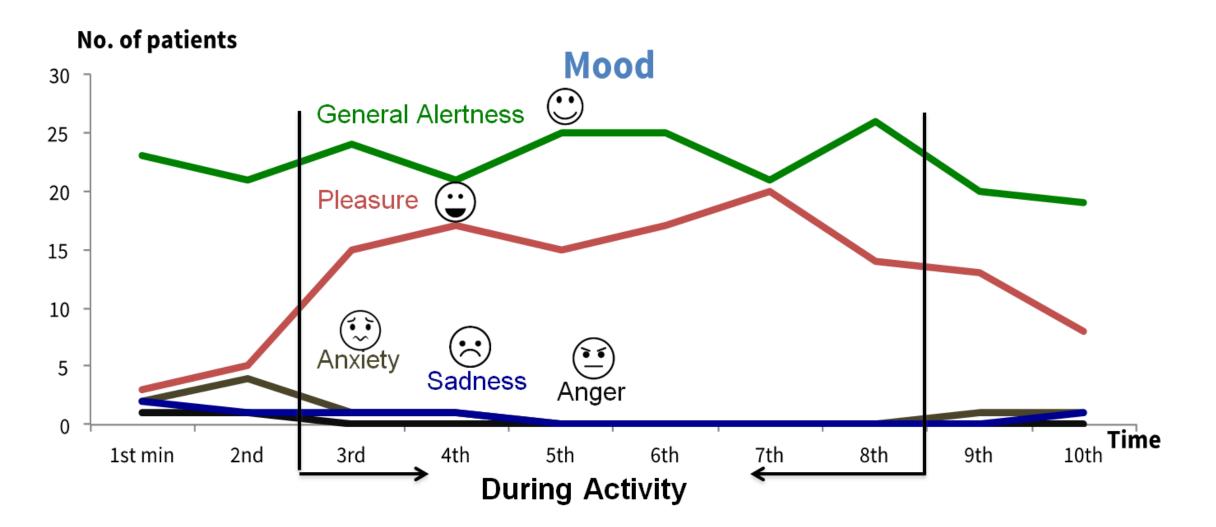
Environment Accessibility: Distance to outdoor gardens from Lack of available plants in the ward	Limited use of
• Staff: Time constraint due to travel	horticulture in the hospital ward
distance to outdoor garden and looking for wheelchair • Patients: Decreased tolerance or medical stability	

Intervention

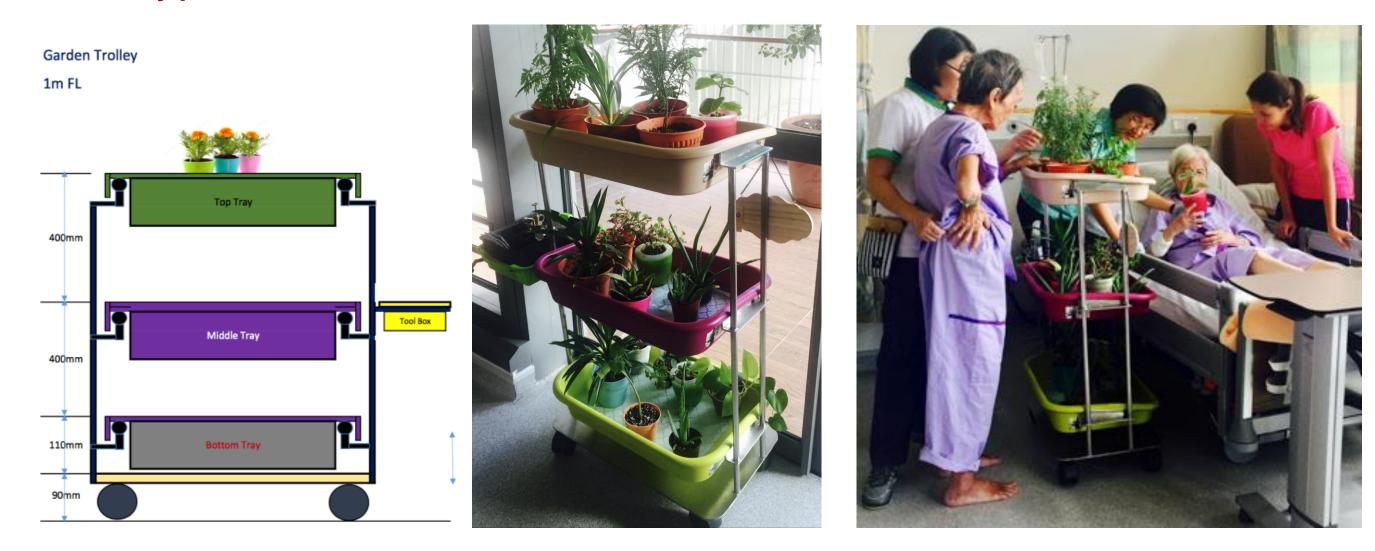
Mobile Horticulture Prototype Designs and Development

There was an increase in numbers of patients displaying constructive engagement during mobile horticultural activity versus pre-activity

Mood: Apparent Affect Rating Scale (ARRS)



Prototype 1



Prototype 2

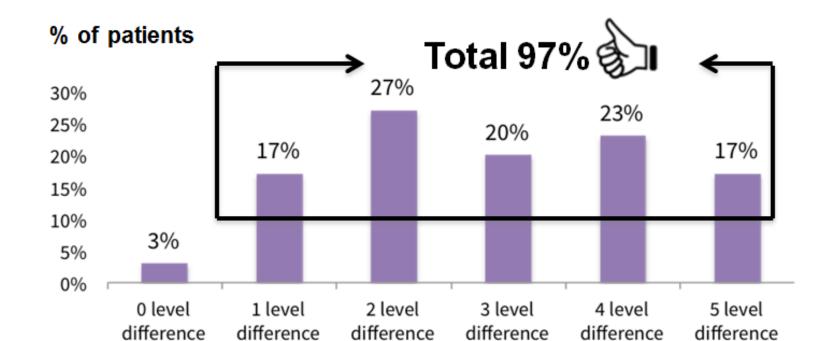




Positive moods were present throughout the horticulture activity, indicating improvement in patients' wellbeing

Mobility Progress: Mobilization Scale

Position changes from lower to higher level



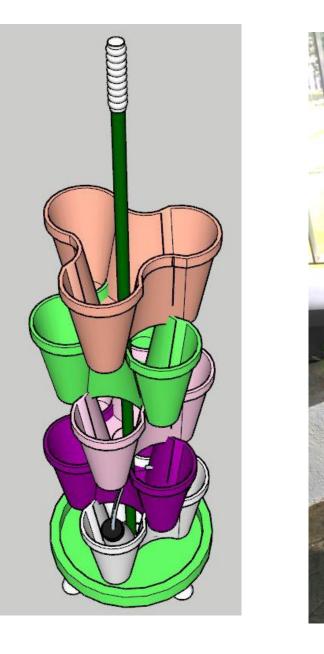
Social Interaction

Eye contact & verbal communication with facilitators 97% of patients were motivated to move up from baseline positions, hence meeting therapy goals in maximizing physical functions and activity tolerance

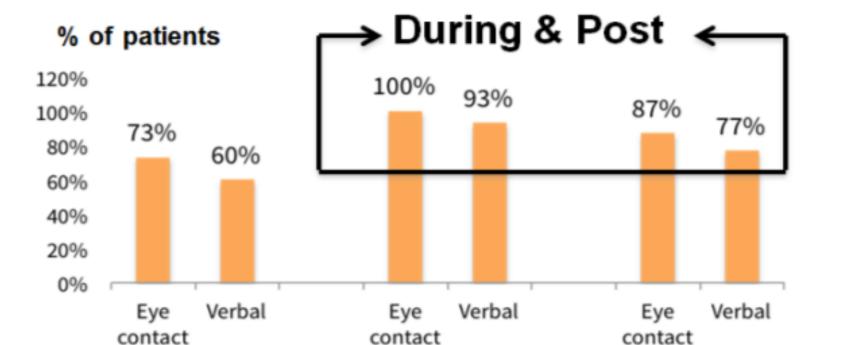
Majority (100% and 93%) of patients are seen to interact with facilitators throughout activity



Prototype 3







Conclusion

The mobile horticulture initiative makes horticulture accessible to patients for therapy and activity engagement. It facilitates patient's functional recovery, mobility and psychological improvement. Mobile horticulture also helps therapists in achieving therapy goals for patients, and healthcare staffs to engage patients in activities in ward.