

#### CHI Learning & Development System (CHILD)

#### **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

CHI Learning & Development System (CHILD)

**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

Name and Email of Project Contact Person(s)

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

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Yishun Health

# Background

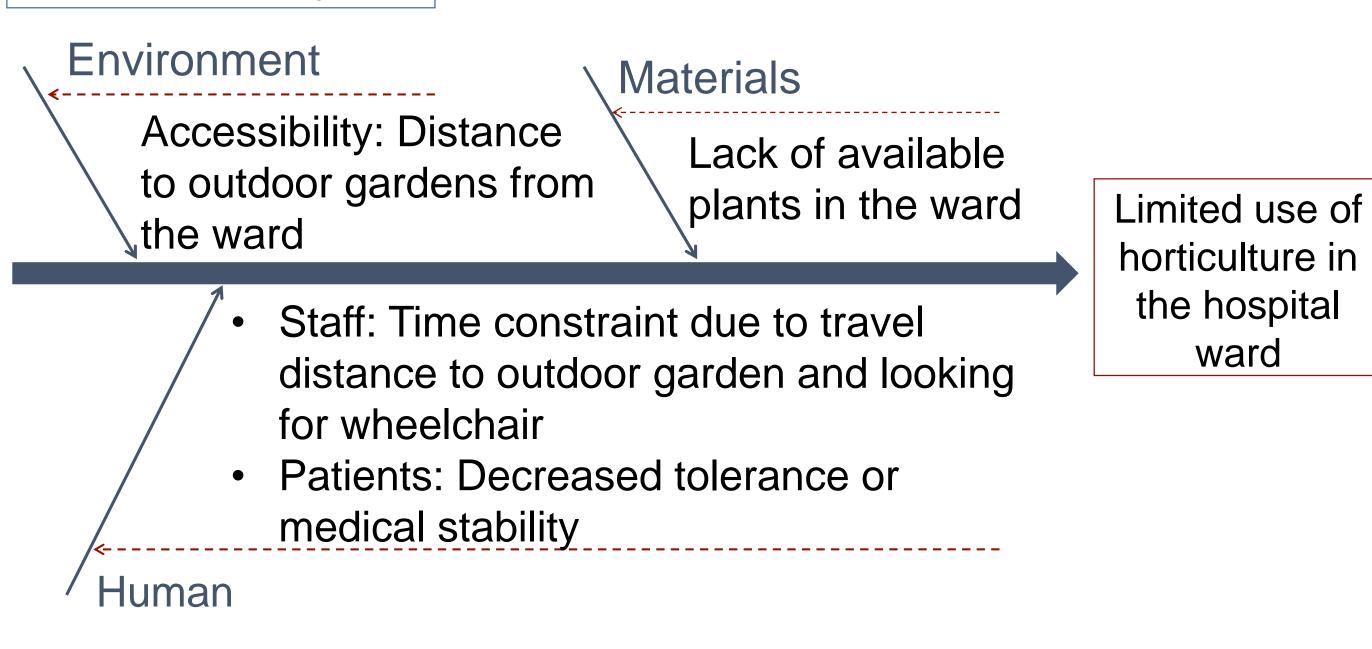
Though the therapeutic effects of horticulture have shown promising results in improving the health and wellbeing of the elderly, and Khoo Teck Puat Hospital (KTPH) is a green, biophilic designed hospital, there was a severely limited use of horticulture in therapy and activity engagement for elderly 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.

### Aims

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

## **Assessment of Problem and Analysis of Its Causes**

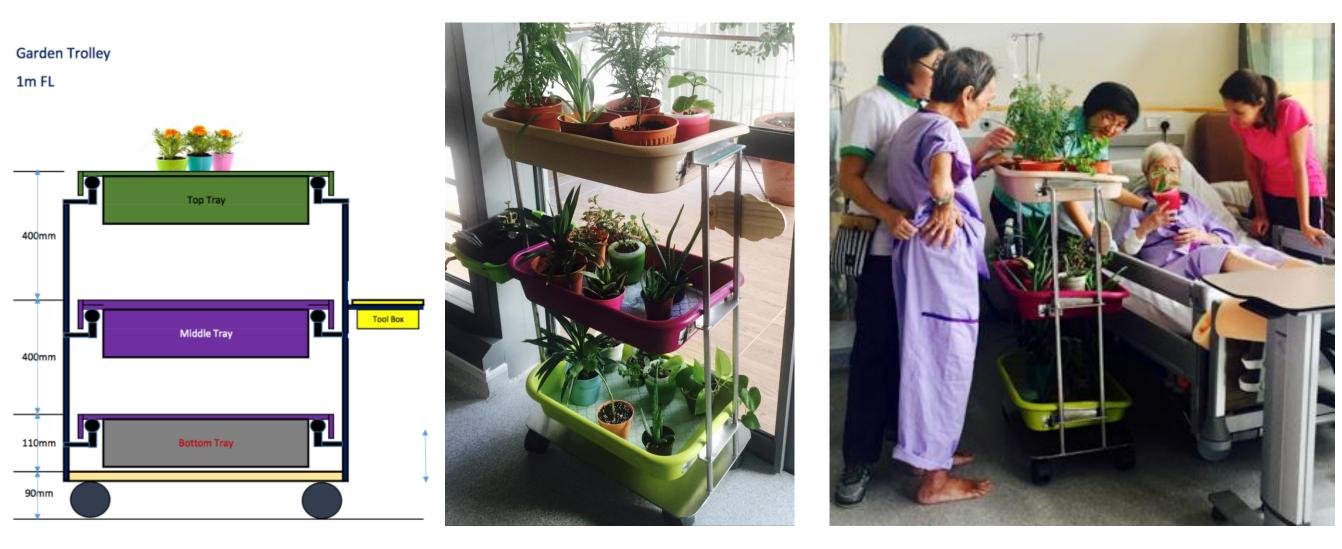
Fish-bone analysis



## Intervention

Mobile Horticulture Prototype Designs and Development

## Prototype 1



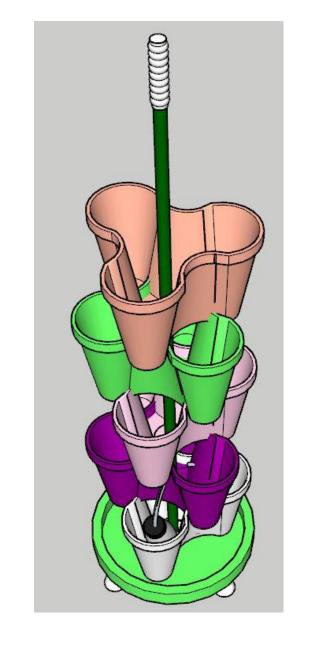
## Prototype 2







## Prototype 3





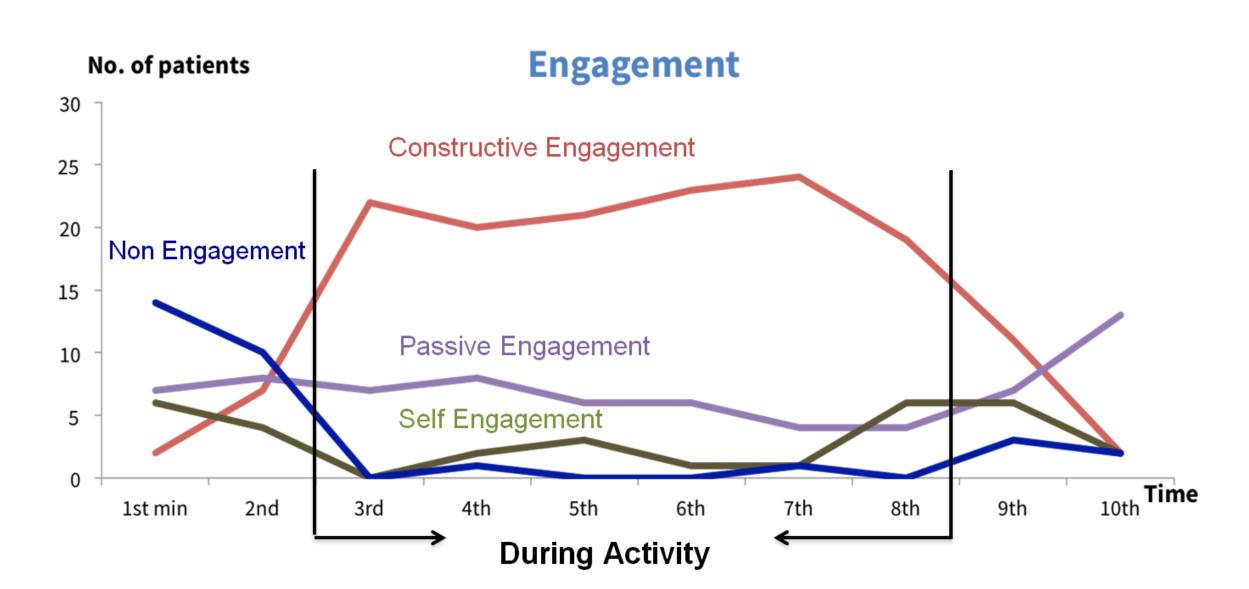




# **Measurement and Effects of Change**

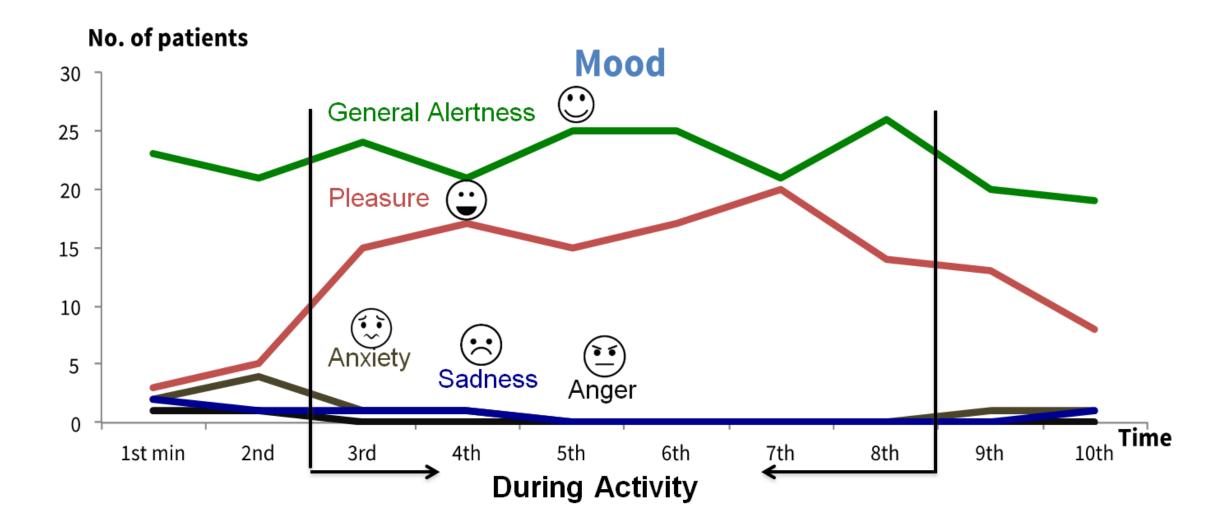
An independent assessor performed data collection & data analysis

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



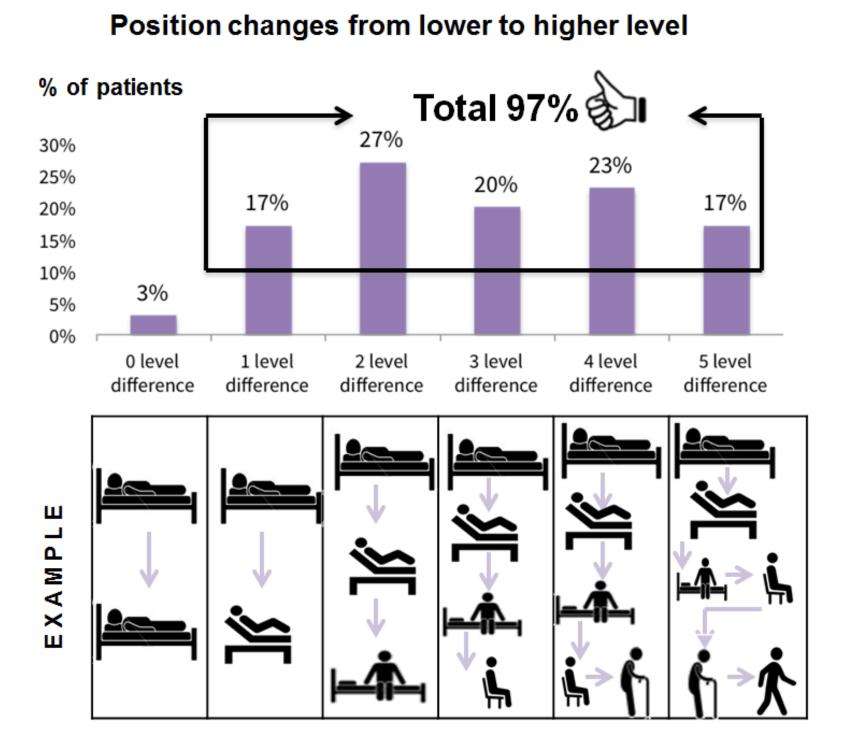
There was an increase in numbers of patients displaying constructive engagement during mobile horticultural activity versus pre-activity

## Mood: Apparent Affect Rating Scale (ARRS)



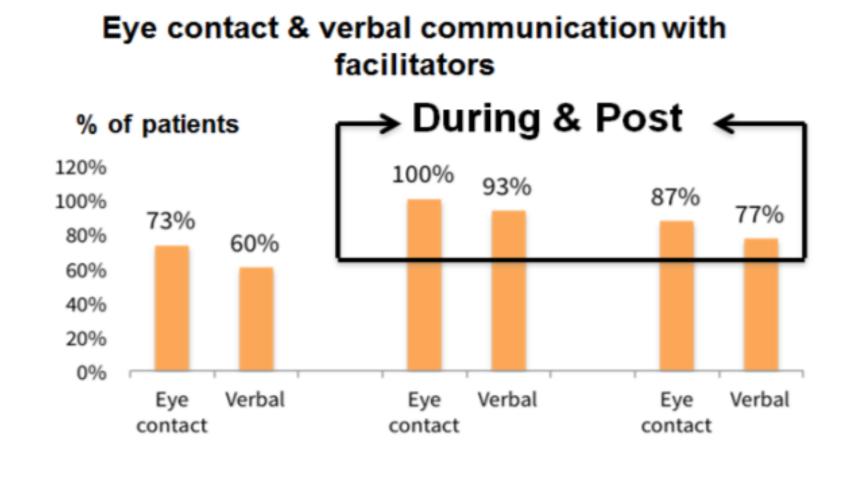
Positive moods were present throughout the horticulture activity, indicating improvement in patients' wellbeing

## Mobility Progress: Mobilization Scale



97% of patients were motivated to move up from baseline positions, hence meeting therapy goals in maximizing physical functions and activity tolerance

## **Social Interaction**



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

# 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.