

#### **Project Title**

**HOME – Handing Over Medications Efficiently** 

#### **Project Lead and Members**

- Haslinda Binte Barman
- Ong Kheng Yong
- Wu Min, Siti Abidah
- Yeo Zhi Hui

#### **Organisation(s) Involved**

Singapore General Hospital

#### Healthcare Family Group(s) Involved in this Project

Nursing, Pharmacy

#### **Applicable Specialty or Discipline**

**Community Health** 

#### Aim(s)

To reduce the man-hours spent processing prescriptions from Hospital-to-Home (H2H) programme home visits by 50% (from 6 hours to less than 3 hours), within 6 months.

#### **Background**

See poster appended/ below

#### Methods

See poster appended/ below

#### **Results**

See poster appended/ below



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

#### **Conclusion**

See poster appended/below

#### **Additional Information**

Singapore Healthcare Management Congress 2022 – Merit Award (Operations category)

#### **Project Category**

Care & Process Redesign

Quality Improvement, Workflow Redesign, Productivity, Time Saving, Cost Saving, Man-Power Saving

#### **Keywords**

Hospital To Home (H2H), Home Visits, Man-Hours, Medicine Prescription, BluPort Lockers, Home Medication Kits

#### Name and Email of Project Contact Person(s)

Name: Haslinda Binte Barman

Email: singaporehealthcaremanagement@singhealth.com.sg

# HOME –

# Handing Over Medications Efficiently

Singapore Healthcare Management 2022

Haslinda Binte Barman, Ong Kheng Yong, Wu Min, Siti Abidah, Yeo Zhi Hui Singapore General Hospital (SGH)



queue, and also allows

H2H nurses.

### Background of the problem

Hospital to Home (H2H) MOH-led programme programme that seeks to ensure smooth and safe transition of care from hospital to home, for patients with complex health and social a high risk of needs, and Care provision readmissions. includes a combination of telephone calls and visits to patients' homes by Nurses, Physicians, Allied Health Professionals (AHPs) and Care Coordinator Associates (CCAs).

Decision-Making Matrix						
Problem Areas	Scores per Criteria				Total	
	Safety	Costs Savings	Time Savings	Resources Availability	Score	Ranking
High rate of medication non-compliance	2	1	2	1	6	3
Many man-hours spent processing prescriptions from home visits	3	3	3	3	12	1
Large number of follow-up appointments needed	1	2	2	2	7	2
Project selection matrix scoring:						

3 – meets criteria most, 2 – meets criteria moderately, 1 – meets criteria least

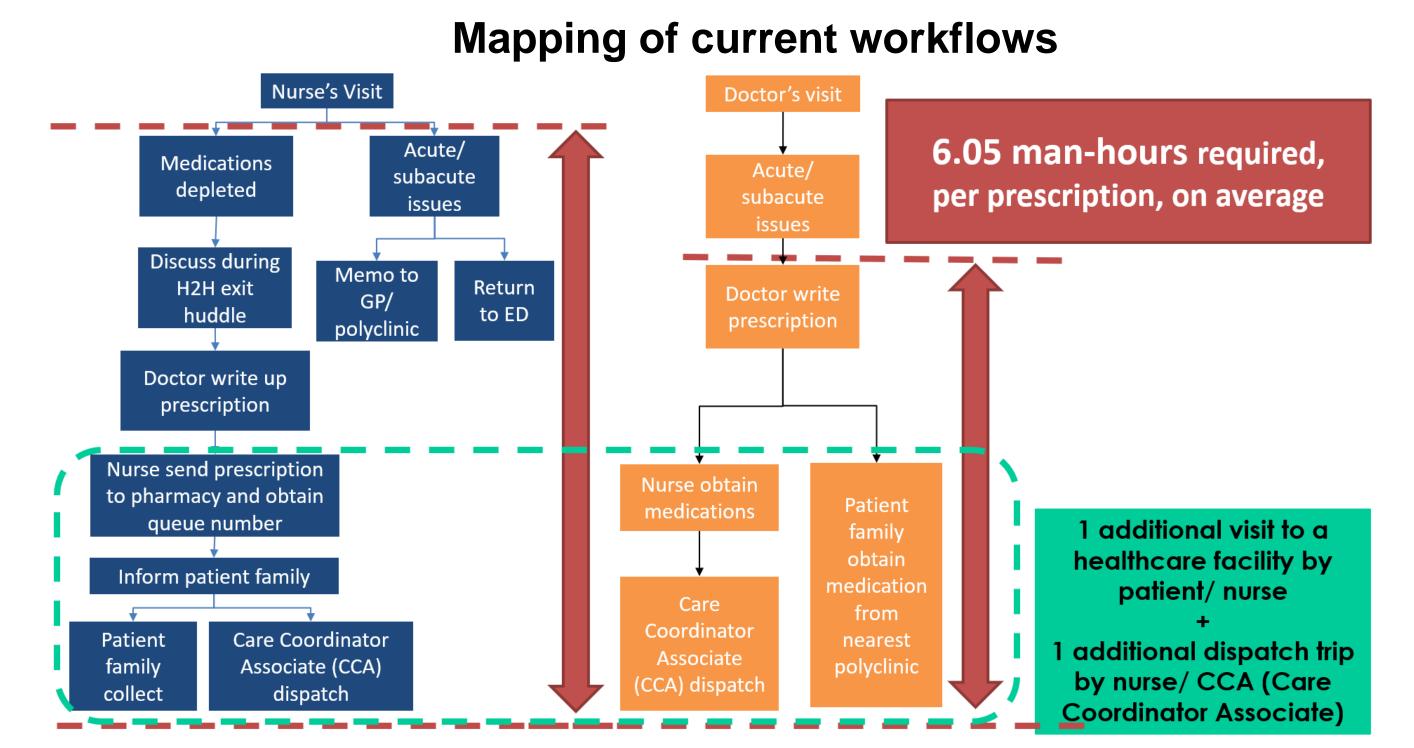
The purpose of the visits are to resolve acute or sub-acute medical conditions. Many patients enrolled under the programme present with issues pertaining to timeliness of administering medications.

H2H conducts an average of 421 home visits per month. Common issues identified by team members are high rate of medication non-compliance, many man-hours spent processing prescriptions from home visits, and large number of follow-up appointments needed. Using the Decision-Making Matrix, our team selected reducing the many man-hours spent processing prescriptions from home visits as our main problem.

### Mission Statement

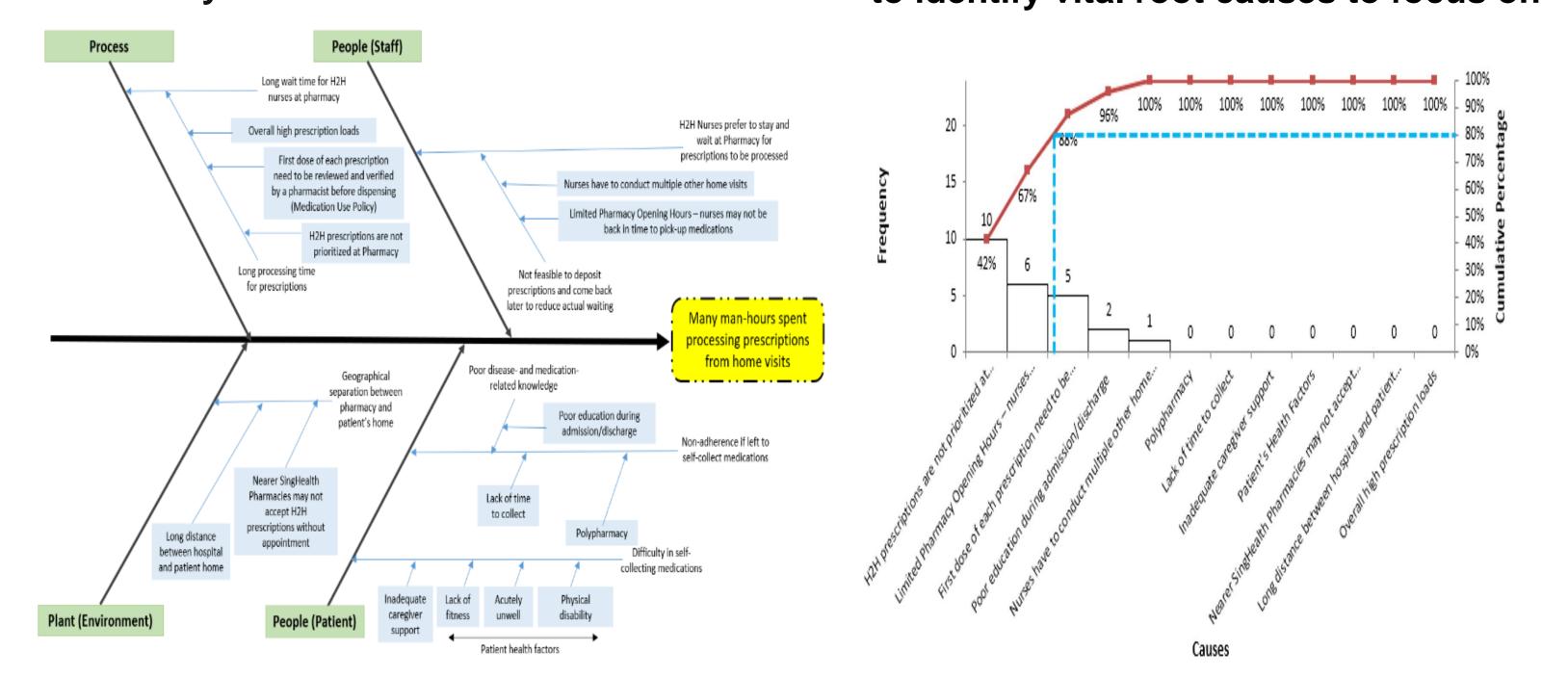
To reduce the man-hours spent processing prescriptions from Hospital-to-Home (H2H) programme home visits by 50% (from 6 hours to less than 3 hours), within 6 months

## Methodology & Problem Analysis



**Cause and Effect Diagram** to identify root causes from the fine bones

**Pareto Chart** to identify vital root causes to focus on



Final root causes identified were:

Limited Pharmacy Opening Hours – nurses may not be back in time to pick-up medications

> First dose of each prescription need to be reviewed and verified by a pharmacist before dispensing (Medication Use Policy)

H2H prescriptions are not prioritized at Pharmacy

### **Initiatives**

**Tools used** 

**Solution 1 Driver diagram - To identify key** drivers to address root causes **BluPort lockers** that were **SCAMPER** technique – To currently being used by **brainstorm** for ideas Pharmacy to store supplied medications for staff

**Prioritisation matrix – To rate** the solutions prescriptions had their use Plan-Do-Study-Act extended to the H2H nurses. (PDSA) cycle - To This allowed the nurses to

implement and refine bypass the main pharmacy solutions Gantt chart – collection of medications 24/7, S To implement at timings convenient to the

overall plan

**Solution 2** 

Home Medication Kits were created, allowing medications to be given directly to patients during home visits, bypassing the collection process.

This was adapted from existing workflows where medications were dispensed first, before a retrospective review by pharmacists e.g. use of emergency medications, protocolized treatments, which were exceptions to the Medication Use Policy. The idea was proposed and presented to the Medical Board, and approved as an exceptional workflow. To ensure safety, pharmacist review would be still done retrospectively within 24h, and immediate phone consults with a duty pharmacist could be made during the visit if necessary.



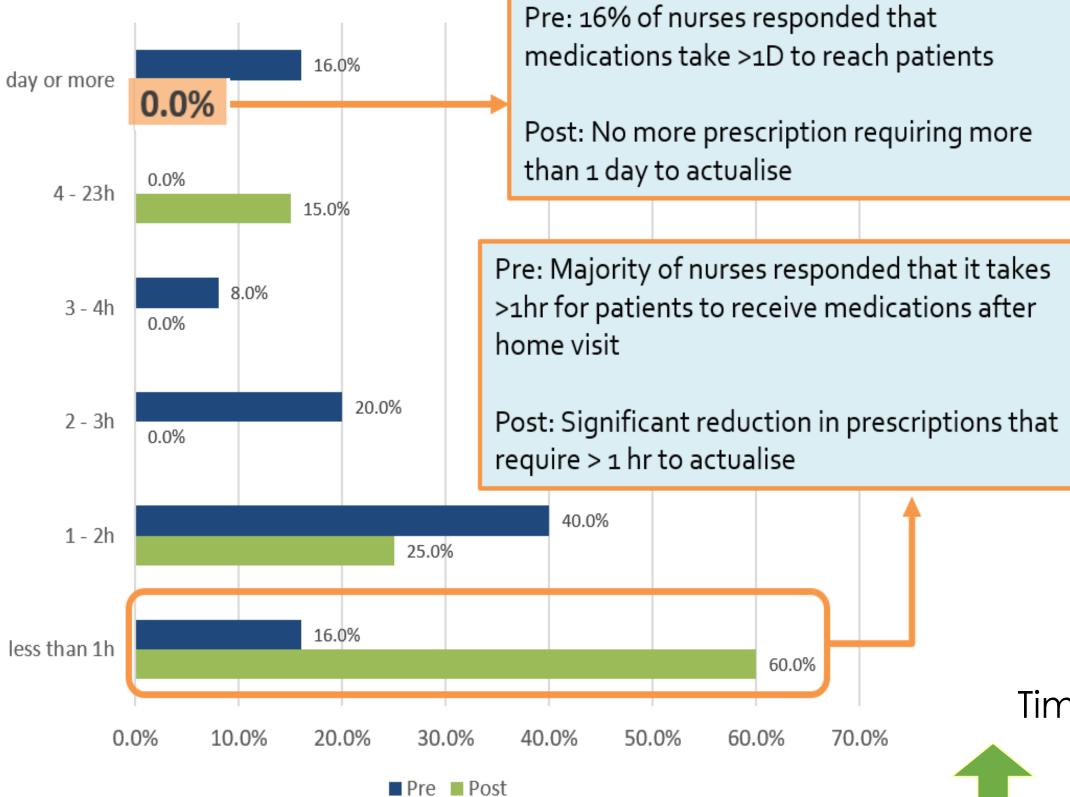
(e.g. before meals) olank for doctors & nurses

### Results

Significant reduction i.e. 80% in man-hours spent processing H2H home visit prescriptions!

## Tangible Results – Primary Objective

Responses on ave. man-hour spent per prescription by nurses: Pre- and Post-Implementation Comparison



### **MANPOWER**

Average time spent per prescription:

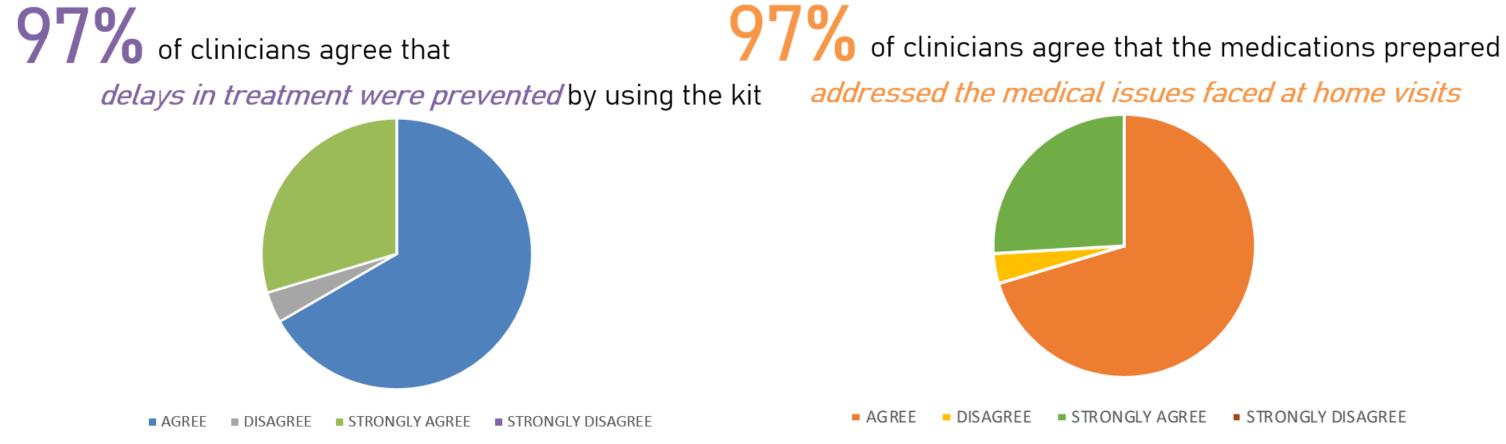
Pre-Implementation: 6.05 hours



Post-Implementation: 1.21 hours

Time-savings: 4.84 hours

Staff productivity & timeliness of medications



# Sustainability Plans

To ensure sustainability, these steps were taken:

- Workflows shared in shared drives for easy reference & access
- Monthly tracking and sharing of statistics
- Regular engagement of both H2H teams and pharmacy staff, with feedback gathered used to refine workflows