

## **Project Title**

Redesigning the workflow to process and communicate home delivery requests

## **Project Lead and Members**

Project lead:

- Nur'Ain Bte Abdul Manan
- Clara Chin

Project members:

- Koh Ying Pei
- Neo Ying Fang
- Alice Chin & Lenny Nuramalina
- Evelyn Soh & Lee She Ink
- Natasha Amalina Binte Bujang
- Yang Jun Ying
- Belinda Lee
- Ong Poh Ching
- Siti Nur Afrinah

## **Organisation(s) Involved**

National Healthcare Group Pharmacy (NHGPh) – Bukit Batok Polyclinic Pharmacy

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

Pharmacy

## **Applicable Specialty or Discipline**

Operations

## **Project Period**

Start date: Jan 2021

Completed date: Feb 2022

## **Aims**

To reduce the time taken to confirm and communicate home delivery requests by 25% (stretch target 30%) within 1 year.

## **Project Attachment**

See poster attached/below

## **Background**

See poster attached/below

## **Methods**

See poster attached/below

## **Results**

See poster attached/below

## **Conclusion**

See poster attached/below

## **Additional Information**

Accorded the NHG Quality Day 2022 (Category C: Developing a Flexible & Sustainable Workforce) Merit Award

## **Project Category**

Care & Process Redesign

Productivity, Time Saving

## **Keywords**

Home Delivery, Productivity

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

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# Redesigning the workflow to process and communicate home delivery requests

Nur'Ain Bte Abdul Manan, Clara Ching, Bukit Batok Polyclinic Pharmacy

## Mission Statement

To reduce the time taken to confirm and communicate home delivery requests by **25%** (stretch target 30%) within **1 year**.

## Team Members

	Name	Designation
Team leaders	Nur'Ain Bte Abdul Manan Clara Ching	Senior Pharmacist Senior Pharmacy Technician
Team members	Koh Ying Pei Neo Ying Fang Alice Chin & Lenny Nuramalina Evelyn Soh & Lee She Ink Natasha Amalina Binte Bujang, Yang Jun Ying, Belinda Lee, Ong Poh Ching Siti Nur Afrinah	Senior Pharmacist Pharmacist Pharmacy Technician Executive Senior Pharmacy Technician Pharmacy Technician
Facilitator	Sanisah Binte Mohd	Principal Pharmacist

## Evidence for a Problem Worth Solving



### Problem:

- Long fulfilment time for home delivery requests
- Staff are **overwhelmed** by sharp increase in requests due to COVID-19 restrictions

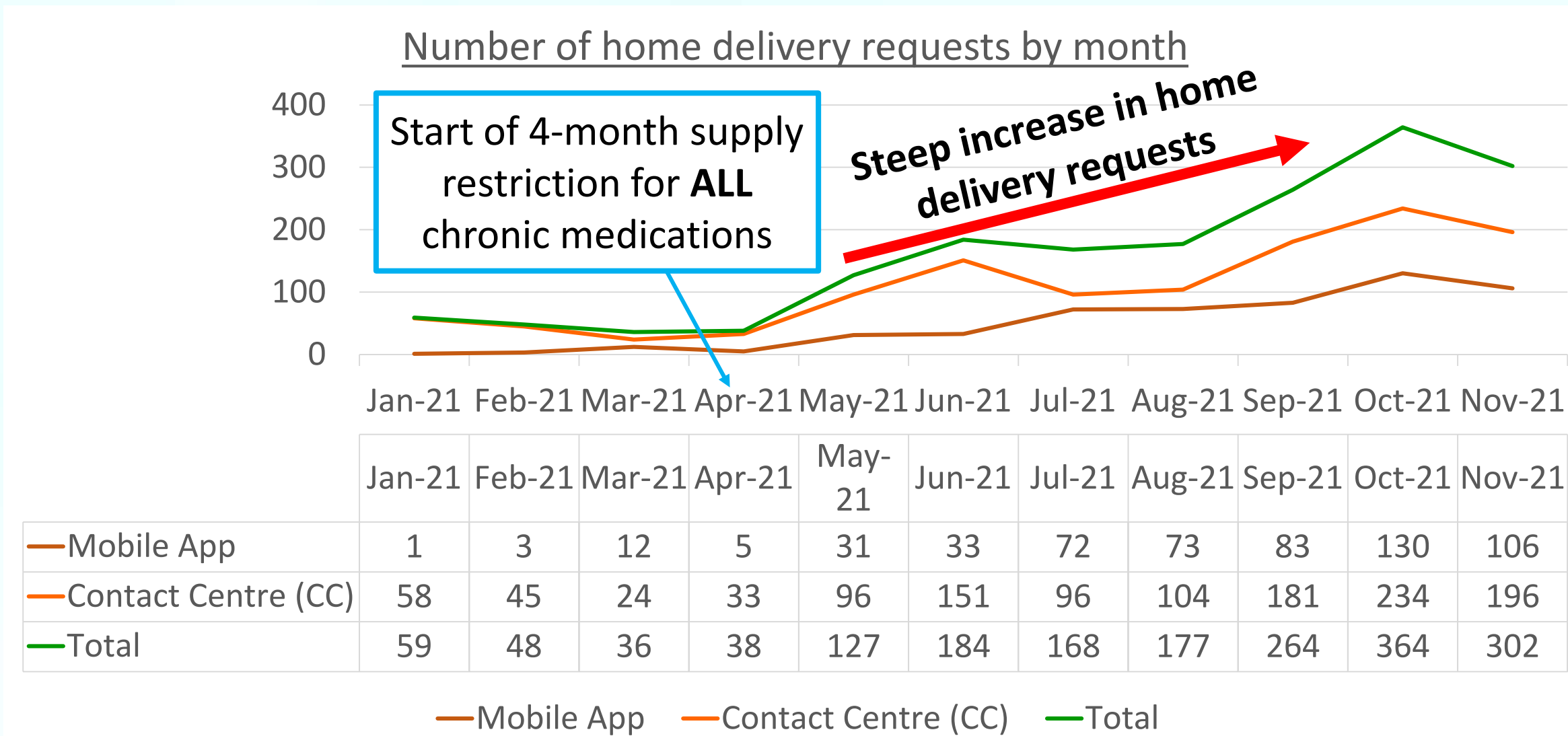
### I know this is a problem because:

- Since the COVID-19 pandemic, there is **surge in home delivery requests** due to rescheduling of appointments and medication supply restrictions. For **all delivery cases**, regardless of the source of request, pharmacy staff are **required to call the patients** to confirm the request and communicate on delivery details
- Average time recorded for verification and communication of request is **approximately 5 min/patient** across staff in the request fulfilment team.
- For unanswered calls, staff would attempt to call twice a day for 3 days before closing the case. Time spent on **no response cases can be up to 3 minutes per case**.
- As significant time is taken to verify the sheer number of simple delivery requests, staff has **less time for more essential duties**.



This problem happens: On a daily basis

## Current Performance of the Process

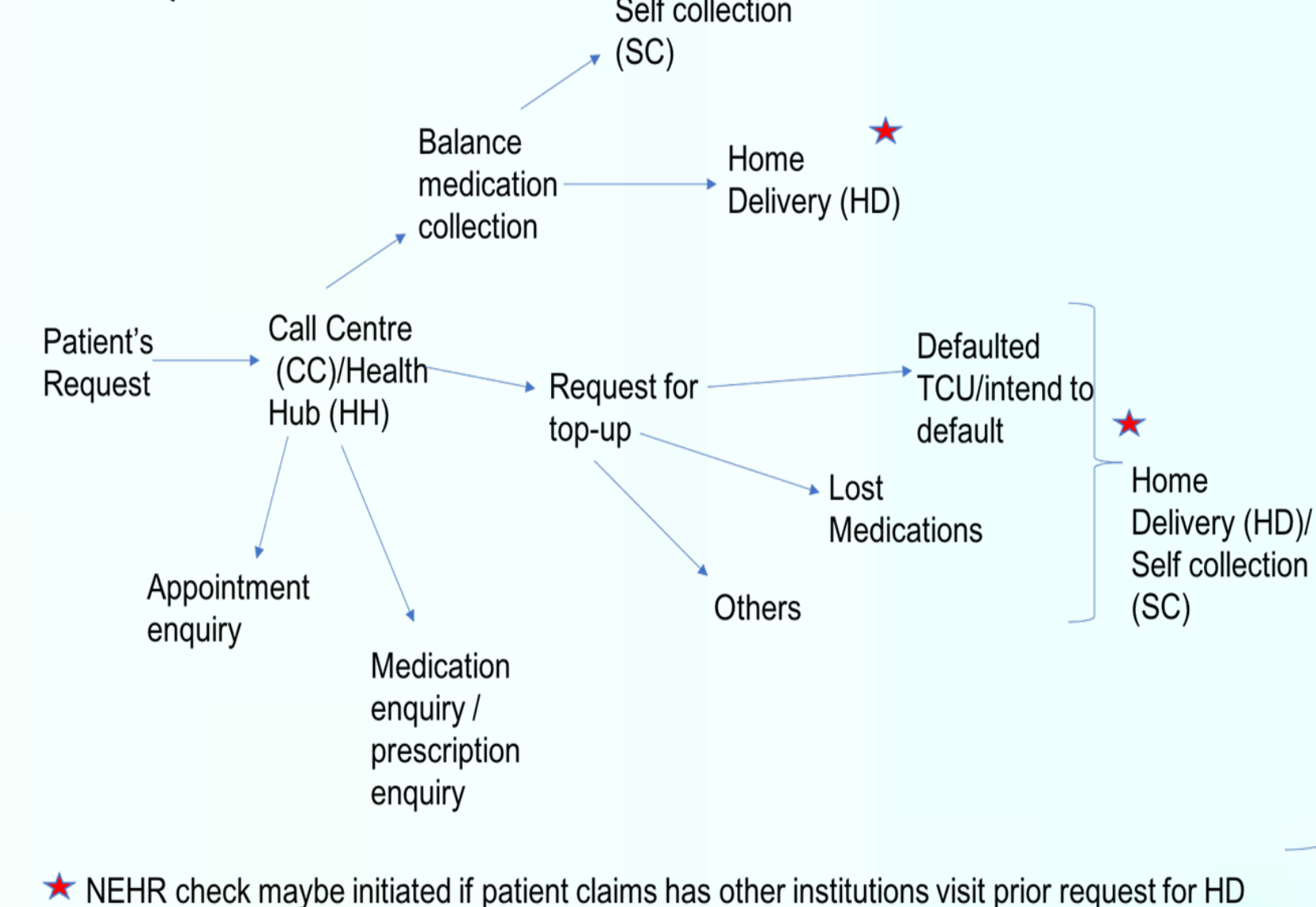


Average Pre-QI data (Jan to Mar 21):

- Mobile app usage: **14%** (86% - CC)
- Time spent calling each patient: **5 mins**

## Flow Chart of Process

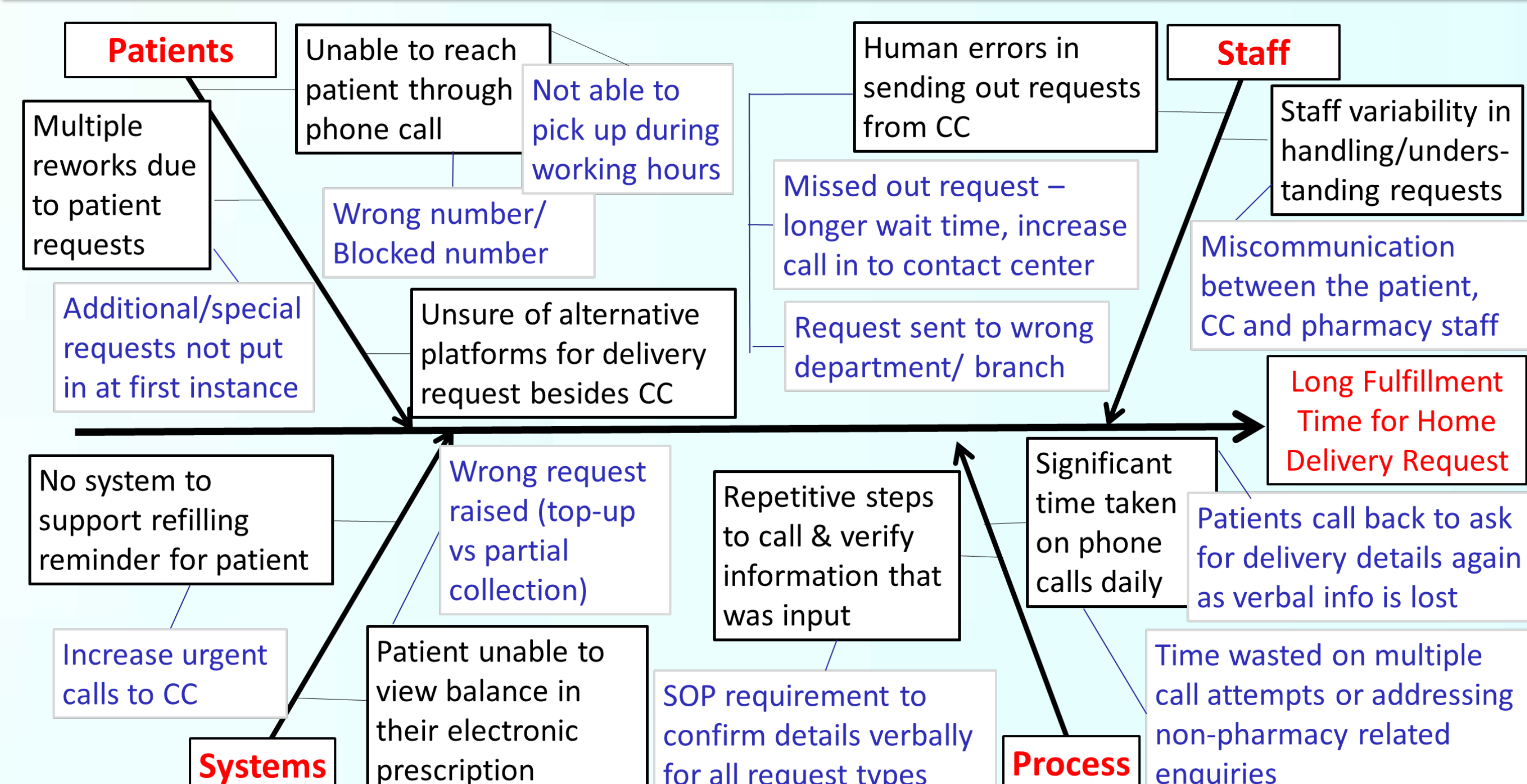
### Pre QI workflow



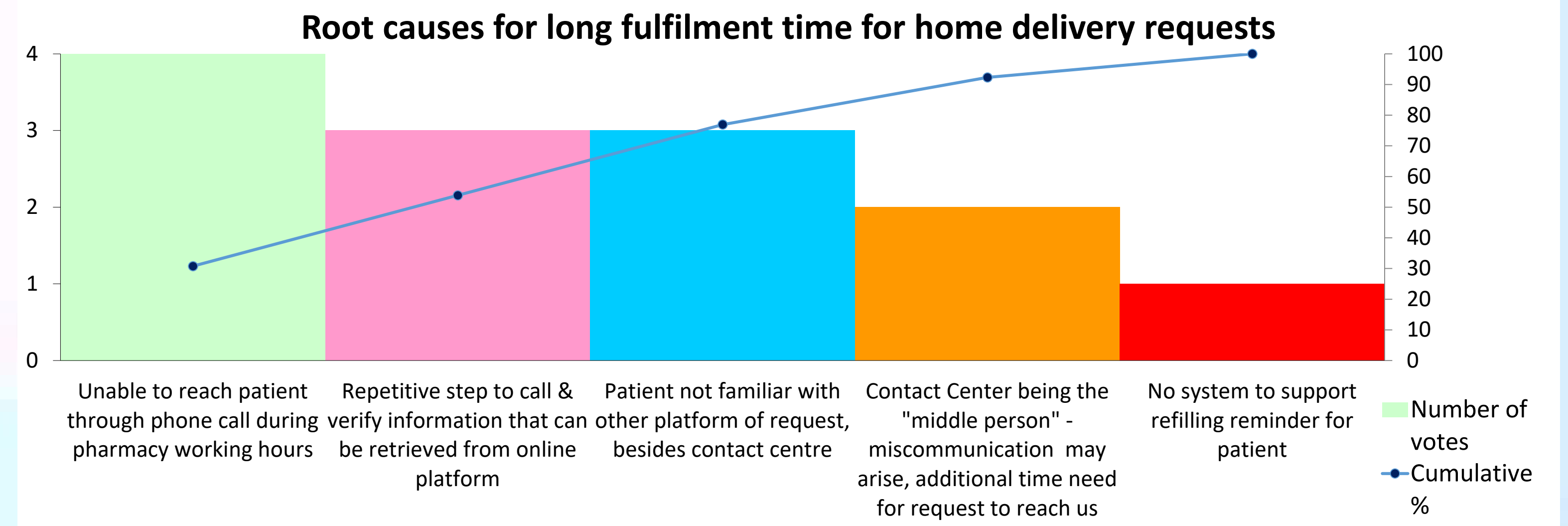
### Each call back for home delivery requests require the following verification:

- Patient's information
  - Last 4 digit of IC number
- Communicate on the request
- Changes to the medication
- Delivery address
- Delivery contact number
- Delivery timing
- Advise on the delivery (need to be at home, provide OTP to staff, etc.)
- Payment mode

## Cause and Effect Diagram

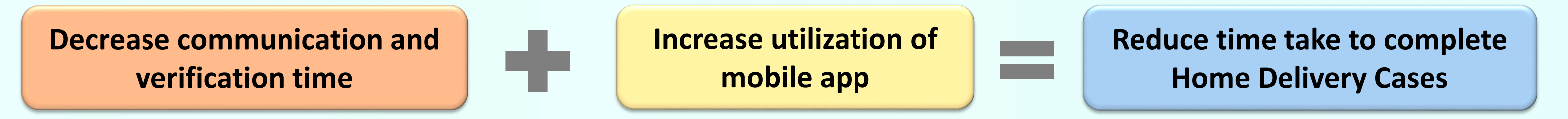


## Pareto Chart

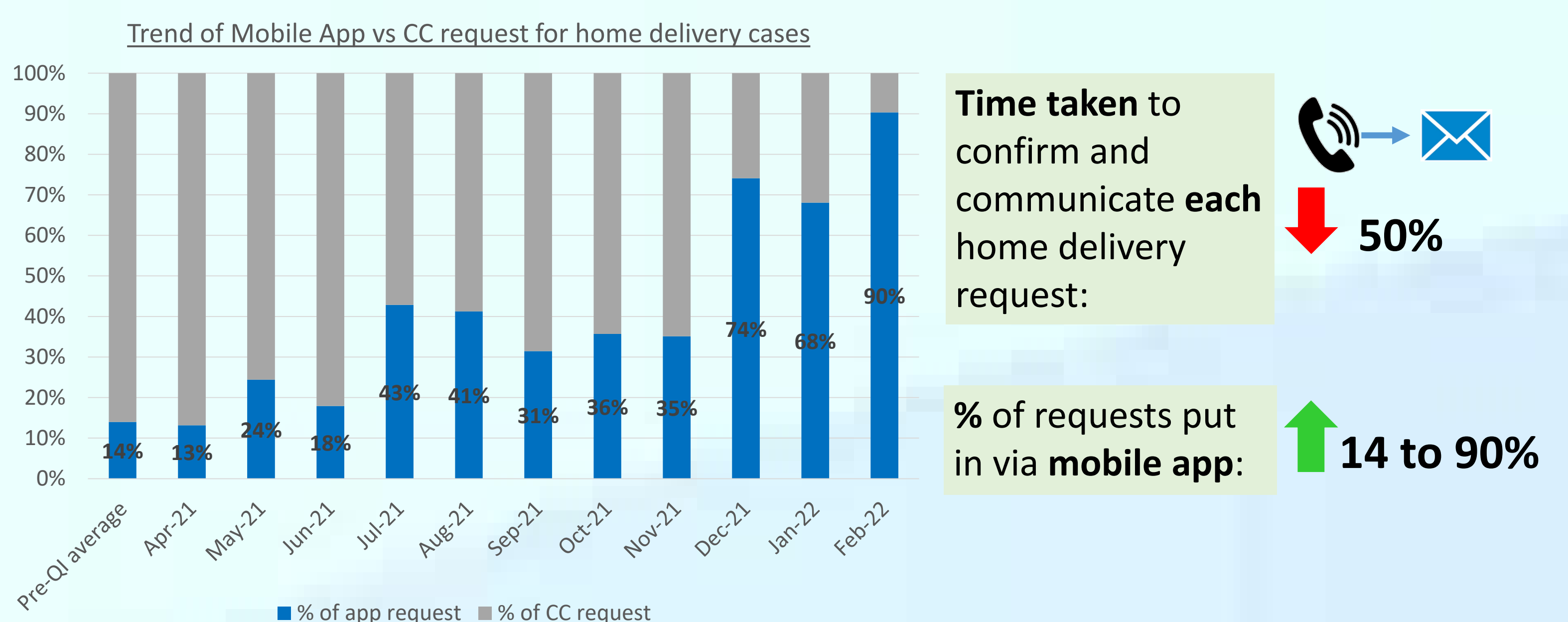


## Implementation

Root Causes	Countermeasures	Sample of email template used
Unable to reach patient through phone call during pharmacy working hours	1. Use <b>email</b> as main communication tool 2. <b>SMS</b> to communicate straightforward requests e.g. pick up at pharmacy [7/8/21]	Dear [Name], Your medication delivery request from HEALTHRHC has been processed. Delivery to the address provided has been scheduled for: Date: 18 Mar 2022 Time: 9pm to 6pm On the day of delivery, you will receive a SMS notification, containing the delivery pin code. As part of the delivery verification process, the recipient might be required to provide the pin code to the delivery courier during the delivery. The delivery courier will contact the provided contact number should there be changes to the delivery timing.  Please note the following: No changes will be allowed to the request once the order has been processed. For safety and hygiene reasons, medications delivered are not refundable or exchangeable. For further enquiries, please call 6663 4847 or email us at <a href="mailto:feedback@pharmacy.nhg.com.sg">feedback@pharmacy.nhg.com.sg</a> .
Repetitive step to call & verify information that can be retrieved from online platform	To call patient only if there are ambiguities or missing required information.	
Contact Center functions as the "middle person" who transcribes patient's request. May misunderstand requests or transcribe info wrongly	1. <b>Reduce</b> number of requests taken by CC 2. <b>Increase</b> requests from <b>mobile app</b> → more accurate information coming from patients themselves, less tendency for rework.	
Patient not familiar with other platforms of request, besides contact centre	Increase promotion of mobile app use • Verbal promotion of Medication Refill on Health Hub (HH) app to patients [12/4/21] • Design step-by-step guide to use med refill function on HH and distribution of brochures [01/09/21] • Distribution of OneNUHS Brochure with step-by-step guide for med refill [01/10/21] • Sending of OneNUHS brochure in home delivery parcel [01/12/21]	<b>Compulsory to input all delivery information for online request</b> 



## Results



Time taken to confirm and communicate each home delivery request: **50%** reduction

% of requests put in via mobile app: **14 to 90%** increase

## Cost Savings

- Average time recorded to complete home delivery screening and verification for
- CC requests = **5 mins**
  - Mobile app requests (from both Health Hub and OneNUHS) = **2.5 mins**

Thus, time savings for processing mobile app request vs CC request = **2.5 mins**  
Taking the average manpower cost for PTs and PAs per = \$25.08 / hour  
Manpower savings for every 100 requests via mobile app = 2.5min x 100 x \$25.08/ 60 = \$104.50

**Total number of home deliveries from Mar 21 to Feb 22 = 1877**  
**Annual savings is estimated to be = 78.2 hours/ year or \$1961.50/year**

## Problems Encountered

- Managing requestor expectations on the multiple modes of communication.
- Unable to tell if receipt of email/SMS is successful e.g. email may be sent to patient's junk mail, thus not read by patients
- There were still instances where patients input the wrong request category on the app, due to unfamiliarity with app usage

## Strategies to Sustain

- Continue to promote the function of the mobile app to patients
- Create more communication templates for other types of requests or outcomes
- Spread the initiative to different branches