

# Increase the Number of Medication Home Delivery Requested via Self-Service Kiosk (SSK) by 50% in Geylang Polyclinic over a Sustained Period

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## Mission Statement

To increase the number of medication deliveries requested via NHGP's Self-Service Kiosk (SSK) by 50% over a sustained period with a stretched goal of 100%. From January 2023 to June 2023, an average of 15.4 medication deliveries were requested via SSK. Only 12.7% of all medication deliveries was requested via SSK. The SSK is a one stop self-service kiosk for patients to make payment for their visit, arrange for their next appointment(s) and request for medication delivery. Thus, using the SSK to request for medication delivery will lead to time and cost savings.

## Team Members

	Name	Designation	Department
<b>Team Leader</b>	Safia Ilham Yunus Khan	Pharmacist	Pharmacy
<b>Team Members</b>	Muhammad Zikry Bin Samsudin	Pharmacy Technician	Pharmacy
	Nurshahida Binte Mohamed	Pharmacy Technician	Pharmacy
	Siti Nur A'dawiyah Binte Mohamed Amin	Pharmacy Technician	Pharmacy
	Choi Yin Yi Valerie	Operations Executive	Operations
<b>Facilitator</b>	Cheryl Char Wai Teng	Senior Pharmacist	Pharmacy

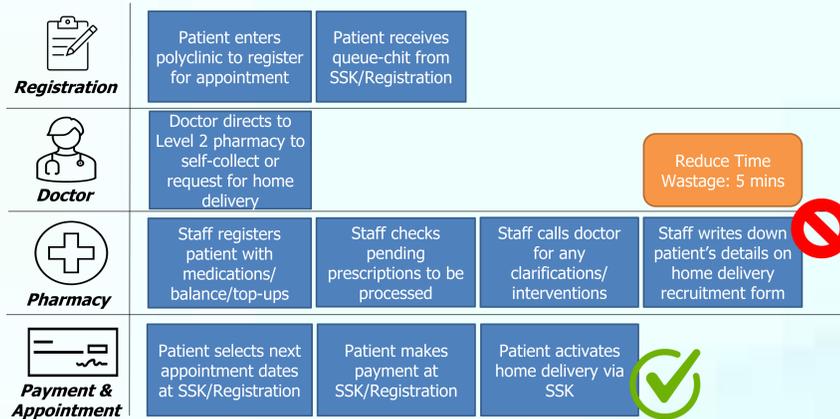
## Evidence for a Problem Worth Solving

There is currently a lack of home delivery uptake via SSK (38-70 per month). Furthermore, pharmacy staff are carrying out multiple tasks which include registering patients for self-collection, validating prescriptions, performing interventions whilst also filling up home delivery recruitment forms. This results in more staff workload, longer pharmacy queues and waiting times. Since January 2023 to June 2023, there is only about 9.4%-12.5% of home deliveries activated via SSK per month.

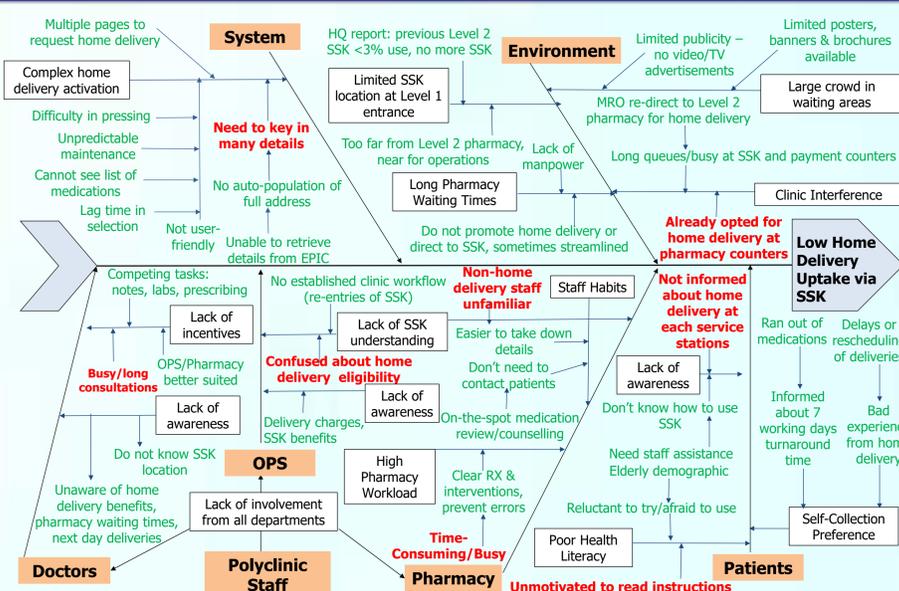
- SSK activation takes up to 2 minutes to complete and have shorter queues than pharmacy. Pharmacy staff take up to 5 minutes in filling up the home delivery forms alone, resulting in longer queues and pharmacy waiting times, which ultimately affect flow of operations.
- Patients take an additional 45 steps from SSK to Level 2 pharmacy to activate delivery or self-collect which is a waste of motion and contributes to crowding in the pharmacy, when activation of delivery via SSK can prevent this.

## Flow Chart of Process

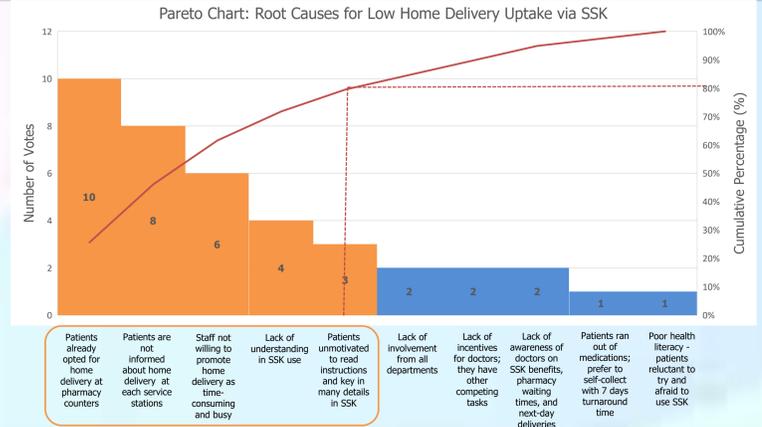
### Patient's Home Delivery Journey – Process Flow Map



## Cause and Effect Diagram



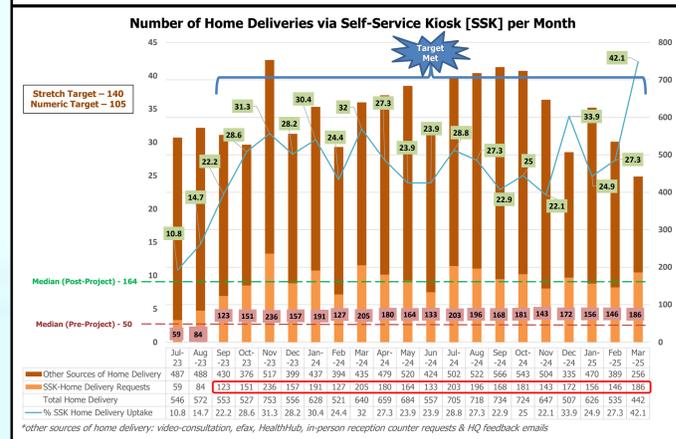
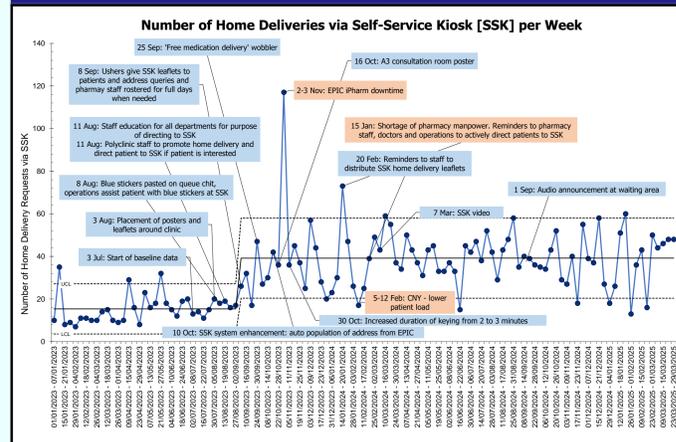
## Pareto Chart



## Implementation

Root Cause	Intervention	Start Date
Patients already opted for home deliveries at pharmacy counters	<ul style="list-style-type: none"> <li>Attachment of Blue Stickers Directing Patients to SSK on Patients' Queue Chit (<i>spread to other clinics</i>)</li> <li>Clinic Meeting for All Departments for Staff Education</li> </ul>	8 Aug 23
Patients not informed about home deliveries at each service stations	<ul style="list-style-type: none"> <li>Placement of Posters and Leaflets (<i>spread to other clinics</i>)</li> <li>Ushers - Operations and Pharmacy (<i>spread to other clinics</i>)</li> <li>Free Medication Delivery Wobblers (<i>spread to other clinics</i>)</li> <li>Medication Home Delivery Video (<i>spread to other clinics</i>)</li> </ul>	11 Aug 23 3 Aug 23 8 Sep 23 25 Sep 23
Staff not willing to promote home deliveries as time-consuming and busy	<ul style="list-style-type: none"> <li>Tracking Daily, Weekly and Monthly Uptake in Excel</li> <li>Pharmacy Staff Rostering from Half-Day to Full-Day</li> <li>Placement of A3 Consultation Room Poster</li> <li>WhatsApp Reminders to Direct to SSK</li> <li>Audio Announcement at Waiting Area (<i>spread to other clinics</i>)</li> </ul>	Monthly 8 Sep 23 16 Oct 23 15 Jan 24 1 Sep 24
Lack of understanding in SSK use	<ul style="list-style-type: none"> <li>Clinic and BlueBell (SSK Vendor) Meeting</li> </ul>	24 Aug 23
Patients unmotivated to read instructions and key in many details in SSK	<ul style="list-style-type: none"> <li>Two System SSK Enhancements: (<i>spread to other clinics</i>)                             <ul style="list-style-type: none"> <li>Auto-population of address from EPIC</li> <li>Increased duration of keying from 2 to 3 minutes</li> </ul> </li> </ul>	10 Oct 23 30 Oct 23

## Results



- Project succeeded in increasing SSK uptake with some countermeasures spread to other NHG polyclinics.
- Sustainability was measured until March 2025 (with highest uptake via SSK at 42.1%).
- Mean weekly SSK uptake improved from 15.4 to 39.2
- % of SSK requests increased from 12.7% to 29.3%.
- Both numeric & stretched target goals of 105 (increase by 50%) and 140 (increase by 100%) were respectively achieved.

## Cost Savings

Time Period	Total Number of Patients Using SSK	SSK Requests	Patient Movement from Level 1 SSK to Level 2 Pharmacy	Cost Avoidance for \$9 Service Recovery
July 23 - March 25	3,354 (with increased patient satisfaction)	Saved 3.3 hours per month	Saved 150,930 steps (45 Steps/Request)	Saved \$30,186 (Recruitment via SSK prevents issues of wrongly written address/delivery dates by pharmacy staff)

## Problems Encountered

- Initial engagement & influencing change took time, but a continuous multi-disciplinary team collaboration overcame several barriers.

## Strategies to Sustain

- Continue to monitor and track the sustained trend by collecting daily, weekly and monthly data of home delivery uptake via SSK.
- Regular reminders and engagement with all polyclinic staff and gather feedback from patients via surveys on how to sustain and improve the countermeasures.