



# QI Project - Improving Medication Management at Discharge for Paediatric Inpatient Units



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## Background

Caregivers often seek urgent updates on patient's discharge medication status. Due to the lack of real-time information, nurses have to call pharmacy to check whenever there is such an enquiry. This workflow is not ideal as it utilizes precious nursing time, disrupts pharmacy medication preparation process, increasing the risk of errors.

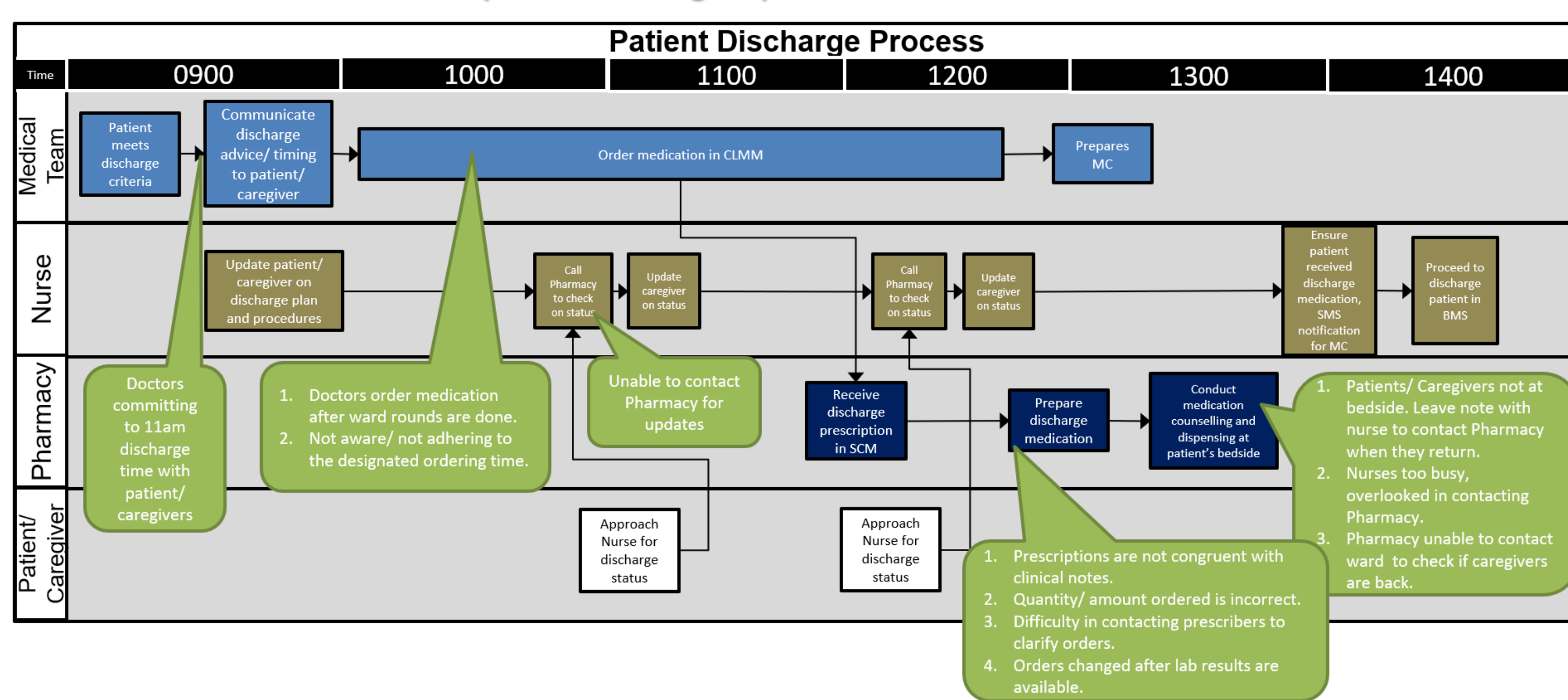
## Aim

To examine the discharge medication process and identify potential solutions to enhance communication among patients, pharmacists, and nurses for improved medication management.

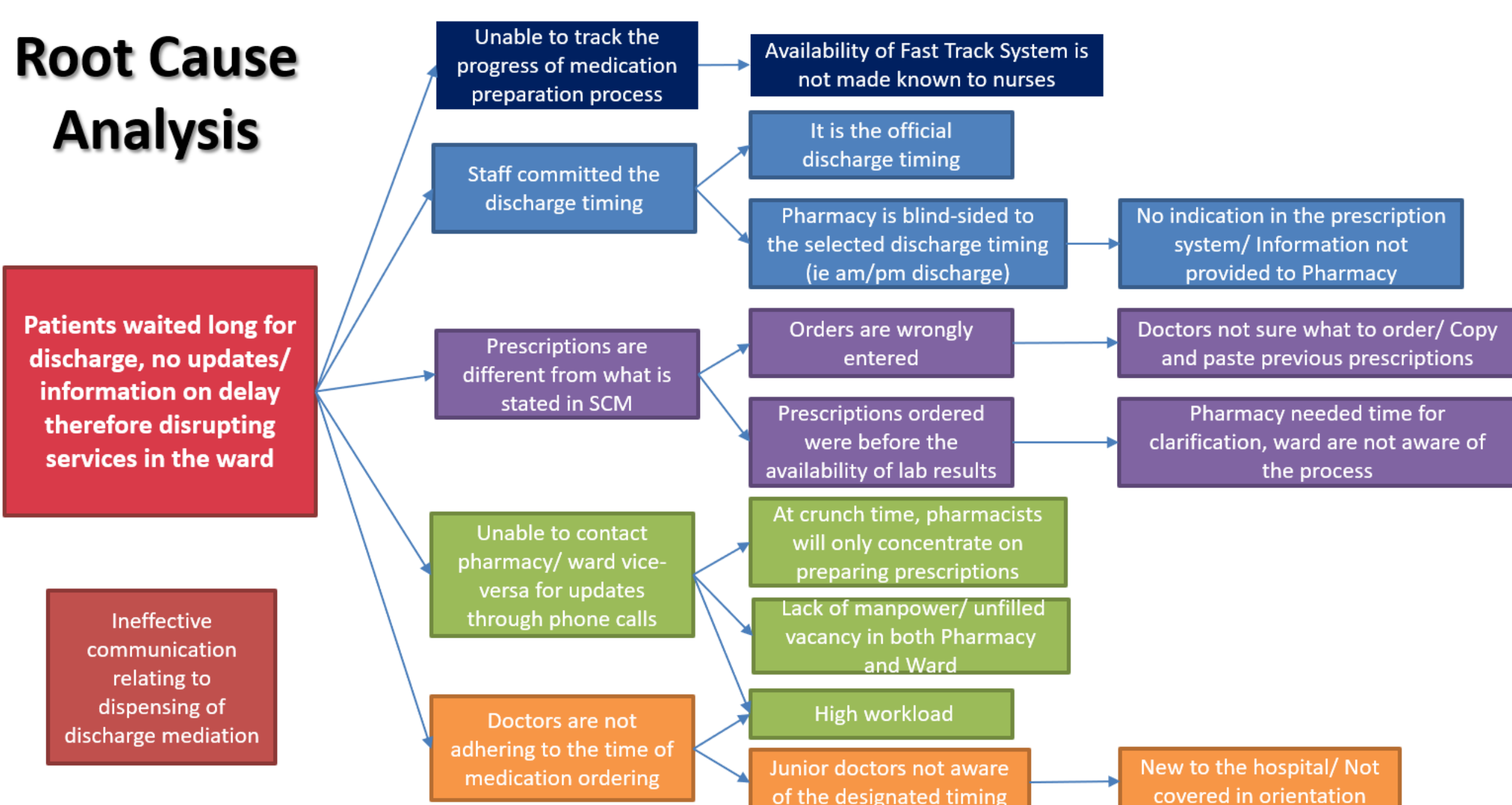
## Methodology

1. Utilized a Process Chart to map out the different activities on discharge day

Process Flow Chart (Swim Lane Diagram)



2. Root Cause Analysis showed a lack in visibility of discharge medication status



3. Utilization of Fastrak can provide real-time status update of discharge medication status

Rx Received(03 Nov 2023 09:37 AM)	
1000/3000	Pharmacy has just started processing the discharge medications at xxxx. The medications should be ready in 1-2 hours' time.
2000	Pharmacy has just started processing the discharge medications at xxxx. The medications should be ready in the afternoon.
Ready for Dispensing(03 Nov 2023 10:45 AM)	
1000	Pharmacy has finished preparing the discharge medications at xxxx. They will be coming to the ward to dispense the medications latest in 1 hour's time.
2000	Pharmacy has finished preparing the discharge medications at xxxx. They will be coming to the ward after 3.30pm to dispense the medications.
3000	Pharmacy has finished preparing the discharge medications at xxxx. Please send caregivers to Children's Inpatient Pharmacy to collect the medications.
En Route to Bedside(03 Nov 2023 03:21 PM)	
The discharge medications have left the pharmacy at xxxx and are on the way to the ward. Please ensure that the caregivers are around at the bedside in the next 1 hour to receive the medications.	
Dispensed to patient(03 Nov 2023 10:25 AM)	
Pharmacy has dispensed the discharge medications at xxxx. Please check with the caregivers if they have received the medications.	
Dispensed to patient(02 Nov 2023 04:24 PM)	
Pharmacy has dispensed the discharge medications previously on dd/mm. Please check with the caregivers if they have received the medications. Please also check with Pharmacy if there are any changes.	
Ready for Dispensing(12 Jun 2023 04:48 PM)	
Rx Received(05 Nov 2023 09:31 AM)	
Patient's discharge medications were not dispensed previously on dd/mm. Please refer to the latest status for today's date.	
Please refer to comment column for more details(14 Mar 2024 11:23 AM)	
Please refer to the table below.	

4. The team then monitored and manually collected the number of calls made to pharmacy and the time spent on attending to such inquiries.

## Results

The trial of Fastrak was successful in the pilot wards. Nurses provided favorable feedback as Fastrak provides real-time information for nurses to update caregivers on the status of their discharge medication, without having to contact Pharmacy and wait for their updates.

Initial data collection displays a down trending of total number of calls to pharmacy. Pre-implementation, 18 calls were made over two weeks, where nurses spent a median of 3.5mins on each call. This is reduced to 3 calls post-implementation, with a median of 1.5mins per call. Moreover, we have received positive feedback from the nurses in the pilot wards.

## Conclusion

The implementation facilitated seamless information sharing between pharmacy and ward nurses, enabling caregivers to receive timely updates with minimal disruption to pharmacy operations from unnecessary phone calls.

In April 2024, the initiative was shared and implemented in all wards within the hospital. Data collection post-implementation is ongoing, and further results will be shared once available.