

## **Project Title**

Inpatient Pharmacy Discharge Process Quality Improvement Project

## **Project Lead and Members**

Project lead: Loo Pey Li

Project members: Shakelah Begum, Tan Li Yan, Tan Wei Keat

## **Organisation(s) Involved**

Ng Teng Fong General Hospital

## **Healthcare Family Group Involved in this Project**

Pharmacy

## **Project Period**

Start date: Aug-2017

Completed date: Apr-2018

## **Aims**

To reduce the percentage of ward 14 (pilot ward) prescriptions which are not ready from 35% to 20% by April 2018.

## **Background**

See poster appended / below

## **Methods**

See poster appended / below

## **Results**

See poster appended / below

### **Lessons Learnt**

Quality improvement is a continuous process which requires continuous analysis of effectiveness and further improvement. Collaboration between various departments is important to ensure successful implementation of improvement initiatives.

### **Conclusion**

See poster appended / below

### **Project Category**

Care & Proces Redesign, Quality Improvement, Workflow Redesign, Job Effectiveness, Access To Care, Waiting Time, Turnaround Time, Bed Occupancy Rate, Value Based Care, Productivity, Time Saving, Manhour Saving, Patient Satisfaction, Technology

### **Keywords**

Discharge Medications, iPharm Virtual

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

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# INPATIENT PHARMACY DISCHARGE PROCESS QUALITY IMPROVEMENT PROJECT

- SAFETY
- PRODUCTIVITY
- PATIENT EXPERIENCE
- QUALITY
- VALUE

LOO PEY LI, SHAKELAH BEGUM, TAN LI YAN, TAN WEI KEAT

## Define Problem, Set Aim

### Opportunity for Improvement

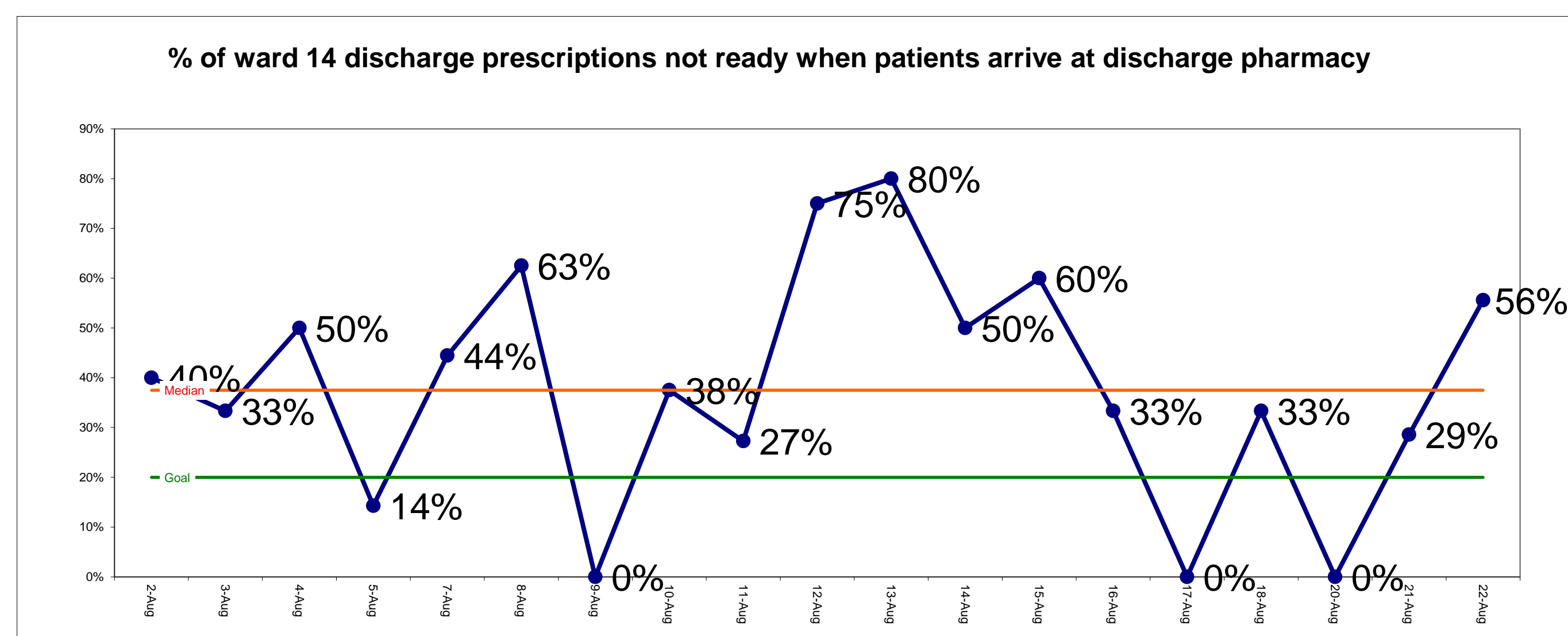
- 35% of ward 14 discharge medications are not ready when patient is ready for home (2<sup>nd</sup> – 22<sup>nd</sup> August 2017).
- Cost of the problem:
  - Unnecessary long waiting time for the patients either in the ward or at discharge pharmacy resulting in unnecessary prolonged bed turnaround time and possibly negative impact on patient's satisfaction.

### Aim

The inpatient pharmacy intends to reduce the percentage of ward 14 (pilot ward) prescriptions which are not ready from 35% to 20% by April 2018.

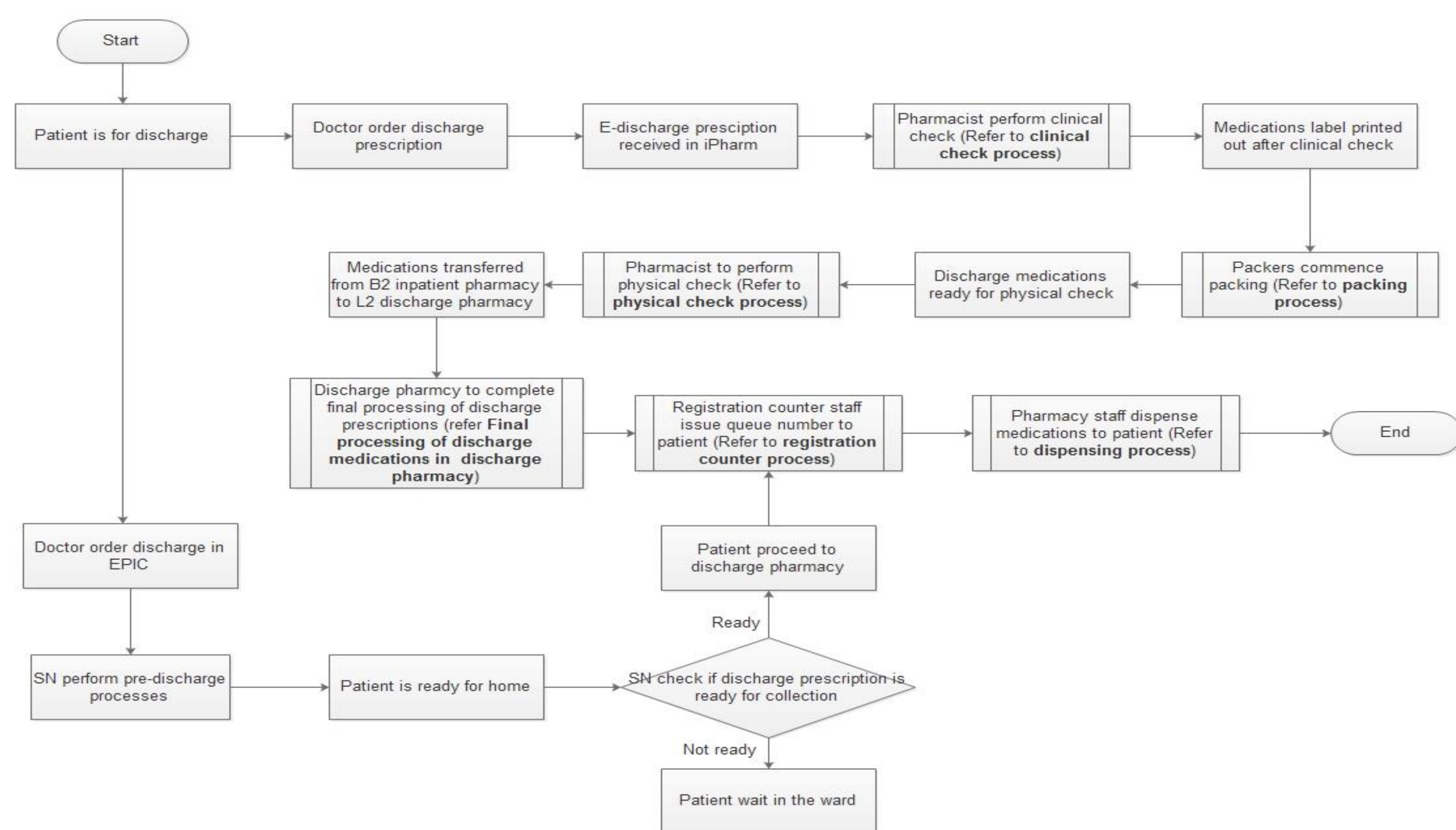
## Establish Measures

### Baseline measurement:

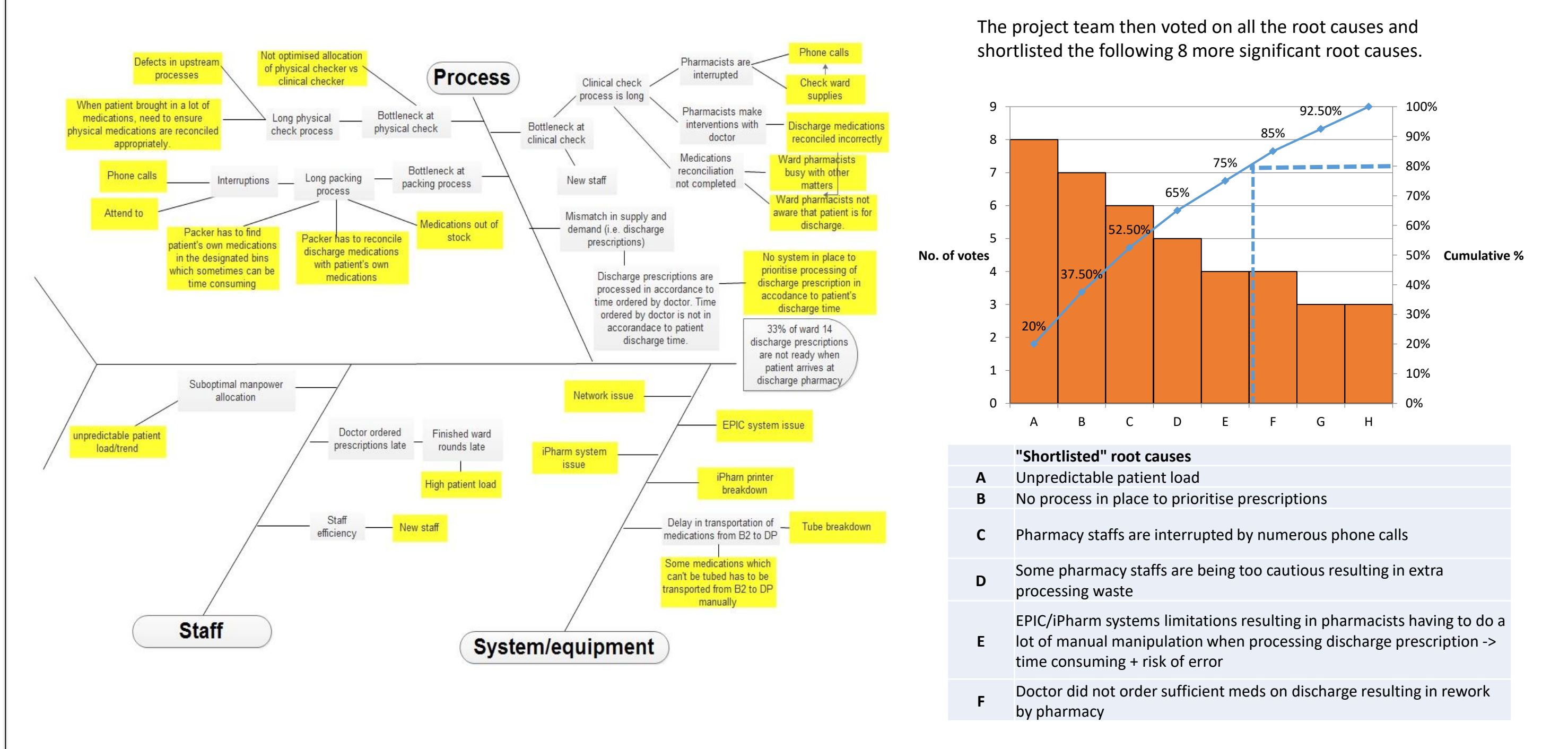


## Analyse Problem

### Process Map:



### Fishbone Diagram and Pareto Chart



## Select Changes

### Probable solution:

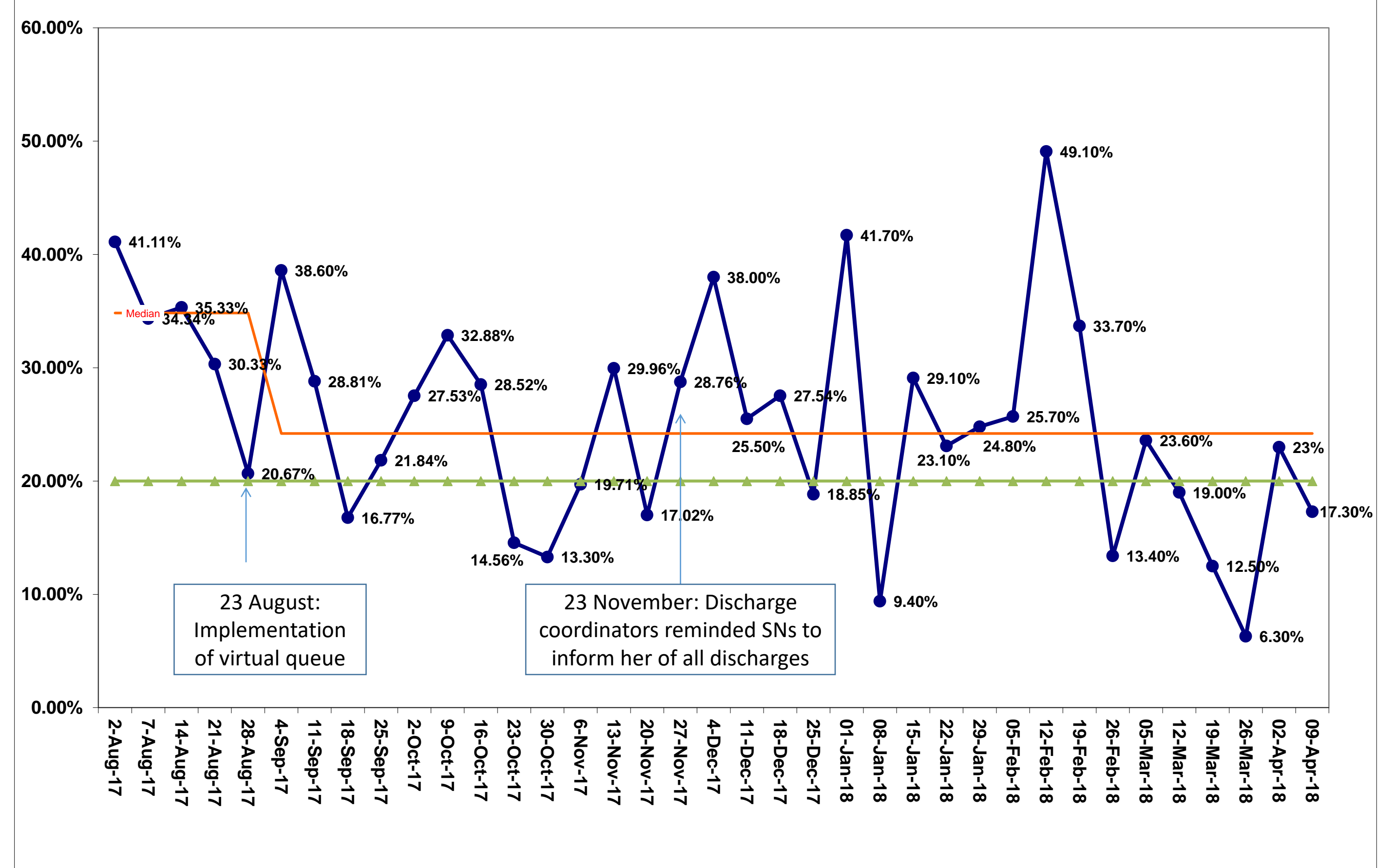
Root cause selected: Unpredictable patient arrival trend at discharge pharmacy

Solution: To introduce a system (iPharm virtual queue) for staff nurse to notify pharmacy when patient is ready for home so that pharmacy can prioritise processing of prescriptions accordingly.

## Test & Implement Changes

CYCLE	PLAN	DO	STUDY	ACT
1	Inpatient wants to test whether the virtual queue system will help pharmacy to prioritise processing of discharge prescriptions.	Piloted virtual queue system in ward 14.	Improvement in % prescriptions not ready for collection though target not reached.	Adapt the intervention.

### % of ward 14 prescriptions not ready for collection when patients arrive at discharge pharmacy



## Spread Changes, Learning Points

### Spread changes

We aim to further strengthen the process measure before spreading the change to other wards.

### Key learnings

- Quality improvement is a continuous process which require continuous analysis of effectiveness and further improvement.
- Collaboration between various departments is important to ensure successful implementation of improvement initiatives.