

**Mr Yin Hao, Nursing**  
**Dr Lau Boon Jia, Dept of Mood & Anxiety, West Region**  
**Mr Nur Hazmi Bin Kannan, Infrastructure & Support Services**

## Mission Statement

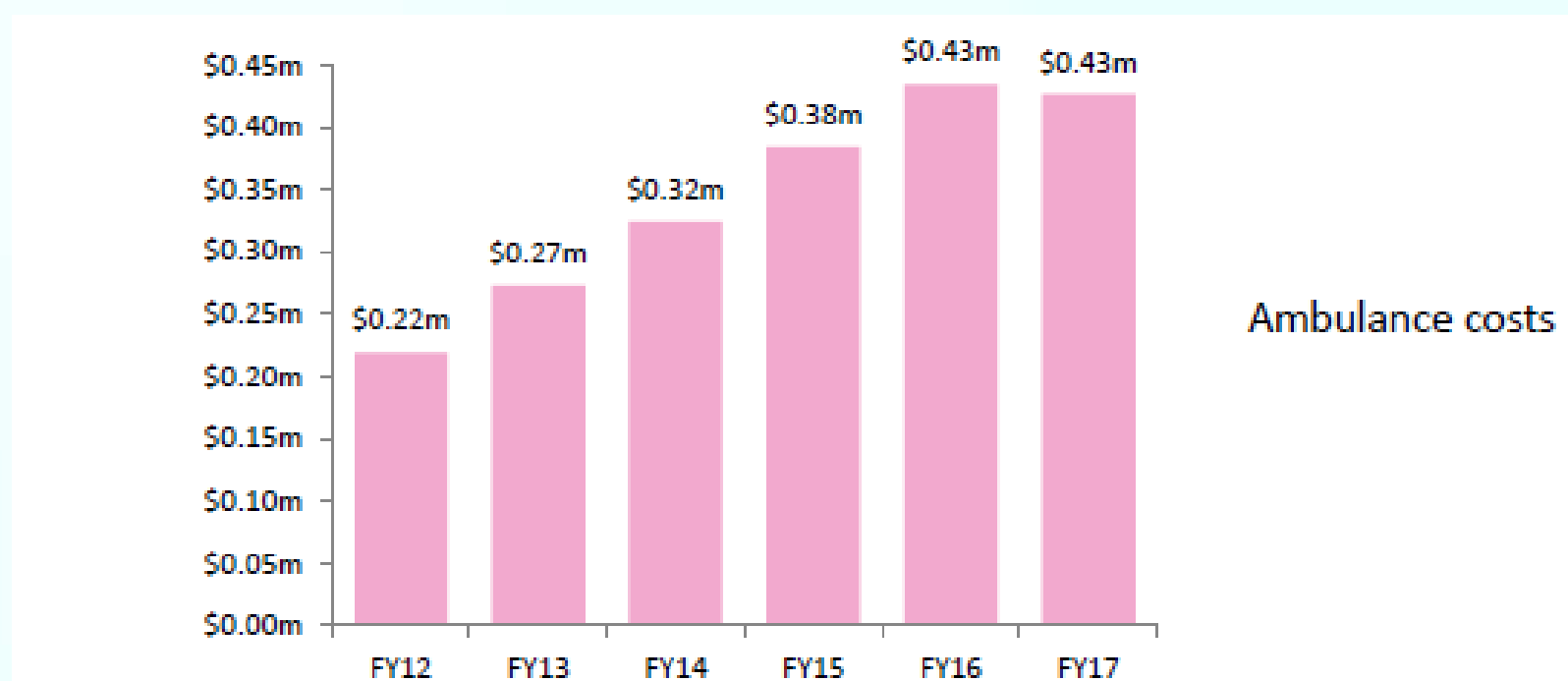
To provide safe and efficient transfers for patients for TCU.

The cost to transfer patients for TCU appointment via ambulance has been increasing over the years. Due to the high demand of ambulance services, it has also resulted in transfer delays. A team was formed to explore alternative ways of transferring patients in a safe and efficient way but with more cost-effective methods. The initiative of TCU by taxi was then introduced.

## Team Members

Name	Designation	Department
<b>Team Leader</b> Yin Hao Dr Lau Boon Jia Nur Hazmi Bin Kannan	Senior Nurse Manager Consultant Senior Estates Officer	Nursing, North and Central Region Dept of Mood & Anxiety, West Region Infrastructure & Support Services
<b>Team Members</b> Jolina Chua Wei Xing Lum Chee Wai Lin Wanting Yvonne	Director Assistant Manager Assistant Manager Accountant	Operations Clinical Governance and Quality Operations, Central Region Finance
<b>Sponsor</b> Ms Ng Bee Lan Ms Samantha Ong Bee Cheng	Chief Financial Officer Director	Finance & Accounting Operations
<b>Facilitator</b> Dr Tina Fang Dr Alex Su	Director Senior Consultant	Clinical Governance & Quality North Region

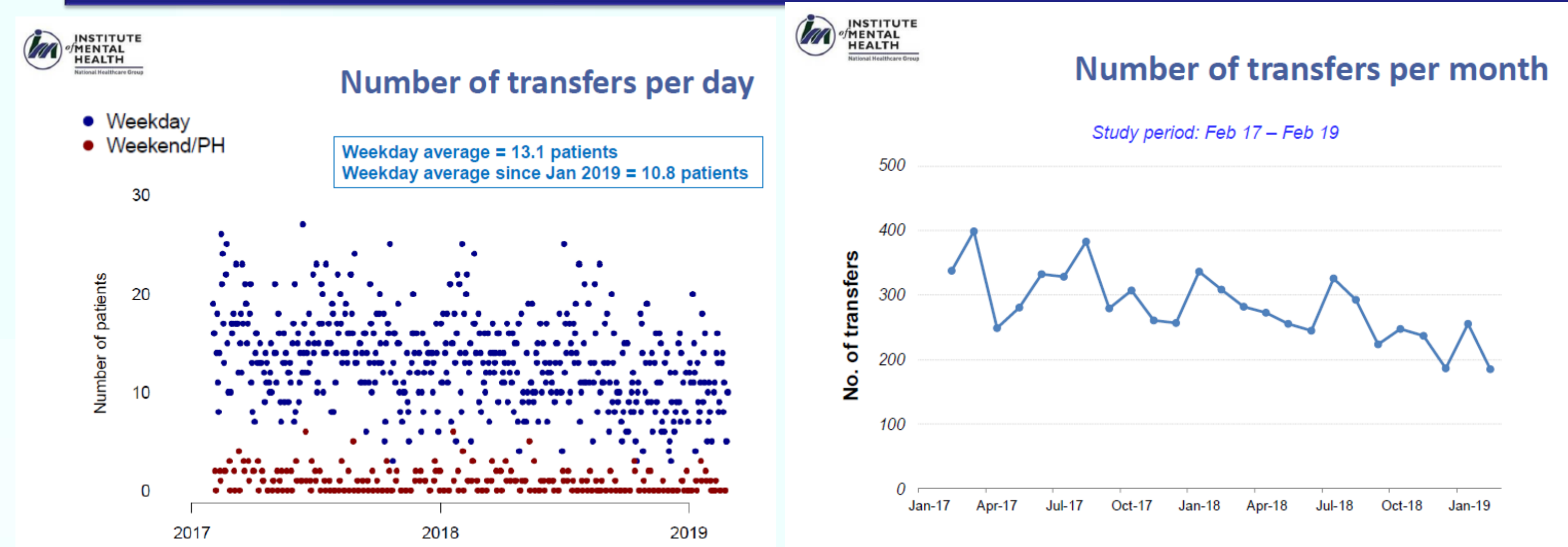
## Evidence for a Problem Worth Solving



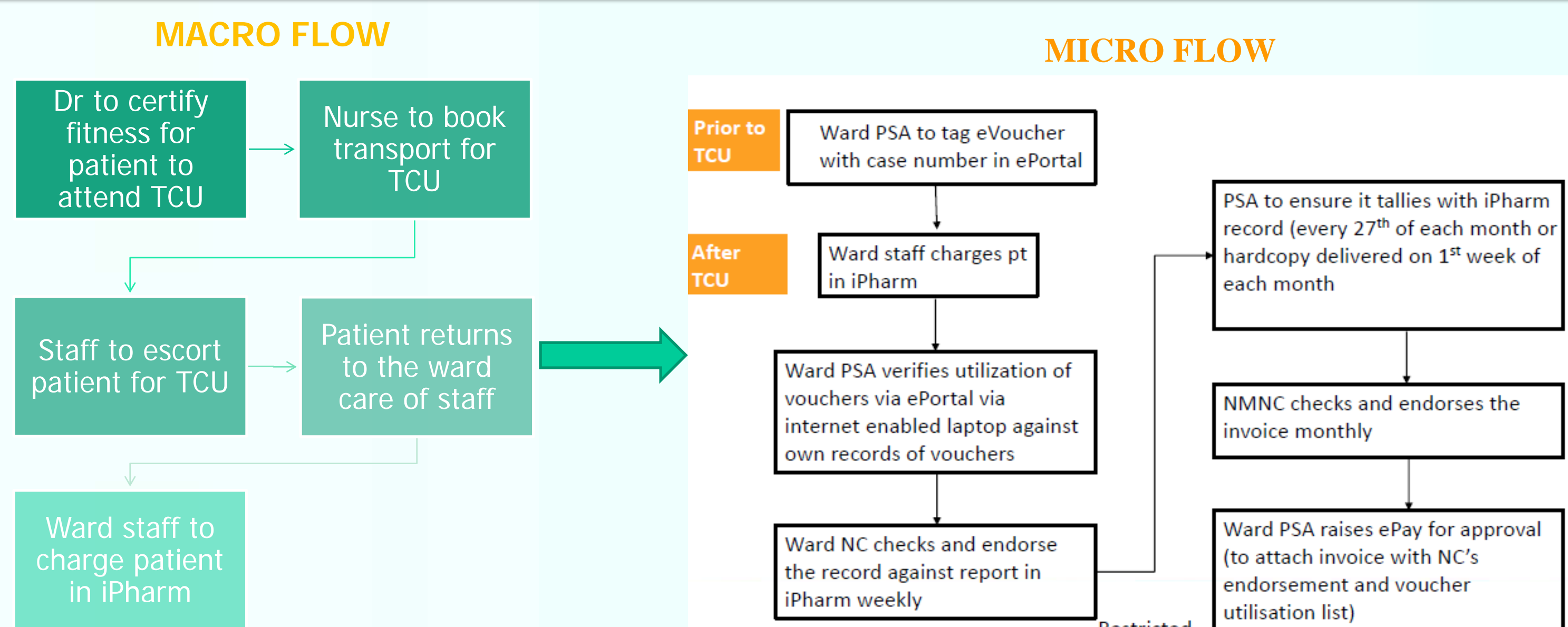
There has been approximately 15% year-on-year increase in ambulance costs in the past 5 years, with only a slight drop in FY2017.

This translates to an overall increase of \$210,000 in the cost of ambulance over 5 years.

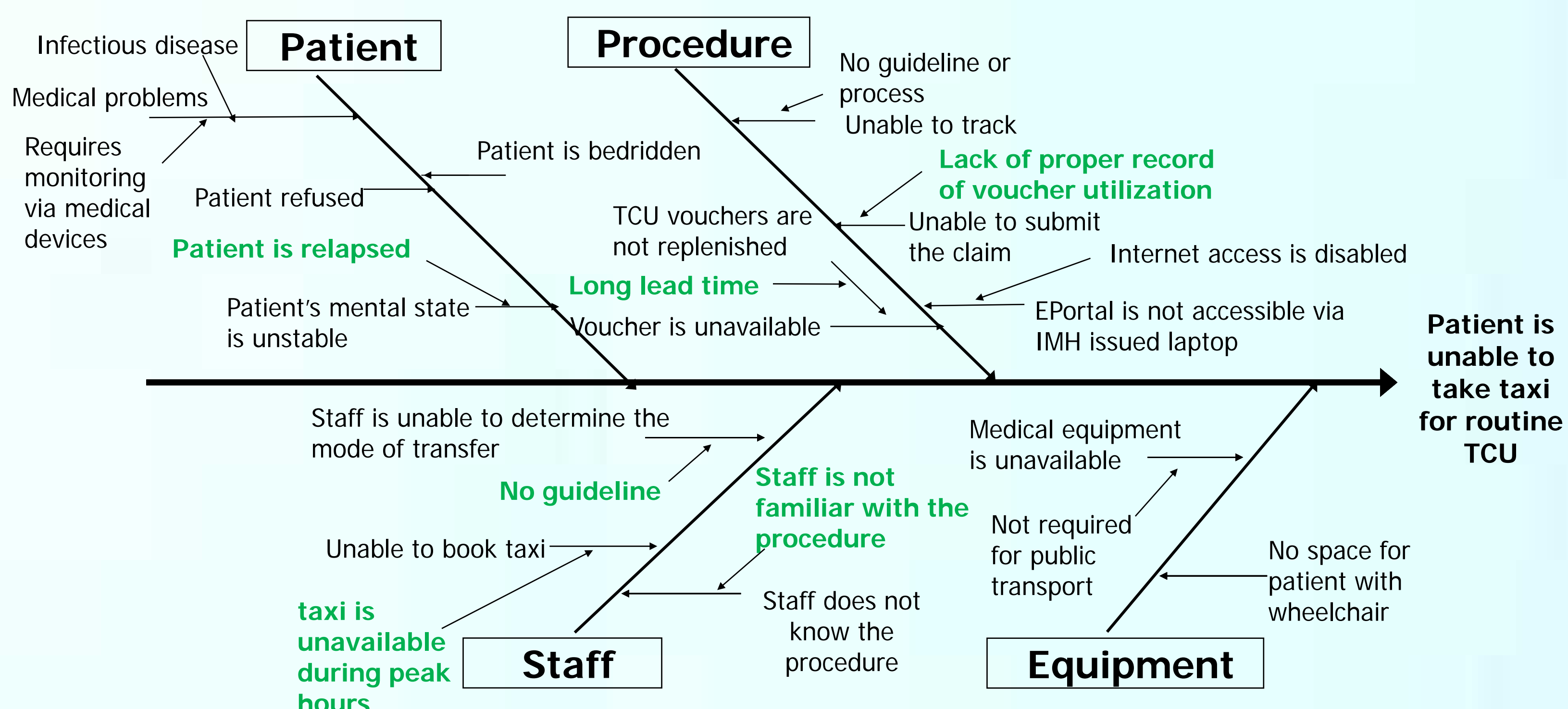
## Current Performance of a Process



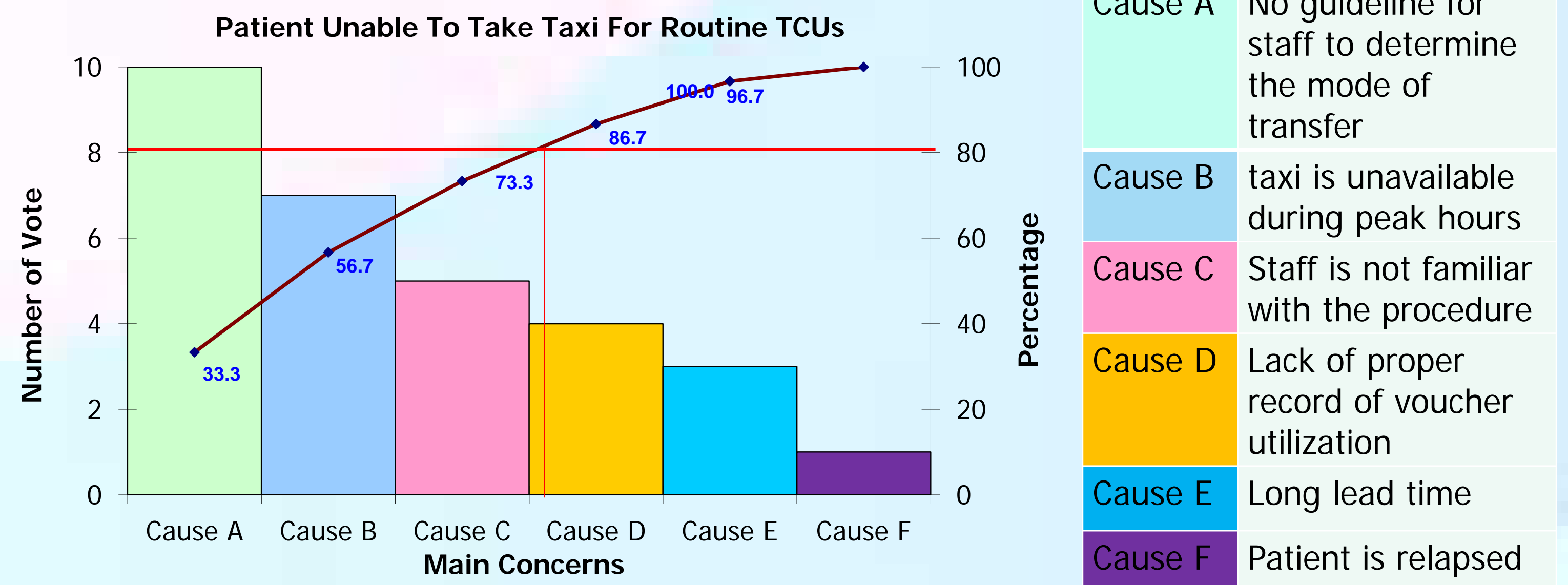
## Flow Chart of Process



## Cause and Effect Diagram



## Pareto Chart



- Cause A** No guideline for staff to determine the mode of transfer
- Cause B** taxi is unavailable during peak hours
- Cause C** Staff is not familiar with the procedure
- Cause D** Lack of proper record of voucher utilization
- Cause E** Long lead time
- Cause F** Patient is relapsed

## Implementation

PROBLEM	INTERVENTION	DATE OF IMPLEMENTATION
No guideline for staff to determine the mode of transfer	Set the criteria for patients using taxi for TCU	01 Sep 2019
Taxi is unavailable during peak hours	Established the process to book taxi for transfer of patient for TCU	
Staff is not familiar with the procedure	Workflow for the management of taxi vouchers were created	
Lack of proper record of voucher utilization	Track sheet was created to track voucher utilization	01 Nov 2019
Long lead time	Par level of taxi vouchers was determined for acute and long stay wards	01 Dec 2019

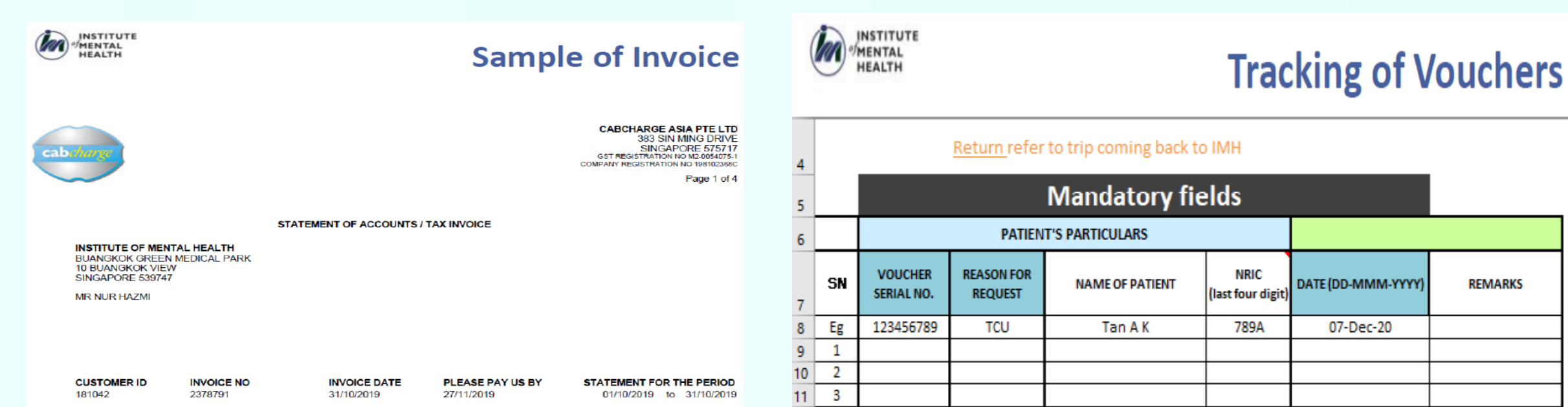
- Feb 2020 - Jan 2022: Project was suspended due to COVID-19
- From Feb 2022: The pilot resumed and was fully implemented in all inpatient ward by May 2022
- From May 2022: The project was rolled out to Emergency Services and Specialist Outpatient Clinic.

## Results

- The 5 interventions were successfully implemented in all inpatient wards, ES, and SOC.
- Service utilization: A total of 1900 patients have been transferred via Taxi instead of ambulance.
- There is an overall time saved of 1900hrs for nurses as the duration of TCU was reduced by 1 hour per trip (2-way). The time saved can be better used by nurses to provide more clinical care to patients.

### Breakdown of service utilization by departments

Department	BLK2	BLK3	BLK4	BLK5	BLK6	BLK7	BLK8	ES&SOC
Number of Patients	150	575	175	525	300	75	75	25



## Cost Savings

	Ambulance cost	Taxi Cost	Total cost saving per patient
Cost saving per patient	\$100.00	\$75.00	\$25.00
Total cost saving for all patients	\$100.00	-\$75.00 = \$25.00	\$25.00 X 1900 = \$ 47,500.00
	Average time spent per patient via ambulance	Average time spent per patient via taxi	Time saved per patient
Time saved per patient	5 hours	4 hours	1 hour
Time saved for staff	1 hour X 1900 = 1900 hours		

## Problems Encountered

- Lack of confidence among staff when escorting patients for TCU via taxi
- PSA and ward staff cannot access the ePortal website during the initial stage
- Delays in raising ePay for approval

## Strategies to Sustain

- Continue to have regular engagement sessions with stakeholders to share results (staff's feedback, patient's feedback and time saved). Through the engagement session, staff felt motivated and had increase morale as they were able to garner a sense of achievement for the staff and patients in the ward.
- To conduct focus group sessions with the ward team to understand their needs and explore how to enhance our existing measures and interventions.
- Continue to collaborate with Comfort Taxi, General Support Service, and Finance Department to share feedback and proactively identify areas for improvement.