

# Increase Rate of Decant for Eligible Patients Requiring Admission from TTSH Emergency Department to Alexandra Hospital (AH)

**Dr Michael Chia Yih Chong**  
Department of Emergency Medicine

## Mission Statement

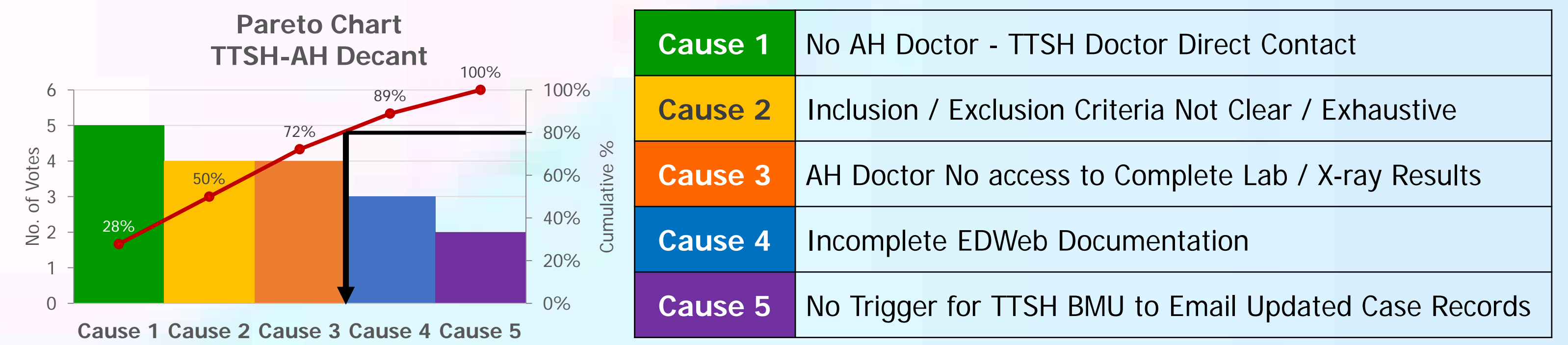
To Increase the Rate of Successful Decant from Tan Tock Seng Hospital Emergency Department to Alexandra Hospital from 56% to 80% (stretch goal 100%) for Eligible Patients\* over 6 months

\*Eligible Patients: (1) Patients requiring admission; (2) Patients fulfil assessment of suitability to be decanted (a) Include Medical Discipline & (b) Exclude Specialty Medical Care (eg. Cardiology, Neurology, Renal, Gastroenterology & Surgery and Orthopaedics; (3) Patient / NOK agree to decant to Alexandra Hospital

## Team Members

	Name	Designation	Department
<b>Team Leader</b>	Dr Michael Chia Yih Chong	Senior Consultant	Emergency Medicine
<b>TTSH Team Members</b>	Dr Lee Chiao Hao	Associate Consultant	Emergency Medicine
	Dr Loi Tsuan-Hao	Principal Resident Physician	Emergency Medicine
	Qiu Hong	Assistant Nurse Clinician	Emergency Medicine
	Ethel Kan Kwai Lam	Senior Manager	Emergency Medicine
	Ng Sheh Li	Executive	Bed Management Unit
	Charlene Tey Zhi Min	Senior Executive	Financial Counselling
<b>AH Team Members</b>	Dr Zulkarnain Bin Ab Hamid	Consultant	AH Urgent Care Centre
	Chiew Ying Siang Shane	Senior Patient Service Associate	AH Urgent Care Centre
	Nurul Azura Binte Hamidi	Patient Service Associate	Bed Management Unit
<b>Sponsors</b>	Dr Keith Ho	Head of Department	AH Urgent Care Centre
	Adj Asst Prof Ang Hou	Head of Department	Emergency Medicine
<b>Mentor</b>	Adj A/Prof Tan Hui Ling		

## Pareto Chart

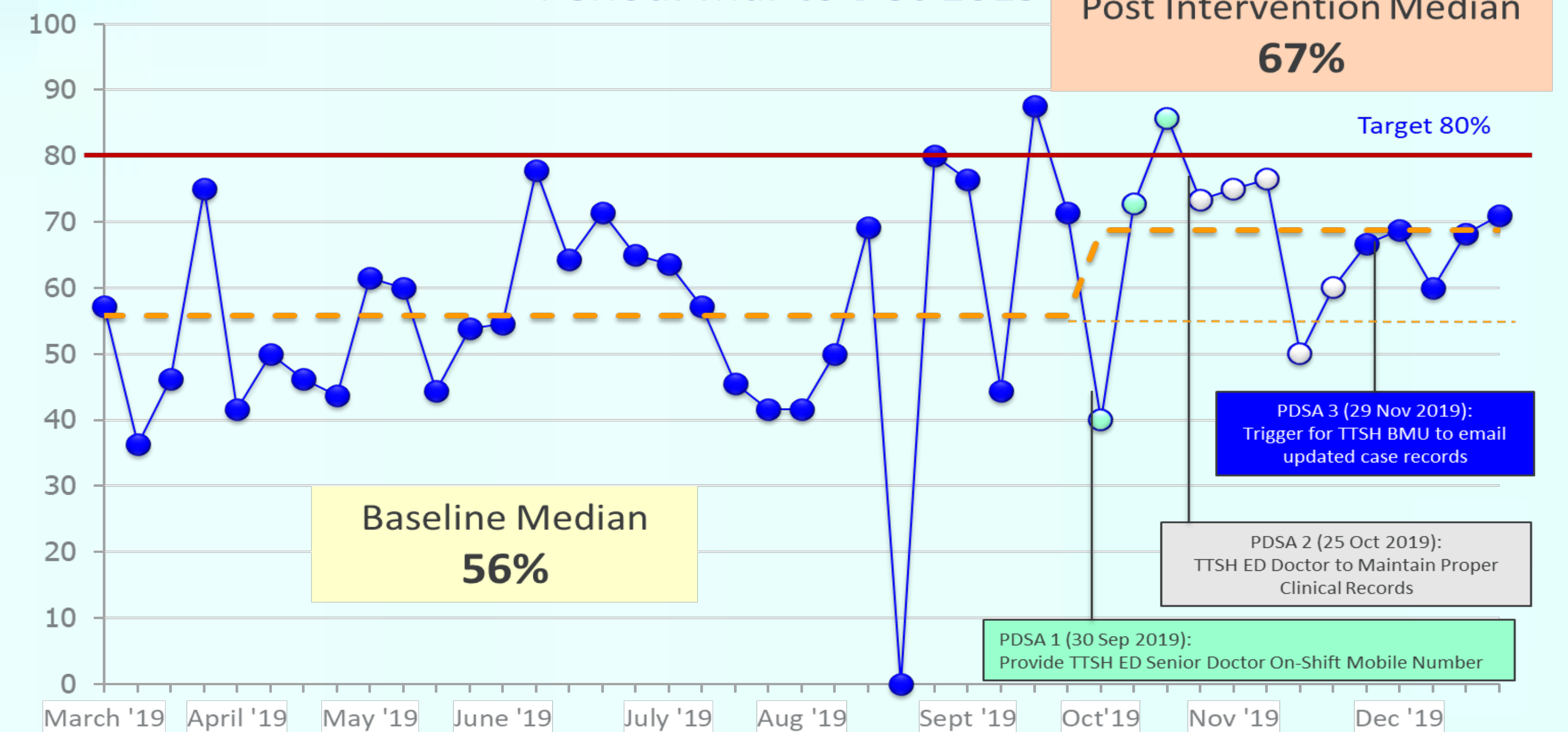


## Implementation

Root Cause	Intervention	Implementation Date
Cause 1: No AH Doctor - TTSH Doctor Direct Contact	Provided TTSH ED Doctor mobile phone number to AH ED Doctor for direct contact 24hrs, 365 days.	30 Sept 2019
Cause 4: Incomplete EDWeb Documentation	The need for proper documentation shared at TTSH ED Department M&M	25 Oct 2019
Cause 5: No Trigger for TTSH BMU to Email Updated Case Records	ED Doctor to alert TTSH BMU through EDWeb to fax clinical notes once updated and completed	29 Nov 2019

## Results

### % of Successful Decant for Eligible Patients to Alexandra Hospital Period: Mar to Dec 2019



Month	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019
No. of eligible patients & agreed for decant	39	49	45	61	48	57	48	38	71	67
No. of successful decants	20	22	25	40	25	29	34	27	47	45

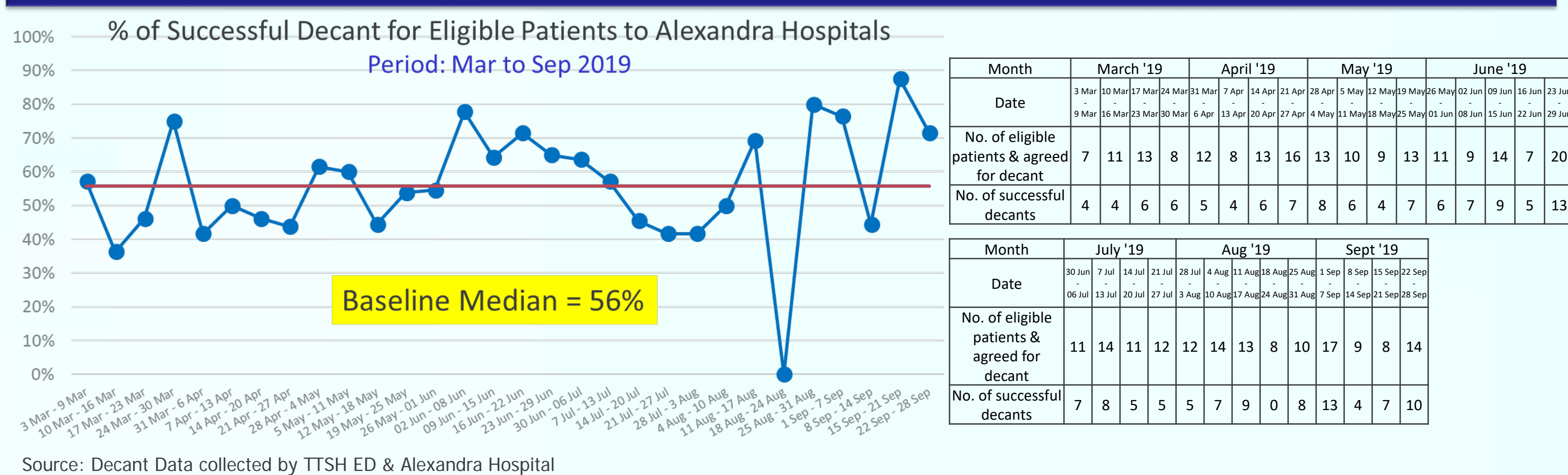
Source: Decant Data collected by TTSH ED & Alexandra Hospital

## Evidence for a Problem Worth Solving

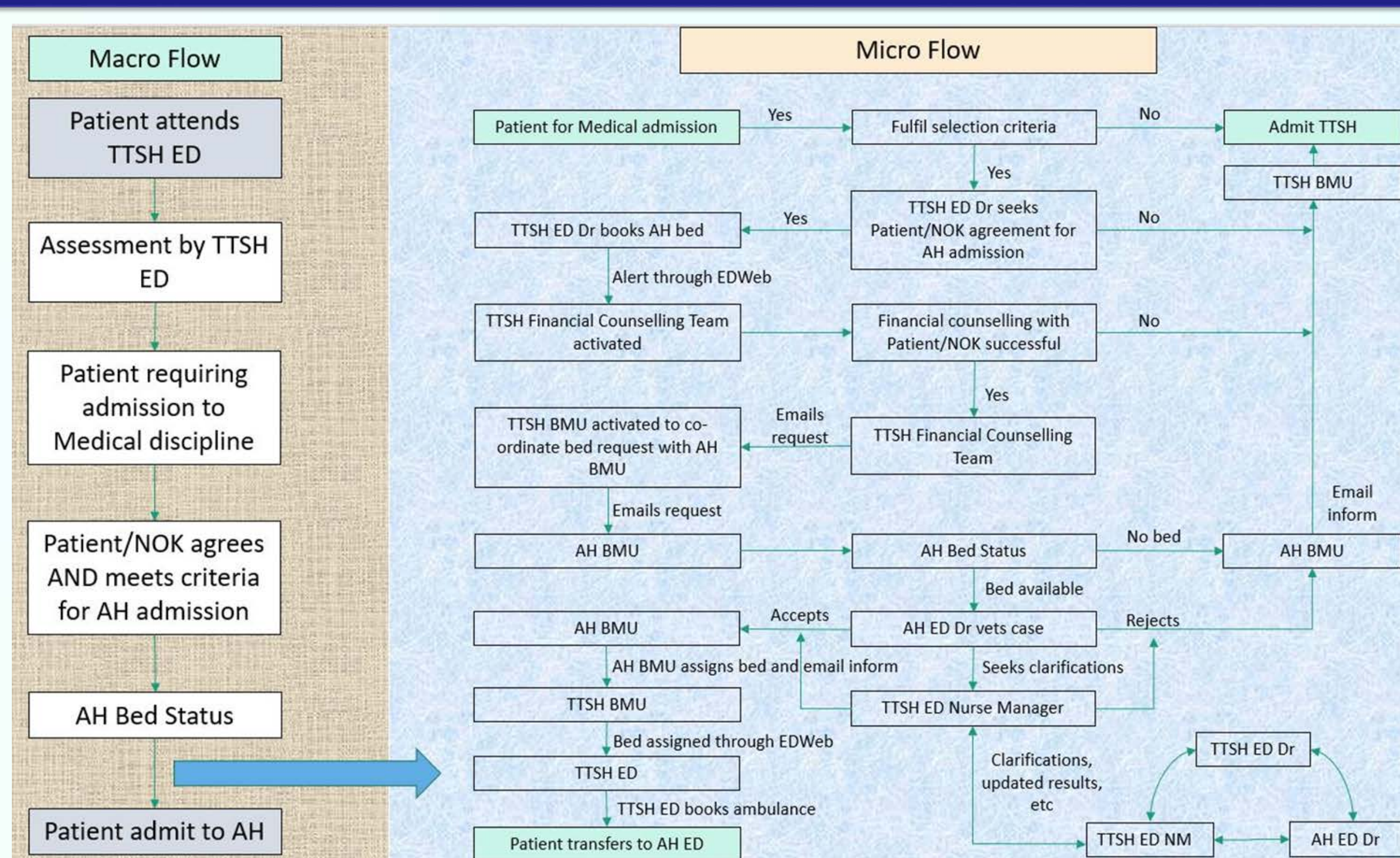
### Top 5 Reasons of Rejection by Alexandra Hospital

1. Patients with background of Psychiatric and/or Alcoholic issues
2. Patients with undifferentiated chest pain, raised troponin, needing telemetry and/or Cardiology review
3. Patients with undifferentiated anaemia
4. Patients with hypo/hyper-kalemia
5. Patients with Fever AND
  - Abdominal pain, tender => unable to rule out intra-abdominal sepsis
  - Joint pain, back pain => unable to rule out septic arthritis / discitis
  - Headache => unable to rule out meningococcal meningitis
  - Cellulitis with bullous => unable to rule out necrotizing fasciitis
  - UTI with previous renal stone or ureter device => unable to rule out kidney abscess

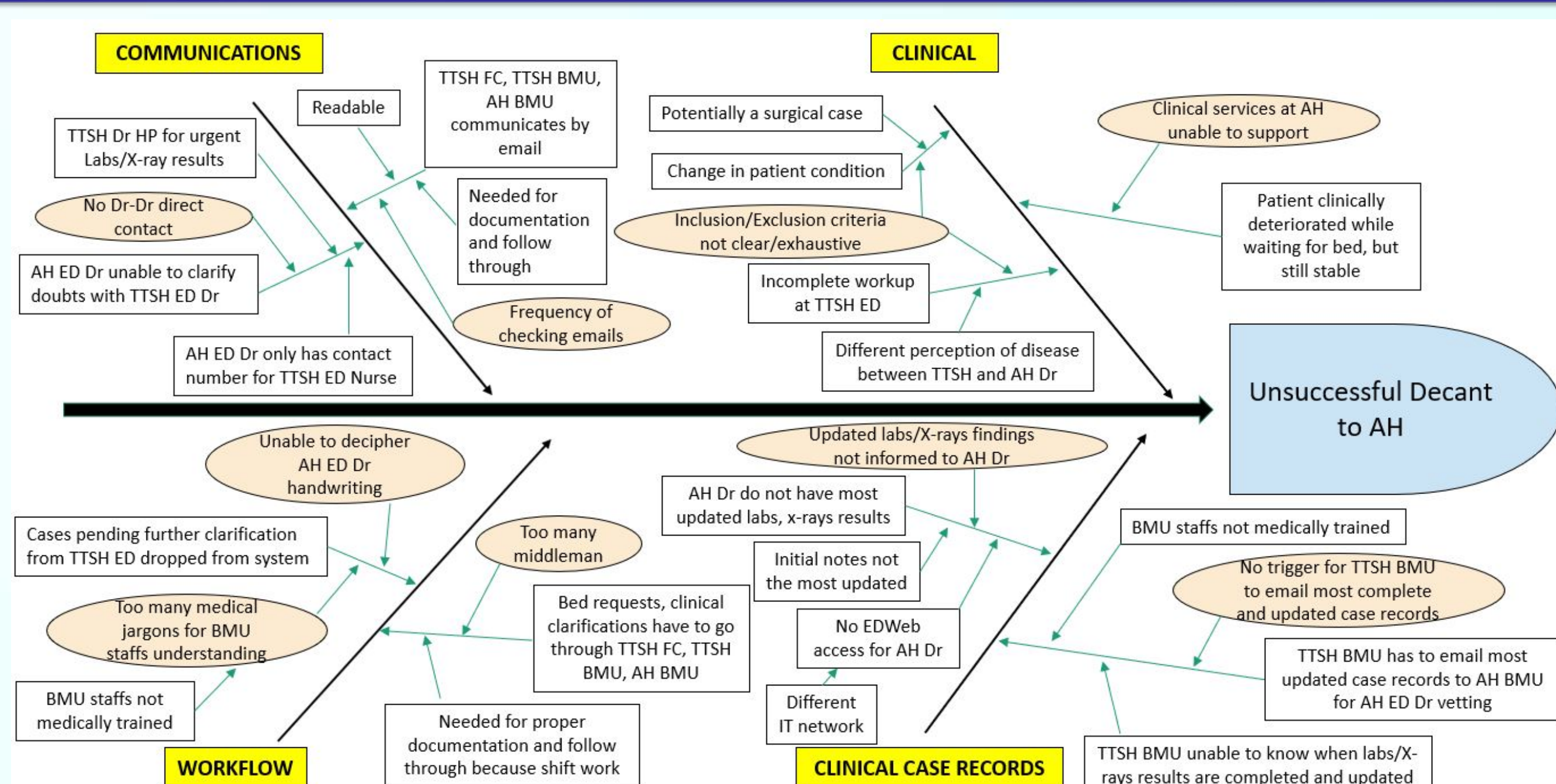
## Current Performance of a Process



## Flow Chart of Process



## Cause and Effect Diagram



## Cost Savings

	Pre-Implementation (Mar 2019 to Sep 2019)	Post-Implementation (Oct 2019 to present)
% of Patients Decanted to AH	56%	67%
Successful average number of patients decanted (Per Week)	6.47 patients	9.15 patients
Assume: Average LOS per patient in TTSH General Ward is 3 days		
No. of Bed Days Saved (Per Week)		$(9.15 - 6.47) \times 3 = 8.04$
Total No. of Bed Days Saved (Annualized)		$8.04 \times 52 = 418$
Difference in Bed Days in Monetary Terms (Annualized):		$418 \times \$1,114 = \$465,652$

Note: Unit Cost Inpatient Ward Stay = \$1114/patient/day

## Problems Encountered

1. Difficult to implement project involving different hospitals (TTSH and AH); and different departments (AH Emergency Department and AH General Medicine).
2. Difficult to co-ordinate common time for meetings when CPIP group is large.
3. Very important to have strong support from Sponsors.
4. Knowing the ground & work processes is essential for planning interventions.
5. As interventions involve multiple teams (medical, nursing to administrative staffs), very important to check understanding between all parties.
6. Best to communicate face-to-face to avoid misunderstanding, compared to using text messages via emails or WhatsApp.

## Strategies to Sustain

1. Continual education
  - New staff orientation (doctors, nurses, administrative staffs)
  - Reminders at monthly M&M Rounds; Nursing Forums; Roll Calls
2. Empowerment of ground staff - Identify champions who will constantly remind or new methods to operationalising workflow
3. Communications with other hospital
  - Open communication channels for constant feedback, review and audit.
  - No blame culture
  - Building trust
  - Willing to try new ways/methods of doing