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Mission Statement

Aim:

To divert subpopulations of minor emergency (P3) and non-emergency (P4) patient attendances from Tan Tock Seng Hospital (TTSH) Emergency Department (ED) to enrolled General Practitioners (GPs) operating within the TTSH vicinity.

Measurable:

- 1) Transition of care safely into community
- 2) Good health outcomes
- 3) Low readmission to TTSH ED
- 4) Shorten ED wait time
- 5) Increase patient satisfaction
- 6) Ensure cost effectiveness for patient

Timeframe for completion:

FY2014: Conceptualization, Planning and Stakeholders' Engagement
FY2015: Programme Pilot and Operational in FY2015
To date: Programme Operational and Running



Team Members

Name	Designation	Department
Adj A/Prof Tay Seow Yian	Head & Senior Consultant	Emergency Medicine
Dr Pauline Yong	Director	PEARL and Partnership Development
Ms Ethel Kan	Senior Manager	Emergency Department
Ms Evelyn Tan	Assistant Manager	PEARL and Partnership Development

Evidence for a Problem Worth Solving

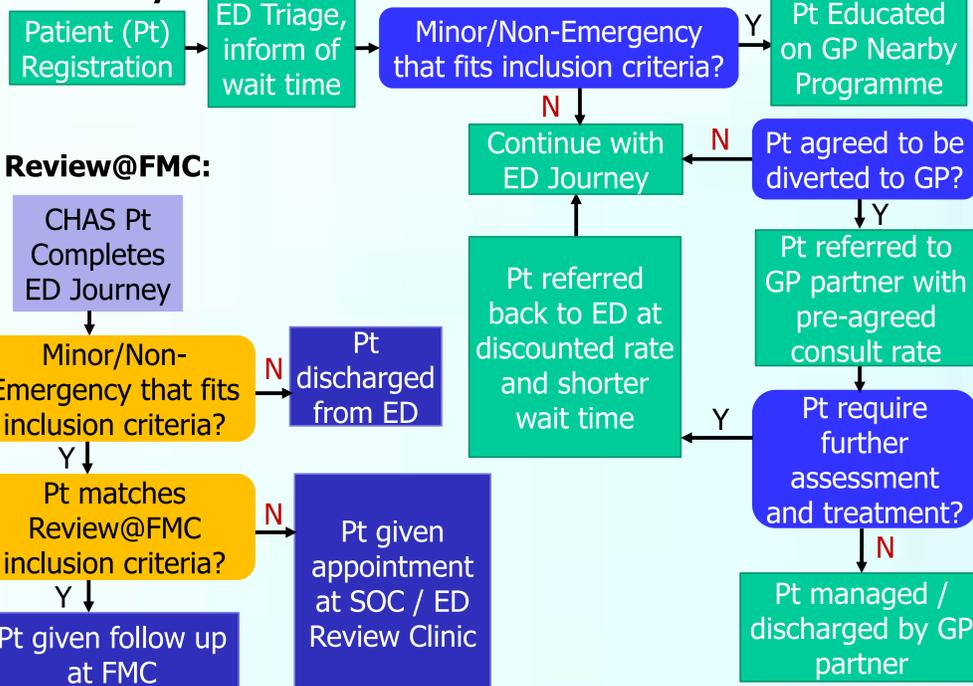
Since 2005, TTSH ED overall attendances have been increasing. P3 patients have increased by 5.7% in 2014 as compared to 10 years ago. With increasing number of minor emergency patients seeking care at TTSH ED, there is an opportunity for TTSH to redesign ED service delivery by establishing GP pipelines for patients to seek care at the appropriate care providers.

Table 1: TTSH ED Attendances by patient acuity category scale CY2005 – CY2014

Hospital / PACS	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
TTSH	140,946	139,516	155,786	162,159	170,052	161,719	152,185	162,273	170,176	163,996
P1	11,484	13,019	12,337	12,529	12,574	12,917	13,907	13,939	13,440	13,302
P2	61,167	64,630	75,035	80,228	76,703	71,972	67,596	73,615	79,527	79,037
P3	67,354	61,194	67,405	68,292	80,094	76,277	70,170	74,283	76,758	71,196
P4	941	673	1,009	1,110	681	553	512	436	451	461

Patient Journey

GP Nearby:



Legend: Y = Yes; N = No

Implementation

To achieve successful reduction in minor emergency (P3) and non-emergency (P4) patient load in ED, P3 and P4 patient attendances are shifted to GP partners operating in the central region of Singapore through two mechanisms.

GP Nearby

- GP nearby is a partnership with Healthway Medical Group where ED diverts P3 and P4 patients who meet inclusion criteria to Healthway Medical Clinic located in Novena Square shopping mall during office hours.
- For diverted patients who are referred to ED from Healthway Novena Clinic, a \$50 discount will be accorded off the prevailing ED attendance fee.

Review @ Family Medicine Clinic (Review@FMC)

- ED currently runs a review clinic for patients with conditions that may not require early SOC follow-up. An example of such a condition is cellulitis requiring one or two subsequent reviews.
- Under Review@FMC, CHAs patients who require reviews are diverted to our National Healthcare Group partners: Ang Mo Kio, Unity and Hougang Family Medical Clinics (FMCs).

Results

1) 35% Unnecessary ED Attendances Avoided

Since FY2015, a total of 891 ED patients were offered GP Nearby and 313 patients accepted and were diverted to our partner GP. This translates to 313 (35%) ED P3/P4 attendances avoided. This also meant that resources could be re-allocated to more critical patients at ED.

2) Time Savings for Patients with Lower Acuity

ED P3/P4 patients who were diverted to our nearby GP partner would receive treatment within an hour, as compared to an average wait time of 4 to 8 hours at TTSH ED. This significant time saved means a quicker diagnosis, intervention and treatment for patient.

3) Low ED Readmission Rate

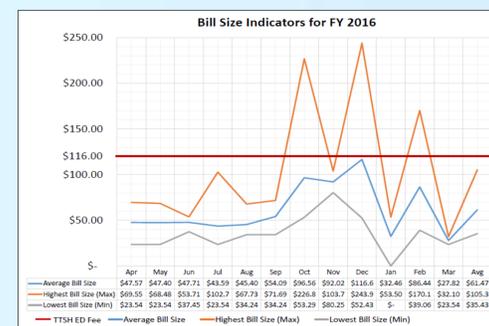
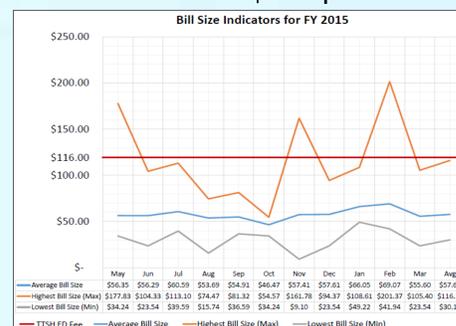
Only 9 (2.8%) out of 313 diverted patients were readmitted to ED for further treatment. Remaining 97.2% were administered appropriate treatment by the GP and remained successfully out of the hospital system.

4) Increased Patient Satisfaction

For every patient diverted, a patient satisfaction survey would be conducted at the GP clinic. 100% of ED P3/P4 diverted patients indicated 'Good' or 'Excellent' in the service delivery by our GP partner and clinic staff.

Cost Effectiveness

The programs ensure cost effectiveness is achieved through a reduction in out-of-pocket costs for the diverted patients. As the GP's consultation fee is capped at \$22 (excluding medications and diagnostic investigations), the patient's total outpatient fee was significantly reduced to an average \$57.64 (FY2015) and \$61.47 (FY2016), as compared to ED attendance fee of \$116 per visit.



A regular financial audit would be done to ensure diverted patients do not pay a GP outpatient bill that is higher than ED attendance fee.

Strategies to Sustain

- Introduce similar models of GP-led care to other TTSH medical disciplines
- GP engagement and recruitment of like-minded partners to expand the network
- Patient education to advocate visiting GPs for minor emergency and non-emergency conditions
- Expanding the scope of program to include and adapt other successful models of care like GPFirst