

Project Title

Improving Acute Hospital to Community Hospital Flow with Expedited Referrals

Project Lead and Members

Project lead: Fatimah Moideen Kutty, Director, Operations

Project members:

- A/Prof Phoa Lee Lan, Deputy CMB; HOD & Senior Consultant, General Medicine, Khoo Teck Puat Hospital (KTPH)
- Dr Lee Kok Keng, Medical Director, Yishun Community Hospital (YCH)
- Shirley Heng, Chief Nurse, Hospital Administration, Yishun Health (YH)
- Kelly Tan Ai Lee, Assistant Director, Inpatient Services
- Jesbindar Kaur, Senior Nurse Manager, Referrals & Admissions Office, YCH
- Loh Khee Chaw, Senior Manager, Patient Service Centre, YH
- Kendrick Tan, Manager, Inpatient Services, KTPH

Organisation(s) Involved

Yishun Health: Khoo Teck Puat Hospital, Yishun Community Hospital

Project Period

Start date: Feb 2018

Completed date: Apr 2019

Aims

To achieve 80% of Acute Hospital-Community Hospital transfers within 1 day

Background

See poster attached/ below

Methods

See poster attached/ below

Results

See poster attached/ below

Lessons Learnt

1. Processes across AH-CH can be streamlined to remove repetitive, non-value steps.
2. Common IT systems & secure messaging platforms across both sides serve as important enablers to have seamless information and referral workflow.
3. Regular communication exchanges including clear transfer criteria enabled process improvement and results-tracking.
4. Embarking on this project opens doors for more collaborations and improve working relationships.
5. Key principles for success are senior management support, collaborative patient care, sharing of risk, and building of trust relationships.

Conclusion

See poster attached/ below

Additional Information

Always practice good communication among team members founded on:

1. Mutual respect & professionalism
2. Collaborative approach & collective leadership
3. Value-add, patient-centric, coordinated care

Adopt a C.A.R.E. mindset:

- Committed to improving patient care;
- Aspiring to new care models and management paradigm;

- Revolutionary by going beyond the norm; and
- Engaging collaborators as a team to ensure the project comes to fruition.

Project Category

Care & Process Redesign

Keywords

Care & Process Redesign, Access to Care, Efficient Care, Productivity, Turnaround Time, Quality Improvement, Workflow Redesign, Plan Do Check Act, Cost Savings, Multi-Disciplinary, Nursing, Healthcare Administration, Yishun Health, Khoo Teck Puat Hospital, Yishun Community Hospital, Operation, Expedited Referral Process, Financial Counselling, Bed Assignment, Admission

Name and Email of Project Contact Person(s)

Name: Fatimah Moideen Kutty

Email: fatimah.mk@ktph.com.sg

Improving Acute Hospital to Community Hospital Flow with Expedited Referrals

Kutty, FM¹, Phoa, LL², Lee KK³, Heng, S⁴, Tan, AL¹, Kaur, J⁵, Loh, KC¹, Tan, K¹

¹Operations, ²Hospital Administration, ³Medical Services; ⁴Hospital Administration; ⁵Referrals & Admissions Office
Khoo Teck Puat Hospital (KTPH) and Yishun Community Hospital (YCH)

Background & Aim

- For transfers from KTPH to Community Hospitals, ~90% are admitted to YCH with an average turnaround time of **3.12 days**.
- This results in less optimal resource utilisation, as patients would occupy an Acute Hospital (AH) bed that would have otherwise been available for an ill patient requiring admission.
- We aim to achieve patient transfers within 1 day through our pilot initiatives and joint clinical governance.

Methodology

AS IS

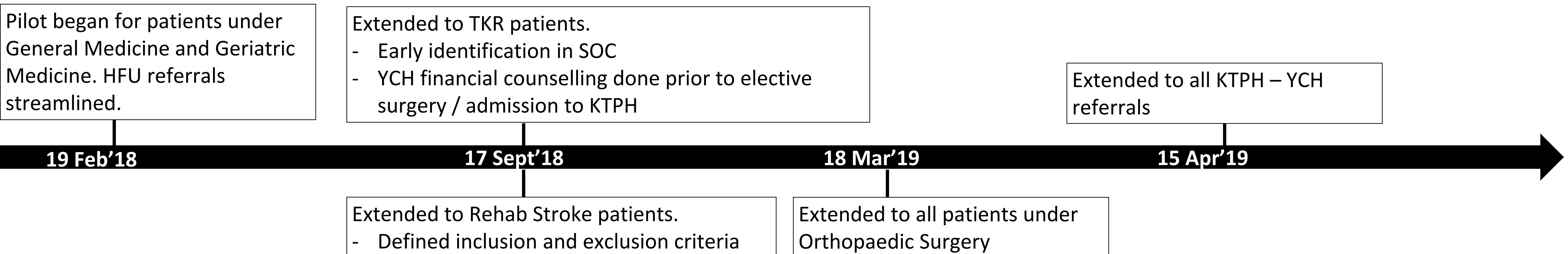
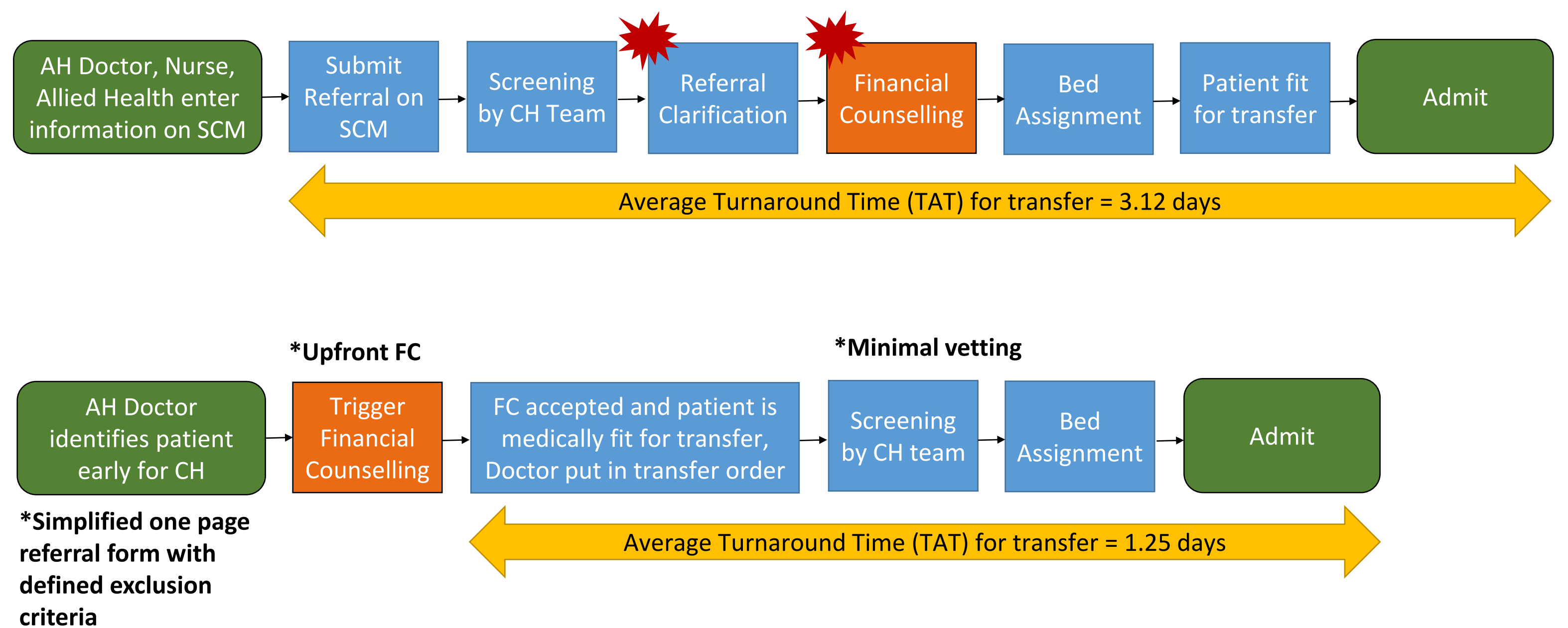
The process of raising referral for YCH via SCM is inefficient because:

- A lot of time spent waiting for referring teams to clarify queries
- Time spent to review referrals may be wasted if Financial Counselling is not accepted

TO BE

Using the PDCA method, the expedited referral process was rolled out progressively. Referrals from various service lines were streamlined in accordance to the expedited referral process with following features:

- ✓ **Financial counselling before referral**
- ✓ **Simplified one page referral form**
- ✓ **Minimal vetting by YCH**



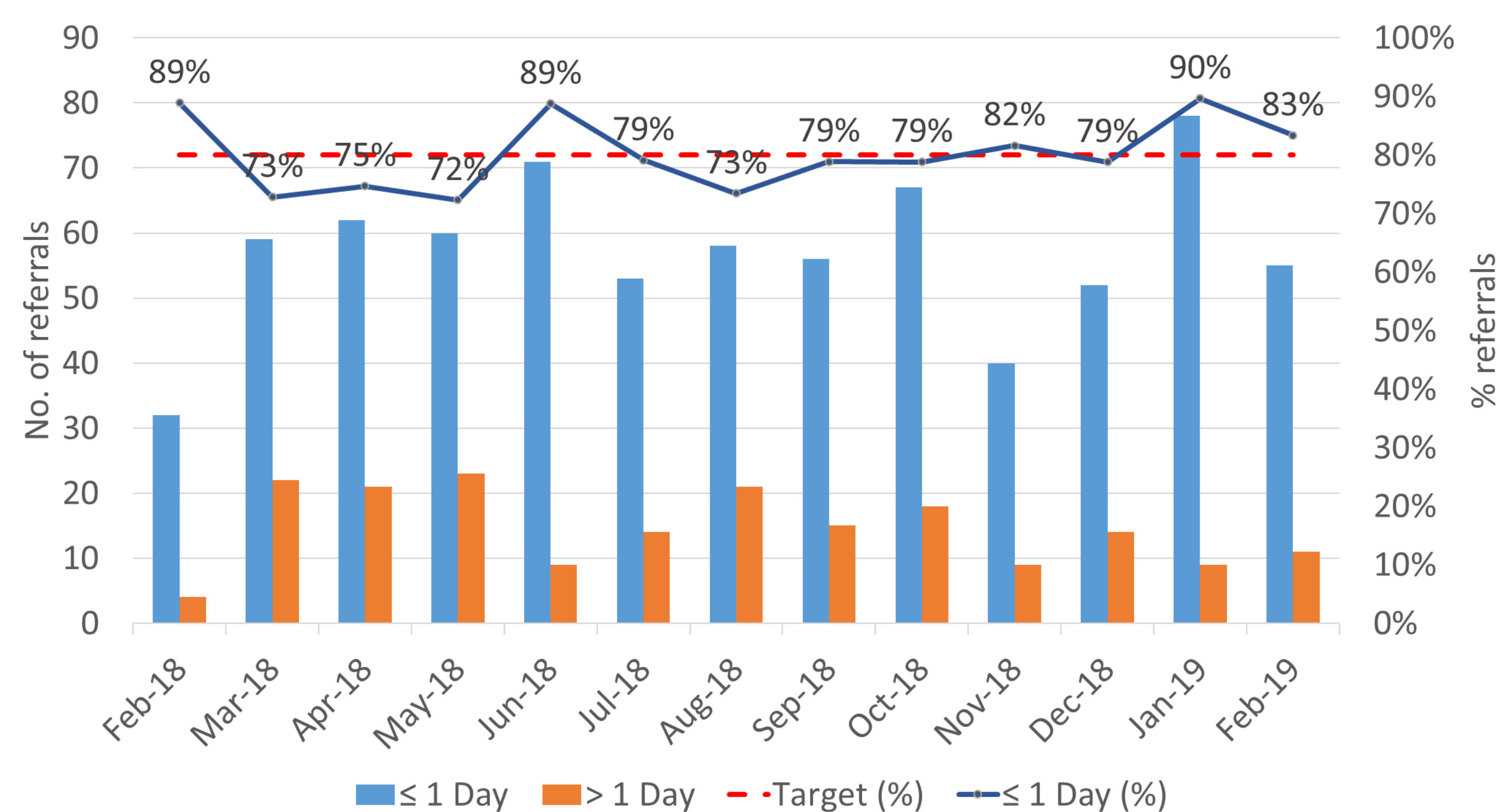
Results

Turnaround time was measured from the date of referral submitted by KTPH, to the date of admission in YCH.

Turnaround time (TAT)

- For the expedited referral process, the turnaround time (TAT) was shortened by **60%** on average.
- Between Feb '18 to Feb '19, the average TAT for the non-expedited workflow was 3.12 days, whereas the average TAT for the expedited workflow is **1.25 days**.

% Transfers within 1 day (Expedited referrals)



Conclusion

- Expedited referrals from AH to CH through workflow improvement and leveraging on existing IT systems is a feasible and cost-effective way to re-design the AH to CH care and flow that not only benefits the patient, staff but also the hospital system.

Project Impact

- For the period Feb '18 to Feb '19, we transferred a total of **969 patients** using the expedited workflow. This has resulted in yearly productivity savings of **1,647 patient days**, an equivalent of **\$1.07M cost savings***.
- Upon full roll out of the project in Apr '19 with the full use of e-referral system, we transferred a total of **2,638 patients** using the expedited workflow from May '19 to July '20, this has resulted in productivity savings of **5,776 patient days**, an equivalent of **\$3.75M cost savings**.
- The target was also achieved such that **81% of the cases** (2,143/2,638) were transferred within 1 day. In total, this has resulted in **productivity savings of 7,423 patient days**, an equivalent of **\$4.80M cost savings**.

Sustainability

- The joint governance committee continues to meet every month for review and to obtain feedback from stakeholders. The committee aims to reduce any kinks from the expedited referral processes.
- The process has been converted to a simplified e-referral form, and the team is working on maintaining/improving the outcomes. The team has also **achieved to sustain 80% of AH-CH transfers within 1 day** as shown below:

