Enhancing Transfers to Community Hospitals via Fast Track & Communication Redesign

Hayley Chau¹, Laura Ho¹, Lynette Ong¹, How Ai Xin¹, Munawar Kahlik¹, Cindy Yong², Cheng Tah Nern², David Yong³

¹Tan Tock Seng Hospital  
²Ren Ci Community Hospital  
³Ang Mo Kio Thye Hua Kwan Hospital

BACKGROUND

• About 5% of TTSH patients are discharged to Community Hospitals (CH) for rehabilitation and recovery. However, the transfer wait time (TAT) was 5.5 days (FY17) for each case.

⚠️ Problem: Delay in transfers affect acute beds availability!

• If these cases had been able to transfer within 1 day, the acute bed days potentially avoided in a year could have been **12,443 acute bed-days** in FY17 (2765 cases x 4.5 days).

AIMS & OBJECTIVES

1. Reduce transfer wait time to Community Hospital (CH) by:
   • Eliminating duplicated work processes
   • Reducing multiple re-work (clarifications) process
2. Increase uptake to CH by increasing awareness on CH capabilities
3. Reducing unnecessary acute hospital bed days leads to overall lower healthcare utilization costs.

4. Enhancing Communications on CHs
   • Empathy studies were conducted to understand the lack of understanding regarding CHs.
   • The team partnered students from Nanyang Polytechnic to develop communication strategies which focused on showcasing the capabilities of CHs. This aims to **build the confidence and understanding of service users about CHs**.

3. Clear communication on transfer criteria
   • Pilots were **rolled-out in 2 phases**; Phase 1 (Jul-Aug 2018) for GM & GRM patients while Phase 2 was a hospital wide roll-out from 15 Oct 2018.
   • Transfer criteria were fine-tuned to enable medically and socially straightforward cases to be Fast-Tracking.

METHODOLOGY

1. Process Optimization: Value Stream Mapping (VSM)
   • Conducted VSM in 2018 with TTSH’s CH Partners - AMKH & RCH (90% of all discharges to CHs) to optimize processes.
   • Established joint agreement on clinical inclusion and exclusion criteria, common EMR platform, bypassing Medical/PT/OT reports eliminated duplication during referral submission in AIC-IRMS.

2. Shared Ownership
   Following the findings, there was joint agreement to **reframe operations model** from work-in-silos to shared ownership.
   • CH partners under Data Sharing Agreement could obtain necessary information directly from shared clinical documentation system to facilitate referral process.
   • Dialysis referral flows were harmonized in April 2019.

RESULTS

1. Fast-Track cases achieved 3 days TAT as compared to 4.8 days for non-Fast-Track cases

<table>
<thead>
<tr>
<th>Data period: (15 Oct 18 to 31 Mar 19)</th>
<th>Fast Track cases</th>
<th>Non-Fast Track cases (e.g. dialysis, MDRO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of cases (%)</td>
<td>623 (48.9%)</td>
<td>651 (51.1%)</td>
</tr>
<tr>
<td>Transfer Wait time (TAT)</td>
<td>2.99 days</td>
<td>4.82 days</td>
</tr>
<tr>
<td>Avoidance / Savings</td>
<td>2,007 bed-days avoided over 24 weeks ($2,007,000)</td>
<td></td>
</tr>
</tbody>
</table>

2) Increase in healthcare professionals’ (HCP) productivity

a) Omitting duplication of reports into referral system, and;
   b) Reducing multiple re-work (clarification with service providers) resulted in a reduction of 30 minutes to prepare a referral application, thus, **saving up to 0.3 FTE/year**.

3) Increase in no. of discharges to CH and decrease in TAT

<table>
<thead>
<tr>
<th>No. of cases admitted to CH</th>
<th>Ave Transfer Wait Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY16</td>
<td>5</td>
</tr>
<tr>
<td>FY17</td>
<td>5.5</td>
</tr>
<tr>
<td>FY18</td>
<td>4.6</td>
</tr>
</tbody>
</table>

CONCLUSION

a) Reduction in transfer wait time by 46% for fast track cases & 12% for non-fast track cases, contributed to a total of 2,007 bed-days avoided within 24 weeks, equivalent to **overall healthcare cost avoidance of $2,007,000**.

b) Apart from cost savings and increase in HCPs’ productivity, the project also enabled the cluster eco-system to strengthen its **coordination** and reframed its modus operandi from working-in-silos to shared ownership.

c) The team envisioned to expand the number and type of cases eligible for fast track referral process, and also introduce communication strategies to positively **influence the general public’s understanding on the capabilities of CHs**.