Frequent Readmitter Programme
– Holistic Multi-Disciplinary Approach for Frequent Readmitters

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Tan Tock Seng Hospital, National Healthcare Group

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Background & Aim

An analysis of our hospital readmissions[1] during the period Jan – Oct 2015 showed that **1.3%** of patients with readmissions contributed to **8.85%** of all readmission episodes.

This provided an impetus for the formation of the **Frequent Readmitter (FR) committee** to review FR associated with high healthcare costs, and **better manage care** to improve health from the perspective of medical and social needs.

In line with our national movement "Beyond Hospital to Community" and TTSH Better Care strategy, the **FR Programme** was established to develop effective and robust processes for proactive identification and management of patients with a pre-determined number of readmission episodes within a year.

[1]Definition of readmission: Unplanned admission within 30 days post-discharged

Strategy

The committee gleaned insights on common **FR profiles and recommended interventions** from initial case reviews. They recognised that readmissions stemmed from interacting medical and social issues extending beyond hospital walls, highlighting the need for a holistic approach involving different care providers across care settings.

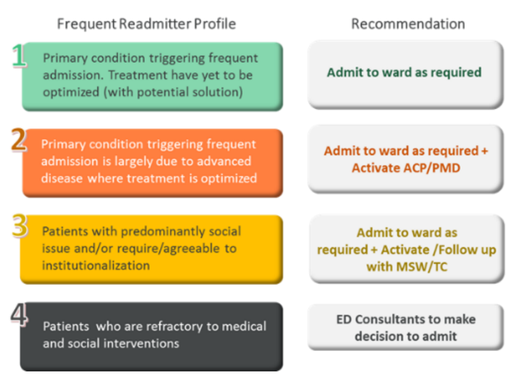


Figure 1. FR Profiles & Recommendations

Today, with the appointment of a Primary Doctor (PD), the programme has moved away from doctor-centric to **patient-centric with a multi-disciplinary approach**.

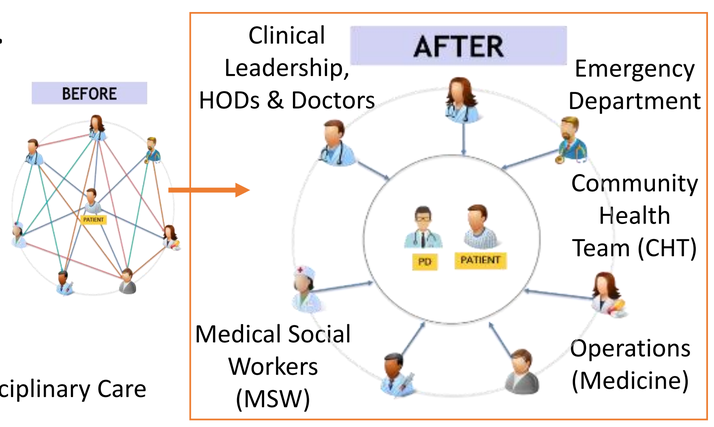
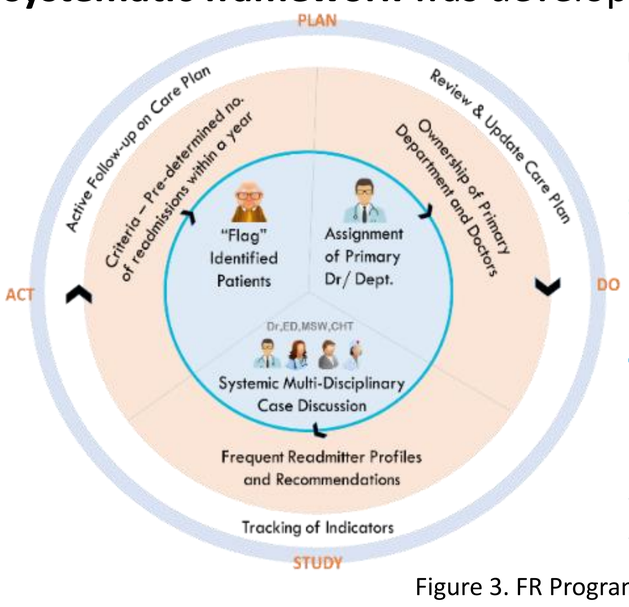


Figure 2. Shift from Fragmented to Multi-Disciplinary Care Coordination

With focus on patient-centred care and to better synergise efforts, a **systematic framework** was developed.



Core Elements
- Patient identification
- Primary Doctor assignment
- Holistic case discussions

Enablers
- Regularly reviewed pre-determined criteria[2]
- Ownership of clinical departments
- FR profiles & recommendations

Supported By
- Active care plan follow up
- Quarterly reviews, Care plan update
- Periodic tracking of data indicators

Reinforced By
- Plan-Do-Study-Act (PDSA)

Figure 3. FR Programme Framework

[2]Programme criteria: ≥7 readmissions within one year from the start of the programme in Jun 2016, then expanded to ≥6 readmissions in Jan 2018 and subsequently ≥5 readmissions in Oct 2018

Oversight of patient care plan and admissions by **Primary Doctor** ensures that care delivered is coordinated across inpatient, outpatient and community settings. **Partnerships with CHT and MSW** serve as a bridge for engagements with community partners i.e. VWOs and allow targeted interventions to be initiated in the community. **Case discussions and quarterly reviews** not only enable relationship building and gathering of consensus among a diverse team, but also serves as a platform to discuss perspectives and align care goals for patients' benefit.

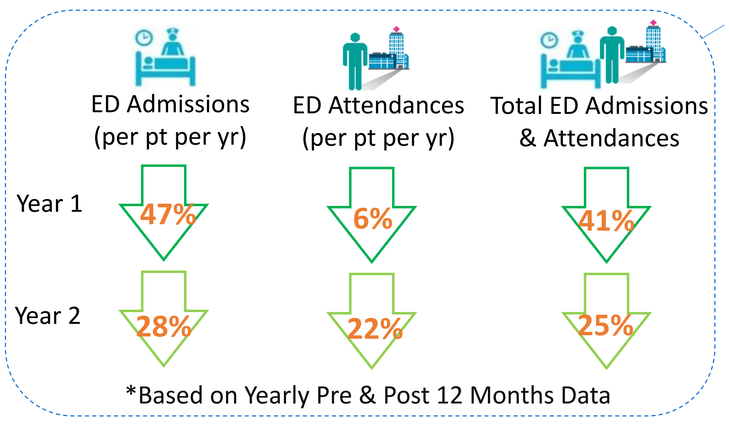
Key Achievements

All outcome indicators are tracked over a minimum 2-year period since the programme started. Patients discharged from the programme are also monitored to ensure their positive outcomes are sustained for at least one year from discharge.

1. An updated analysis of our hospital readmissions during the period Jan to Oct 2018 showed ↓**60%** reduction in the number of patients with ≥7 readmission episodes compared to that in 2015, which translates into ↓**65%** reduction in total readmission episodes.

2. ↓ **number of newly identified FRs** with each batch due to proactive clinical ownership of patient care plans

3. ↓ **in ED admissions and attendances** that is sustained into the second year

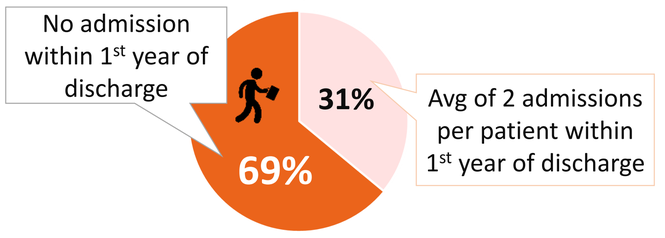


*Based on Yearly Pre & Post 12 Months Data

Greater ↓ in admissions than attendances, which may be attributed to:
- **Execution of pre-formulated care plans at ED**
- **Better support structure to discharge patients from ED preventing admission**

4. ↓ **in total admissions and length of stay (LOS)** that is sustained into the second year

5. % of Discharged[3] Patients



69% of patients discharged from the programme had **no admission** within 1st year of discharge.

[3]Criteria for discharge: No admission within the last consecutive 6 months

6. **3066 patient days avoided** with a **projected cost avoidance of $3,066,000**[4]

[4]Days avoided in Year 1 = Admissions avoided (345) x ALOS (8.4) = 2898 days. Days avoided in Year 2 = Admissions avoided (20) x ALOS (8.4) = 168 days. Total cost avoidance in both years = (2898 + 168) days + $1,000 = $3,066,00. Assume cost of inpatient admission per day is $1,000. Only admissions of patients with an active care plan for the full Year 1 and 2 are considered in this calculation.

Conclusion

With our population rapidly ageing and experiencing dynamic healthcare needs, it has and will be an iterative process for the committee in understanding, managing and impacting this group of vulnerable patients.

The programme remains **one of our hospital's strategic projects** over the last 3 years. Throughout this journey, the direction has become clearer on the need for a multi-disciplinary approach and systematic framework to anchor the programme so that the processes remain productive and aligned to meet patient goals.

The programme not only **brings health care value** to patients by viewing them holistically, but also propels us forward in care design and delivery as we shift beyond hospital to community.