



The Development of the First Medical Ambulatory Centre (MAC)

Singapore Healthcare Management 2016

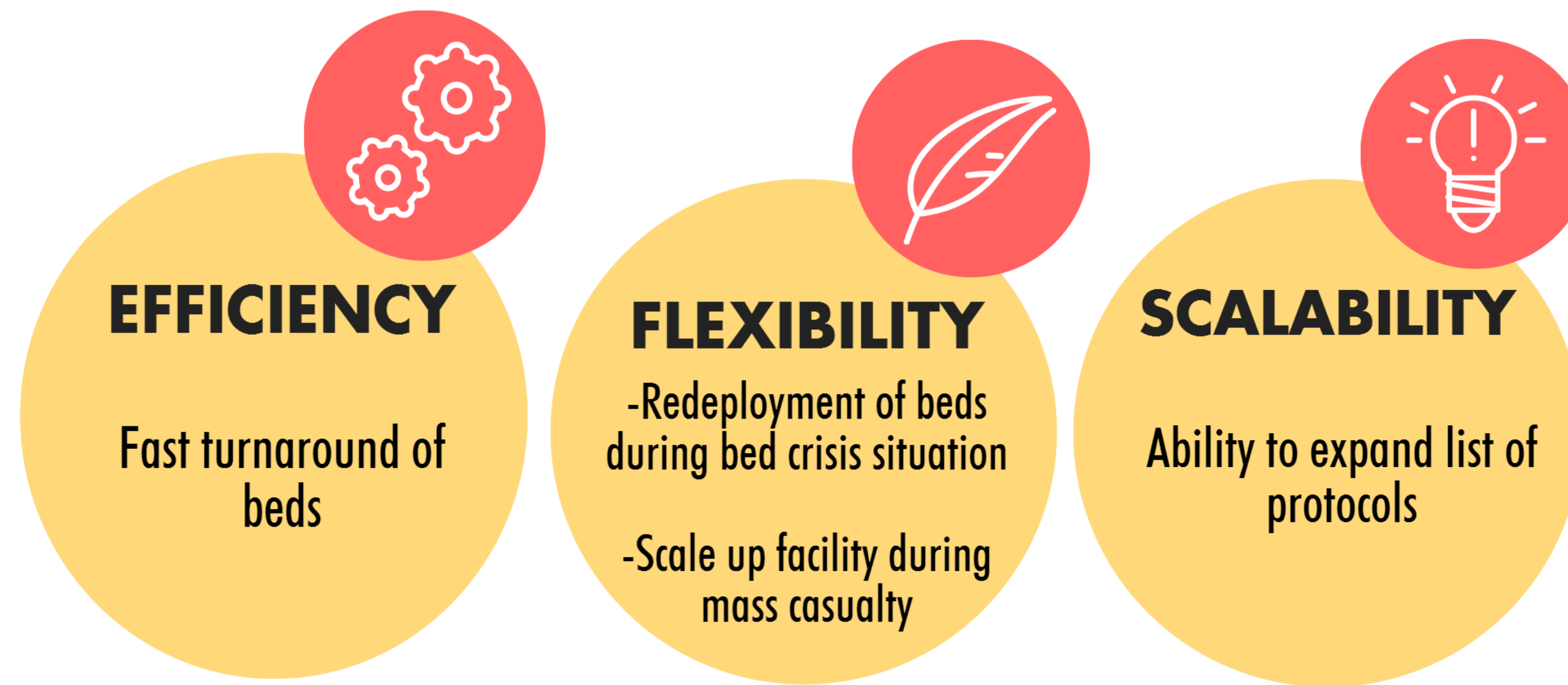
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1. BACKGROUND

- 1 Increasing demand for healthcare resources and persistently high hospital Bed Occupancy Rate.
- 2 Concept piloted in smaller scale Medical Day Centre (MDC) demonstrated feasibility to perform specific procedures in an ambulatory setting.
- 3 MAC was established in January 2015 as a facility with 33 beds and 4 recliners.
- 4 Patients come to MAC for their medical procedures or treatments.
- 5 Thereafter, patients are discharged within 24 hours instead of being managed as inpatients.
- 6 Patient care is therefore sited to the appropriate setting for ambulatory care.

2. MISSION



3. IMPROVEMENT PROCESSES

MORE EFFICIENT ADMISSION PROCESS

- BEFORE** Patient goes to Admission Office first for registration before going to MDC for the procedure/treatment.
- AFTER** Registration is done at MAC before the procedure/treatment. This creates a one-stop centre for patients.

DECENTRALISATION OF BED BOOKING AT CLINICS

- BEFORE** Clinics have no visibility to bed booking, staff have to call MDC for beds, then inform patients of procedure/treatment date.
- AFTER** Clinics book directly through a dedicated booking system and patients get their appointment date instantly.

HARMONISATION OF BED BOOKING SYSTEM

- BEFORE** 3 different booking systems were used (SleepLab - EAS, Inpatient - EDweb, MDC - OTS).
- AFTER** Single bed booking system for all MAC services
 - Staff can have visibility of all services in MAC
 - Staff learn 1 system instead of 3 systems

Nurse Led Care Protocols

- Developed workflows and protocols to enable care to be delivered by nurses without requiring clinicians to be on-site.
- Nurses can discharge patients after the procedure, following a standardised approach.
- Examples of protocols carried out by nurse led discharges include, Blood Transfusions, Bone Marrow Aspiration and Chemotherapy.



4. OUTCOMES

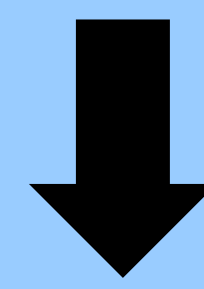
Inpatient Beds Freed For Acute Admissions

Total no. of MAC cases : 3,537
 Total no. of bed days avoided : 7,074¹
Cost Avoidance to the system:
\$4,194,000²

¹ Each case seen is equivalent to at least 2 inpatient bed-days avoided.
² After deductions from operations cost.

Reduction of Length of Stay from

48 hours



17 hours (65% of cases)

11 hours (50th Percentile)

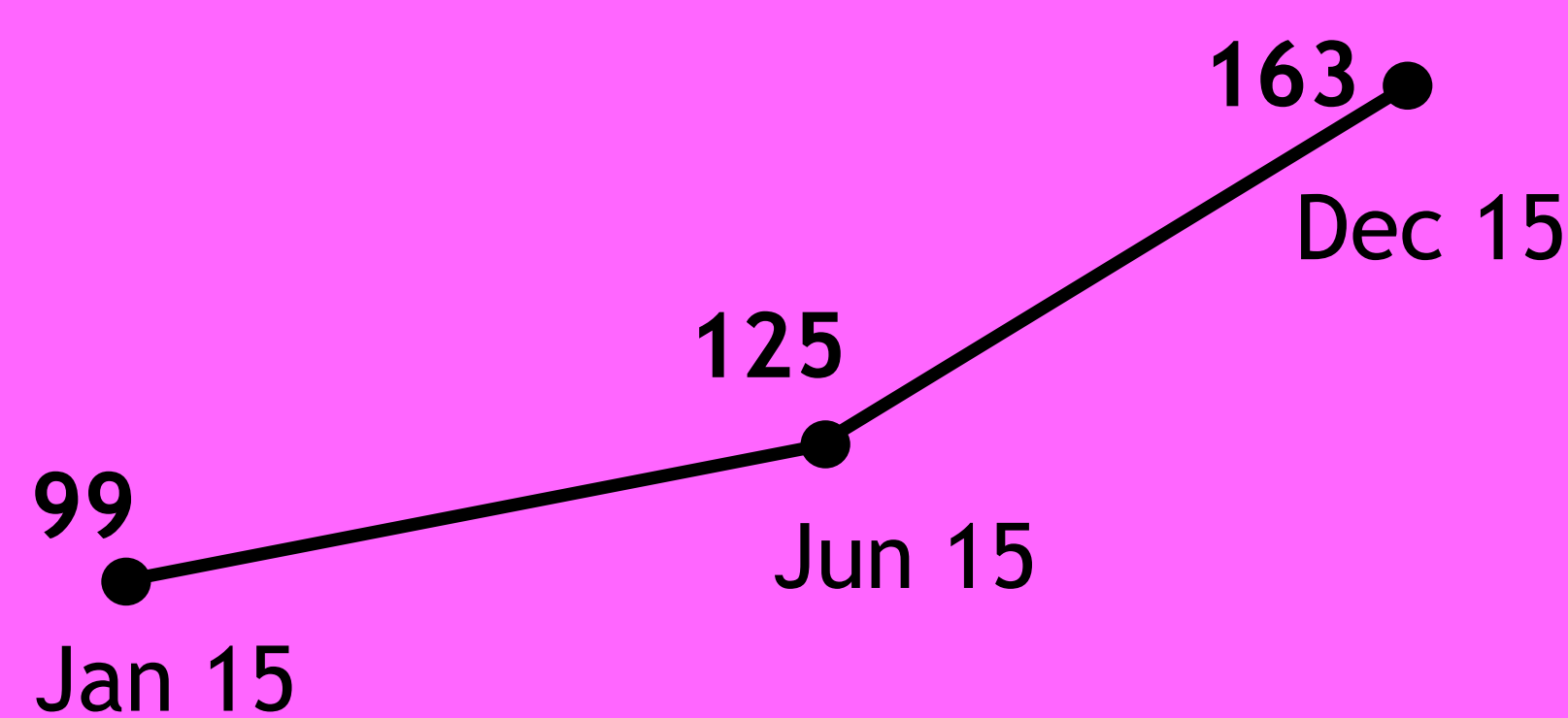
% of MAC Cases Turned Inpatient

Average % per month : 4%³

[Target: <5%]

³ Include all causes for transfers to inpatient wards

Expansion of Number of Medical Procedures



Flexibility in Deployment of MAC Beds

Inpatient managed during bed crunch:
 Total No of Cases : 1,754
 Total No of Bed Days : 9,500

MAC Space Utilisation

Use of Recliners to Optimise Use of Limited Space
 Increase in monthly usage of recliners⁴ by 19 times

⁴ For selected patients on specific procedures

5. CONCLUSION



MAC has been developed and successful in:

- Right siting patients from an inpatient setting to an ambulatory one for specific treatments/procedures to free up precious inpatient beds
- Optimising operational and clinical processes for effective utilisation of resources