

Same Day Discharge Post Mastectomy

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BACKGROUND & OBJECTIVES

Mastectomy has traditionally been an inpatient procedure requiring overnight stays, which strains hospital resources, increases costs, and extends patient recovery. Despite surgical advancements, various barriers such as logistical constraints, patient/caregiver concerns, and limited infrastructure have slowed the adoption of Same Day Discharge (SDD) programs. However, early discharge, aligned with Enhanced Recovery After Surgery (ERAS) principles, has been shown to reduce hospital-acquired complications, improve patient outcomes, and enhance overall satisfaction.

METHODS

In April 2023, the National University Hospital in Singapore launched the SDD program for mastectomy. This initiative involved a multidisciplinary team and targeted eligible patients undergoing morning elective unilateral mastectomy, who were under 65 and deemed healthy by surgeons and anaesthetists.

Key features of a multi-faceted approach centered on SDD implementation.

Implementation of SDD Program

- Developed a new workflow for SDD patients
- Created specific discharge criteria to ensure patient safety

Patient Education and Counseling

- Enhanced pre-operative counselling to prepare patients for early discharge with videos and written materials
- Educated patients and caregivers on post-operative care at home

Multi-disciplinary Coordination

- Coordinated efforts between surgeons, nurses, physiotherapists, and anaesthetists
- Ensured all team members were aware of their roles in the SDD process

Follow-up Care

- Implemented tele-visits for post-operative day 2 reviews
- Scheduled in-person follow-ups with Breast Care Nurses (BCN) on post-operative day 5

Operating Theatre Scheduling

- Prioritized morning slots for SDD candidates

Discharge Process Optimization

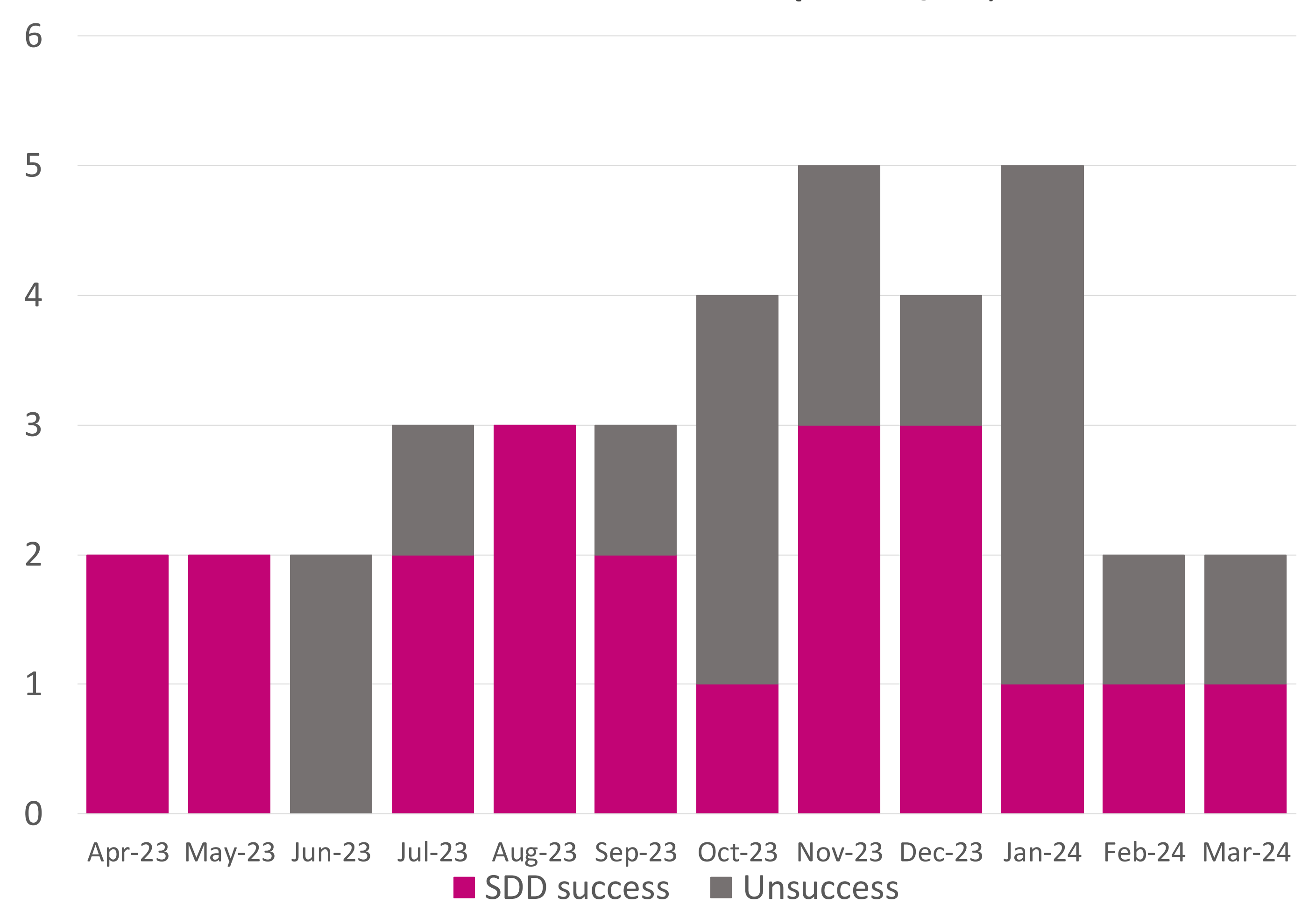
- Standardized medication orders for pain, nausea/vomiting, and constipation
- Streamlined discharge process and follow-up appointment scheduling

RESULTS

- Pre-implementation – ALL patients who underwent stayed at least one night after surgery.
- Post-implementation – 57% of recruited mastectomies was discharge same day after surgery. Average cost savings per patient about S\$4,900- \$5,700.

Patients discharged under SDD

Overall success rate 57% (N = 21/37)



Other Key KPIs

SDD
(Apr 23 – Mar 24)

Post-op complication rate	0%
Re-admission within a month rate	0%
Inpatient completed medical review sessions (e.g PT / BCN review)	100%

Healthcare Environmental Sustainability



Reduced hospital stays lower energy consumption from lighting, air conditioning, and medical equipment use.

- Estimated savings of 840 - 1,050 kWh energy and 336 - 420 kg CO₂ emissions over project period of one year.



Shorter hospital stays reduce water usage from hygiene, cleaning, and food services.

- Estimated water savings of 6,300 - 12,600 liters over the project period of one year.



Decreased hospital stays lead to lower medical and general waste production.

- Estimated 31.5 - 63 kg total waste reduction over project period of one year.

Health Gain

- Reduced hospitalization rate: 57% of eligible patients discharged on the same day minimizing infection risks and recovery time.

Health System Efficiency

- Optimized resource utilization by reducing average length of stay, enabling better allocation of inpatient beds to other patients.

Health Literacy

- Empowered patients and caregivers with pre- and post-op education on recovery practices, ensuring no increase in readmission rate.

Health Equity

- Equal access to SDD for all eligible patients, regardless of socioeconomic status.

Population Health

CONCLUSION

The implementation of SDD program for mastectomy patients at NUH has demonstrated promising results in terms of cost savings, patient outcomes, and potential hospital efficiency. The program enhances population health and has potential contributions to healthcare sustainability.