



INTRODUCTION

Traditionally, laparoscopic wound dressings are cleansed aseptically with 0.9% Normal Saline and covered with a piece of non-woven gauze, followed by two pieces of 6cm X 7cm Tegaderm films (Figure 1a). Patients are instructed to keep the dressing on until post-operative day 5. Although nurses are skilful in surgical wound dressings, they found the process of folding gauze to fit the small laparoscopic wounds to be time-consuming. Additionally, the cost and time taken to apply a piece of a gauze and two pieces of Tegaderm film to each of the 4-puncture laparoscopic wounds was considered inefficient and not cost-effective. Consequently, a better dressing material was sourced; the Tegaderm with Pad Film (Figure 1b), was chosen and applied to all laparoscopic wound dressings. Feedback from the nursing team was positive. The review concluded that this change saved valuable nursing time, allowing nurses to focus more on essential bedside care.

AIMS To streamline the process of changing laparoscopic wound dressings to optimize nurses' time utilization. To reduce the cost of dressing material utilization.

METHODOLOGY

A comparative study was conducted to assess the time spent when applying different dressing materials for a patient with a 4-puncture laparoscopic abdominal wounds.

IMPLEMENTATION

Two cohorts comprising 50 laparoscopic wound dressings were evaluated using different dressing materials. (July to September 2023 in KKH Ward 71).

2 cohorts of patients

Traditional group: Gauze & 2 pieces of Tegaderm

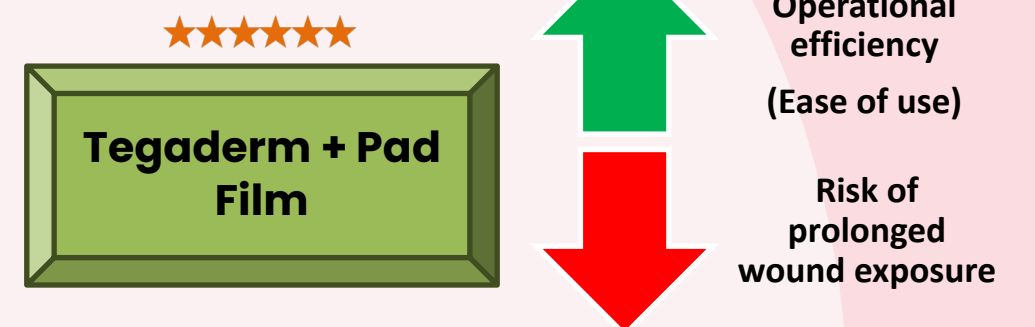
VERSUS

New implementation group: Tegaderm + Pad film

- The time taken for the entire dressing procedure; from initiation of wound cleansing to wound covering, was meticulously monitored. Feedback on the use of 'Tegaderm + Pad Film' was gathered from staffs.

RESULT

Nurses reported that eliminating the need to fold the gauze into half before application improves operational efficiency and minimize prolonged wound exposure.



Reduction in time taken (40 minutes of man-hours saved -> equivalent to 8 dressing procedures spared)

Time efficiency data & cost

Table with 3 columns: Dressing material, Average time per dressing, Cost. Rows: Gauze & 2 pieces of Tegaderm (Traditional) and Tegaderm + Pad Film.

Potential annual saving per ward

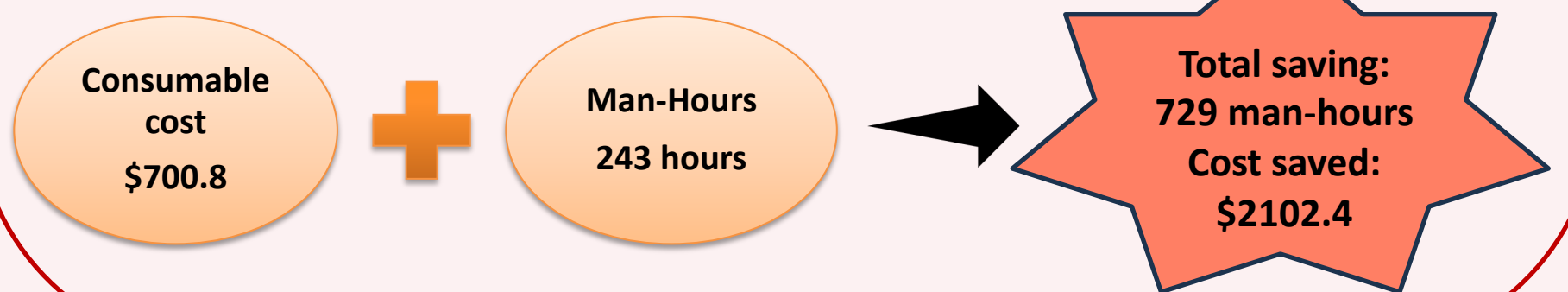


Figure 1a: Gauze & Tegaderm (Traditional group)



Figure 1b: Tegaderm + Pad Film (New implementation group)

CONCLUSION

Tegaderm + Pad Film being all-in-one dressing, is specifically designed to improve application time. Its adaptable nature to conforms to the body and accommodate movement, thereby promoting extended wearability.

- Significant reduction in the time taken enables nurses to allocate their time more effectively toward other nursing tasks. Cost efficiency. This initiative has been embraced by other inpatient wards, aligning with the organizational trajectory toward healthcare innovation. Nurses have expressed heightened satisfaction in utilizing this novel dressing material.