



Cost and manpower savings in Clinic H (Orthopaedic Surgery) Plaster Room

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Background

SGH Specialist Outpatient Clinic H (SOC H) is an Orthopaedic Surgery Clinic with 13 consultation rooms and has a daily average attendance of 300-500 patients. The Plaster Room at Clinic H carries out an average of 500 plaster cast applications and removals per month and serves both outpatients and inpatients.

Methodology

With a high patient load at the plaster room, significant amount of time is also spent preparing the required materials for casting of patient. The team prepared a value stream map to help identify value-added processes that could be improved upon.

One step that was identified was the cutting of cotton gauze dressing pads used for cleaning a patient's limbs before the application of plaster casts or after the removal of plaster casts.

The existing process was to order large dressing pads (Figure 1) which are then cut into smaller lengths which are more suited for disinfection. This process would take about 30 minutes to cut a single pad into 120 smaller pieces, which is time consuming and laborious (Figure 2).

Due to the need to cut the dressing pads, this process was batched and thus required large quantities of dressing pads to be ordered and stocked.

The team proceeded to review other similar products available in SGH, looking for a suitable replacement that would come packaged in the required size for cleaning a patient and at a cheaper price point.

Results

The identified replacement, Wypall X60 Wipers (Figure 3), were able to meet the needs of the team as the wipers maintained their texture and strength even when wet with disinfectant spirit. This was not achievable using other cheaper alternatives like C-fold paper towels. The wipers are also strong and flexible allowing the staff to wipe down large areas of the patient's body easily and without breaking apart.

The Wipers are packaged in a set of 100 wipers of the required size for cleaning a patient. As a result, the Wipers can be used immediately without any processing required, providing manpower and time savings to the staff in the Plaster Room.

Additionally, on a per piece comparison, the cotton gauze method was 5.6 times more expensive than the Wipers.

By switching to the Wipers, Clinic H saves about 2 manhours and \$158 per month with no decline in clinical care.

Item	Cost	Pieces	Cost per piece	Savings per sheet
Cotton Gauze Dressing Pad	\$46	120	\$0.383	
Wypall X60 Multipurpose Wipers	\$6.80	100	\$0.068	\$0.315

Table 1: Price comparison between cotton dressing pads and Wypall Wipers.

Conclusions

Since switching to the Wipers, there was no observable decline in patient care and patients who were polled mentioned that the Wipers felt comfortable against their skin. The Wipers are more hygienic as they are used straight from the package, as compared to the dressing pads, which were taken out of the packaging, cut and then repacked.

The packs of Wipers are also more compact and take up less shelving space, which has reduced the clutter in the plaster room store. Additionally, with the wipers ready to use immediately without processing, staff in the plaster room are freed up to spend more time in clinical care.

The cost of cleaning a patient was similarly reduced as the costs of the Wipers was 82% cheaper than the dressing pads. The Wipers are sturdy as the dressing pads and hence there was no increase in the number of pieces of cleaning material used per patient when switching over to the Wipers.



Figure 1: Cotton Gauze Dressing Pads.



Figure 2: Staff cutting dressing pads into useable lengths.



Figure 3: Wypall Wipers packs.



Figure 4: Staff using Wypall Wipers on a patient.