

Return Savers

Optimize order and supply processing between Wards and Retail Pharmacy: Minimizing wastage and providing seamless service

Cheah BH, Chan SS, Fu WH, Chua N, Koh E, Goh BG, Elma, Tay AC, Suzzanna Shariff

Background and Problem

As part of Inpatient Pharmacy service, Retail Pharmacy supplies retail items to inpatient wards on daily basis. The items include feeds, wound dressings, surgical items and consumables. The accurate supply of items impacts patient care. Items wrongly ordered or supplied would end up with delay in treatment and additional resources to rectify the problem and re-work. Baseline data collected in Aug 2012 showed that wound dressings were the highest in returns to Pharmacy. Ward 76,75,48 were identified as highest in returns among other wards.

Objective

This project aimed to reduce the median percentage of wound dressings returns from 20% to 10% from ward 76,75,48 within 6 months. Reduction in rework would improve service efficiency.

Methodology

Fishbone diagram (Figure 1) was used to identify root causes and a survey was conducted to verify the reasons for returns. Final root causes identified using the Pareto chart were: 1) Nurses did not check medication trolley before discharging patient, 2) No tracking system for staff on status of orders, 3) Nurses were not familiar with available dressings. Tree diagram and prioritization matrix were used to select solutions. (Figure 4)

Two Plan-Do-Check-Act (PDCA) cycles were implemented. For PDCA 1, self-inking stamp "Return to patient upon discharge" was stamped on the dressings' labels as a visual reminder and nurses would place the dressings at patients' bedside to remind patients to collect the dressings upon discharge (Figure 2). For PDCA 2, wound directory (Figure 3) was introduced to facilitate the order process. The folders were made available for reference at nursing stations.

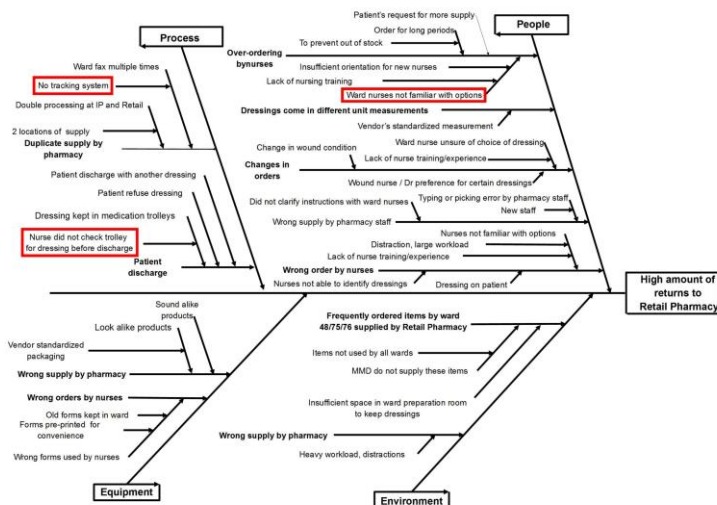


Figure 1 : Fishbone Diagram to identify root cause for high amount of returns to retail pharmacy

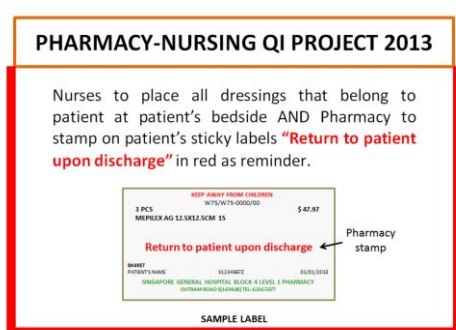


Figure 2 : Poster as reminder at nursing station for pharmacy self-inked stamp on dressing labels



CODE	ITEM	Price
083011	Comfeel Plus Ulcer Dressing 10x10cm	\$5.61
080008	DuoDERM CGF 4" X 4" [10 x 10 cm] (CNT 187660)	\$8.60
080009	DuoDERM CGF 6" X 8" [20 x 20 cm] (CNT 187662)	\$29.30
080016	DuoDERM Extra Thin 4" X 4" [10x 10cm] (CNT 187955)	\$3.90
080017	DuoDERM Paste 187930 30gm	\$25.70

Figure 3 : Contents inside wound directory

Results

Results showed reduction in median percentage of returns from 20% to 10%. The use of self-inking stamp and placing dressings at patient bedside has been rolled out across all wards except for selected patient groups. Post-intervention survey indicated that wound directories were useful to nurses. An online version has been uploaded onto Pharmacy Intranet to serve as reference for all healthcare staff. Collaboration between Pharmacy and Nursing has led to further improvement in the service whereby common dressings are kept in automated medicine cabinets in selected wards. The improved workflow led to substantial time saving for healthcare professionals.

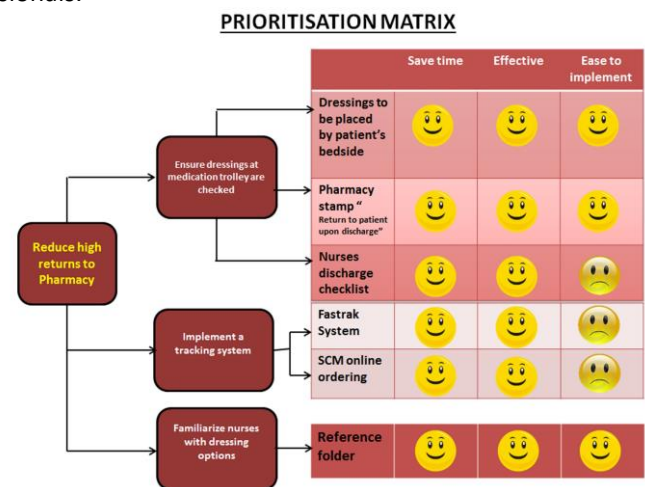


Figure 4 : Tree Diagram and Prioritization Matrix

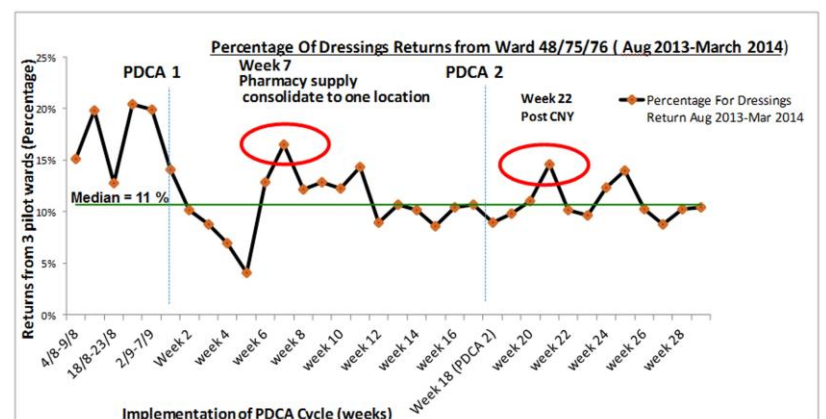


Figure 5 : PDCA cycle showing percentage of dressing returns in 8 months

Sustainability

The first initiative was rolled out to all wards since Jan 2014 with exclusion of group of patients with multi-drug resistant and *C.difficile*. In addition, online wound directory in Pharmacy Intranet has been used by wound nurse clinicians and pharmacists as teaching tools for student nurses and pharmacists. A similar milk feeds directory has also been successfully produced by pharmacist in collaboration with dieticians in view of positive feedback from the wound directory. It was uploaded into the Pharmacy intranet for healthcare professional reference as well.

Conclusion

Overall, the team managed to reduce percentage of return of dressings from average of 20% to 10% in 8 months. This helped to improve patient's quality of life, optimizing nursing and physician care, decrease length of stay for patient, increasing the overall satisfaction level and hospital reputation. Staff are able to provide excellent patient care and service with appropriate supply of dressings.