“Save Me, Unplug Me”

Singapore Healthcare Management 2019

ANC Neo Ah Hoe (Team Leader),
ANC Cai Biwei (Assistant Team Leader),
NC Kang Yuling (Member)
SSN Siti Zubaidah Binte Yatiman (Member)
Ward 52A Labour Ward

Background

Accuracy in the weighing of the newborn babies in Labour Ward is important for Neonatologist to calculate the dosage of medication / amount of milk feeds required. There are two battery operated infant weighing scales for the weighing of newborns. Charging these weighing scales at the charging points is required after each use to ensure the functionality for the subsequent use (Figure 1). There had been multiple episodes of broken adaptor cables for the chargers due the frequent abrupt removal from electrical sockets (Figure 2). These damaged adaptor cables had to be sent to the Biomedical Engineering Department for repair almost every fortnightly and it took 3 to 4 working days (Figure 3). The repair process and duration impacted the smooth workflow due to the unavailability/ shortage of of infant weighing scales for daily usage. This had indeed caused disruption to the workflow in weighing of babies.

Interventions / Initiatives

PDCA 1 - Reminders during roll call
Verbal reminders were given during roll call sessions to all staff to be observant and cautious on the need to unplug the adaptor with cable from the charging point. However, it did not reduce the number of damage to the adaptor cables.

PDCA 2 (Figure 5) – Placement of colourful cards on scale act as a reminder
Colourful cards with plastic covers was placed on the weighing scales to remind the staff to unplug the weighing scale from the charging point before pushing for use. However, the coloured picture smudged easily due to alcohol seeping into the plastic cover after frequent wipe down using the mikrozid AF wipes.

PDCA 3 (Figure 6) - Revised Laminated colourful picture
The colourful card with plastic cover was then changed to a laminated cover to curb smudging. Staffs were happy with this change and it had reduced the number of damaged adaptor cables thus reducing the repair needs tremendously.

Mission Statement

To improve the work process by decreasing the number of repair to the charging adaptor cables by 70% within 3 months.

Methodology

Problem analysis

Disruption of workflow (frequent repair of snapped adaptor cables)

- Staffs are task orientated
- During imminent delivery
- Cable damage due to abrupt pushing away of weighing scale
- Require frequent repair thus wasting time and resources

Wall plug is not visible

Staff overlooked that ‘charging is in progress’

Results

1. There is a significant reduction in repairing the damaged adaptor cables from fortnightly to zero over the 3 months period.
2. Each repair would cost $17, Thus we achieved cost savings of total of $102 in total over 6 months.
3. Cost saving on manpower and time as:
   - Labour Ward staff need not raise form and arrange e-portering to send item to BME department for repair, time can be channeled to providing quality care for mother and her baby.
   - BME staff can make use of the time save to attend to other repairing work or maintenance jobs.

Sustainability Plans

Conduct random audits on staffs’ compliance on the following:
1. Removal of the adaptors before pushing the weighing scales from the charging point.
2. Placement of the pictured cards on the weighing scales after each wiping down.