

## BACKGROUND

Rehabilitation Department has a manual inventory management process for therapeutic supplies. This process is inefficient and often resulted in out of stock situation, poor stock accountability, and non-compliance to audit control of stock movement and sales.

## AIM

We aim to introduce an efficient inventory management system for the reduction of operating costs, timely availability of supplies, compliance to the full accountability of stock holdings and generate stock inventory summary reports.

## METHODOLOGY

The team identified that the key process steps in the new system must be able to:

- Update stock quantity in real time;
- Provide inventory Periodic Automatic Replenishment (PAR) level alert; and
- Provide report on stock inventory summary

Prospective vendors were called for an initial discussion. Out of two vendors, the selection was narrowed to a single vendor at the lowest cost of \$20,501.19.

A workflow comparison between the manual and proposed electronic inventory management process was conducted.

### MANUAL

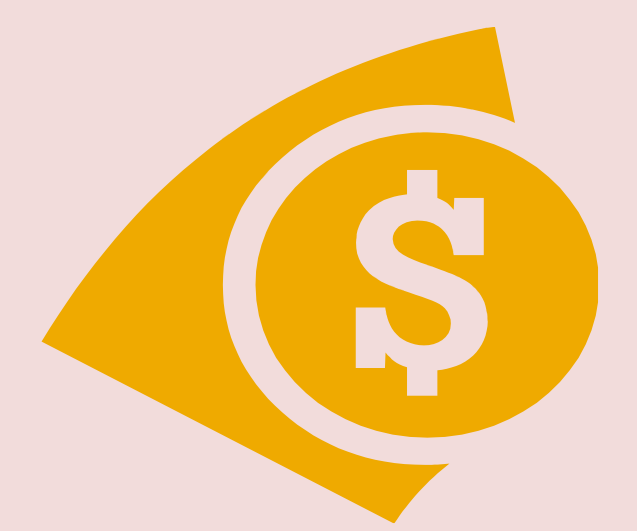
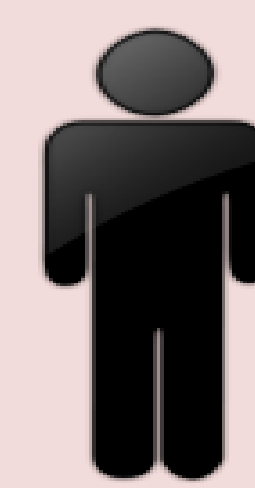
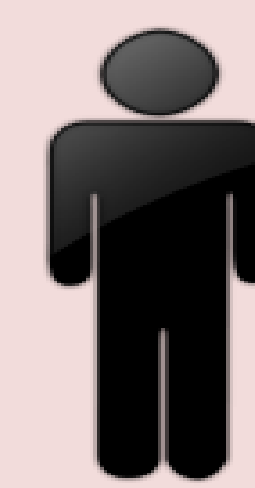
- 1 Rehab Assistant checks location of physical stock to ensure items in the store and sales stock location tallies with the master stock list.
- 2 Once an item is taken from the designated location, therapist updates stock card to indicate quantity taken and place the item tag in a box.
- 3 Rehab Assistant collects item tags from designated locations and tallies them with the stock card to ensure it is updated.
- 4 Rehab Assistant updates and amends the stock card if it is not updated, and orders items if it reaches PAR value.
- 5 Rehab Assistant brings new stock to designated locations and updates stock cards.
- 6 Item tags are printed and tagged to all incoming stock.

### ELECTRONIC

- 1 Once a therapist takes an item from designated location, Rehab Assistant scans the item out.
- 2 The system automatically updates the stock quantity.
- 3 Rehab Assistant orders items if it reaches PAR value and brings new stock to designated locations by scanning items to update the system.
- 4 Item tags are printed and tagged to all incoming stock.

## RESULTS

### Time and cost savings

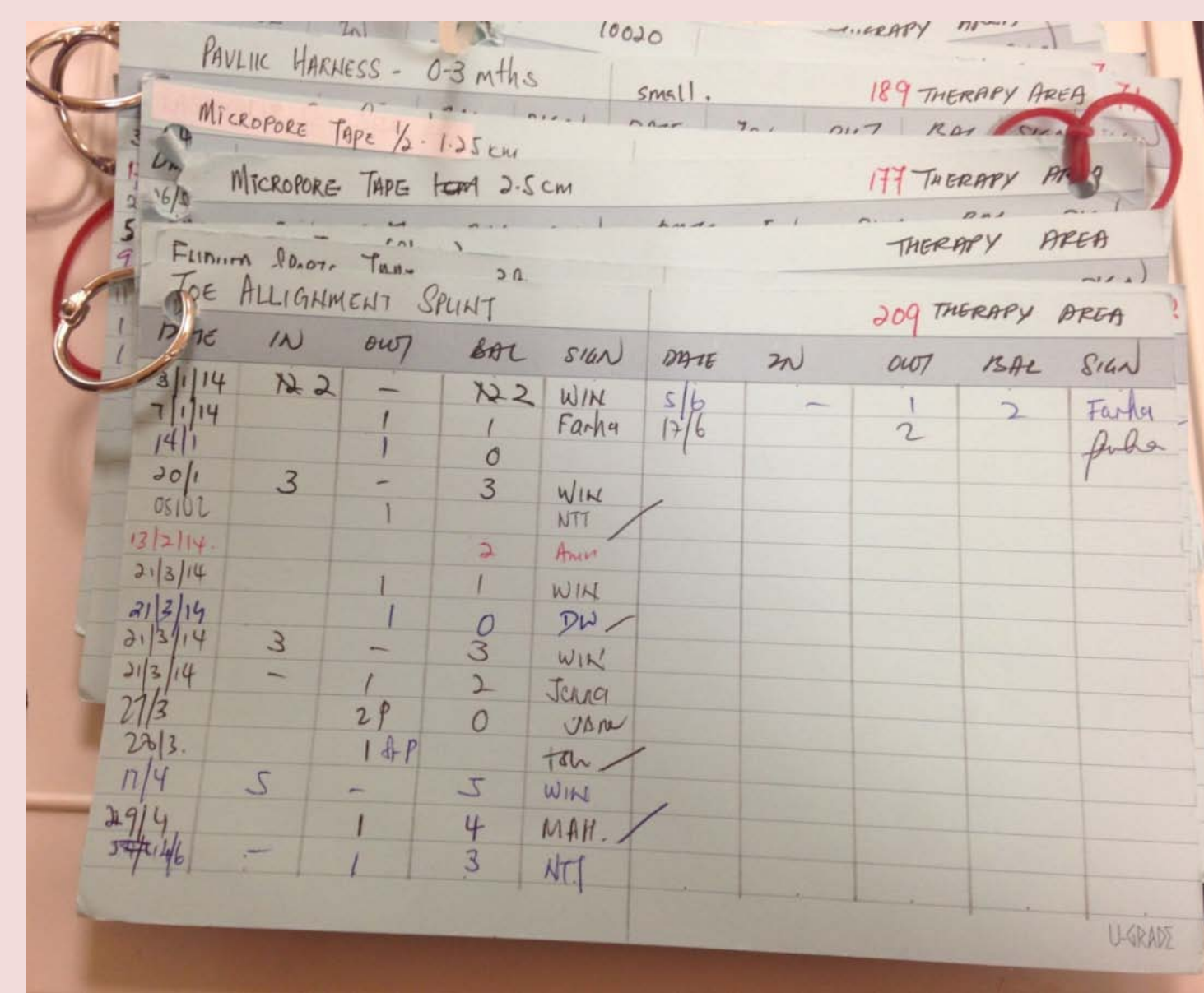


Savings of 510 man hours per year

Savings of \$12,750 manpower cost per year

### Reduced human errors

#### MANUAL:



40 error entries on stock cards per month eliminated

**ELECTRONIC:** Removes the necessity of manual updating of stock cards and hence human transcription and recording error can be completely eliminated.

### Enhanced patient care

Timely replenishment of stocks through real time stock update and ordering. Hence, Rehab Assistants can optimise patient care with reduced/simplified administrative work.

## CONCLUSION

The electronic inventory system provides an efficient way of managing therapeutic supplies. This potentially leads to 510 man hours (\$12,750) savings per year. Human errors in manual updating of stock cards can also be completely eliminated. Importantly, the electronic system enhances patient care as stocks are readily available.