



Improving & Sustaining Picking & Packing with Increasing Workload at Central Warehouse

Singapore Healthcare Management 2017

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Aim

- To reduce the incidence of picking and packing errors with increasing number of products and volumes
- To improve accuracy, especially for drugs not delivered in original full cartons to the pharmacies
- To enable better traceability including receiving at the pharmacies and investigations for mistakes (when applicable)
- To promote green environment by eliminating hard copies

Background

NHG Pharmacy uses third party logistics services from Schenker Singapore (Pte) Ltd for inbound, storage and outbound.

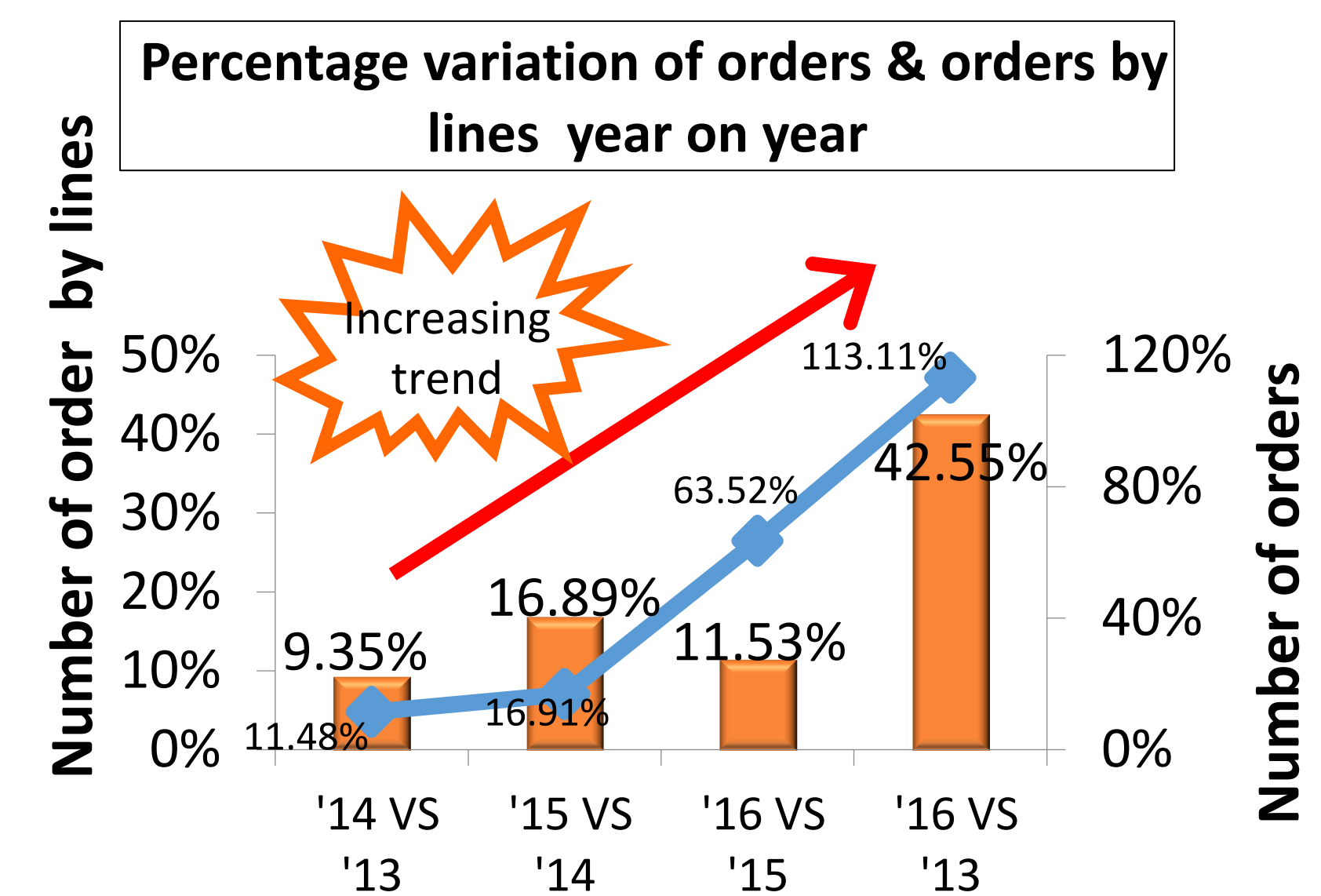
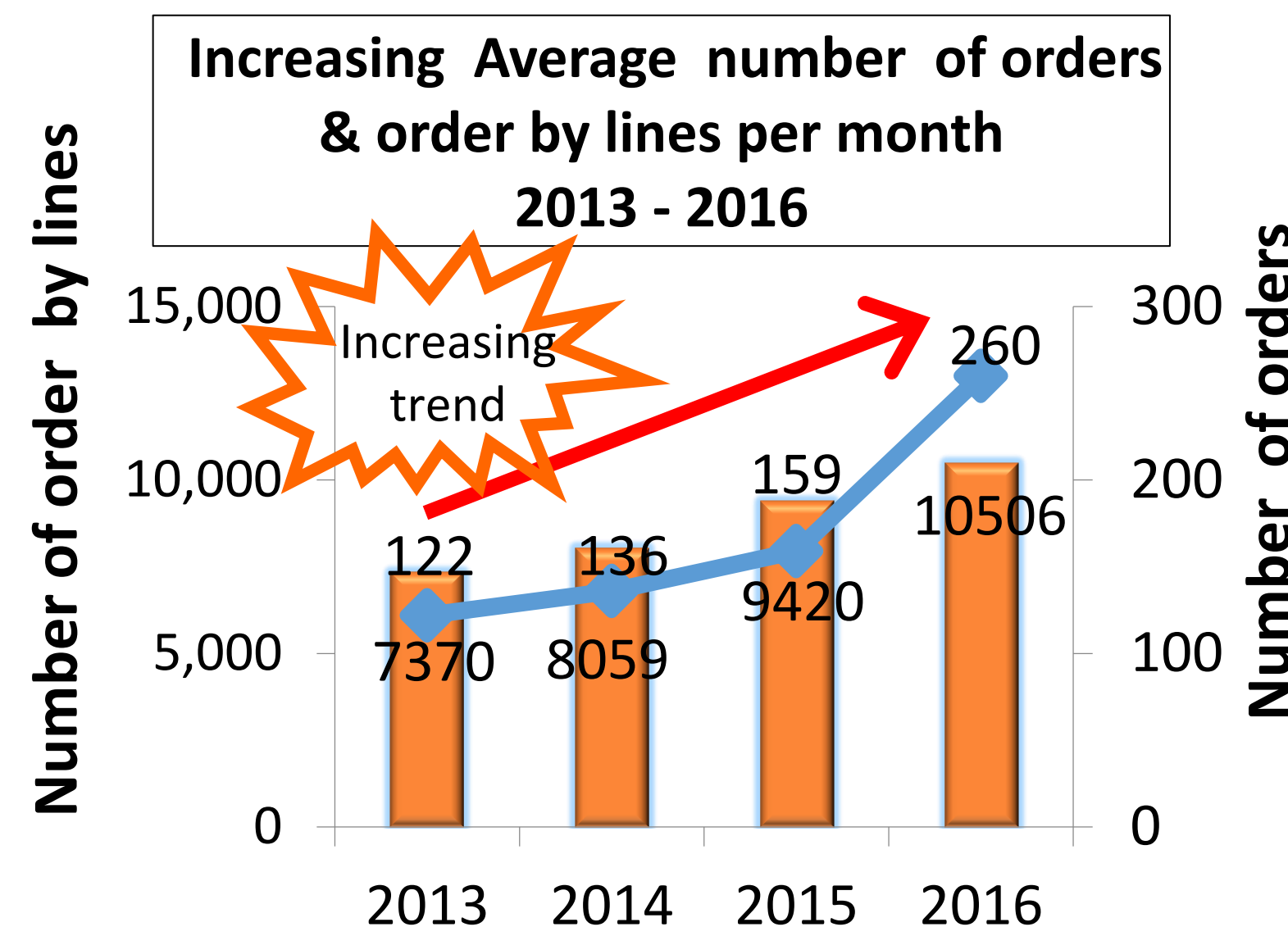
For outbound, the picking and packing activities were manually performed, including verification.

It is common that drugs come in different strengths yet similar packaging, which may contribute to mistakes, especially for non full cartons.

The ideal situation is to use vendor barcode information, but this is not feasible, either due to absence of barcode, or, the information cannot be used as it is different from NHG description and the unit of measure (UOM).

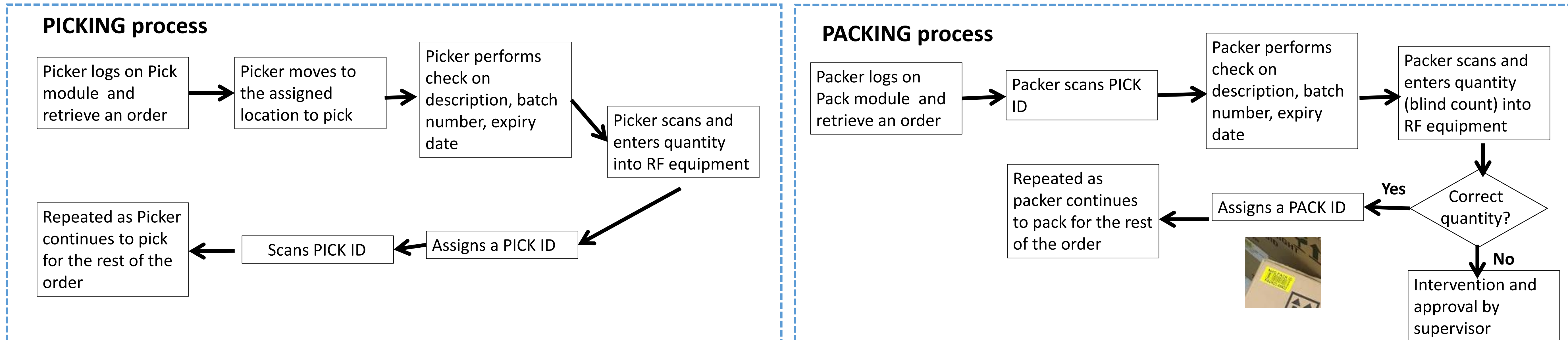


Similar looking products



Methodology

Schenker developed Radio Frequency (RF) technology which allows picking and packing with a scan of a barcode. The project was first piloted in late 2014, and rolled out in phases for full implementation by January 2015 for the 11 pharmacies. Currently, the total number of pharmacies is 13.



Results

With the implementation, Schenker has successfully achieved the following:

- Improvement in accuracy rate
- Meeting NHG (Pharmacy) KPIs
- Shorter time for goods receipt at the pharmacies
- Full visibility of products packed in cartons, reflected in packing list with Pack ID reference → Pharmacy staff no longer needs to search through cartons by cartons for a certain item
- Full traceability of products picked, packed and delivered
- Sustainability of accuracy with the growing volumes recorded since 2014
- Elimination of hardcopy picklist - Environment friendly, Go Green and cost savings for paper usage

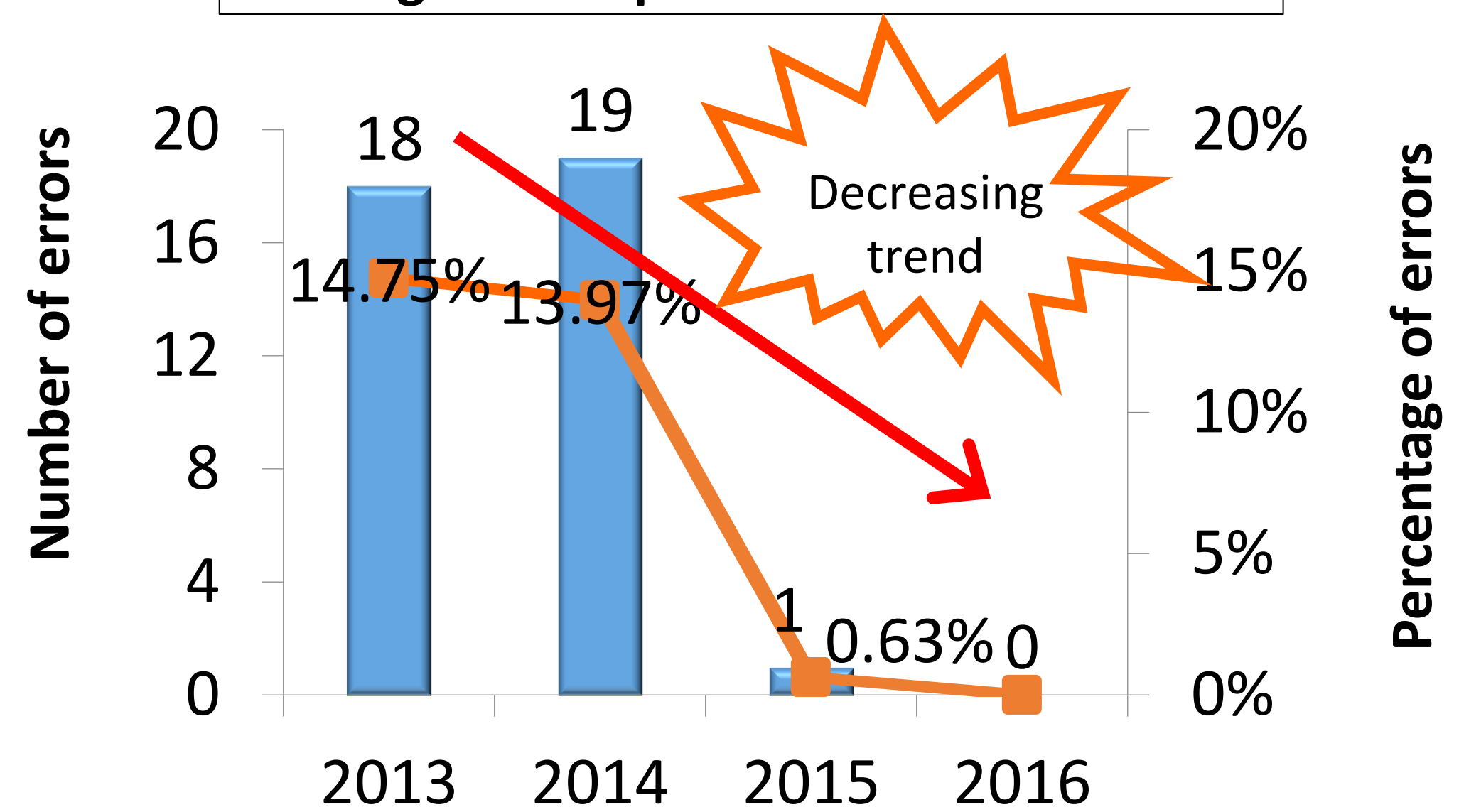
Paper Savings

Photocopy Paper A4/70gsm (500sheets/ream)

Period (5 months)	Quantity replenished (no. of reams)	Total Cost
Aug to Dec 14	380	\$ 1,111.70
Jan to May 15	60	\$177.60

Average / month	Total cost
Before implementation	\$222.34
After implementation	\$35.52

Average errors per month in 2013 – 2016



Average cost savings per month \$186.82

Total cost savings per year \$2,241.84*

* Assume no growth of the orders for picking and packing

Using 43% growth from 2013, the savings will be \$3,205/ year



Conclusion

Rate of improvement of errors

	2013	2014	2015	2016
Total order by lines	88,437	96,706	113,038	126,068
Total errors	219	233	15	5
Percentage of errors	0.25%	0.24%	0.013%	0.004%

1. With increasing order lines to pick and subsequently to pack, it is necessary to ensure that the process improvements assist the staff to be productive, consistent and accurate.
2. Downstream, pharmacy staff at the 13 locations are also relieved from spending more time to verify and retrieve the contents. In addition, with almost zero errors, precious time is not wasted to investigate for discrepancies.
3. Contribution for a greener and more friendly environment