KK Women's and Children's Hospital

## Supplementing the Right Way: Effective Cost Management of Multivitamin Syrups in a Paediatric Hospital

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## Introduction

Multivitamins containing lysine are supplements commonly prescribed to improve appetite and promote growth in children.

Historically, KKH carried two brands of multivitamin syrups (Brand $X$ and Brand $Y$ ) in the formulary, but in 2012, the Pharmacy and Therapeutics ( P \& T ) committee reviewed the need for two similar products.

## Aims

This project aims to illustrate an evidence-based review process of multivitamin syrups in the formulary and retail setting.

It also serves to demonstrate the potential COSt-SaVings from the review process.

## Methodology



- Literature search performed to ascertain standard vitamins, minerals and lysine requirements in children.


BRAND X remained in formulary (higher usage). Brand Y deleted from formulary, but available in retail setting.


- Expert opinions of hospital's paediatricians and dieticians sought.

-BRAND Y selected.

- Costs and hospital movement (formulary and retail) of both Brand X and Brand Y were analyzed from 2010 2014.


## Results

There are no specific recommendations on the most effective multivitamin, including lysine amounts.

From 2010-2012 (formulary and retail):

| BRAND | MOVEMENT | COST |
| :---: | :---: | :---: |
| Brand $X$ | 8,700 bottles | S $\$ 92,000$ |
| Brand $Y$ | 4,100 bottles | S $\$ 45,000$ |
| Total | 12,800 bottles | S $\$ 137,000$ |

From 2012-2014 (formulary and retail):
Although Brand $X$ was the only multivitamin syrup available in the formulary, overall usage and costs for Brands X and Y remained almost constant at 12,400 bottles ( $\$ \$ 136,000$ ).
There was no change in the prices of Brand X and Brand Y .
For the 2015 RFP, Brand Y offered a competitive $22 \%$ decrease in cost. Assuming similar movement to previous years, patients can expect annual cost savings of
Annual cost-savings


Movement and Total Costs of Multivitamin Syrup


## Discussion

Initial selection of Brand X was largely dependent on its higher usage. Upon further consultation with the experts, however, it was found that Brand $Y$ was the preferred option. This was due to the content of iron and vitamin $\mathrm{B}_{12}$, which was lacking in Brand X . These two ingredients are important in "picky" eaters as they tend to eat less meat.
Besides that, analysis of the hospital usage of multivitamins revealed that there was no brand preference among prescribers, and depended on whichever multivitamin syrup was available in the formulary.

## Conclusion

This review demonstrates that evidence-based management strategies can be applied to both formulary and retail items, even though the latter is often perceived as brand-specific, to increase the value for healthcare consumers.

