

Lidocaine Can Save Us Money

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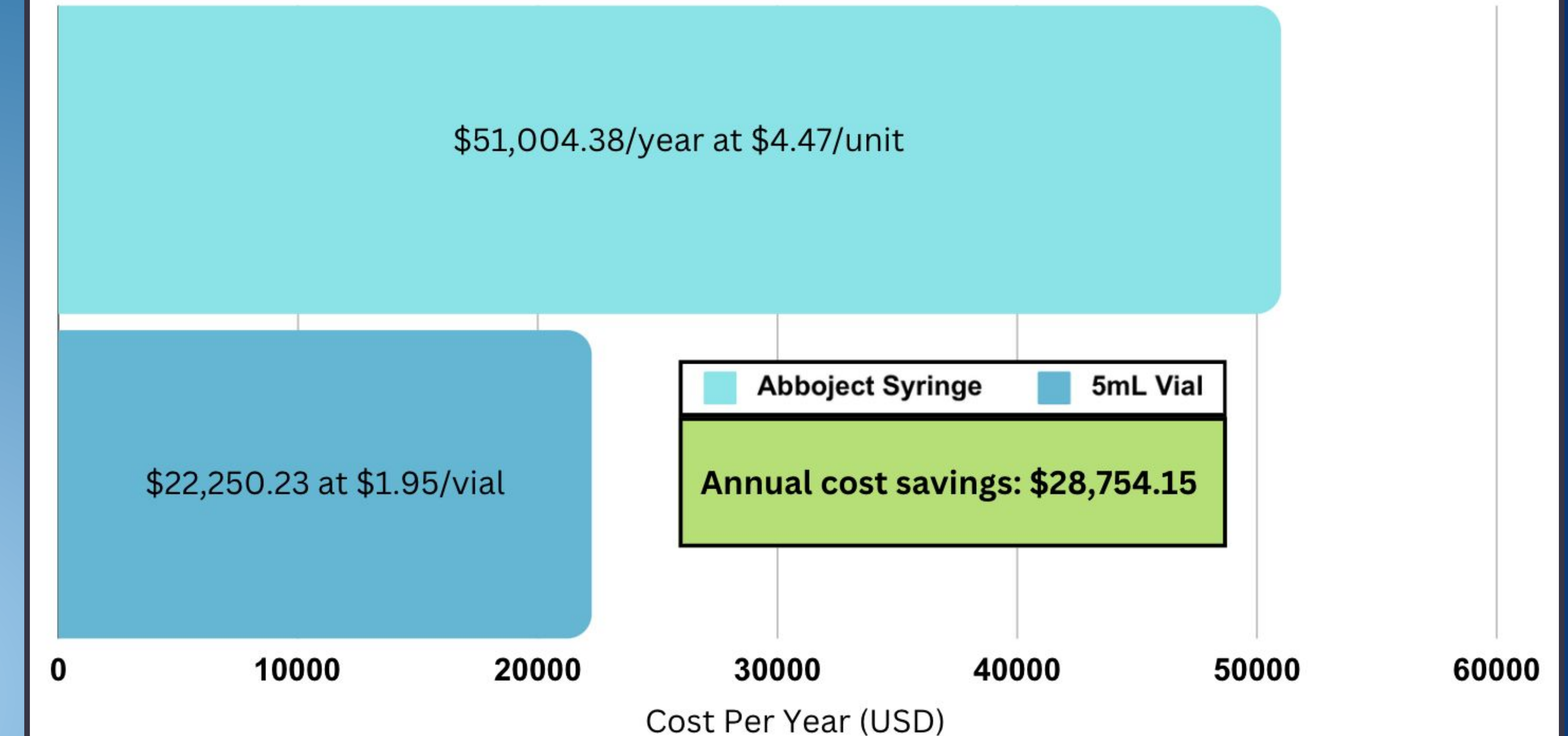


INTRODUCTION

- Healthcare costs are on the rise
- We must determine methods to minimize spending and maximize efficiency, without compromising patient safety
- Purchasing and stocking medications for automated medication dispensing cabinets such as the Omnicell is a significant expenditure
- One way that healthcare systems can significantly decrease spending is by substituting medications, such as prefilled assembly-required Lidocaine syringes, with more cost effective versions of the same medication
- This can lead to significant cost savings within the healthcare system while protecting and preserving patient safety
- Automated medication dispensing cabinets were evaluated across different hospital departments where anesthesia is administered to compute costs and determine ways to substitute current medication inventory to optimize expenditure

BENCHMARK DATA

- Thirty-three automated medication dispensing cabinets across five departments were evaluated for their stock and usage of Lidocaine 2% 100 mg/5mL, 5mL syringes over an approximate 28-week period
- During this study timeframe, quantified parameters were as follows:
 - total medication usage
 - the maximum amount used in one day
 - average daily use
 - how many days this medication ran out of stock
- Based on this information, a collaboration with the Pharmacy department was established to determine the per unit cost of these syringes to calculate yearly expenditure
- Given such high frequency use (average of about 31 units daily), prefilled Lidocaine abboject syringes requiring assembly were targeted with plans to substitute for vials of the same concentration and volume to seamlessly decrease expense without compromising safety



OUTCOMES

- A significant opportunity for savings was revealed
- The proposed substitution of Lidocaine 2% 100 mg/5mL, 5mL vials for prefilled syringes limits risks because the proposed substitute has the same concentration and volume
- Once this substitution is implemented across the studied medication dispensing cabinets, comparison of actual to expected cost savings will be performed
- Since data is based on user reported dispensing, it is likely that actual savings will be even higher than anticipated given known discrepancies between actual and documented use

REFERENCES

- Papanicolas I, Woskie LR, Jha AK. Health care spending in the United States and other high-income countries. *JAMA*. 2018;319(10):1024- 1039. doi:10.1001/jama.2018.1150
- Whitaker DK, Lomas JP. Time for prefilled syringes - everywhere. *Anaesthesia*. 2024;79(2):119-122. doi:10.1111/anae.16181