

CASE STUDY

INCREASING OPERATIONAL EFFICIENCY AND DRUG COST SAVINGS

How Beverly Hospital discovered an annual cost savings opportunity of more than \$200,000.

A NEW STRATEGY FOR REDUCING DRUG PURCHASING COSTS

Beverly Hospital, a small community health system with three hospitals and 340 beds, discovered a new strategy for reducing drug purchasing costs and increasing operational efficiency by collaborating with Yankee Alliance, a regional group purchasing organization (GPO), and Safecor Health, an FDA-registered unit-dose repackaging vendor. Through this type of collaboration, Safecor Health identified commercially available unit-dose oral solid and liquid products, with bulk alternatives, that could be repackaged into unit-dose at a significantly reduced cost. Safecor Health also assessed the current bulk products repackaged in-house.

DISCOVERING SIGNIFICANT DRUG COST SAVINGS

To determine the potential annual savings opportunity, Safecor Health performed an analysis of Beverly Hospital's previous 12-month drug purchase history.

The purchase history was categorized into two groups: oral solids and oral liquids.



Safecor Health completed a line-by-line analysis to identify the total number of doses purchased and the corresponding cost of the commercially available unit-dose product.



Safecor Health then identified alternative bulk medications for those commercial unit-dose products identified.



The cost-per-dose of the commercial unit-dose products was compared to the cost of repackaging bulk product — purchased on contract through wholesaler — with Safecor Health, including repackaging fees, to evaluate savings opportunities.



Safecor Health identified an annual **savings opportunity of \$264,180** (\$777 per patient bed)

Safecor Health identified 192 products with a minimum of 500 doses or a savings of \$250 or greater for a **total annual savings opportunity of \$264,180** (\$777 per patient bed).

Of the 192 products identified, Beverly Hospital initially converted 20 items totaling \$91,554 (\$269 per patient bed) in realized annual savings (*table 1.1*).

Table 1.1: Converted Drugs from Cost Savings Analysis

Drug Description	Total Doses	Original Unit-Dose Cost	Total Equivalent Bulk Drug and Repackaging Cost	Total Savings
ARIPiprazole 10 mg tablet	800	\$9,590.92	\$552.60	\$9,038.32
ARIPiprazole 15 mg tablet	480	\$4,358.66	\$130.44	\$4,228.22
ARIPiprazole 5 mg tablet	900	\$8,601.34	\$432.07	\$8,169.27
buPROPion 150 mg/24 hours	1,200	\$3,615.60	\$644.13	\$2,971.47
celecoxib 100 mg capsule	700	\$4,801.58	\$436.90	\$4,364.68
celecoxib 200 mg capsule	3,600	\$7,312.96	\$3,127.61	\$4,185.35
cloZAPine 100 mg tablet	2,000	\$3,150.73	\$668.80	\$2,481.93
divalproex sodium 500 mg tablet	3,200	\$7,227.87	\$1,164.80	\$6,063.07
doxycycline 100 mg tablet	1,290	\$4,087.58	\$1,217.76	\$2,869.82
OLANZapine 10 mg tablet	870	\$2,806.31	\$575.65	\$2,230.66
oxybutynin 5 mg/24 hours	2,760	\$7,109.02	\$1,456.67	\$5,652.35
paliperidone 3 mg tablet	300	\$10,336.95	\$4,362.40	\$5,974.55
paliperidone 6 mg tablet	500	\$17,228.25	\$6,861.33	\$10,366.92
paliperidone 9 mg tablet	400	\$20,673.72	\$11,062.87	\$9,610.85
atovaquone 750 mg/5 mL (5 mL cup)	126	\$3,898.53	\$1,912.77	\$1,985.76
Al OH/Mg OH/simethicone SS (30 mL cup)	2,000	\$3,557.40	\$1,741.15	\$1,816.25
levETIRAcetam 100 mg/mL (5 mL cup)	110	\$1,753.29	\$148.45	\$1,604.84
oxyCODONE 80 mg tablet	320	\$5,144.64	\$2,527.87	\$2,616.77
oxyCODONE 5 mg/5 mL (5 mL cup)	600	\$3,371.16	\$923.76	\$2,447.40
oxyCODONE 5 mg tablet	16,000	\$5,204.98	\$2,329.60	\$2,875.38
Totals	38,156	\$133,831.49	\$42,277.63	\$91,553.86

PACKAGING LABOR AND MATERIALS SAVINGS

In addition to the drug cost savings identified, further savings and increased operational efficiency were measured by compiling data for bulk medications Beverly Hospital previously repackaged in-house but instead outsourced to Safecor Health during a one-year period (*table 1.2*).

Efficiency was measured as pharmacy hours saved by outsourcing repackaging, and cost savings were measured as avoidance of salary dollars (*table 1.3*) and materials (*table 1.4*) from reduced in-house packaging.

Table 1.2: Outsourced Repackaged Medication Fees from 3/1/17-2/28/18

Format	Doses	Repackaging Vendor Fees	Average Cost/Dose
Liquid Cups	9,861	\$6,696.76	\$0.68
Strip (Oral Solids)	127,570	\$17,194.21	\$0.13
Oral Syringes	5,306	\$7,267.10	\$1.37
Overwrap U/D Med	26,297	\$4,708.92	\$0.18
Total	169,034	\$35,866.99	\$0.21

Table 1.3: Hospital Labor Freed Up from Outsourced Repackaged Drugs from 3/1/17-2/28/18

Format	Tech Hours	Pharmacist Hours	Tech Cost	Pharmacist Cost
Liquid Cups	49.31	84.52	\$1,232.75	\$5,071.02
Strip (Oral Solids)	255.14		\$6,378.50	
Oral Syringes	53.06		\$1,326.50	
Overwrap U/D Med	131.49		\$3,287.25	
Total	489	84.52	\$12,225.00	\$5,071.20
		573.52 freed up hours	\$17,296.20 in savings	

Technician: \$25/hour loaded salary;
Repackages 200 cups/hour, 500 oral solids/hour, 100 syringes/hour and 200 overwraps/hour

Pharmacist: \$60/hour loaded salary;
Checks 2,000 doses of repackaged drugs/hour

Table 1.4: Hospital Materials Savings for Outsourced Repackaged Drugs from 3/1/17-2/28/18

Format	Material Cost per Dose	Total Cost
Liquid Cups	\$0.21	\$2,070.81
Strip (Oral Solids)	\$0.07	\$8,929.90
Oral Syringes	\$0.51	\$2,706.06
Overwrap U/D Med	\$0.21	\$5,522.37
Total		\$19,229.14

“ Safecor Health was extremely responsive and helpful throughout our conversion. In addition, they are knowledge leaders in the area of repackaging and provided helpful advice on regulatory requirements for any in-house repackaging we were unable to outsource. ”

- Hope Violette, Director of Pharmacy

UNIT-DOSE REPACKAGING AS A COST SAVINGS STRATEGY

The strategic collaboration with Safecor Health and Yankee Alliance allowed Beverly Hospital to uncover a significant reduction in drug costs. Additionally, increased operational efficiency may be realized by decreasing in-house labor around unit-dose repackaging.

Safecor Health has completed numerous cost savings analyses for customers and determined the average cost savings opportunities typically range between \$200 to \$700 per patient bed — even after Safecor Health's repackaging fees.

How much could your pharmacy save?

Discover how Safecor Health can help your hospital reduce costs and reach budget goals.

Visit www.safecorhealth.com/costsavings to get started.



Discover your comprehensive unit-dose strategy.

800.447.1006

sales@safecorhealth.com

Columbus

4060 Business Park Drive
Columbus, Ohio 43204

Boston

317 New Boston Street
Suite #100
Woburn, MA 01801

safecorhealth.com