

Pharmacy Auto-Refill Cost-Effectiveness Analysis

Executive Summary

This report evaluates the financial impact of transitioning from a 90-day prescription fill model to a 100-day fill model for the pharmacy's top 10 maintenance medications. The analysis compares annual revenue for 300 patients enrolled in the auto-refill program per medication.

Key Findings:

- **90-Day Model Annual Revenue:** \$72,766.88
- **100-Day Model Annual Revenue:** \$52,993.95
- **Revenue Difference:** -\$19,772.93
- **Percentage of Total Annual Revenue (\$800,000):** -2.47%
- **Decision Threshold (2% of revenue):** \$16,000

Comparative Revenue Analysis by Medication

Medication	90-Day Revenue	100-Day Revenue	Difference
Amlodipine 5mg	\$7,084.80	\$5,196.60	\$-1,888.20
Amlodipine 10mg	\$7,455.28	\$5,490.57	\$-1,964.71
Atorvastatin 10mg	\$6,847.52	\$5,017.65	\$-1,829.87
Atorvastatin 20mg	\$5,527.88	\$3,983.82	\$-1,544.06
Rosuvastatin 5mg	\$8,986.76	\$6,537.30	\$-2,449.46
Rosuvastatin 10mg	\$9,225.20	\$6,711.00	\$-2,514.20
Losartan 25mg	\$7,355.68	\$5,361.87	\$-1,993.81
Losartan 50mg	\$6,210.36	\$4,486.95	\$-1,723.41
Metformin 500mg	\$6,507.00	\$4,724.19	\$-1,782.81
Tamsulosin 0.4mg	\$7,566.40	\$5,484.00	\$-2,082.40
TOTAL	\$72,766.88	\$52,993.95	\$-19,772.93

Methodology

Assumptions:

- Each medication is taken as 1 tablet once daily
- 300 patients enrolled in auto-refill program per medication
- 90-day model: 4 fills per year (360 days covered)
- 100-day model: 3 fills per year (300 days covered)
- Revenue = Reimbursement - (Drug Cost + Vial Cost)

Recommendation

DO NOT IMPLEMENT the 100-day refill strategy.

The revenue difference between the 90-day and 100-day fill models is **\$19,772**, representing **2.47%** of the pharmacy's total annual revenue (\$800,000).

This difference exceeds the 2% threshold (\$16,000), meaning switching to 100-day fills would result in a significant financial impact. The 90-day model generates higher annual revenue across all 10 medications analyzed, with an average loss of approximately \$1,977 per medication when switching to 100-day fills.

Conclusion: To preserve profitability, maintain the current 90-day fill model.