

BACKGROUND

- In dependent pharmacies are finding it more and more difficult nowadays to become profitable and compete with large chain retail pharmacies.
- Many Independent pharmacies have used value added services (VAS) as a way to stay relevant and profit.
- Maryville Pharmacy is one such pharmacy that has numerous VAS such as mastectomy fittings, DME sales, compounding, vaccinations, and LTC value added service.
- The LTC VAS currently services 128 patients.

OBJECTIVE

- There are several goals, the primary goal is to increase profitability of the existing service.
- Additional goals are to increase customer base and reach an unmet need of patients. In addition, the existing LTC facilities have expressed a want for unit dose packaging.

METHODS

- There are several methods in which the VAS can improve profitability.
 - Automated dispensing machine
 - Parata Pass 208
 - The Pass 208 has 208 cells for frequently used medications
 - The Pass 208 does however have high upfront cost, and high monthly service fees
 - Used machines cost approximately 20-30% of new machines but have large refurbish and licensing fees that total approximately 60% of the new machines
 - For Maryville Pharmacy, and opportunity was given to purchase the product at sale prices that greatly reduced the cost
 - ScriptPro MP 100 and 400
 - ScriptPro MP line of cabinets is similar to the Parata Pass but at a much lower price compared to the Pass208.
 - ScriptPro had two sizes that Maryville Pharmacy would consider, the 100 and 400 cell sizes.
 - Much like the Parata Pass 208, it has a high upfront cost as well as a high monthly maintenance cost.
- ComboMed by GeriMed
 - ComboMed is a program that works specifically with LTC eligible prescriptions for pharmacies to improve profitability
 - ComboMed works as a pharmacy service administrative organization (PSAO) and group purchasing organization (GPO)
 - The PSAO component is what helps with improving reimbursement
 - The GPO component is what what helps with negotiating discounted prices for the pharmacy for purchasing medications
- Increasing Customer Base
 - Maryville Pharmacy want to expand it's LTC VAS. In order to achieve this, building a larger customer base would greatly help to improve profitability of the program.
 - The local environment has numerous opportunities with many LTC facilities in the area but it also has numerous competitors from local and distant pharmacies.

METHODS

- If the customer base is to be increase, Maryville Pharmacy must also be able to take on the increase number of prescriptions. One benefit of the Automated dispensing machines is that it would be able to improve the capacity of the LTC VAS and allow for additional patients without additional labor.
- Catering to existing customers
 - Many facilities prefer the single dose packaging dispensed by the automated dispensing machines. This would help to improve relations with existing and new LTC facilities and cater more profitable opportunities for Maryville Pharmacy

RESULTS

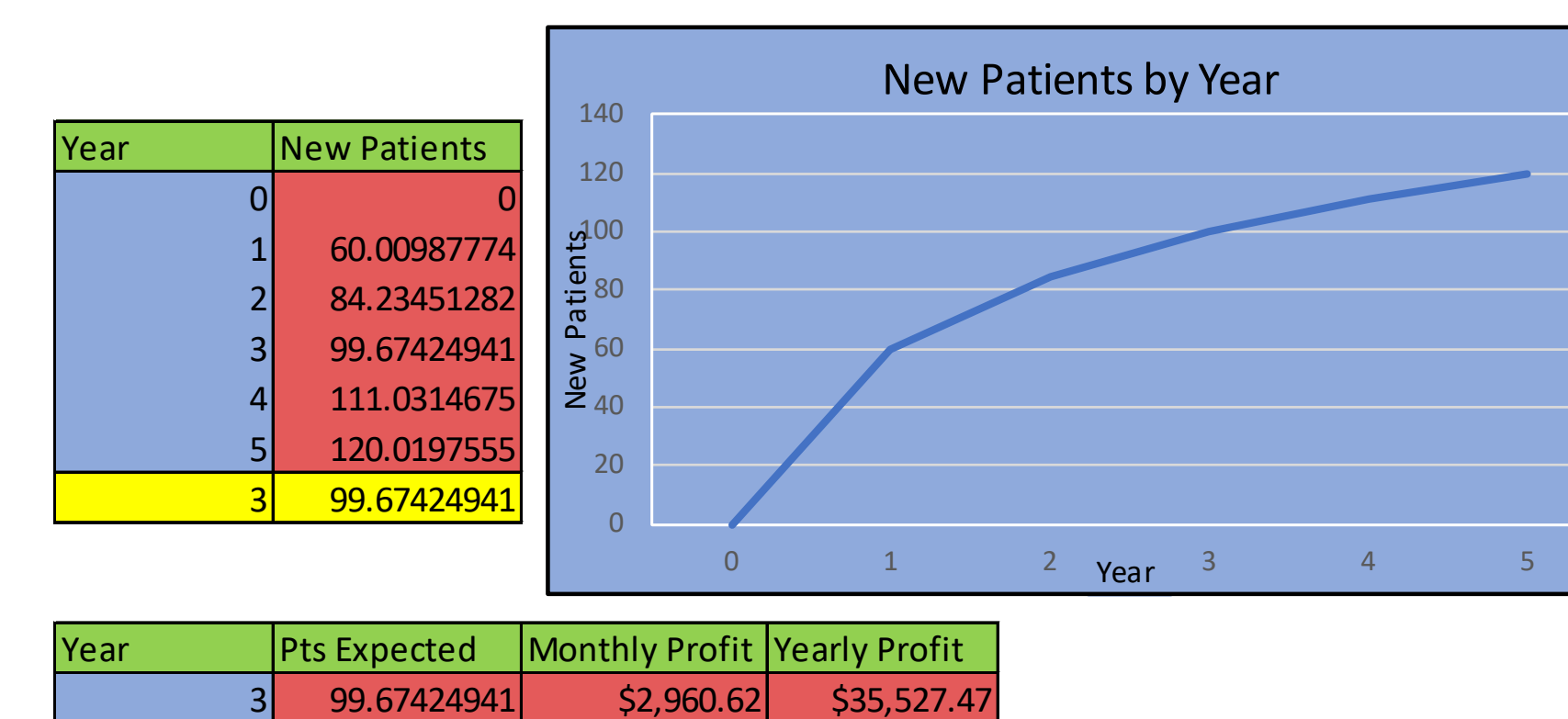
Figure 1: Automated dispensing machine financials.

Data Title	Current Facilities	Caritas	Independent	New Facilities	
Demographics					Break Even Point Sales
patient #	102	11	15	120	3.34
average script #/patient	10.24	7.9	5.9	10.24	% Increase of Scripts
cards/month	881.48	86.9	0	1037.04	94%
viols/month	113	0	0	132.94	
planners/month	50	0	15	58.82	
Physical Costs with Current setup					
card cost	\$0.65	\$0.65	\$0.65	\$0.65	
vial cost	\$0.16	\$0.16	\$0.16	\$0.16	
planner cost	\$0.93	\$0.93	\$0.93	\$0.93	
total monthly card cost	\$572.96	\$56.49	\$0.00	\$674.07	
total monthly vial cost	\$18.08	\$0.00	\$0.00	\$21.27	
total monthly planner cost	\$46.50	\$0.00	\$13.95	\$54.71	
					\$1,458.03
Physical Costs with Parata Pass					
Pass Cost	\$0.80	\$0.80	\$0.80	\$0.80	
Est. Pass conversion %	60%	60%	60%	60%	
total monthly card cost	\$229.18	\$22.59	\$0.00	\$269.63	
total monthly vial cost	\$18.08	\$0.00	\$0.00	\$21.27	
total monthly planner cost	\$18.60	\$0.00	\$5.58	\$21.88	
total pass cost	\$415.81	\$38.79	\$6.70	\$489.19	
					\$1,557.31
Labor Time					
labor (hours)	93.148	8.69	5	109.585824	
Pass time reduction	60%	60%	60%	60%	
labor with pass	59.61	5.56	3.20	70.13	
Labor Costs					Total
labor cost/hr	\$23.28	\$23.28	\$23.28	\$23.28	
labor cost/month Current	\$2,168.49	\$202.30	\$116.40	\$2,551.16	\$6,496.37
labor cost/month Pass	\$1,387.83	\$129.47	\$74.50	\$1,632.74	\$4,781.86
					\$1,714.52
					\$20,574.22
Parata Financial					Yearly & Monthly Service Fee
Used Parata Fee	\$0.00			12835	
Parata cost	\$143,025.00			1069.583333	
Break Even Point in Months	221.8				
Break Even Point in Years	18.5				
Monthly Profit After Service Fees				\$644.94	

Figure 2: ComboMed financials.

Data Title	Current Facilities	Caritas	Independent	New Facilities		
Demographics						
patient #	102.00	11.00	15.00	120.00		
average script #/patient	10.24	7.90	5.90	10.24		
cost	\$24,033.43	\$9,388.13	\$5,621.49	\$28,274.63		
price	\$30,041.79	\$11,735.16	\$7,026.86	\$35,343.28		
copy	\$8,230.75	\$81.18	\$772.31	\$9,683.24		
ComboMed					Monthly Yearly	
Additional Reimbursement	\$2,088.96	\$173.80	\$177.00	\$2,457.60	\$4,897.36	\$58,768.32
DIR Fee	\$901.25	\$704.11	\$421.61	\$2,120.60	\$4,147.57	\$49,770.86
COGS Change	\$600.84	\$46.94	\$28.11	\$141.37	\$817.26	\$9,807.08
					\$9,862.19	\$115,946.27
Est. % of Patients that Qualify for ComboMed		31%			Monthly	Yearly
					\$2,857.28	\$35,743.34

Figure 3: Patient growth estimation.



RESULTS

Figure 4: Overall profit evaluation factoring automated dispensing financials, ComboMed financials, and estimated customer growth.

Modifiable Estimations	
Est. Parata Pass Pt Conversion	60%
Est. Parata Pass time Savings	60%
Monthly Savings	\$1,714.52
Yearly Savings	\$20,574.22
Break Even Point in Months	221.8
Break Even Point in Years	18.5
Yearly Profit	\$7,739.22
Total Fees to BEP	\$143,025.00
Parata and ComboMed Together	
Monthly Profit	\$3,502.21
Monthly Savings	\$4,571.80
Months to Break Even Point	40.83845519
Years to Break Even Point	3.4032046
Profit based on Additional Prescription Sales	
Monthly profit by LTC RX sharing expenses BU fee	\$986.28
Monthly profit by LTC RX Gross profit BU fee	\$4,633.94
Profit Sharing Expenses	
Monthly Profit	-\$83.30
Yearly Profit	-\$999.65
Profit Based on Gross Profit	
Monthly Profit	\$3,564.36
Yearly Profit	\$42,772.29
Break Even Point in Months	-1,716.9
Break Even Point in Years	-143.1
Break Even Point in Months	40.13
Break Even Point in Years	3.34
Total Fees to BEP	-\$1,693,338.26
Total Fees to BEP	\$185,943.58

- All variables that we wanted to explore was put into an excel sheet so that we could modulate variables individually and see their effects on profitability.
- Figure 1 focuses on the automated dispensing machines while figure 2 focuses on ComboMed. Figure 3 focuses on predicted growth rates so that the estimation of initial profit is more accurate. Figure 4 combines all the methods for profitability so that we could determine what combination of methods would be most profitable.
- In figure 4, we also evaluated how to treat the VAS. We decided to use calculate profitability without adding utility expenses of the rest of the pharmacy. This is because our main goal was to find how much additional profit the changes, we implement would affect the business. Without existing financials specific to the LTC VAS, it's difficult to determine the comparative profitability without excluding utility fees.

CONCLUSION

- Due to concerns about high initial cost and high monthly fees, the automated dispensing machines would take a large amount of time to break even without a large number of additional patients (approximately 360 additional patients) and we decided not to persue this method
 - Another idea that was considered was using profitability from ComboMed to pay for the automated dispensing machine. We decided not to waste profit on a methods that wouldn't stand on it's own.
- In the ComboMed method, there was minimal upfront cost and minimal monthly fees that would work with the existing number of patients. ComboMed would cover its monthly fees within the first 3-4 days of each month. ComboMed also requires no additional fixed assets and can be quit at any time with minimal risk.