



# **Colombia Memorial Hospital - Breakeven Analysis**

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## Presentation Outline

- ◎ Case Issue
- ◎ Background
- ◎ Outcome #1
- ◎ Outcome #2
- ◎ Outcome #3
- ◎ Recommended Solution



# Case Issue

What breakeven analysis does.

# Case issue & problems to be resolved

- Colombia is facing financial instability and wants to determine if:
  - Cease operation
  - Clinic can continue to operate as is
  - It's necessary to adopt new marketing strategies
    - i.e. OHS



## Breakeven Analysis will help determine the best course of action

- ◎ It will determine:
  - projected profitability for 1 year at its current level
  - additional visits needed per day if no marketing strategy is adopted
  - additional visits per day if marketing strategy is accepted



# Background

- Columbia Memorial Hospital, owned by Health Services of America, is a for-profit hospital
- Holds 300 beds and consists of 160 staff members
- Historically, highly profitable due to exceptional facilities, patient physician quality of care, and overall reputation
- Hospital includes an emergency room department and walk in clinic
- There are three walk in clinics in the area, none of which are highly profitable
- On average, the Columbia Memorial Hospital walk in clinic sees 45 patients a day, with the ability to see 85
- Should the hospital close down the walk in clinic?





# Outcome #1

Close clinic



# Loss \$ 37,500

Lease contract cancellation  
penalty of three months' rent



## P&L Statement for outcome 1

Total Revenue	\$54,888.
Total VC	\$3.50
Total CM	\$54,884.50
FC + OH	\$58,059
Profit	<b>-\$3,174.50</b>

$-\$3,174.50 + (-\$37,500) = \text{Total loss of } -\$40,674.50$





# Outcome #2

Continue Operating - As Is

1,350

\$54,888

\$13,542

18,000

3,215

602

843

0

1,077

139

105

12,500

8,038

\$58,059

58061

(\$ 3,173)

-5.8%

## Projected Profitability – As Is

- Keeping the walk-in facility open would result in a net profit loss of \$3,173 and a gross margin of -5.8%, if the same patient volume rate continued at 1,350 monthly visits. In addition, this would result in \$38,076 in loss for the year.

Month	Net Revenue	Total Operating Cost	Net Profit
1	54888	58061	-3173
2	109776	116122	-6346
3	164664	174183	-9519
4	219552	232244	-12692
5	274440	290305	-15865
6	329328	348366	-19038
7	384216	406427	-22211
8	439104	464488	-25384
9	493992	522549	-28557
10	548880	580610	-31730
11	603768	638671	-34903
12	658656	696732	-38076



## Visits Per Day Breakeven – As Is

$$P = TR - TC$$

$$\textcircled{C} P = TR - TVC - FC - OH$$

- Rev. Per visit:  $(\$54,888 \times 12 \text{ months}) = \$658,656$   
 $(1,350 \text{ visits} \times 12 \text{ months}) = 16,200$   
Revenue per visit = **\$40.66**
- VC per visit: \$3.50 given by exhibit 6.2
- **FC + OH: \$58,059**

$$CM = R - VC$$

$$\$40.66 - \$3.50 = \$37.16$$



Jan/Feb 2010

1,350

\$54,888

\$13,542

18,000

3,215

602

843

0

1,077

139

105

12,500

8,038

\$58,059

(\$ 3,173)

-5.8%

## Breakeven Calculation- As is

- ◎  $\$3,173 = \$40.66V - \$3.50V - \$58,059$
- ◎  $\$61,232 = \$37.16V$
- ◎  $V=1,648$  visit/ month
- ◎  $(1,648-1,350)=298$  additional visits per month / 30 days

**10 additional visits per day**



## Breakeven Calculation- with Semifixed cost

- ◎  $\$3,173 = \$40.66V - \$3.50V - (\$58,059 + \$14,000)$
- ◎  $\$3,173 = 37.16V - \$72,059$
- ◎  $\$75,232 = \$37.16V$
- ◎  $V = 2,025$  visits per month
- ◎  $(2,025 - 1,350) = 675$  additional visits per month / 30 days

**23 additional visits per day**



## Breakeven Calculation- recalculating with the new semifixed cost

- ◎  $\$3,173 = \$40.66V - \$3.50V - (\$58,059 + \$16,000)$
- ◎  $\$3,173 = \$37.16V - \$74,059$
- ◎  $\$77,232 = \$37.16V$
- ◎  $V = 2,078$  visits per month
- ◎  $(2,078 - 1,350) = 728$  additional visits per month

**24 additional visits per day**





# Outcome #3

Continue Operating – Expanding  
Marketing Program



## Visits per day to breakeven - with marketing program

- ◎  $\$3,173 = \$40.66V - \$3.50V - (\$58,059 + \$7,000)$
- ◎  $\$3,173 = \$37.16V - \$65,059$
- ◎  $\$68,232 = \$37.16V$
- ◎  $V = 1,836 / \text{month}$ 
  - $(1,836 - 1,350) = 486$  additional visit per month
  - 16/ day



## Visits per day to breakeven - with marketing program & semifixed costs

◎  $\$3,173 = \$40.66V - \$3.50V - (\$58,059 + 7,000 + 15,000)$

◎  $\$3,173 = \$33.66V - \$80,059$

◎  $\$83,232 = \$37.16V$

◎  $V = 2,240 / \text{month}$

○  $(2,240 - 1,350) = 890$  additional visits per month

○ 30 additional visits/ day



## Visits per day to breakeven w/ marketing program & adjusted semifixed costs

◎  $\$3,173 = \$40.66V - \$3.50V - (\$58,059 + \$7,000 + \$16,000)$

◎  $\$3,173 = \$37.16V - \$81,059$

◎  $\$84,232 = \$37.16V$

◎  $V = 2,267 / \text{month}$

○  $(2,267 - 1,350) = 917$  additional visits per month

○ 31 additional visits/ day



## Visits per day to breakeven w/ marketing program- recalculating the new semifixed costs

◎  $\$3,173 = \$40.66V - \$3.50V - (\$58,059 + \$7,000 + \$27,000)$

◎  $\$3,173 = \$37.16V - \$92,059$

◎  $\$95,232 = \$37.16V$

◎  $V = 2,563 / \text{month}$

○  $(2,267 - 1,350) = 1,213$  additional visits per month

○ 40 additional visits/ day





# Recommended Outcome



## Comparing Outcomes

	<b>Outcome #1 Close Clinic</b>	<b>Outcome #2 Normal Operations</b>	<b>Outcome #3 Operation with Marketing</b>
Patients Needed to Breakeven	N/A	24	40

Net Profit/Loss

(37,500)



- ◎ Based on the calculated information outcome #2 would be easier to achieve a profit.
- ◎ If the organization continues to run as is, they will require less additional patients to become profitable
- ◎ If they implement the marketing strategies, it will force them to treat more patients a day to breakeven

