

Market Estimation and Demand

Name:

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Course Title:

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Date:

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Part I: Market Size Calculation

The market size for women's care services offered by the ECRH may be estimated by using research methods along with the Demographics Data and the U.S. Census Bureau.

Utilizing the data collected from the U.S. populace, women represent approximately 50.8% or 508,000 in the assumed city setting. If this demographic is further broken down, a "subset" of roughly 42% or 213,360 females from the child-bearing group makes up the category of the 15-44 age group. Based on the demographic, if obstetrical services are provided to women of this age group, the ECRH services would become the potential level of interest for the women's community of the assumed city.

According to the insights drawn from the case study, a significant number of around 72% of the women population from the East Chestnut community prefer to avail ECRH's healthcare services. When this percentage is applied to the subset of 213,360 women, a figure of 153,619 women is potentially the population that shows interest in obstetrical services of ECRH. It is a feasible estimate that if the merger achieves the 40% market share in the assumed city, it would cater to 61,448 women's obstetrical needs.

The merger is expected to generate a revenue of approximately \$153,620,000 from the obstetrical offerings based on the average charge of \$250 per service provided. This offsets the projected revenue collected from the provision of care services which is 70% of the revenue including direct medical expenses and administrative charges costs where the revenue for marketing and promotion is 5% of the projected revenue. Drawing on the projected revenue, the organization of ECRH is expected to earn \$15,362,000 as the net profit. In essence, drawing on

the demographic data and the U.S. Census Bureau as well as the market size and projected revenue of the ECRH, the local market share of women from the city is a total of around 72% requiring women's services.

Part II: Breakeven Analysis

After precisely describing the market size, interest group, care needs, and demographic of the women's community, the next central step is to create a pro forma income statement of ECRH in order to foresee potential financial consequences from the women's obstetrical offerings of the East Chestnut Regional Health system.

Analysis

- **Projected Revenue**

61,448 Patients x \$2,500 Average Charge per Service = \$153,620,000

- **Projected Costs**

Direct Medical Costs on the basis of 70% of revenue = \$107,534,000

Administrative Costs on the basis of 15% of revenue = \$23,043,000

Marketing and Promotion on the basis of 5% of revenue = \$7,681,000

- **Net Profit**

\$15,362,000

- **Breakeven Quantity Required**

(Fixed Costs / Revenue per Unit – Variable Cost per Unit)

Fixed Costs = \$100,000

Revenue per Unit = \$140 per 15-minute obstetrical facility visit

Variable Cost per Service Provided = \$250

= [$\$100,000 / (\$140 - \$250)$]

Breakeven Quantity Required = approximately 909 patient visits

Costs	
Fixed Costs	\$100,000
Variable Costs	Physician service per visit = \$100 Staff wages per visit = \$25 Supplies used = \$15 Variable costs = \$140
Revenue	\$140 per 15-minute obstetrical facility visit
Breakeven Quantity Required	$[\$100,000 / (\$140 - \$250)] = \sim 909$ patients

Discussion

The Breakeven analysis includes information about the anticipation of the projected revenue which is \$153,620,000 for the East Chestnut Regional Health System. It is derived from the services provided to the 61,448 patients which actually sums up to \$107,534,000, accounting for 70% of the projected revenue of ECRH's servicing at an average charge of \$250 per patient's visit to the obstetrical care center. Moreover, the administrative costs are estimated at around \$23,403,000, representing 15% of the revenue when the associated costs are broken down. The

marketing and promotion costs are estimated to be a total of \$7,681,000, consuming approximately 5% of the projected revenue for the East Chestnut Regional Health System's obstetrical servicing. Subsequently, the accumulative costs for the overhead, marketing, and servicing stand at approximately \$138,258,000 in terms of revenue for ECRH.

Considering this analysis and figures, the breakeven quantity required for women's care services would need to generate around a projected revenue of \$138,258,000 to cover all the associated costs of obstetrical services. The revenue is determined to be made without any loss incurred as well as any profit determined to reach the breakeven point. In terms of the number of patients, the organization would need to serve 909 patients at the average charge of \$250 per service provided to woman patients. This information is needed to determine what is required to breakeven, what service must be sold to cover all the costs, and other significant factors such as revenue aligning with fixed and variable costs, in order to make profits and accommodate 909 patients' visits necessary to breakeven.

Part III: Pro Forma Income Statement

The pro forma income statement is created for 1 year based on the breakeven analysis which provides a clear overview of anticipated costs, revenue, and profitability for the obstetrical care services at ECRH.

Pro Forma Income Statement (1 Year)

(Obstetrical Care Services)

Category	Amount (USD)	Explanation
Projected Sales Volume		61,448 patients served during

(Units)		the year
Revenue	\$153,620,000	Total projected revenue from 61,448 patients served
Less: Costs of goods/services sold		
- Direct Service Costs	\$107,534,000	70% of total revenue is derived from patient services including healthcare staff salaries, servicing costs, supplies, etc.
Gross Profit	\$46,086,000	Revenue minus the cost of goods/services sold
Less – Operating Costs		
- Administrative Costs	\$23,403,000	15% of total revenue
- Marketing and Promotion Costs	\$7,681,000	5% of total revenue
- Other Overhead Costs	\$7,640,000	Includes services and other overheads to reach \$138,258,000 total costs
Total Operating Costs	\$38,724,000	Total to reach the break-even point
Operating Income	\$7,362,000	Total revenue – total operating costs
Taxes (Assumed at 21%)	\$1,545,120	Assuming a 21% tax rate on

		operating income
Net Income	\$5,816,880	Final projected profit after covering all costs and taxes

- **Summary of Market Size Calculation**

In my assessment, I focused on ECRH's obstetrical care department within the women's services line as the specific service or product offered by the merger of ECRH to determine the relevant market size. Beginning with the assessment, I carefully analyzed the population demographic of the city where ECRH is providing its services with approximately 50.8% of the women populace according to the U.S. Census Bureau making up approximately 508,000 women in the area. Breaking down this demographic, 213,360 women from the child-bearing group make up around 42% of the 15-44 age group in obstetrical need. Through this analysis, a figure of roughly 153,619 females from the populace is potentially the population that showed interest in obstetrical services of ECRH. Based on my understanding and research, approximately 72% women of in the area from the 50.8% total U.S. women populace in this age group would fall into the category where they need obstetrical services of the ECRH, with 72,000 as the market size for the ECRH specialized obstetrical services.

- **Summary of Breakeven Analysis**

The total revenue is projected to be \$153,620,000 which is based on serving 61,448 patients at an average cost of \$250 per service provided. Based on the breakeven analysis I conducted, administrative costs are estimated to be \$23,403,000 which is 15% of the total revenue. Similarly, the marketing and promotion expenses are \$7,681,000 which accounts for

5% of revenue. In addition, the overhead costs include all other costs such as facilities, servicing, and any miscellaneous overhead which is required to operate the healthcare services including obstetrical services (Lougee & Marquardt, 2004). When these costs are combined with administrative and marketing expenses, they would become the total overhead sum of \$38,724,000. The operating income before taxes is \$7,362,000 after covering all the operating costs required to breakeven. Furthermore, assuming a corporate tax rate of 21% on the operating income would amount to approximately \$1,545,120. After accounting for taxes, the net profit for the year is projected to be \$5,816,880.

- **Projected Profit Summary**

The projected profit is estimated to be \$15,362,000 building on the information from the breakeven analysis, highlighting the key drivers of profitability, cost structure, covering revenue sources, and profit outcomes. The total projected revenue for the year is \$15,362,000 derived from 61,448 patients at an average rate of \$250 per service visit. This revenue is primarily driven by the high volume of patients visiting the obstetrical care center expanding the women's care service line of the ECRH. The cost of services provided such as direct patient care, healthcare supplies, and healthcare staff accounts for the amount \$107,534,000 for 70% of the total revenue which reflects the significant operational expenses required to provide high-quality obstetrical services to women of the city assumed for ECRH servicing. Moreover, the administrative costs of \$23,403,000, representing 15% of revenue, include management salaries, administrative support functions, and office expenses that keep the facility running efficiently. The breakeven point for the obstetrical care services ensures that the system covers all associated costs, serving 909 patients at an average charge of \$250 is the minimum threshold that is needed to breakeven. After covering all associated costs including direct and indirect ones, the net profit after the 21%

tax rate is projected to be \$15,362,000 which reflects the efficient management of both costs and revenue, leading to a financially stable and sustainable outcome.

Part IV: Marketing Plan Considerations

When it comes to planning marketing considerations, there are several variables that may impact the ERCH's marketing strategies. These strategies need to be considered, especially in the healthcare facility, where numerous internal and external factors or variables play an important part such as economic challenges, climate change, supply chain shortages, market competition, and HIPAA regulations or restrictions (Doi et al., 2017). For instance, the pandemic of Covid-19 has posed a significant economic challenge in the face of supply chain shortages across the global healthcare sector. Based on the location of the East Chestnut Regional Health System, it will be a fundamental consideration for the organization to conduct marketing research and analysis and develop as well as meet organizational goals.

Furthermore, it will also help the organization to stay within a determined budget plan for women's care services departments, and to stay relevant in the competitive market, in the women's services line specifically. Therefore, it is crucial to not only determine the addition of women's services line to the marketing plan consideration but also consider continuing the maintenance and improvement of existing services in the organization (Purcarea, 2019). By focusing on variables and factors necessary for the improvement and expansion of additional services provided to the patients by the ECRH, the organization can stay competitive in the market.

For the merger of ECRH and its location, the addition of a women's services line is a significant variable that adds to the effective improvement of the services ECRH provides to its

patients from the East Chestnut community and the neighboring counties, especially the women in obstetrical care needs. This addition of services provides the organization with an opportunity to thrive and gain a competitive edge in the market against its competitors, especially against Banford Medical Center (BMC). In the constantly evolving healthcare and women's services market, it is crucial for the organization to continue determining the target group and considering additional effective services based on the research of the target market.

This research-based data collected from the East Chestnut community and the city assumed can prove to be beneficial for the merger as it will help determine the organization's development and achieve both short-term and long-term healthcare as well as organizational goals. This data collection will allow the ECRH to establish different marketing approaches to attract as many potential clients as the organization can in order to increase the population of the ECRH system. Incorporation of advanced technological tools in the merger is another factor that requires serious consideration so that patients can be informed of changes in their appointment schedules, ad campaigns, and the changes in services, adding to how the organization can improve and expand. This consideration and incorporation of a marketing plan will ensure the overall survival and success of the ECRH in the ever-evolving healthcare market in the long run.

References

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