

Developing a Business Case

Capella University

Economics and Decision Making in Health Care

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Mobile health clinics offer a convenient service, often at no charge. In order to serve a population in our community that struggle to access health care due to lack of trust in the health care system, language and financial barriers. The mobile clinics is the unique way to reach out to our community. Parking at their neighborhood is important to establish trusting relationships and facilitate our business. With faster treatment, health care industry can save millions of dollars in this way this investment will continue to be reimburse from our hospital sot it continue to increase the patients' quality of life. That would show the value of the mobile health business.

Opportunities Associated with Mobile Health Business

Mobile clinics are often parked in community spaces such as shopping centers; or near the public libraries. The vehicle not just a setting to deliver health care services but also a social space. Cultural competent staff offer patient-centered care that focus on patient education and empowerment, stability and consistency of service delivery within communities. Each of these interventions can contribute in overcoming many obstacles such as mistrust and miscommunication between patients and providers, and disempowerment in minority communities (Walker, Martinez-Gómez, & Gonzalez, 2018, P.1).

There is a big need for programs that can provide screening to our community, particularly for minority communities. There is a consistent body of peer reviewed articles demonstrating that mobile clinics are successful at identifying high rates of chronic and infectious disease through screening. Some studies have found that mobile clinics facilitate earlier diagnosis of life-threatening diseases, thereby potentially prolonging life and improving quality of life. For example, one study showed that

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individuals found to be HIV positive through mobile clinics had higher CD4 counts than those screened in a clinic, indicating that infected patients were identified earlier and therefore could begin treatment earlier.

Another study found that women accessing prenatal care via a mobile clinic accessed services in a more timely manner than those who accessed care in a traditional clinic. Statistics indicates a lower rates of pre-term births and low-birth-weight infants for the pregnant women who use the mobile clinics.

The mobile clinic also provide prevention and screening services in underserved communities through community health workers, nutritionists and counselors. Many clients visit to monitor their health and receive health coaching and support. The hypertensive who visit the mobile clinic regularly experienced average reductions in systolic and diastolic blood pressure.

Over 2300 women was screened and 14 of them received diagnosis ranging from precancer to various stages of malignancy. 95% of these women returned for their next scheduled mammogram (Dineen, Orduña, Rastelli, Flores & Roggemann, 2020, P.395). Therefore, it is crystal clear that mobile clinic business is a lifesaving as well as cost saving opportunity. The education and screening services offered at the mobile clinic will reduce unnecessary visits to the emergency department.

Risks Associated with Mobile Health Business

Purchasing and maintaining a suitable vehicle could be costly. It is true that non-profit organizations will contribute but there is no guarantees that they will able to secure a steady source. In five year the maintenance costs will increase as the vehicles age.

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A study shows that there is a continuous financial concerns from issues such as vehicular problems due to maintenance issues, unexpected damages, and bad weather. Interrupted services due to shortage of funding could damage the relations established previously with the community. To maximize benefits and control cost, we should collaborate with community leaders to issue monthly checks for vehicle maintenance.

Treating time critical diagnosis will be an issue. For instance, the cost of stroke is terrible, unfortunately, this mobile clinic will not be able to offer a sooner treatments for stroke patient that could make a significant difference in the patients' quality of life due to the price tag of the CT angiography imaging as well as the scarcity of neurologists (Erich, 2016, P.27).

Costs-Benefits Analysis of Mobile Health Business

The cost of this projects is analyzed over 5 years period .The mobile units/buses can cost up to \$250,000(Polansky & Arsenault, 2016, P.41). Staffing for the mobile health clinic will include a nurse practitioner, 1 registered nurses, 1 licensed practical nurse, Community Health Worker, and a physician. Based on the national average recruitment incentives, staff salaries per year is predicted to be around: 1500.000 \$ for a full time physician, 90.000\$ for nurse practitioner, 45.000\$ for the RN and 30.00\$ for the LPN. Another significant expense of 200.000\$went into the routine maintenance and repair of the mobile unit itself along with gas and diesel. "The electronic medical record (EMR) system is costly even after the initial installation expense (Polansky & Arsenault, 2016, P.41).

The key to a successful mobile practice is a coverage area with a large population of long-term care and other medical facilities. Rates of preventable/avoidable ED visits

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are high among Medicaid and Commonwealth Care recipients, the uninsured, minorities, young and working-aged individuals, this is related to ongoing barriers to primary care services including waiting times, copayments, complexities of navigating the system and feelings of intimidation. By providing care that is affordable, mobile clinics can potentially help reduce healthcare costs. The return on investment is huge in avoided emergency department visits and return on investment based on quality life years saved. For instance, there is “an average return of \$1.32 and a community ROI of \$1.45 was estimated. A predictable benefits were \$445,125.00 and cost avoidance was \$263,853.01\$. A mobile pediatric asthma clinics operating in less densely populated regions is able to yield a positive ROI” (Orsak, Starnes & Ledlow, 2018, P.97).

Economic Cost and Benefits Analysis over Five Years

Due to potential increase in the patients’ number within the next five years, our company may need to invest in adding more mobile clinics to serve our community as well as hiring additional medical team. As per the cost benefits analysis, additional expenses will also include, insurance, mobile maintenance/gas, training staff, besides the average increase in salaries. The yearly growth rate of employee’s salary in the USA is expected to be about 3%, according to the Economic Policy Institute (2018). Using a value discount rate of 11%, the present value of the total costs over the five year period is expected to be about \$3,871,795.20 (see Appendix for more information on cost benefit analysis over a 5 years period).

It is presumed that the mobile clinic will serve 75 people daily, and charge about \$30 per visit. Therefore, \$810.000 is the estimated earned benefit within the first year period. Based on the 11 % present value discount rate over 5 year period, the present

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value of total benefits is estimated at \$ 32,749,914.6 (see Appendix for more information on cost benefit analysis over a 5 years period).

The net benefit over 5 year period is the difference between the present values of the total cost that is estimated at \$180,129.53. Therefore, investing in the mobile clinic will be beneficial and valuable to our company, internet access could be a challenge in certain locations,

Although the net benefit sounds promising. It is important to note that there are many factors that can impact the cost benefit analysis over a five years period Appendix. For instance, the clinic cannot operate for days if the vehicle breakdowns, which means losing money and patients. Some undocumented and uninsured patients cannot afford the fee visit to cover the cost of medical consultation.

To reduce costs, it important to explore the volunteer market especially among the community. Training and integrating community volunteers into the primary care setting, will add human connections to deepen the primary care team's understanding of their patients (Gaber, Oliver, Valaitis, Cleghorn, Lamarche, Avilla, Parascandalo, Price & Dolovich, 2020, P.13).

There are many other benefits besides increasing revenue. According to Essington, and Hertelendy (2016), an unhealthy community that struggles with many health challenges and chronic diseases such as obesity, diabetes and heart disease, can contribute to the spread of many infectious diseases. These chronic diseases tend to reduce life expectancy and also have a dramatic effect on the economy (p. 454). Each of us has his/her own role to stand for justice. The impact of social justice affects all of us. A lack of community health can lead to a range of

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complex diseases that aren't easy to correct. Therefore, the work of the mobile health clinics is going to impact positively the entire community step by step in order to mitigate health disparity.

Conclusion

Mobile clinics will improve health within underserved population in our communities through education and screening services. Avoiding unnecessary visits to the emergency department will save the hospital millions. The mobile clinic business is an underutilized resource that can help reduce disparities, improve health quality, and saving health care costs.

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