ESCUELA TÉCNICA SUPERIOR DE INGENIERÍA (ICAI)

INGENIERO INDUSTRIAL

MOBILE DOCTORS

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Madrid
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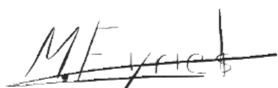

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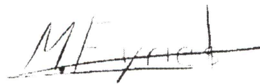

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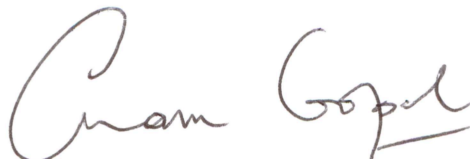

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Resumen

En este documento se evalúa la viabilidad de la propuesta de negocio de Mobile Doctors. Mobile Doctors (MD) tiene como objetivo proporcionar servicios básicos de salud a las residencias de la tercera edad, tales como hogares de ancianos y centros de vida asistida. Para ello se empleará camiones especialmente diseñados y equipados con el personal médico y los equipos necesarios para proporcionar los servicios de los residentes en estas instalaciones requieren.

La empresa tiene la intención de aprovecharse del crecimiento de la población estadounidense en la tercera edad, que crece actualmente tres veces más rápido que la población no anciana, y del consecuente crecimiento de la industria del cuidado de los ancianos, que ha experimentado un crecimiento estable a un 4.5 % durante los últimos 5 años.

El atractivo de Mobile Doctors reside en el aumento de la comodidad que ofrece el proporcionar atención médica en la puerta del paciente, el ahorro de costes asociados con la una mayor utilización de los médicos y la reducción en los costos de transporte. Además, Mobile Doctors proporcionará el valor añadido de ofrecer plena accesibilidad a los resultados médicos y de diagnóstico a través de su totalmente informatizada y almacenada en la nube base de datos. Para proporcionar estos servicios el personal Mobile Doctors estará compuesto por personal médico, un equipo de ventas, un equipo gestión y un centro de llamadas para atender todas las dudas de los clientes.

La viabilidad de la empresa será analizada mediante el uso del *Business Model Canvas*. El modelo de negocio de Mobile Doctors se caracteriza por el considerable capital inicial necesario para iniciar el negocio y los altos ingresos después de tras años de funcionamiento la empresa va a conseguir. En este sentido, la empresa se caracteriza por la enorme importancia que la utilización del personal tiene en la rentabilidad del negocio. Este aspecto es debido fundamentalmente a los altos salarios que los profesionales en la profesión médica requieren.

El cliente objetivo de Mobile Doctors serán los ancianos que residen en hogares de ancianos y centros de vida asistida. Para cubrir las necesidades de este grupo, la empresa se apoyara en la utilización de los tres tipos de camiones diferentes que varían en la cantidad de equipos y personal portado.

La propuesta de valor de Mobile Doctors no sólo será de interés para sus clientes objetivos, sino también para las compañías que ya operan en la industria. En este sentido, la capacidad de Mobile Doctors para reducir costes, aumentar el acceso a la información y la capacidad para

remitir pacientes a otras instituciones hacen de la empresa un potencial aliado estratégico para compañías de seguros, hospitales, clínicas privadas y hasta el gobierno.

Debido al elevado número de residencias de tercera edad y el grado de cobertura de la asistencia sanitaria, California será la región en la que Mobile Doctors comenzará sus operaciones. Mobile Doctors comenzará a dar servicio con un solo camión que servirá como modelo de pruebas, dando a la compañía valiosa información sobre cómo adaptar las futuras adiciones a las necesidades de los clientes.

Para diseñar las características y configuración del negocio, el mercado que en el que operará en ha sido analizado, haciendo especial hincapié en las tendencias actuales y las proyecciones de crecimiento. También se han estudiado las necesidades del consumidor y criterios de compra para determinar la oferta de servicios. Además de esto un preliminar análisis regional ha sido llevado a cabo para determinar tanto la estrategia de entrada en el mercado como la configuración física de cada camión.

Por último, un modelo financiero preliminar junto con un modelo de stress basado en tres escenarios, se ha creado para evaluar los flujos de caja y la rentabilidad de la empresa. A partir de estos análisis la cantidad de capital inicial se ha estimado, así como el período de pago.

Abstract

This document evaluates the feasibility of Mobile Doctors business proposal. Mobile Doctors (MD) aims to provide basic health services to elderly care facilities such as nursing homes and assisted living facilities. To do so it will employ specially designed trucks equipped with the necessary medical staff and equipment to provide the services residents at these facilities require.

The business intends to make profit from the growth of the elder segment of the population, currently growing three times as fast as the nonelderly segment, and the subsequent growth in the long term care industry, that has been steadily growing at 4.5% over the last 5 years.

Mobile Doctors' attractiveness resides in the increased comfort it offers by providing healthcare at the patient's doorstep, the cost savings associated with a higher doctor utilization and reduced transportation costs. On top of this Mobile Doctors will provide the added value of offering full accessibility to medical results and diagnosis through its fully computerized and cloud-stored data base. To provide these services Mobile Doctors workforce will be composed of medical staff, a sales force, management and a call center to attend all customer inquiries.

The feasibility of the business will be analyzed using the Business Model Canvas. Mobile Doctors business model is characterized by the considerable initial capital needed to start the business and the high revenues it will realize after only a few years of operation. Moreover, the business will be characterized by the importance that staff utilization has on profitability due to the high salaries that professionals in the healthcare profession require.

Mobile Doctors target market will be the elders that reside in assisted are facilities and nursing home. To cover the needs of this group the company will employ the use of three different truck layouts that vary in the amount of equipment and staff they carry.

Mobile Doctors’ value proposal will not only be of interest for its target customers but also for players already operating in the industry. In this sense, Mobile Doctors' capacity to reduce costs, increase access to information and capacity to refer patients to other institutions makes it of strategic interest for insurance companies, hospitals, private clinics and even the government.

Due to the high amount of long term care facilities and the degree of healthcare coverage, California will be the region in which Mobile Doctors will start its operations. Mobile Doctors will begin operations with just one truck that will serve as a demo giving the company enough information of how to tailor the future additions to the clients’ needs.

To design the characteristics and configuration of the business the market it operates in has been analyzed, placing a special emphasis on current trends and growth projections. Consumer needs and purchasing criteria have also been studied to determine the exact service offering.

Lastly, a preliminary financial model and a three-scenario stress test on it have been created to analyze the cash flows and the profitability of the business. From these analyses the amount of initial capital has been estimated as well as the payout period.

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1. INTRODUCTION

Today, as society ages in developed countries, long term care solutions such as nursing and elderly care homes are growing in popularity. People in these places require a considerable amount of medical services due to their age. Having to arrange transportation every time they have a doctor's appointment becomes a nuisance, especially for people with reduced mobility.

Being able to provide basic medical services for such people at their doorstep would be both beneficial for them and for the doctors who could have a higher utilization of their time. However a single retirement home would not be enough to fill a doctor´s time given that not everyone in the building will require the same service.

Matching the elderly needs with the doctors' is by Mobile Doctors (MD) aims to do by using trucks specially designed for the type of services commonly demanded by residents at these facilities.

In this document the structure for such a business will evaluated and developed. In order to perform an exhaustive analysis of the viability of the business the Business Model Canvas will be used to thoroughly study all the factors and peculiarities of the business. Moreover, the different competitive aspects of the business will be refined thanks to the discussion and understanding needed in the creation of the Business Model Canvas. The canvas can be found on the next page.

Key Partners

- Strategic partners
  - Hospitals
  - Private clinics
  - Insurance companies
  - Health consultants
- Buyer
  - Facility management
- Staff support
  - Private clinics
  - Hospitals
  - Universities
- Drug suppliers

Key Activities

- Preventive care
  - Vaccines
  - Blood tests
- Follow-ups
- Consultations
- Dental
- Interventions

Key Resources

- Customized trucks
  - Standard
  - Urban
  - Plus
- Medical Equipment
- IT network

Value Proposition

- Health services
- Comfort
  - Transportation
  - Appointments
  - One-stop service
- Cost
- Connectivity
  - Client
  - Relatives

Customer Relationships

- Management driven
  - Contract negotiation
- Direct Customer
  - Personalized care
  - Assigned medical staff
- CRM
  - Focus on relatives
  - Cloud-stored database
  - Periodic follow-ups

Channels

- Pull-push system
- Management focus
- Cold-calls
- Trade fairs
- Industry magazines
- Regional events

Customer Segments

- Long term care industry
  - Assisted living facilities residents
  - Nursing homes residents
- Regions of interest
  - California
  - Florida
  - Texas
  - Illinois

Cost Structure

- Most expensive cost: Staff
  - Junior Doctors
  - Internships
  - High reliance on nurses and
- Licenses and permits
  - Outsourced
- Legal coverage
  - Outsourced at beginning
- Assets
  - Truck
  - Medical equipment (buy pre-owned)

Revenue Streams

- Monthly fare
- Per service payment
  - Procedures
  - Follow ups
  - Consultations
  - Diagnosis
- Prescriptions
- Referrals
- Interventions

2. VALUE PROPOSITIONS

Mobile Doctors (MD) aims to provide basic health services to elderly care facilities such as nursing homes and assisted living facilities. The business intends to make profit from the growth trends seen in both the elderly care industry and the elder segment of the population.

2.1.VISION

To change the way health services are provided to old people living in nursing/retirement homes and marginalized areas.

2.2.MISSION

Mobile Doctors goal is to alleviate the pain of having to go to a hospital/doctor's office for treatments that could be performed at much more convenient locations such as the patient's doorstep. MD offers the elders the opportunity to receive a variety of high quality services while avoiding waiting for an appointment.

Mobile Doctors will require all of its employees to behave ethically and to have the client's interest as their first priority. Our clients are everything to us and we must ensure that their comfort is our priority. Only through client satisfaction will Mobile Doctors be able to build a brand name and thus expand its operations.

2.3.KEYS TO SUCCESS

Securing a loyal and solid initial base of clients to demonstrate the benefits of MD services will be the determinant factor for the success of the business. Word of mouth will be the most important marketing channel and the initial means to build a brand name. For this reason, Mobile Doctors will establish a firm culture based on having the clients' interests as the first priority and focusing on comfort and customization.

2.4.SERVICE DIFERENTIATION

To achieve the aforementioned increased comfort Mobile Doctors will make use of its service differentiators. Mobile Doctors value proposal is characterized by the increased comfort that receiving healthcare at your doorstep brings and the decrease in costs that avoiding transportation causes. Mobile Doctors will alleviate its customers from the pain of having to arrange doctor appointments and the inconvenient waiting times that these procedures normally carry. This will not only benefit the elder community but also the management of the long term care facilities as they will no longer have to be on top of this procedures.

Moreover, Mobile Doctors will be characterized by the high degree of customization tailored to cover its clients' needs. In this sense, Mobile Doctors will design its trucks depending on the specific needs and characteristics of each region. To do so the company will not make use of the knowledge gathered with the experience but also of the health records published by all local authorities.

On top of this, Mobile Doctors will offer the unique feature of offering a full connectivity service. Mobile Doctors will offer its patients and relatives the option of having continuous access to a cloud-stored database in which they can find their health records as well as the results from every test they have taken. Moreover, Mobile Doctors' fully connected system will keep track of each customer's health status reminding them when their next check-up is due and referring them to the appropriate specialists when necessary. With Mobile Doctors patients will no longer have to go back to the doctor's office for their tests results and diagnosis and by no means will have to remember to take any documents with them if they want to visit other doctors as MD will send them electronically.

In conclusion, Mobile Doctors value proposal could be defined by four fundamental pillars: customization, cost, comfort and connectivity. The figure below shows MD's value proposal.

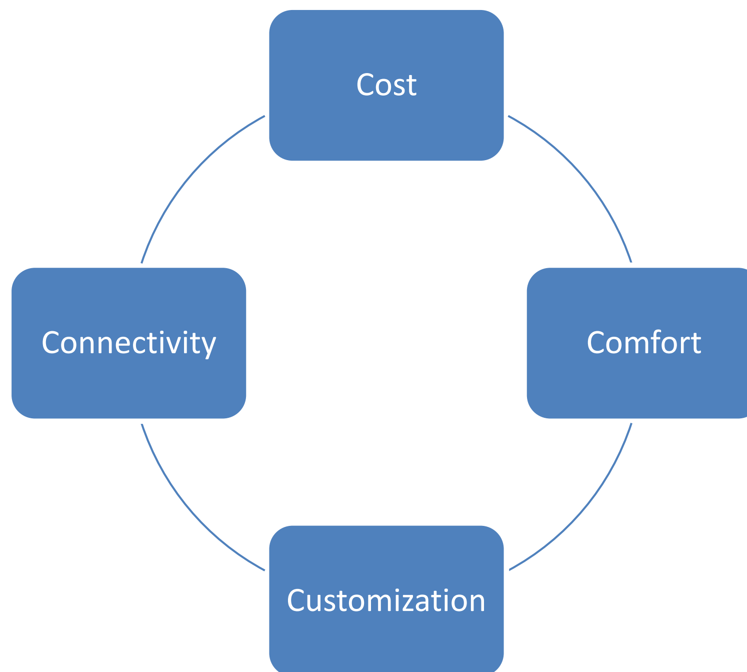

Figure 1. Mobile Doctors Value Proposal

2.5.BARRIERS TO ENTRY

The principal barrier will be the licenses and permits required to operate in the health care industry. In this regard, companies with long experience in the industry would require less time to set up a business like Mobile Doctors. However, since Mobile Doctors will be the first movers to the industry they will enjoy an approximately 3 month time gap between when a competitor decides to take action and when it gets the appropriate licenses and permits. This aspect will give MD a wide window of time to secure long term contracts when there is a threat of a competitor entering the business in a certain region.

Furthermore, equipping the trucks with the necessary devices and information technology can be challenging as well. While there exists various truck customization companies, some of whom have already built mobile health clinics, finding the right mix of equipment that will provide both utility and comfort will only be achieved with experience.

On top of this, the amount of connectivity options that MD will give its clients is a characteristic most major health service companies will not be able to provide due to their size. Most Hospitals still use paper forms to record client information, a practice that not only increases bureaucracy complexity but also decreases efficiency. In order to change their current data management systems big corporations need considerable investments in IT services and in most cases lengthy transition times. In this sense, MD's reduced scale will allow it to provide its users with an interface where they can have real time access to all their medical information and diagnoses. This information will be later used when referring clients to partner institutions and thus will be an added value in an industry that is struggling to adapt to the new data handling trends.

2.6.SERVICE OFFERING

In order to layout the list of services that Mobile Doctors' will offer the current industry trends were studied. In this sense, an analysis of the existing substitutes of Mobile Doctors' services was carried out to discover which are the most demanded and frequent services amongst MD's target customer. The providers of such services are hospitals and independent doctors' offices.

2.6.1. HOSPITALS

Hospital visits have been increasing steadily over the last decade reaching 126 million visits to hospital outpatient departments and 136 million to hospital emergency departments in 2011 (Health, United States, 2014). Out of these visits, the 65 years and older segment represented 18% and 15% of the total number, respectively (Health, United States, 2014).

In analyzing the possible substitutes for the company, hospital inpatient departments will not be considered since the services provided in such departments are tailored for patients who require intense monitoring and overnight stays. Moreover, despite the fact that over 2% of the visits to hospital emergency departments do not need urgent medical assistance making them a possible source of future business (National Hospital Ambulatory Medical Care Survey, 2011), visits to emergency departments will not be considered, as it is believed that these patients will continue to go to hospitals driven by time and psychological factors. In this sense, visits to hospital outpatients departments will be considered the primary source of potential customers. Figure 2 shows the number of visits, in millions, to outpatient hospital departments by year.

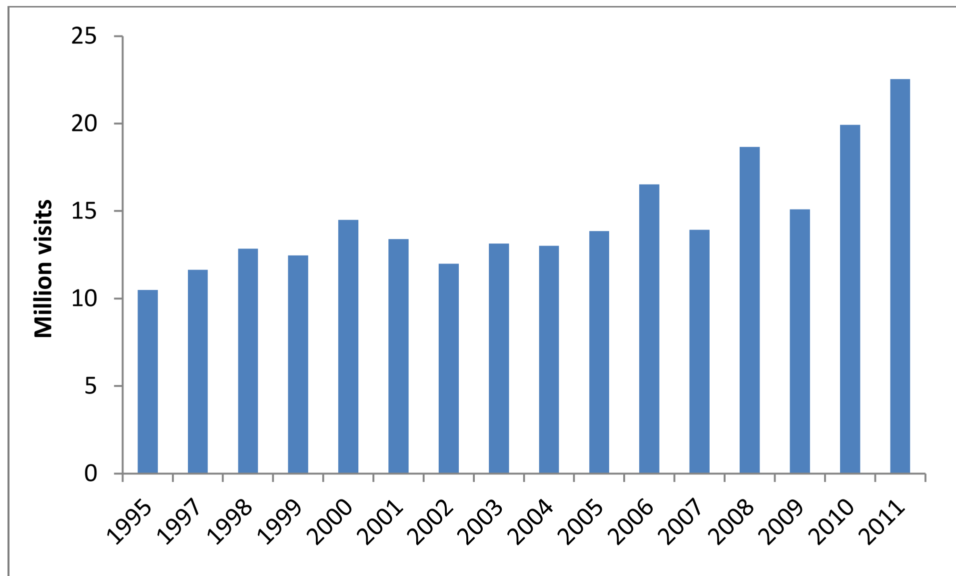

Figure 2.Visits to Hospital Outpatient Departments by People 65 Years and Older(Health, United States, 2014)

The different services offered by hospital outpatient departments need to be analyzed to determine which ones could be offered by the proposed business initiative. Such services have a common denominator: they must not require a specialist physician to carry them out or highly specialized and bulky equipment.

We could classify the potential services onto dental care, drug prescription and preventive care (screenings, tests, vaccinations, mammograms, x-rays, etc).

Preventive care, whether in a hospital as an outpatient or in private doctors' offices, constitutes one of the main sources of health expense for all demographics. Preventive care accounted for ~20% of the total reasons for hospital visits in 2008-2010 (National Hospital Medical Care Survey). For the 65 years and older segment of the population, these preventive care visits constitute around 10% of their total hospital visits (National Hospital Ambulatory Medical Care Survey, 2011), amounting for ~31% of their total expenses in 2011 (Household Component of the Medical Expenditure Panel Survey).

Dentist visits, on the other hand, represent a high percentage of hospital outpatient visits with 54% of the elders, with private health, having visited a dentist within the past 6 months. This figure is slightly lower, at 41%, for those who had only Medicare and 25% for those who had Medicare and Medicaid (National Health Interview Survey, 2012).

Lastly, prescribed medicines, amounting for 21.5% of total elders health expenses in 2011 (Figure 3) could definitely be one of the services offered by the proposed business proposal.

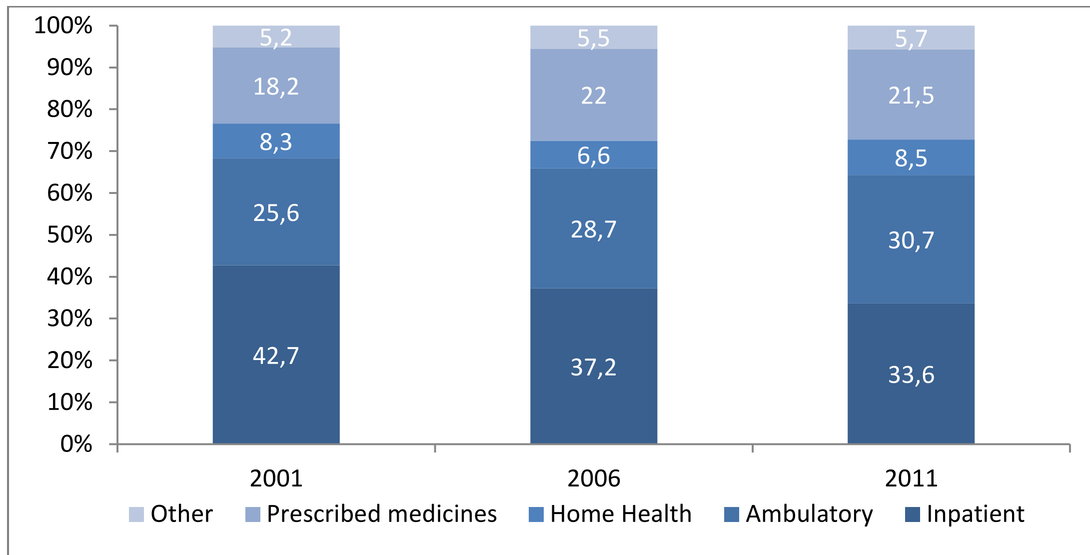

Figure 3.Breakdown Health Expenses for Elders (Trends in Health Care Expenditures for the Elderly, 2011)

2.6.3. PRIVATE CLINICS

Given the private nature of this business not much information is publicly available. However a few statistics were found on the Center for Diesease Control and Prevention database.

On average US citizens of 65 years and over make approximately 6 visits to a physician office per year (Table 1). This number increases to 6.7 for the citizens of 75 years and older, most of which fall under MD's segment of interst. This relatively high number of visits per year is an attractive number for MD as its objective is to take over as many of these visits as possible. While this data was not exclusive to long term care facility residents it is useful in getting an estimate of the size of the health care needs of elder people.

Table 1.Office Visits by Patient Age and Sex (National Ambulatory Medical Care Survey)

Patient age and sex	Number of visits in thousands (standard error in thousands)		Percent distribution (standard error of percent)		Number of visits per 100 persons per year[1] (standard error of rate)	
All visits	928,630	(13,217)	100.0	…	300.8	(4.3)
Age						
Under 15 years	147,387	(8,108)	15.9	(0.8)	241.2	(13.3)
Under 1 year	27,919	(1,969)	3.0	(0.2)	708.4	(50.0)
1-4 years	46,891	(2,988)	5.0	(0.3)	292.1	(18.6)
5-14 years	72,578	(3,795)	7.8	(0.4)	176.6	(9.2)
15-24 years	71,451	(2,431)	7.7	(0.2)	166.3	(5.7)
25-44 years	186,852	(5,112)	20.1	(0.5)	231.5	(6.3)
45-64 years	275,307	(5,938)	29.6	(0.5)	335.5	(7.2)
65 years and over	247,634	(6,022)	26.7	(0.5)	591.7	(14.4)
65-74 years	126,436	(3,078)	13.6	(0.3)	532.2	(13.0)
75 years and over	121,197	(3,472)	13.1	(0.3)	669.9	(19.2)
Sex and age						
Female	540,221	(8,771)	58.2	(0.5)	342.0	(5.6)
Under 15 years	69,656	(4,034)	7.5	(0.4)	233.1	(13.5)
15-24 years	45,040	(1,862)	4.9	(0.2)	211.5	(8.7)
25-44 years	125,650	(4,362)	13.5	(0.4)	306.1	(10.6)
45-64 years	158,469	(3,842)	17.1	(0.3)	374.6	(9.1)
65-74 years	70,443	(1,880)	7.6	(0.2)	556.0	(14.8)
75 years and over	70,963	(2,260)	7.6	(0.2)	659.6	(21.0)
Male	388,409	(7,358)	41.8	(0.5)	257.7	(4.9)
Under 15 years	77,731	(4,324)	8.4	(0.4)	249.0	(13.9)
15-24 years	26,411	(1,108)	2.8	(0.1)	121.8	(5.1)
25-44 years	61,202	(2,154)	6.6	(0.2)	154.3	(5.4)
45-64 years	116,838	(3,247)	12.6	(0.3)	293.8	(8.2)
65-74 years	55,993	(1,717)	6.0	(0.2)	505.0	(15.5)
75 years and over	50,234	(1,648)	5.4	(0.2)	685.1	(22.5)

...Category not applicable....Category not applicable.
[1]Visit rates are based on the July 1, 2012 set of estimates of the civilian noninstitutional population of the United States as developed by the Population Division, U.S. Census Bureau.
NOTE: Numbers may not add to totals because of rounding.
SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

Analyzing the number of visits to physician offices revealed an interesting factor that will have a great impact on MD's business strategy. While the nation's average number of visits to physician offices for people 65 years and older was 6 that number greatly varies across states with Connecticut having the greatest number at 10.25 and Ohio the lowest at 3.21. The statistics for each state can be observed below in Table 2.

Table 2.Number of Office Visits per Age and State (National Ambulatory Medical Care Survey)

Selected states	Patient age: Under 18 years		18-64 years		65 years and over		Patient sex: Female		Male	
All visits	232.4	(11.8)	263.9	(5.2)	591.7	(14.4)	342.0	(5.6)	257.7	(4.9)
State										
Alabama	238.7	(50.8)	289.2	(27.9)	598.6	(80.8)	371.4	(31.5)	267.8	(25.6)
Arizona	203.4	(51.9)	243.1	(35.8)	572.1	(82.8)	324.6	(39.7)	238.1	(25.3)
Arkansas	265.6	(55.2)	186.4	(18.3)	472.6	(56.5)	266.2	(18.7)	228.8	(22.4)
California	*204.6	(62.2)	264.0	(24.7)	662.2	(85.4)	333.7	(23.8)	259.8	(27.5)
Colorado	253.3	(44.3)	216.3	(23.8)	706.0	(102.9)	321.5	(34.3)	243.6	(22.3)
Connecticut	287.0	(60.2)	449.7	(52.5)	1025.7	(139.6)	586.4	(64.4)	401.0	(44.3)
Florida	217.3	(59.3)	298.2	(33.0)	789.4	(107.6)	429.0	(39.9)	307.8	(30.3)
Georgia	192.1	(45.3)	283.3	(37.6)	751.5	(102.4)	348.4	(35.4)	275.9	(37.3)
Illinois	297.3	(66.4)	254.8	(30.6)	516.5	(88.0)	324.4	(29.0)	271.8	(32.2)
Indiana	230.8	(55.8)	241.0	(22.1)	604.6	(69.4)	324.8	(25.7)	247.0	(21.1)
Iowa	216.9	(40.8)	205.2	(26.1)	422.3	(41.0)	261.1	(27.2)	218.4	(22.2)
Kansas	175.8	(51.0)	229.3	(26.6)	583.7	(76.9)	304.6	(32.9)	219.7	(23.3)
Kentucky	295.8	(73.5)	253.8	(32.3)	583.2	(86.6)	353.2	(35.7)	263.1	(31.3)
Louisiana	300.8	(80.3)	283.1	(31.2)	578.0	(71.7)	373.4	(37.1)	273.5	(31.3)
Maryland	*298.7	(98.7)	334.4	(66.6)	718.5	(168.4)	418.9	(64.1)	327.9	(56.6)
Massachusetts	277.9	(62.2)	274.2	(44.6)	551.5	(87.0)	347.4	(46.3)	278.0	(32.9)
Michigan	*177.5	(55.2)	185.4	(35.1)	421.0	(74.6)	234.0	(35.1)	200.0	(32.9)
Minnesota	*331.3	(113.2)	228.5	(25.2)	429.2	(71.0)	296.5	(30.6)	262.3	(35.8)
Mississippi	137.1	(35.4)	233.4	(25.4)	506.3	(64.7)	296.0	(28.9)	190.4	(20.3)
Missouri	146.3	(30.7)	145.1	(19.2)	295.5	(50.3)	183.6	(21.9)	149.3	(17.9)
New Jersey	226.2	(55.4)	390.9	(49.6)	904.8	(128.7)	480.0	(54.5)	364.4	(46.1)
New York	317.5	(81.4)	286.5	(34.6)	528.4	(83.0)	353.9	(40.1)	297.4	(36.7)
North Carolina	262.5	(57.8)	166.0	(24.6)	444.0	(91.3)	255.2	(32.3)	197.1	(24.5)
Ohio	*238.8	(71.9)	228.7	(38.4)	321.2	(48.3)	281.2	(37.7)	205.5	(28.3)
Oklahoma	*189.1	(64.5)	269.7	(23.5)	568.3	(74.9)	351.0	(34.0)	228.2	(22.1)
Oregon	172.9	(48.7)	256.7	(31.4)	668.3	(104.5)	357.9	(37.9)	238.4	(32.9)
Pennsylvania	251.8	(63.7)	215.4	(28.6)	444.6	(68.0)	274.6	(29.2)	242.8	(29.0)
South Carolina	*134.1	(45.7)	201.9	(24.7)	507.5	(65.0)	265.8	(28.2)	193.2	(21.9)
Tennessee	247.6	(51.9)	381.8	(46.0)	718.6	(108.3)	439.9	(44.7)	352.3	(44.0)
Texas	330.0	(82.1)	280.3	(26.8)	704.8	(82.4)	387.8	(31.1)	289.9	(28.3)
Utah	228.9	(40.8)	287.6	(25.2)	684.2	(70.2)	354.7	(26.4)	258.8	(22.1)
Virginia	268.0	(72.9)	254.3	(33.0)	673.0	(115.8)	347.3	(40.5)	274.0	(35.5)
Washington	*108.8	(37.4)	205.1	(24.2)	487.7	(67.6)	250.7	(25.1)	188.0	(22.7)
Wisconsin	*184.1	(56.5)	258.3	(28.1)	473.1	(56.0)	342.2	(33.0)	198.8	(22.2)

*Figure does not meet standards of reliability or precision
[1]Visit rates are based on the July 1, 2012 set of estimates of the civilian noninstitutionalized population of the United States as developed by the Population Division, U.S. Census Bureau.
NOTE: Numbers do not add to total because estimates are only available for 34 states.
SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

Furthermore, it was found that for the segment of interest, 14% of the physician visits were related to preventive care, 8% for post-operative reasons and 42% for chronic problem routines, all of which are services that MC believes will be able to provide at its trucks (CDC, 2012). On top of these, 80% of visits to physician offices admitted having one or more chronic conditions and 20% having two or more. This numbers are of great importance to determine the amount of services/procedures that each client would need on average.

Among the most common chronic conditions that the segment of interest have are: hypertension (~50%), Hyperlipidemia (~28%), Arthritis (~22%), Diabetes (~20%) and Cancer (~12%) (CDC, 2012).

2.6.4. HEALTH CARE MARKET CONCLUSIONS

Whether is to hospitals or to physician offices the segment of the population being studied makes a considerable amount of health visits. With over 50% of the population of 65 years and over having more than 4 visits to a doctor per year (Health, United States, 2014) and over 20% having more than 10 visits Mobile Doctors believes that there is a substantial market for the services it intends to provide. The table below shows the number of health care visits per age and year.

Table 3.Number of Health Care Visits (National Ambulatory Medical Care Survey)

Characteristic	Number of health care visits[1]											
	None			1–3 visits			4–9 visits			10 or more visits		
	1997	2010	2013	1997	2010	2013	1997	2010	2013	1997	2010	2013
	Percent distribution											
Total, age-adjusted[2,3]	16.5	15.6	16.1	46.2	45.4	47.6	23.6	25.8	24.0	13.7	13.2	12.3
Total, crude[2]	16.5	15.4	15.8	46.5	45.2	47.0	23.5	26.0	24.5	13.5	13.5	12.7
Age												
Under 18 years	11.8	8.1	8.2	54.1	55.6	59.7	25.2	28.2	25.1	8.9	8.2	7.1
Under 6 years	5.0	3.7	4.7	44.9	48.9	49.6	37.0	36.8	37.1	13.0	10.6	8.6
6–17 years	15.3	10.4	9.9	58.7	59.1	64.5	19.3	23.6	19.3	6.8	6.9	6.3
18–44 years	21.7	24.2	24.8	46.7	43.9	45.9	19.0	20.6	18.5	12.6	11.3	10.7
18–24 years	22.0	25.9	26.9	46.8	43.4	46.8	20.0	21.1	17.5	11.2	9.6	8.8
25–44 years	21.6	23.6	24.0	46.7	44.1	45.6	18.7	20.5	18.9	13.0	11.9	11.5
45–64 years	16.9	14.8	15.2	42.9	42.8	43.0	24.7	26.1	26.7	15.5	16.4	15.0
45–54 years	17.9	17.6	17.2	43.9	43.5	44.2	23.4	23.9	25.2	14.8	15.0	13.4
55–64 years	15.3	11.1	13.1	41.3	41.9	41.6	26.7	28.8	28.5	16.7	18.2	16.8
65 years and over	8.9	5.3	6.4	34.7	33.8	35.9	32.5	36.7	34.4	23.8	24.2	23.2
65–74 years	9.8	6.3	7.8	36.9	36.1	37.4	31.6	35.7	33.7	21.6	21.9	21.0
75 years and over	7.7	4.1	4.5	31.8	31.0	33.7	33.8	38.0	35.4	26.6	27.0	26.3
Sex[3]												
Male	21.3	20.4	21.0	47.1	46.4	47.7	20.6	22.7	21.2	11.0	10.5	10.1
Female	11.8	10.9	11.4	45.4	44.4	47.5	26.5	28.8	26.7	16.3	15.9	14.4
Race[3,4]												
White only	16.0	15.3	16.1	46.1	44.9	47.3	23.9	26.1	24.0	14.0	13.7	12.7
Black or African American only	16.8	15.7	15.2	46.1	47.2	47.6	23.2	24.7	25.7	13.9	12.4	11.5
American Indian or Alaska Native only	17.1	19.4	16.1	38.0	40.3	43.2	24.2	28.1	28.3	20.7	12.2	12.4
Asian only	22.8	20.4	18.4	49.1	49.9	53.1	19.7	22.1	21.3	8.3	7.6	7.2
Native Hawaiian or Other Pacific Islander only	- - -	*	*	- - -	*	*	- - -	*	*	- - -	*	*
2 or more races	- - -	13.9	15.8	- - -	42.3	42.6	- - -	25.2	24.9	- - -	18.6	16.8
Hispanic origin and race[3,4]												
Hispanic or Latino	24.9	23.5	24.0	42.3	43.2	45.8	20.3	22.6	20.5	12.5	10.7	9.7
Mexican	28.9	25.2	26.2	40.8	43.3	44.6	18.5	21.4	20.0	11.8	10.1	9.2
Not Hispanic or Latino	15.4	14.0	14.4	46.7	45.8	47.9	24.0	26.5	24.8	13.9	13.7	12.9
White only	14.7	13.2	13.9	46.6	45.3	47.6	24.4	27.1	25.0	14.3	14.4	13.5
Black or African American only	16.9	15.6	15.2	46.1	47.3	47.7	23.1	24.9	25.7	13.8	12.2	11.4
Percent of poverty level[3,5]												
Below 100%	20.6	20.4	20.1	37.8	37.5	39.8	22.7	25.1	23.5	18.9	17.0	16.6
100%–199%	20.1	20.8	21.0	43.3	42.1	42.8	21.7	23.1	22.5	14.9	13.9	13.7
200%–399%	16.4	16.2	16.7	47.2	46.3	48.9	23.6	25.4	23.0	12.8	12.1	11.3
400% or more	12.8	10.2	11.1	49.8	49.4	51.9	24.9	27.6	25.7	12.5	12.7	11.3

Mobile Doctors will start with a service offering that includes preventive care, dental services and minor to medium illness coverage. As the base of clients grows, Mobile Doctors will incorporate two additional models of trucks to allow it to have a more diverse and flexible product offering. In this sense, once a solid base of clients is managed MD will be operating with three kinds of trucks. The three different layouts will be called: Urban Truck, Standard Truck and Plus Truck. Each one of them will be described below.

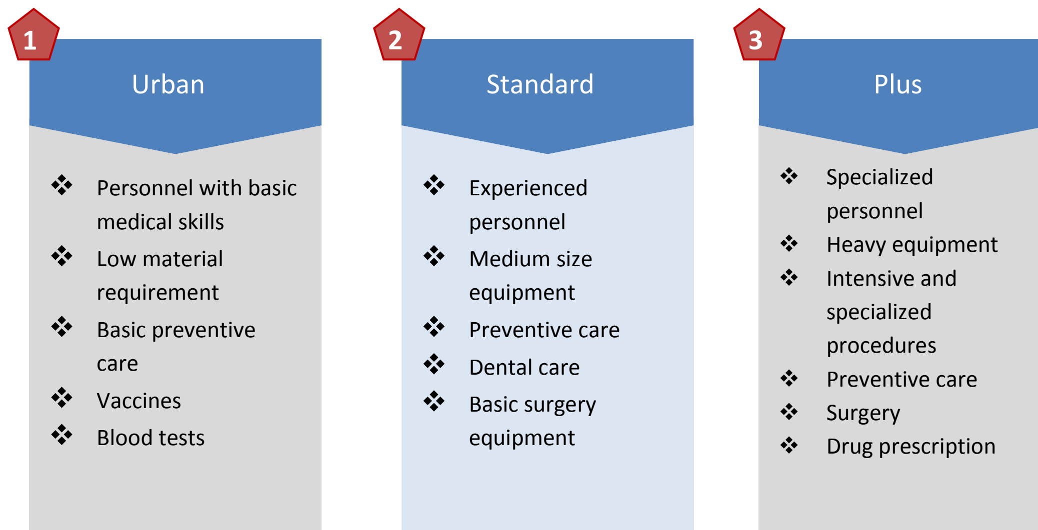

Figure 4. Mobile Doctors Trucks Configurations

2.5.4. URBAN TRUCK CONFIGURATION

This configuration is constructed around two types of low skill necessary services: vaccinations and tests. Both types of services are characterized by not requiring staff with high medical skills. In this sense, the crew for this configuration would consist of physicians, nurses and assistants.

The vaccination services offered are dependent on the geographical region and season of the year. For example, if the truck were to operate in a cold area and during the winter season most vaccinations will be flu shots.

The testing services offered will be somehow similar to those offered at Point of Care facilities (POC). These are diagnostic tests performed outside the central laboratory and are also known as near-patient testing, bedside testing, remote testing, etc. POC tests are becoming more and more popular and are usually offered at places such as the pharmacy sections of Wallmart, Wallgreens, etc.

The amount of material required to perform such tests is relatively small compared to the other two proposed truck configurations. By using non-invasive procedures based on blood, urine, saliva, hair and breath samples the set of conditions tested could be: cancer, diabetes, drug abuse, infectious diseases and osteoporosis.

In order to calculate the amount of staff needed for this truck configuration the average size of an elder facility will be estimated at 60 residents and the average demand for the services offered at the truck at 30% of the total residents. In this sense, a total of 18 clients per residence are estimated. Next, knowing that the services offered in this truck configurations are almost instantaneous it could be assumed that each patient could be treated under half an hour, making the time necessary to treat the average number of patients 9 hours.

The average 9 hours of work could be performed by any type of physician, however, in order to reduce costs a nurse will be choose to perform such activities. Besides the nurse, a doctor will be added in order to interpret the results of the tests and offer detailed diagnostic. With these two employees the average stay per facility could be set at 1 day.

Lastly, since there is not much need for equipment in this configuration and only two employees will operate the business, a regular van could be used for this case. It should be noted that this van could be driven by any of the two employees as no especial driving license is needed. An indicative plan of the van layout can be observed in Figure 5.

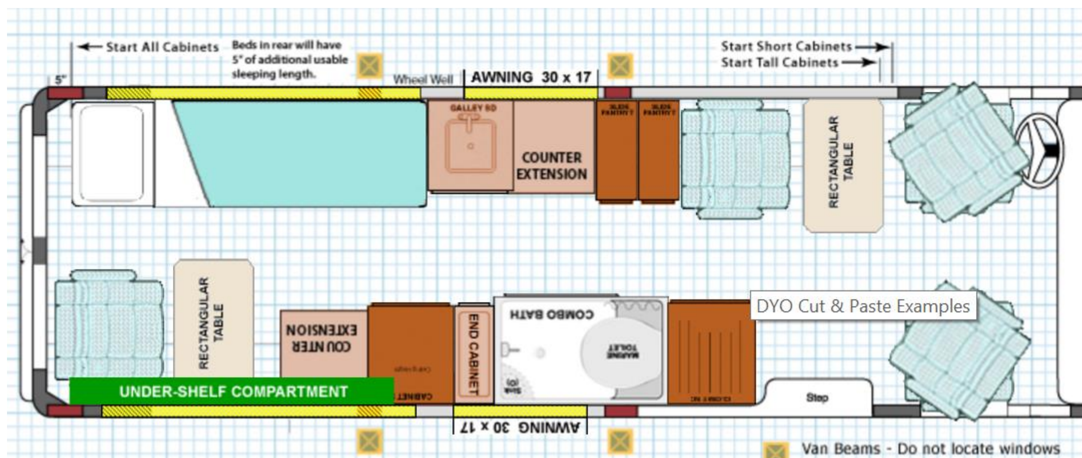

Figure 5.Basic truck layout (designed using Sportsmobile)

The exact list of procedures for this configuration will be designed with the performance results obtained from the Standard Truck.

2.5.5. STANDARD TRUCK CONFIGURATION

This configuration adds more skill demanding services and therefore higher trained staff and specialized doctors. Among the new services that this configuration will add are: drug prescriptions, dental services and hearing deficiency treatments. This configuration will be the first one tried out and the one used for modeling purposes.

In light of the previous analysis of the most popular services offered at hospitals and private clinics a list of preliminary services offered by MD was drafted. To complete this list some of the procedures being offered by other mobile clinics and point of care pharmacies were included. The resulting list could be observed in Table 4.

Table 4.Standard Truck Service Offering

Screenings	Vaccines	Illness
Carotid Artery Ultrasound	DTaP (diphtheria, tetanus, pertussis)	Allergy Symptoms
Abdominal Aortic Aneurism Ultrasound	Flu	Bronchitis & Coughs
Electrocardiogram (ECG or EKG)	Hepatitis A	Earaches & Ear Infections
Peripheral Arterial Disease Test (PAD)	Hepatitis B	Flu-like Symptoms
Hardening of the Arteries Test (ASI)	IPV (polio)	Ingestion & Heartburn
Colorectal Cancer	Td (tetanus, diphtheria)	Mouth& Oral Conditions
H Pylori Test	Tdap (diphtheria, tetanus, pertussis)	Nausea, Vomiting & Diarrhea
Lipid Panel	Pneumonia	Sinus Infection & Congestion
Diabetes Screening		Upper Respiratory Infections
Prostate Specific Antigen Test (PSA)		Urinary Track & Bladder Infections
Testosterone Test		Splinter Removal
C-Reactive Protein Test (hs-CRP)		Minor Cuts, Blisters & Wounds
Echocardiogram		Minor Burns
Cholesterol Test		Bug Bites &Stings
Diabetes Test (glucose)		Suture & Staple Removal
Flu Test Influenza		Sprains, Strains & Joint Pain

On top of this, Mobile Doctors will also offer dental services performed by a professional dentist. The list of services offered, which can be observed in Table 5 what created after a careful review of the most common elder dental issues.

Table5. Dental Service List

Procedure
General Dental Care
Full Mouth and Oral Examination
Oral Hygiene Treatment
Fluoride Treatment
Cleaning
Filling
Root Canals
Dental Extractions
Cavities Treatment
Removable Prosthesis
Wound Healing
Implants
Denture Fittings

The amount of material needed for this configuration is considerably larger than for the previous configuration as many of the service offered such as dentistry require large and expensive machines. This is the reason why this configuration demands the use of a regular size truck. A preliminary design of such truck can be observed in Figure 6.

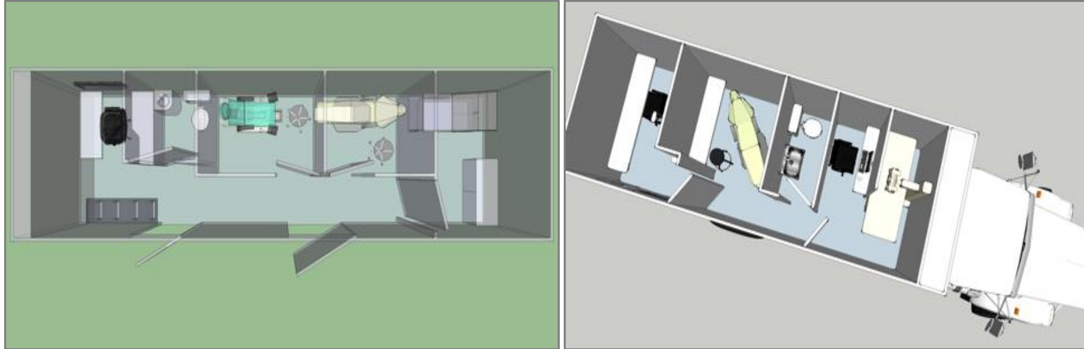

Figure 6.Standard Truck Layout (AMOHS)

Moreover, due to the nature of the services offered the amount and type of employees for this configuration is not determined by the average amount of expected clients but by the type of services offered. In this sense, this configuration will require the presence of a generalist doctor, a dentist and a nurse/assistant.

Lastly, it should be noted that for this configuration, due to the size of the truck, a special driving license is needed. In order to reduce staff costs the nurse/assistant will be required to take the appropriate tests to receive such license. The training for such tests will take place during the license acquiring phase so there will be no delay caused to the project's schedule and it will be fully paid by Mobile Doctors.

2.5.6. PLUS TRUCK CONFIGURATION

This configuration will be the last to be added to Mobile Doctors. The Plus Truck is intended to serve geographic locations where accessibility to hospitals is a major issue. For this reason this configuration will feature an operation unit as well as various patient beds.

The cost of this unit will be considerably higher and thus a considerably high utilization rate will be needed to cover the costs. It should be noted that due to the size of the truck, an experienced driver will be needed for this configuration. A preliminary design of the truck layout can be observed in the Figure 7.

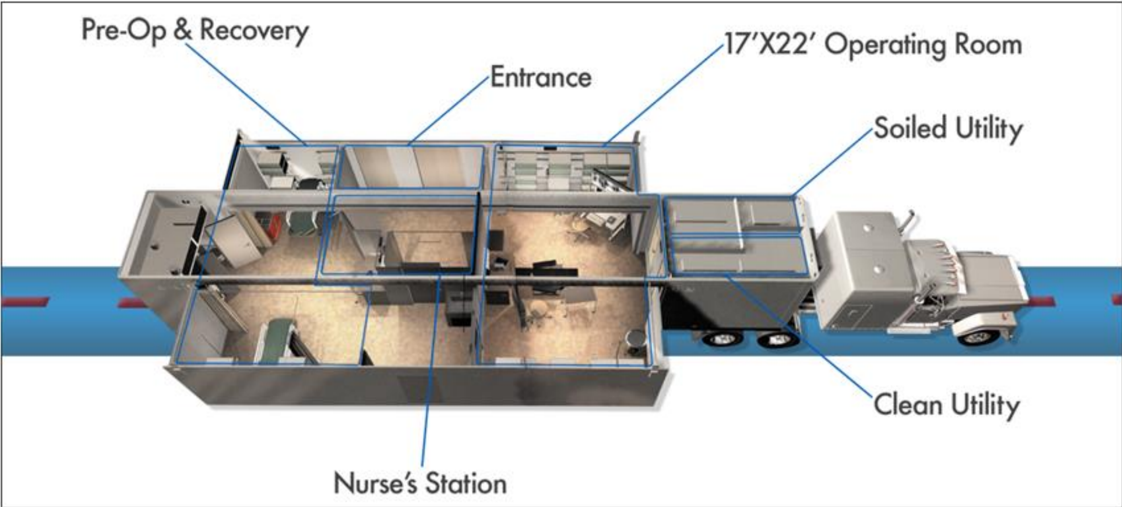

Figure 7. Plus Truck Layout (AMOHS)

3. CUSTOMER SEGMENTS

Mobile Doctors' services are aimed at the elder community. However this segment of the population is considerably ample and a higher segmentation would be needed to evaluate the feasibility and attractiveness of the business. In order to get a complete idea of who the target customer is and how is he/she currently served the long term care market as well as the health care industry will be analyzed. The following brief analyses will serve to detect existing trends and possible demand gaps. Afterwards the potential starting region and logistic aspects of the business will be evaluated.

3.1.LONG-TERM CARE MARKET

The target market for the services under evaluation is the elder that reside in assisted living facilities, nursing homes, elderly care centers, etc. These facilities can be found in the long-term care industry. The long-term care industry offers a wide range of care solutions to patients based on their needs and budgets.

This section will analyze the long-term care market by studying the prevailing trends and economic performance.

The long-term care industry has been steadily growing over the last few years due to several factors. The U.S. population has grown at an annual 1% (MULTPL, 2015) over the last 10 years to reach 322 million residents in 2015 (United States Census Bureau). In addition, the elder portion of the population is growing at a pace double or triple that of the global population. The number of people aged 65 and over has been growing at an annual rate of 2.1% since 2000 while the number of people under 65 has grown at a 0.7% rate (United States Census Bureau). Assuming prior rates of expansion continue as expected population over age 65 will reach 58 million in 2030. Behind this aging of the American population we can find the increase in life expectancy. U.S. life expectancy has grown from 76.1 years in 1996 to 78.9 years in 2015.The evolution of the segment of the population over 65 years can be observed in the figure below.

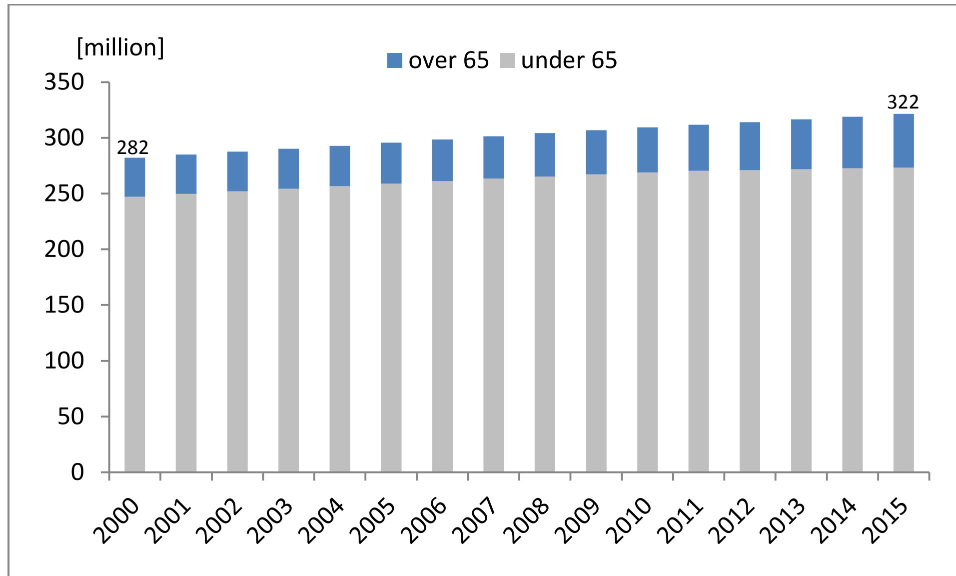

Figure 8.U.S. Population Split

This growing and aging population is driving up the demand for long term care. The U.S. long care industry has experienced steady growth from 2008 to 2013 due to the aging of population. Overall, the industry grew at a yearly rate of 3.4% from 2008 to 2013, growing from $224 billion to $276.7 billion (Kalorama, Long term care, 2014) as it can be seen in Figure 9.

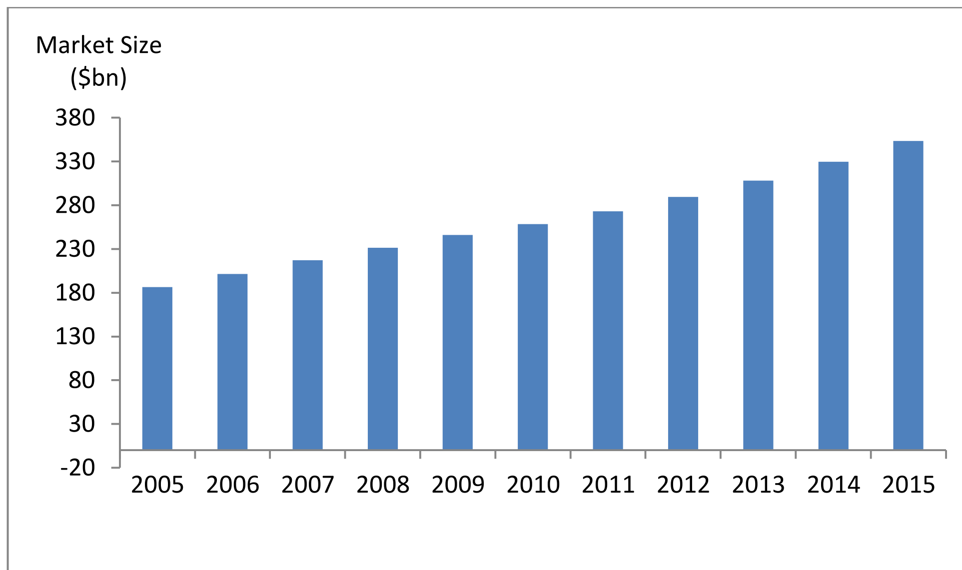

Figure 9.Size of Long Term Care Market

Long-term care refers to a wide variety of services that range from assisting with activities of daily living (ADLs) to 24hr assisted care, specific disease treatment and professional and expert nursing. Generally, these services are provided for a long period of time, during which the patient´s needs evolve usually to higher levels of care. In 2014 the Health Care Financing

Administration (HCFA) predicted that two out of five Americans would need long terms care sometime during their lives.

Within the long term care industry different segments can be found, such as, nursing care, home care, hospice care, assisted living and retirement communities. Of these, the relevant ones, for the scope of this project, are the nursing homes and the assisted living facilities. The rest fall out of interest since their services are either performed at small communities (i.e. small centers or private homes) or to people who require highly technical services (cancer, dementia, etc).

3.1.1. NURSING HOMES

Nursing homes offer the most complete level of care for individuals with physical or mental impairments that impede them from living autonomously. These facilities are designed for people with relatively high medical needs as they provide a continuous and intensive skilled supervision that is difficult to receive in a home setting. It is not rare for seniors to shift from assisted living to nursing homes after a fall leaves them unable to walk as before.

Included in this segment are the intermediate care facilities (ICFs) and the skilled nursing facilities (SNFs) that although are mostly freestanding facilities can also be found as care units of hospitals.

Nursing Homes can also provide a wide range of services apart from the traditional nursing services. Almost a quarter of residences offer contract rehabilitation therapy and almost all of them provide basic services such as meals, rooms, personal hygiene and recreational activities (Kalorama, Long term care, 2014). Other popular services include pharmacy, sub-acute care and adult day care. The wide variety of services offered by nursing homes, with a quarter of them offering assisted living, makes it difficult to draw the line that divides the two segments. According U.S. department of commerce nursing homes are "primarily engaged in providing inpatient nursing and rehabilitative services to patients who require continuous health care, but not hospital services".

Nursing homes represent the last option for the elderly and are primary used by the most impaired of all long term care populations. Almost 70% of the patients transfer directly from acute-care hospitals with Pneumonia representing the leading cause of such hospitalization.

The average length of stay is approximately 2 years for men and 3 years for women due to their higher life expectancy. This average length is often achieved in several stays, with readmissions representing 25% of nursing home admissions (Kalorama, Long term care, 2014).

In the U.S. there were, according to the Centers for Disease Control (CDC), roughly 15,700 Medicare-certified nursing facilities with 1.7 million beds and 1.4 million residents in 2013. Despite the size of the numbers, they represent a decline from the 19,000 nursing homes in

1995. The main reason behind this reduction lies in the restrictive legislation that constraints the operation of licensed skilled nursing facilities.

The number of nursing homes varies notably from one state to another with Florida having the highest number of them, followed by California and Texas. Although the average number of beds across all the states is more than 100, the 50-99 and 100-199 make up 75% of the market. Overall the occupancy rates have been stable at the 80% levels since 1995 with 84% in 2013. Usually, independent non-profit facilities tend to have the higher occupancy rates (Kalorama, Long term care, 2014).

Growing demographics are also positively affecting this segment. By 2013 it was estimated that, almost half of all Americans turning 65 would be admitted to a nursing home at least once, and one out of four persons over the age of 85 currently lived in a nursing home (Kalorama, Long term care, 2014).

Although cheaper than hospital care, nursing homes can be one of the most expensive options in the long term care industry, with annual fees ranging from $50,000 to $150,000. Some studies estimate the 2013 average annual cost for a private room at more than $80,000. growing at a 1.6% yearly average from 2008, these expenses amounted for $109 billion in 2013 and are expected to reach $117 billion in 2018.

Regarding certification, some facilities are certified by both Medicare and Medicaid, some by only one of them and some are not certified by either. In 2013, only 5% had not certification at all, while the majority had both Medicare and Medicaid. The later ones generally had the highest occupancy rates and averaged more than 100 beds. Out of this two certifications, Medicaid constitutes together with private insurance the two main sources to pay for nursing homes. Medicare program for senior citizens does not generally cover long term care and out-of-pocket financing is not something nursing home residents can normally afford. The second most used form of payment, private insurance, own income and Social Security benefits accounted for approximately 22.2% of nursing home payments in 2013. However, most residents cannot afford to pay for nursing care on their own and although 16% begin their nursing home using their own funds they soon run out of resources and become eligible for Medicaid.

Like every other sector in the long term care industry, nursing homes are benefiting from an aging population whose families have increasing difficulties to care for them. This is due to a change in mentality driven by the mobility of the American society, breakdown of family structures and several economic trends that are forcing many individuals to remain in the workforce longer than before. Other factors that will buoy the segment include increasing quantity of payments that come from private funding sources, such as long-term care insurance

and home equity as well as changing views toward long term care making it more acceptable to individuals who need it.

The real estate recovery after the credit crunch is expected to support the private funding and overcome the possible cuts in the Medicare and Medicaid programs. In many cases, gains by the sale of these assets have been so large that seniors have been able to support several years of assisted living and nursing homes.

The nursing home segment has shown a 1.6% compound annual growth from 2008 to 2013 and is expected to continue at a similar pace. In this sense, it is expected that the $100 billion revenues of 2008 will grow to $117 billion in 2018 as shown in Figure 10 (Kalorama, Long term care, 2014).

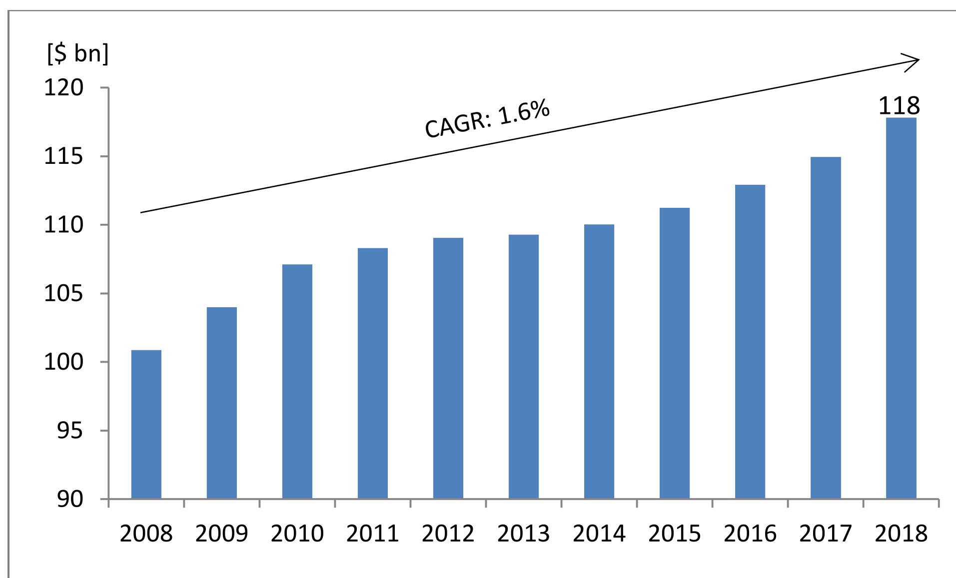

Figure 10.Nursing Home Market Size

3.1.2. ASSISTED LIVING

Assisted living facilities offer basic services such as housing, entertainment and personal assistance to relatively autonomous elders. It is the midpoint between the housing that senior housing provides and the complex medical services of nursing homes. Compared to the hospital-like services of a nursing home, assisted living facilities tend to be more comparable to a home-like setting. They offer a wide range of accommodation options, from apartments with several rooms to single rooms.

Among the services that assisted living facilities provide are 24-hour care services, three daily meals, regular social and religious activities, maintenance and housekeeping (Jackie Foss, The Birches Assisted Living). These facilities offer a monthly fee which includes the basic services and additional charges for extended services. They normally provide additional services such as entertainment activities, hairdressing, cultural trips, and special events to invite guests.

Moreover, some may offer special services to treat residents with more developed mental illness, Alzheimer´s disease or other significant impairment. Many of the residents who require this services end up moving to nursing homes.

As opposed to nursing homes, assisted living facilities do not requires highly skilled nurses and typically have a workforce comprised of activity coordinators, administrators, nurses, cooks and personal care attendants. Unlike nursing homes, these facilities are subject to looser state regulations which gives them ample flexibility in choosing the services they want to offer.

Although the length of stay varies noticeably, the average is approximately 28.3 months, with most residents staying for 3 years prior to transferring to nursing homes. However, despite the fact that 59% of the residents end up moving to nursing homes, many of them spend five or even more years in assisted living facilities due to its lower cost (Kalorama, Long term care, 2014).

The most common assisted living resident is a women 85 years and older who can execute many, but not all, personal activities independently. In fact, according to the National Centre for Assisted Living (NCAL), in 2014, nearly 75% of the assisted living residents were females. This is due to their longer life expectancy.

Estimations on the number of elders living in assisted living facilities vary significantly depending on the source but consensus put the total U.S. number of residents at about 1.3 million in 2014. Growth has been driven by nursing home patients looking for cheaper ways of long term care. Regarding the number of facilities it is believed that in 2014 there were more than 40,000, which represents a 28% increase from the 2010 number of 31,100. Overall these facilities had an average size of 54 units and an average utilization of 88%, according to the National Center for Assisted Living (NCAL). As expected, the facilities with the greatest reputation and highest state ranking have the highest occupancy ratios. Despite the claims to the contrary, occupancy levels were only mildly affected by the recession. This is due to several factors surrounding the assisted living segment such as the decreased stigma around assisted living facilities or the expanding awareness of assisted living options.

Assisted living as opposed to other long-term care options, is largely private-funded, making it considerably difficult to afford for many seniors as basic monthly fees can easily reach $5,000 per month or more. However, assisted living is supported by many long-term care insurance plans which makes it more attractive for the seniors that hold these kind of insurance. It is estimated that in 2014 over 80% of the long-term care insurers offered assisted living as a primary service (Kalorama, Long term care, 2014).

The segment´s competitive environment is characterized by the affluence of mergers and acquisitions. These are fostered by the growth of the industry, the economies of scale and the

considerably thin margins. In this sense, larger corporations are the result of the acquisitions of small players. The aging of the U.S. population together with the decreasing stigma around assisted living will continue to fuel demand and the M&A activity of business looking to expand.

The assisted living segment has shown a 5.6% compound annual growth from 2008 to 2013 and is expected to continue at a similar pace. In this sense, it is expected that the $63.6 billion revenues of 2008 will exceed $91 billion in 2018. This growth is boosted both by fee increases and increase in resident population (Kalorama, Long term care, 2014).

Similar to other segments in the long-term care industry, the assisted living sector is very fragmented with no player accounting for a big portion of market share and thus having any influence on the market. The growth in the assisted living market size can be observed in the figure below.

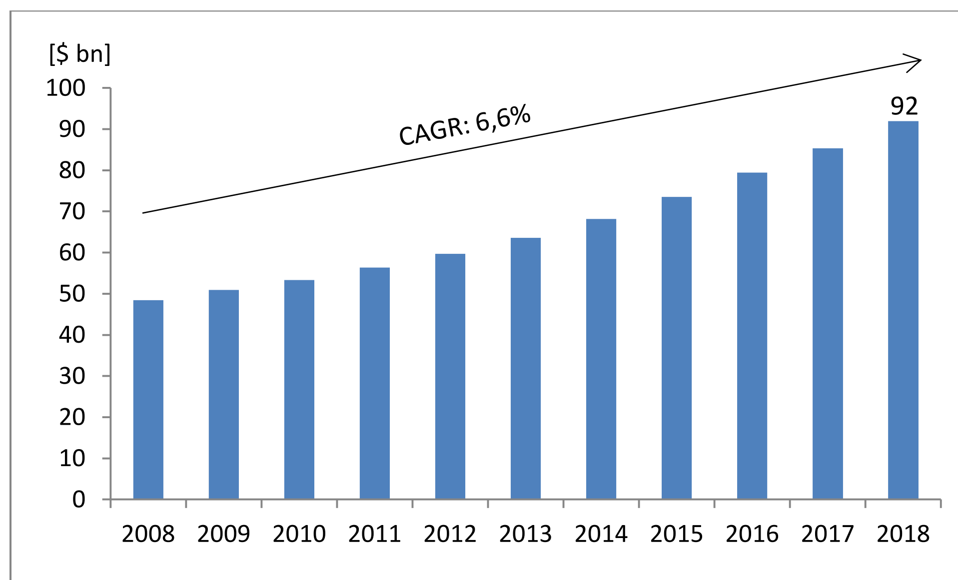

Figure 11.Assisted living market size

3.1.3. LEADING PLAYERS

Across all of its segments the long term care market is characterized for having a great amount of players with even the largest only accounting for a small share of the total market.

- In the nursing home segment Genesis Healthcare led the market with a 4.0% market share and revenues of $4.6 billion, followed by HCR Manor with 3.7% market share and $4.2bn in revenues. Kindred Healthcare had the third position with a 2.2% share and $2.5bn revenues. Other important players in this segment are Life care Centers of America and Golden Living.

- In the assisted living segment Brookdale led the market with a 3.4% share and $2.4bn of estimated revenues, followed by Sunrise Senior Living with a 1.5% share and $1.1bn revenues. Atria had the third position with 1.2% share and was followed by other players like Genesis Healthcare, HRC Manor Care and Golden Living.

3.1.4. MARKET STAGE IN THE LIFE CYCLE

The elderly care industry has experienced a stable growth since 2011 and is expected to follow this trend through 2020. As baby boomers gain weight in the segment of interest, the idea of leaving the family household to enter a long term care facility will gain acceptance and strength. Given this change of mentality, losing the fear of entering elderly care facilities, Mobile Doctors believes that the long term care industry is in the growth stage of the life cycle as shown in the figure below.

Figure 12. Long Term Care Life Cycle Stage

As baby boomers and generation X start to replace the older generations the long term care will gain momentum and thus provide an even greater base of clients for Mobile Doctors.

3.1.5. MARKET CONCLUSIONS

The long-term care industry, which offers a wide range of options depending on patients' needs, is seeing a stable growth fueled by the aging of the U.S. population and the proliferation of diseases such as Alzheimer, obesity and dementia. The lines between these providers are sometimes difficult to tell but growth has been the trend across all segments.

Over 2013, growing at 4.3%, the industry overall saw a substantial expansion. The assisted living segment grew at 5.6% per year in an economy that was recovering from the economic crunch. Tightly linked to demographic growth, the nursing home segment grew at 1.6% per year. This segment however, will continue to be the largest portion of all the options available in the long-term industry, at almost $118 billion in 2018 and accounting for a 33.2% share.

In conclusion, the services this projects is evaluating could be directed to either the $63.6bn assisted care market, the $100bn nursing home segment or both. In this sense, only a small participation of the current revenues could more than justify the starting up of the business. The potential profitability of this business will be analyzed in the following sections.

The previous analysis has been useful in understanding who the target customer is. Mobile Doctor's target customer is the elder that resides in either a nursing home or an assisted living facility. This target customer is characterized by having an advanced age (over 65 years old), a reduced mobility and some kind of illness that requires periodic check-ups or tests. To deepen the segmentation a geographical analysis will be carried out to determine which is the best state for Mobile Doctors to start its business in.

3.2.GEOGRAPHIC SEGMENTATION

The operating region of the first Mobile Doctors truck is of paramount importance as it will dictate the fate the business. In this sense the decision should be based on the number of elderly care facilities in the area, type of care offered by such facilities and average age of residents. It would also be very useful to know the average proximity of the facilities to hospitals and private clinics and the average waiting time for doctor appointments, but such data was not available at the time this document was written.

Since residents in nursing homes are less autonomous and require a higher level of care it would be a good idea to focus on the number of those when looking possible areas in which to begin operations. In this sense, making use of the information shown in Figure 13, the five most attractive states in terms of number of nursing homes would be Ohio, Texas, California, Illinois and Florida.

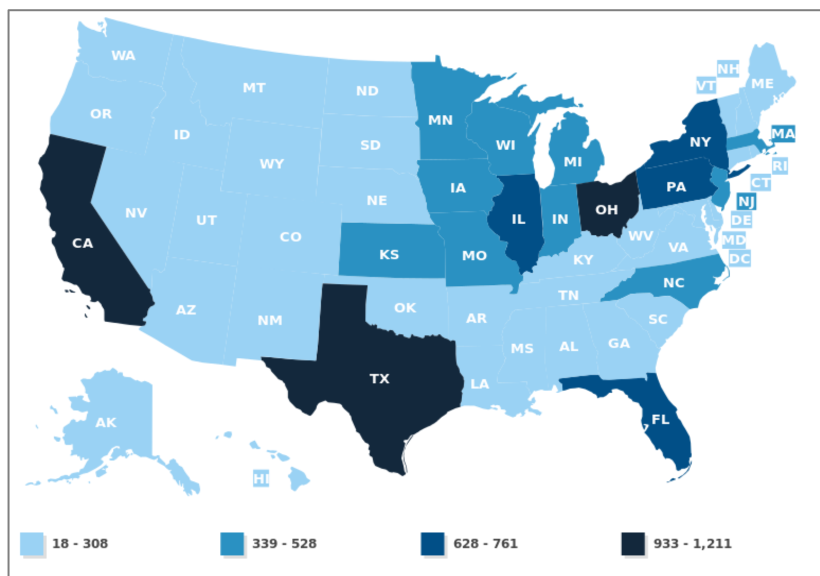

Figure 13.Nursing Homes per State

Taking California as an optimal candidate the number of facilities per county was studied (Table 6) in order to find out the best region in which to start. As of 2016 California has over 2,500 elderly care facilities that are distributed according to table below (Health Facilities Consumer Information System, 2016). Out of these counties Alameda, Los Angeles, Orange, Riverside, San Bernardino and San Diego deserve special attention since they have over 100 long term care facilities each.

Table 6.Long Term Care Facilities per County in California

County	# Facilities	County	# Facilities
Alameda	115	**Orange**	207
Alpine	0	**Placer**	18
Amador	1	**Plumas**	2
Butte	21	**Riverside**	133
Calaveras	1	**Sacramento**	60
Colusa	2	**San Benito**	3
Contra Costa	62	**San Bernardino**	169
Del Norte	1	**San Diego**	197
El Dorado	5	**San Francisco**	22
Fresno	89	**San Joaquin**	66
Glenn	2	**San Luis Obispo**	20
Humboldt	8	**San Mateo**	54
Imperial	6	**Santa Barbara**	24
Inyo	2	**Santa Clara**	92
Kern	49	**Santa Cruz**	9
Kings	3	**Shasta**	30
Lake	4	**Sierra**	1
Lassen	1	**Siskiyou**	2
Los Angeles	738	**Solano**	31
Madera	15	**Sonoma**	46
Marin	23	**Stanislaus**	21
Mariposa	1	**Sutter**	9
Mendocino	4	**Tehama**	2
Merced	21	**Trinity**	1
Modoc	2	**Tulare**	58
Mono	0	**Tuolumne**	3
Monterrey	19	**Ventura**	59
Nava	9	**Yolo**	14
Nevada	6	**Yuba**	2

In order to determine which of these 6 counties is the most appropriate to start operating, the total number of hospitals was used to determine a facilities to hospital ratio (HealthCare Atlas,

2016). The bigger the ratio the less covered the elder population are in terms of medical services and thus the more attractive for Mobile Doctors. Table 7 shows such analysis.

Table 7.County Hospital to Facility Analysis

County	Facilities	Hospitals	Ratio
Alameda	115	43	2.67
Los Angeles	738	138	5.37
Orange	207	47	4.40
Riverside	133	46	2.89
San Bernardino	169	64	2.64
San Diego	197	37	5.32

Based on this information Los Angeles would be the most underserved county followed by San Diego. Given the fact that Los Angeles County is slightly smaller in size but has a considerably worse traffic it would be more convenient for the type of business offered by MD to start in San Diego.

Once the region in which to start operating has been chosen the sales team will begin contacting the different facilities in the region to set up the initial trials. Based on the location of these facilities the logistic routes will be designed to reduce transportation times and fuel consumption. Fortunately the high density of long term care facilities in San Diego area together with the relatively small area of the region are guarantees of short transportation times and thus high utilization rates. A small sample of the location of 30 of the 197 elderly care facilities in San Diego can be observed below.

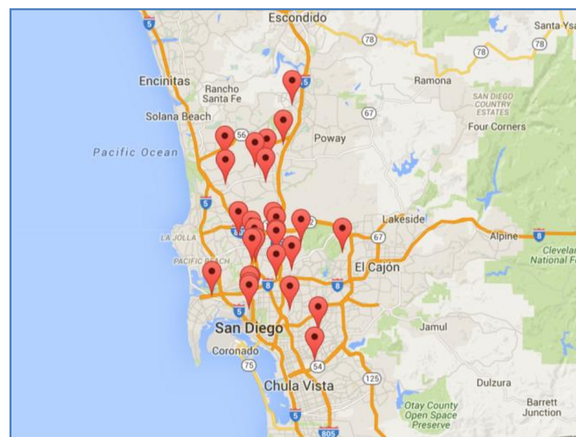

Figure 14.Elderly Care Facilities in San Diego County

3.3. COMPETITION

In the U.S. there exist approximately 2000 mobile health clinics that receive between 5 and 6 million visits annually (AJMC, 2015). These mobile clinics are spread throughout the country

with California being the state with the highest number of them (Mobile Health Map Organization, 2016). The approximate location of all these clinics can be observed in the figure below.

Figure 15.Geographic Distribution of U.S. Mobile Clinics (Mobile Health Map)

These clinics vary in size and shape and offer a wide variety of services including preventive care, dental care, mental health services, chronic disease management, and maternal and infant health. There can also be found specialty clinics offering services such as substance abuse treatment, pap smear tests, pediatric care, asthma and allergy care, urgent care, speech therapy and HIV testing. It is estimated that over 50% of these facilities offer more than one type of service/treatment (AJMC, 2015). The figure below shows the most popular services offered at these clinics (Mobile Health Map Organization, 2016).

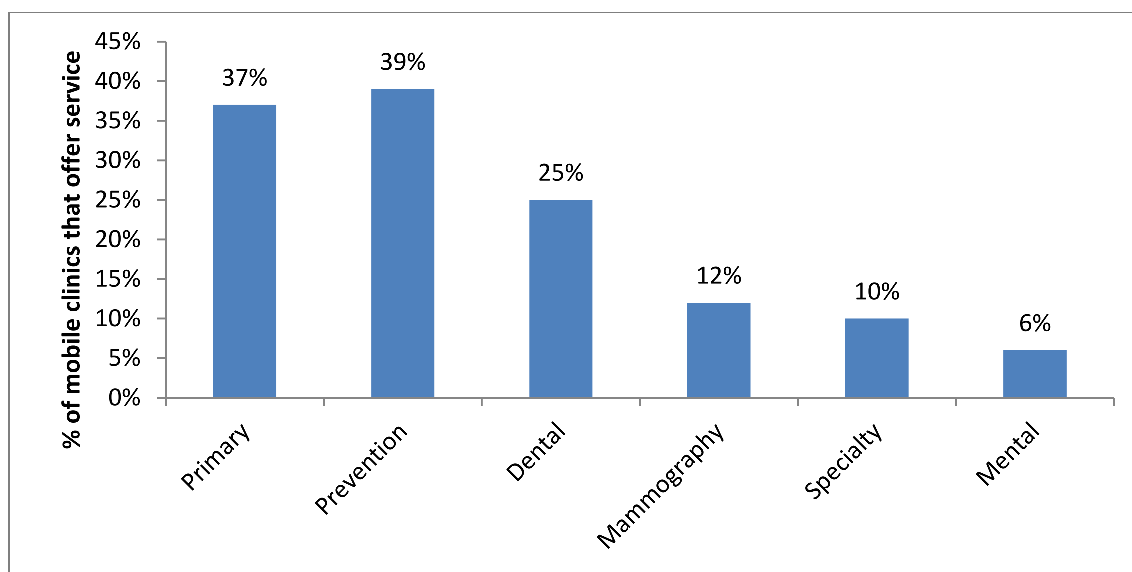

Figure 16.Types of Services Offered by Mobile Clinics

Most of these clinics are focused on serving the medically disenfranchised - "individuals who are or who are otherwise disconnected from the healthcare system due to access barriers" (AJMC, 2015). They target minority and low-income populations who have several obstacles, including economical and logistical, to preventive care. On top of this, these clinics are mainly concerned with the segments of the population under 65 years old, as shown in Figure 16(Mobile Health Map Organization, 2016). For this reason it is believed that there exists no players that are currently targeting the segment of the population MD is aiming to focus on and therefore there exists no form of direct competition.

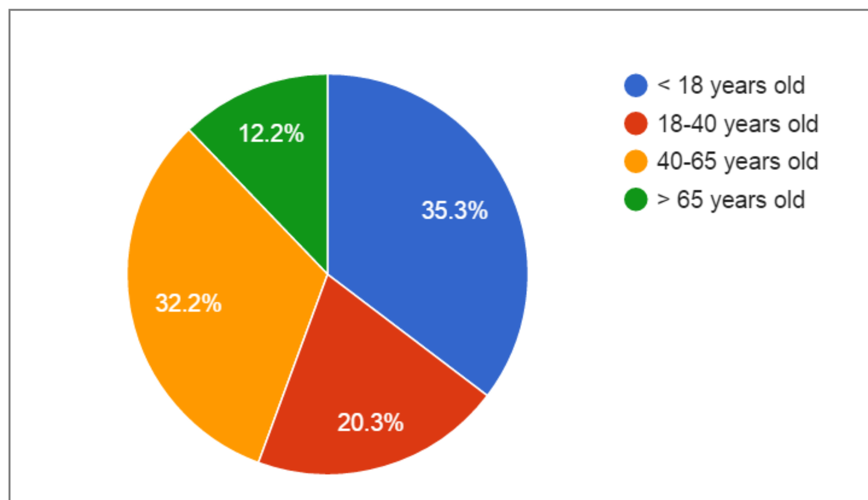

Figure 17.Ages Served by Existing Mobile Clinics (Mobile Health Map Organization, 2016)

To give an idea of how these mobile clinics are set up and how they operate a few of them are analyzed below. It should be noted that since most of them belong to non-for-profit organizations not much public information is available.

TEXAS HEALTH- MOBILE HEALTH SERVICE BUS

Owned by Texas Health Huguley Hospital, this bus offers medical services to those who have difficulty accessing health care due to lack of transportation or economic funds.

This mobile unit provides several services including immunizations and a broad range of screenings. It operates according to a set schedule, visiting high transit places such as shopping centers and churches on a monthly basis. Currently the bus only operates in the northeastern Texas communities of Everman, Cleburne, Burleson, Godley, Alvarado and Joshua.

The total list of services offered, as stated on the company´s website, can be observed in the following table.

Table 8.Services offered by Texas Health Mobile

Services Offered
Well Child and Adult Physicals
Sick Child and Adult Physicals
Blood Pressure Screening
Childhood / Adult Immunizations
Cholesterol Screening
Diabetes Checks
Electrocardiogram (EKG) Testing
Flu and Whooping Cough shots
Hepatitis A & B Immunizations
Labwork
Pap Smears
STD Screening
Colorectal Cancer Screening
Vision Screening
Tetanus and Meningitis Vaccines
Limited TB Testing

CHILDREN'S HEALTH EXPRESS

Operating in central Texas, the Children´s Health Express is a mobile clinic of Dell Children Medical Center. This program is aimed at the sick and poor, following Dell Children´s Medical Center mission.

Targeted to the younger part of the population, this mobile clinic provides primary and preventive pediatric health care. The clinic is staffed with a board certified pediatrician, a family nurse practitioner, a licensed vocational nurse and a licensed medical social worker. The bus currently operates at several school sites offering a wide range of services such as well child exams, immunizations, minor illness, sports physicals.

Figure 18.Children's Health Express Bus

MOBILE CARE CHICAGO

With over 15 years in the business, this organization is focused on providing health services to the children less well-off. The organization operates through partnerships with over 40 schools to provide on-going care to children in low-income neighborhoods. With this service the organization aims to reduce school absenteeism, increase children's health awareness and save money to the community.

Initially this organization, formerly known as Mobile C.A.R.E, was dedicated to administering asthma medical care to the Chicago area children and has evolved to deploying Children´s Health, Dental and Asthma Vans.

The organization is highly concerned with Asthma treatment, devoting to it the largest amount of its human capital. This van team is comprised of one nurse practitioner, one nurse, four asthma educators, two clinical assistants and one medical assistant.

The organization also operates two dental vans as of Nov 2015, the first of them started in 2014. These two dental vans also aim to reduce school absenteeism and increase awareness of good dental health habits among these low-income communities. The van layout for this dental services can be observed in the following figure.

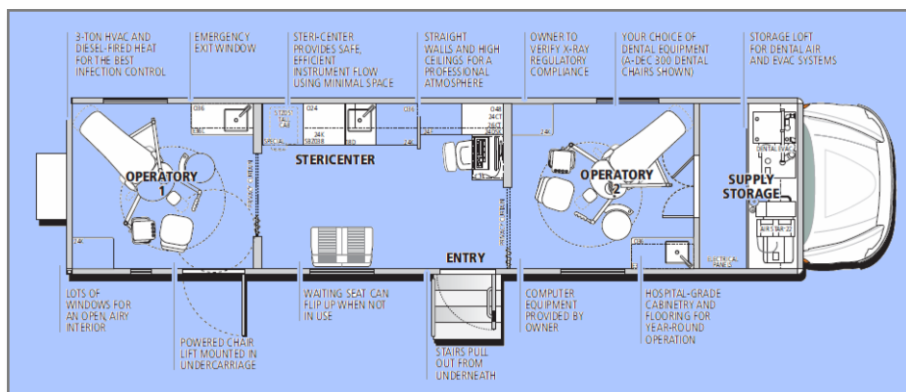

Figure 19. Mobile Health Care Chicago layout (Mobile Health Care Chicago Website)

The organization has also partnered with health care provider Present Health to deploy the Children's Health Van. This focuses on providing immunizations and child physicals in the Humboldt Park neighborhood.

LOYOLA PEDIATRIC MOBILE HEALTH (CHICAGO)

Loyola Medicine's pediatric mobile health unit as it states on its website "is a pediatric doctor's office on wheels that serves underprivileged communities in the Chicago area. The first of its kind in the Midwest, it provides vital healthcare services to children and young adults, from birth to age 21, who might otherwise not have access to healthcare in their community".

Figure 20.Loyola Pediatric Mobile Health Truck (Loyola Website)

The clinic currently visits 300 sites each year in the Chicago area and includes an onboard pharmacy for families with limited access to medication for their children. The mobile clinic also offers lab testing, physical exams and screenings for the following conditions.

Table 9.Services Offered by Loyola Pediatric Mobile Health

Services Offered
Anemia
Asthma
Diabetes
Hearing Problems
High Cholesterol
Lead Testing
Obesity
Tuberculosis
Vision Problems

3.4.COMPETITIVE RESPONSE

Mobile Doctors expects its services to be of help to the community and thus to receive good acceptance among the elder. Because MD will serve customers currently covered by private clinics and hospitals it is reasonable to expect some form of competitive response.

On the hospital side, not much reaction is expected as MD will not have the capacity to provide the more intensive and more profitable medical procedures such as surgical operations. Moreover Mobile Doctors, as many existing mobile health clinics do already, will create a great source of saving to hospitals by reducing unnecessary visits. A recent study by the Mobile Clinic Map with aggregated data of 10 mobile clinics showed $6.8 million saving from avoidable ED visits in a 1-year period. On top of this, Mobile Doctors believes it will play a critical role in referring patients to hospitals for higher levels of primary and specialty care.

On the private clinic side, as soon as the business gains a critical mass of clients some competitive response is expected. Mobile Doctors will surely draw many clients from these

physician offices and thus they will do whatever is in their hand to prevent it. While replications of the business idea are not expected to be done by these clinics, other forms of reactions like lowering rates or paying visits to elderly care facilities can be easily expected.

It should also be noted all these actions will not compete with Mobile Doctor's value proposition based on comfort and connectivity. While they can lower their prices they will not provide full on-the-cloud connectivity or doorstep service.

4. CHANNELS

Mobile Doctors' target customer is a person of 65 years and older who lives in an elderly care facility. Residents of elderly care facilities have little contact with the outside world and given their age little exposure to information on the internet. Their main sources of information are the television, their relatives and the facility's bulletin board. With these features in mind, a marketing and market entering plan will be layout in the next two sections.

3.1. MARKETING PLAN

In order to lay out a marketing plan it is important to find out how to best reach customers and who the decision makers are. In the case of Mobile Doctors the marketing efforts should target both be the management of the elderly care facilities and the elders themselves. In this sense MD could have a pull-push diagram like the one shown in the figure below.

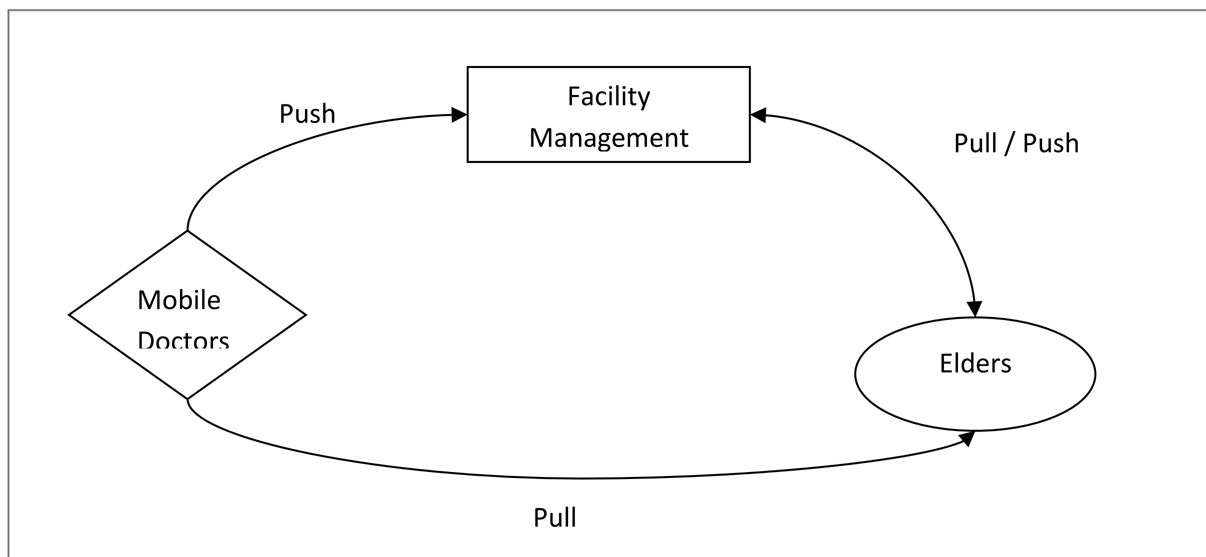

Figure 21. Push-Pull Target Customer System

Currently some facilities provide basic health coverage through a physician that spends a couple of hours a week at an on-site doctor office. The marketing efforts of these physicians are limited to signing exclusivity agreements with the facilities management. Similarly, it is understood that agreeing with each facility management on the time schedules for providing the service and letting them promote the service internally would be the best and easiest way of penetrating the market. As it can be deduced from the push-pull diagram above, facilities management would be interested in having an coverage agreement with mobile doctors as their residents would be positively affected by it and could end up including the existence of such in their criteria to choose one facility over another.

In this sense, the marketing strategy would be at first focused on reaching the management teams of the elderly care facilities. To do so, four channels would be used: trade shows, magazine advertisements, company events and sales representatives. A brief description of each one can be found below:

- Trade shows: Renting stands at elderly care trade shows will allow Mobile Doctors to build brand awareness and come in contact with potential new clients.
- Magazine advertisements: being present on industry related magazines will increase brand awareness among both facility management teams and facility residents.
- Company events: Holding company events once arrived at a new location is key to create a sense of need and competition among the different facility managers and to gain insight in the characteristics and expectations of local residents.
- Sales representatives: Apart from attending the aforementioned trade shows and company events, these employees are responsible for spotting the decision makers at each facility and convincing of the advantages the company offers to their business.

Given the limited budget to launch the business, the marketing proposal for the first year can be the one shown below.

Table10. Marketing Budget

Marketing Channel	Number	YearlyCost
Sales Force	2	$ 180,000
Trade Shows	8	$ 8,000
Magazines	1	$ 4,000
Company Events	1	$ 10,000
Total		$ 202,000

This initial budget would necessarily increase as the business geographic footprint and client base increases. A five year marketing plan could look like the one shown in the below.

Table11. Marketing Budget Projection

Channel	Y1	Y2	Y3	Y4	Y5
Sales Force	2	3	4	6	7
Trade shows	8	10	14	18	18
Magazines	1	2	4	5	6
Company Events	1	3	6	9	12

3.2. MARKET PENETRATION STRATEGY

In order to increase the truck utilization as fast as possible, free one-time trials could be offered to each of the initial region's elderly care facilities. This initiative will help create brand awareness, will help engage potential future clients and will make managers aware of the advantaged that Mobile Doctors can offer.

After the initial trial the sales force would collaborate with each facility's management to create a visiting schedule. The objective is to have a minimum of 2 visits per month to each of the facilities to ensure doctor's utilization is kept at a reasonable level and thus revenues exceed costs.

3.3. TIME TO FIRST SALE

Once the starting state is chosen the sales force should start contacting all local facilities to make them aware of the existence of this new service. It is understandable that this process may take a while given the limited number of sales employees and the lack of know-who in the area/industry. This latter issue would be greatly diminished if Mobile Doctors manages to engage in a partnership agreement with any of the potential players analyzed in section 5. For modelling purposes it was assumed that during the first year Mobile Doctors will experience an slow growth in the number of facilities covered only adding two additional facilities each quarter. While this case is believed to be pessimistic rather than realistic it will help to evaluate the feasibility of the business under harder conditions.

On top of this, state regulations, permits and licenses would also add time to the expected date of the first sale. In this sense, it would seem prudential to not expect any sales prior to the seventh month from the creation of MD’s legal entity as it will be seen in section 7.

4. CUSTOMER RELATIONSHIPS

It should be noted that due to the pull-push system explained previously Mobile Doctors will refer to two things when talking about customer relationships: the relationships with the management of the elderly care facilities and the relationship with each individual customer. In this sense, the strategy used to engage and retain each of these "customers" will be somewhat different.

On the management side, relationships will be managed through a Customer Relationship Management (CRM) tool. This tool will keep track of all communications with each facilities management. On top of this, the tool will store personal information as well as contractual information such as expiration date of the contract and agreed fees.

On the pure customer side the relationships will be managed through Mobile Doctors' proprietary IT system. Mobile Doctors will keep constant contact with its customers through monthly communications informing clients of their next due procedures and tests. On top of this, Mobile Doctors will implement annual events to foster customer loyalty. This initiatives will consists of social events such as barbecues for local residents and small scale concerts and game and travel tickets raffles.

However, Mobile Doctors believes that the biggest booster of customer loyalty will be MD's connectivity system that will greatly impact the quality of service perceived by its clients. Mobile Doctors call center will keep a close and warm relationship with every client. The call center will respond to all client needs and will inform them of the availability of results and due procedures as many times as needed. Mobile Doctors will also offer telephone consultations for the test results that are not available immediately.

It should be noted that although all members of the company are responsible for the maintenance and improvement of customer relationships it is ultimately the sales force responsibility to ensure clients are treated according to Mobile Doctors' mission statement and that loyalty is achieved. The sales team will have to make special efforts to establish a strong and close relationships with each facility's management in order to sign future contracts and to extend the duration of such as much as possible. To do so, the sales force will have an ample budget for travel, meal and gifts purposes. Mobile Doctors management will also hold corporate events such as golf tournaments and trips to incentivize not only its sales force but also to strengthen relationships with key clients.

Regarding the cost of maintaining these relationships, the pure customer ones will not require additional costs as the IT system will be operative from the moment the business is launched and thus adding additional customer accounts will not cost anything, just the additional cloud storage space. Managing relationships with facility management teams will be more costly as all of the events mentioned above will require considerable expending. However, these events will

be organized after a considerable time of operation and when the first contracts are close to their expiration date, so in this sense, the cost of maintaining these relationships should not be a problem for this stage of the business.

Lastly it should be noted that although Mobile Doctors is a business with a clear customer exposure component, its sales force should prioritize the relationships with the management of the long term care facilities as these will be the main sources of business. This however will not be the case of the call center team and medical staff that have to prioritize customer service quality. In this sense we could assign the different customer relationships to each team of the company according to the level of priority as shown in the following figure.

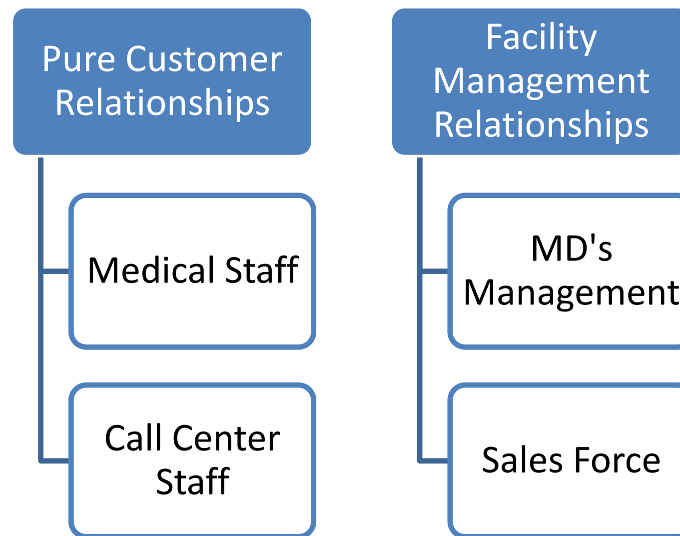

Figure 22. Mobile Doctors Customer Relationships

5. KEY PARTNERS

Research carried out by the Mobile Clinic Map has shown that mobile health clinics have the potential to improve health outcomes while reducing costs. For this reason we believe there exists four potential parties that could be interested in forming a partnership with Mobile Doctors. These parties are: Insurance companies, private clinics, hospitals and Acountable Care Organizations (ACOs).

- Insurance companies' interest would come from the potential reduced costs that Mobile Doctors would offer. As private payers move to risk based contracts from fee-for-service contracts there is an even bigger focus on value, cost-effectiveness and targeted cost management of high-need beneficiaries (AJMC, 2015). Moreover, a partnership with such a convenient service for the elderly could be seen as a product differentiation in a highly competitive market.
- Private clinics' interest would come from the idea that by helping Mobile Doctors they could increase their doctors' utilization and as well as attract to their facilities patients whose conditions cannot be treated in the truck.
- Hospitals interests would come from the reduction in the number of readmissions that currently penalizes them. Hospitals get negatively penalized for patient readmissions and having someone taking care of the after discharges would be highly beneficial for them explained Jackie Foss from The Birches Assisted Living. Furthermore, the capacity to refer clients with several illnesses or in need of higher levels of care could also be attractive to these players.
- Accountable Care Organizations (ACOs) are the organizations in charge of financially and clinically managing populations of patients. They represent a delivery and payment system to incentivize cost efficiency and improve quality. As they take responsibility for the total cost of care for their assigned areas MD believes they will be highly interested in ideas that could reduce such costs.

These strategic partners will not only be useful for operational purposes but also for financing purposes as some of them might be interested in investing in the company and thus have a saying the decision making process.

6. KEY RESOURCES

Mobile Doctors key resources will consist of its customized trucks, the medical equipment in them, its IT network and its medical staff.

6.1.HUMAN RESOURCES

The medical staff employed by the company will be the main pillar of customer service as it will be the visible face of the company. To offset the high salaries these professionals require, Mobile Doctors will try to hire young doctors and students doing internship programs. The type of services offered, mainly preventive care and follow-ups, allows MD to hire doctors with reduced experience and thus considerably reduce fixed costs.

Mobile Doctors will try to fit as less doctors as possible in each truck in order to reduce costs and substitute them with nurses or practitioners when possible. This practice has already been adopted by other healthcare providers such as Point of Care facilities where almost all test and vaccines are run by certified nurses instead of doctors. Mobile Doctors, for instance, will only staff one generalist doctor and a dentist per Standard Truck. With this in mind and taking into account that the company will begin operations with only one truck, MD's workforce will be constituted as shown in the table below.

Table 12.Mobile Doctors Initial Workforce

Medical Staff	Sales Force	General & Administrative
• Generalist Doctor (1) • Dentist (1) • Nurse (1)	• Sales Director (1) • Marketing Director (1)	• Chief Executive Officer (1) • Chief Financial Officer (1) • Phone Operator (1)

It should be noted that in the "Sales Force" section the two employees have been named directors of two different areas for growth purposes but both will be in charge of sales and marketing interchangeably.

6.2.FINANCIAL RESOURCES

The business will have at its beginnings, a combination of shareholders equity and a small bank loan.

On the one hand, shareholder equity will come from the owner and a financial partner. This financial partner could be either one of the potential partners mentioned above or an angel investor. Ideally Mobile Doctors would prefer to partner with someone that does not demand ownership of the company but a high share of profits and this is why venture capitals and private equities will be avoided.

One the other hand, the bank loan will have to be considerably small due to the reduced cash flows that the business will generate during the first months of operation. In this sense,

although current interest rates are considerably low the risk profile of the business will make this option the most expensive. As the business progresses and the client base grows, bank financing will become less expensive and thus will gain importance in the capital structure of the firm. It should also be noted that securing a solid financial partner would greatly impact the conditions of the bank loan.

The total amount of capital needed to launch the business has been derived by looking at the cash flows the business will generate during its first years of operation. To calculate the amount of capital needed the losses of all the years with negative cash flows has been added and a buffer of money has been added on top. This buffer has been estimated at the amount of the first quarter operative losses (i.e. not taking into account the initial investment in assets and licenses). The graph below shows the cash flows for the first three years.

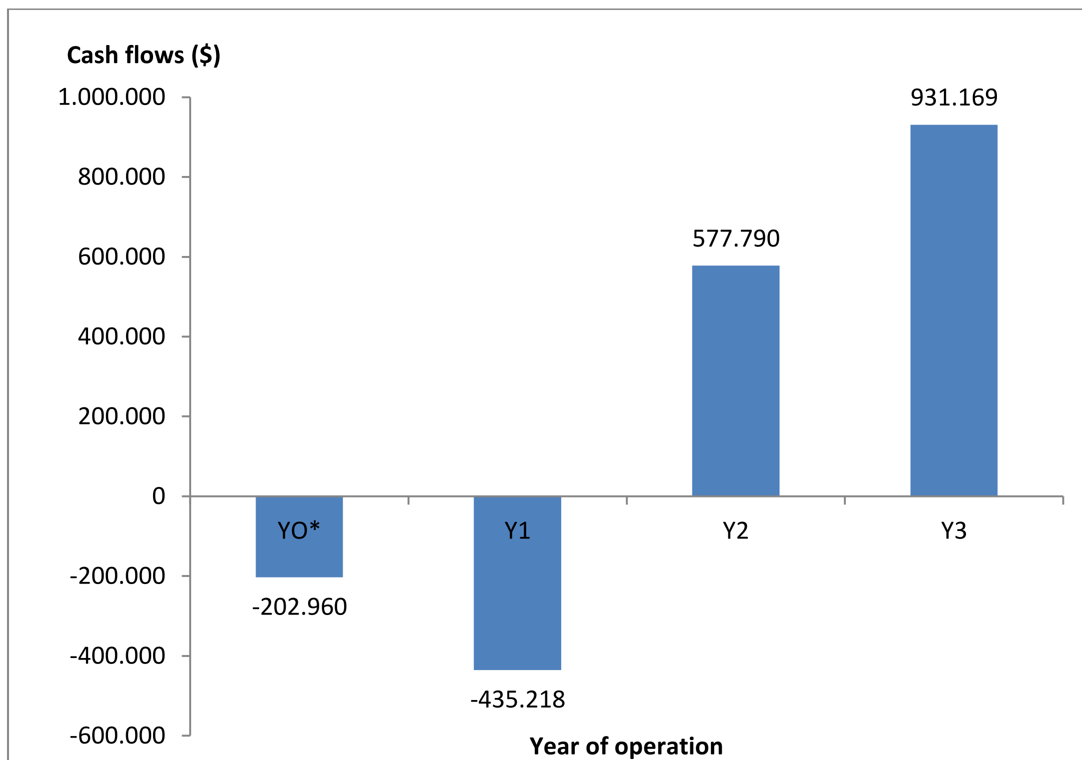

Figure 23.Mobile Doctors Cash Flows

**Refers to initial investment and costs incurred during licensing and business setting up stage*

Based on this information and taking into account a $130,000 economic buffer, the financing break up will be the one shown below.

Table13. Capital StructureEstimation

Concept	Amount
Initial Line of Credit	$75,000
Shareholders' Equity	$700,000

6.3.EQUIPMENT

With regard to the trucks, as exposed in section 2.6, Mobile Doctors will use three types of trucks depending on the region it is operating in and the characteristics of the facilities it serves. Each truck will be customized to fit all the medical equipment necessary to cover the basic medical needs of each community. As a general rule the truck configurations with the highest amount of equipment (plus truck) will be used for remote or highly underserved areas.

The size of the initial investment is highly dependent on the number of trucks and on the ownership of the medical equipment. For this reason, starting the business with only one truck would not only reduce both the fixed and variable costs to operate it but will also allow the company to test the layout for possible improvements. Moreover, starting with one truck would reduce the size of the initial investment and thus reduce the financial risk of the venture, making the company more attractive for potential financial partners.

Regarding the ownership of the medical equipment, given its high cost, it is useful to investigate alternative ways of buying the equipment rather than new. In this aspect, the options of buying pre-owned equipment or leasing become interesting. Between these two options it is believed that leasing the equipment would allow the company to have the latest technology but a higher price than if it were to buy pre-owned equipment. When deciding which of the options to choose the quality of service provided to the customer should be the most important criteria.

For modeling purposes the initial number of trucks will be one and the equipment cost will be $191,760 all of which will be depreciated on a year straight line basis. The initial investment on equipment was done using the following table.

Table14. Cost of Equipment

Asset	Price
Truck	$80.000
Truck Customization	$32.000
Dentist Equipment	$10.000
IT System	$10.000
Fat Analyzer	$8.000
Dentist Chair	$4.000
Pharmaceutical Refigerator	$3.000
Portable X-Ray Machine	$2.000
Blood Analyzer	$1.500
Cholesterol Analyzer	$1.500
Computers	$1.200
Glucose Analyzer	$1.100
Vital Sign Monitor	$1.100
Articulated bed	$1.000
Urine Analyzer	$1.000
Cashier	$1.000
Esterilized Equipment	$700
Blood Pressure Arm	$700
Nursing equipment	$500
Subtotal	$159.800
Safety Coefficient	20%
Total	$191.760

6.4. TECHNOLOGY

There are several factors to take into account when setting up the cloud-stored database Mobile Doctors intends to use. Although most of the details will be negotiated with MD's IT supplier, some factors to take into account are described below:

- Hardware. Very small companies can get along with a database stored in a single PC located at their offices. However, this is not the case for Mobile Doctor as it plans to serve several hundred clients and pretends to give them 24hr access to their medical records. For this reason Mobile Doctor's database will have to be stored at a rented computer facility. The reason for this is that setting up a robust computer system would be inconvenient at the beginning due to the higher initial costs, space needed and maintenance.
- Software. Mobile Doctors will have the option to either design its proprietary database software or use an existing one such as Oracle, MySQL or Microsoft Access. Due to the fact that medical records are highly confidential and for economic purposes Mobile Doctors will start operations by paying a database supplier license to later on set up its own software once the business has a solid client base.
- Support and Maintenance. Mobile Doctors will externalize all of its IT services. In this sense, a third party will be in charge of controlling the security of the system and

robustness of the database. With this decision Mobile Doctors aims to lower its fixed costs at the launch stage. With the set-up of the proprietary software Mobile Doctors will evaluate the possibility of having in-house IT service.

Taking all these factors into account and after consulting several forums such as CostOwl, the cost of setting up Mobile Doctors It system was estimated at $10,000 plus a maintenance fee of $200 per month.

7. KEY ACTIVITIES

In order to launch the business, the first step will be to secure financing from either a strategic or financial partner. As discussed previously in this document, MD would prefer a strategic partner to possibly take advantage of its existing network. Secondly MD would need to hire a legal firm to set up the company legally and to apply for all the required permits and licenses. Thirdly, MD would have to order a mobile health clinic from one of the existing truck customization companies. At the same time, MD would have to start the hiring process to find a crew with which to start operating. The following figure is a rough estimation that illustrates the time schedule of events preceding the official launch of the business.

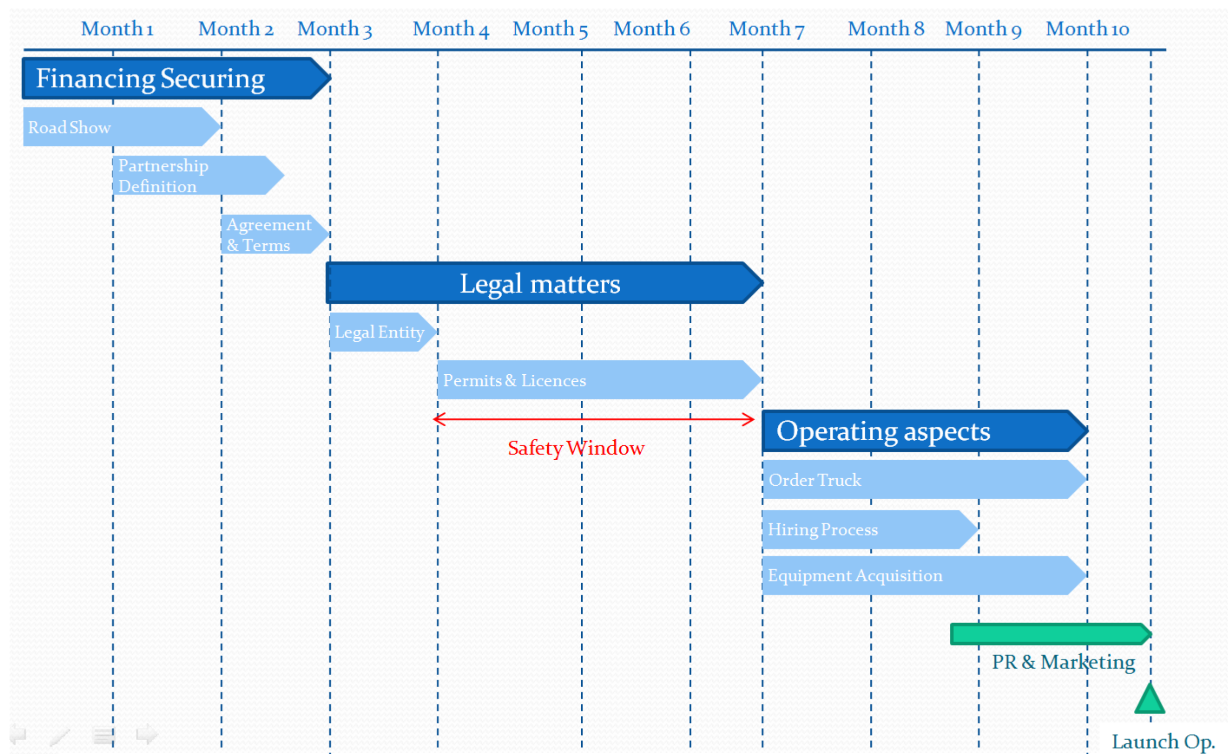

Figure 24.Business Launching Estimated Timetable

Once the business has been officially launched Mobile Doctors will have a two-phase value chain. On the one hand the management of the company together with the sales force will be in charge of signing new clients and scheduling the truck visits. On the other hand the medical staff and call center will be in charge of serving customers. The two phases of the value chain can be defined as the client engagement phase and client management phase. The following graph is a representation of the two-phase value chain.

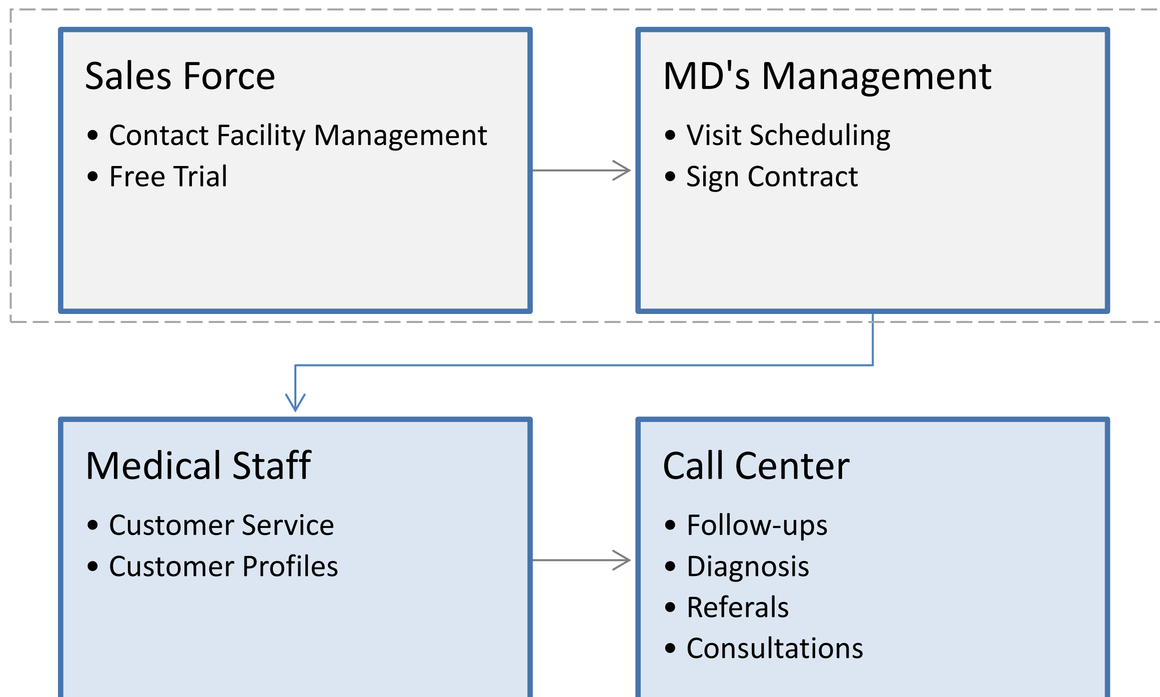

Figure 25. Two-Phase Value Chain

Each of the steps of the two-phase value chain can be described as follows.

- Client engagement phase: Firstly the sales force is responsible for contacting the management teams of the different facilities and setting up meetings. In these meetings the sales force will introduce the company's services and offer a free trial. After the trial, MD's management will start contract negotiations with each facility's management. The aim of these negotiations is to sign an exclusivity contract with the maximum time length possible. After the contract is signed MD's management will coordinate with each facility to set up bimonthly visits.
- Client management phase: On the first trial, the medical staff has the task to create a new profile for each client. This profile will go in Mobile Doctors' cloud-stored database and will allow customers to have full access to MD's accessibility features. After the first visit and after MD's medical staff has treated each patient it is the call center's responsibility to keep each customer informed of any updates available to his profile or any check-ups due.

These two phases will repeat themselves on a recurrent basis in order to achieve customer retention from both the patients and the facility's management.

8. COST STRUCTURE

Mobile Doctors cost structure is characterized by the importance of its fixed costs (90% of total costs in first year), more specifically the cost of its employees' salaries. The intense preparation needed to become a doctor together with the high cost of insurance needed to cover for civil responsibility make salaries in the medical profession considerably high. The table below shows a breakdown of the cost of each employee's salary at the beginning of operation. It should be noted that the Chief Executive Offer salary is just a representative figure as he will be a shareholder and thus does not have salary as he will receive part of the benefits as dividends.

Table15. Salaries Breakdown

Service Operations	
Doctor, General Practice	*$180.000*
Dentist	*$150.000*
Nurse	*$60.000*
Total	*$390.000*
Sales and Marketing	
Sales Director	*$90.000*
Marketing Director	*$90.000*
Total	*$180.000*
General and Administrative	
Chief executive officer	*$0*
Chief financial officer	*$80.000*
Assistant	*$50.000*
Total	*$130.000*

On top of this, another important line item that should be taken into account is the benefits (such as health care, training, 401(k)) for each employee estimated at 25% or the annual salary and the aforementioned insurance for the medical staff, estimated at 10% of the annual salary. With these into account the fixed costs broken down by employee division can be observed in the following table.

Table 16.Mobile Doctors' Fixed Costs

Service Operations	
Salaries	*$390.000*
Benefits (such as health care, training, 401(k))	*$97.520*
Insurance	*$39.000*
Total	*$526.520*
Sales and Marketing	
Salaries	*$180.000*
Benefits (such as health care, training, 401(k))	*$45.000*
Marketing programs	*$22.000*
Public relations	*$4.000*
Total	*$251.000*
General and Administrative	
Salaries	*$130.000*
Benefits (such as health care, training, 401(k))	*$32.520*
Depreciation	*$40.092*
Rent	*$48.000*
Professional services (not including subcontractors)	*$40.000*
Telephone	*$6.400*
Postage	*$4.000*
Interest expense	*$495*
Miscellaneous	*$8.000*
Total	*$309.507*
Total Fixed Costs*	*$1.087.027*

**An extended table with the reasoning behind all estimations can be observed in annex 1*

As it can be observed in the previous table the influence of the medical staff cost is considerably important for the profitability of the business, to be more exact costs associated to doctors and their salary amount for 43% of all fixed costs. For this reason doctor utilization will be a key value to measure the profitability of the business. A high doctor utilization will mean that the cost associated to each service is lower and thus a higher margin is achieved per service. In this sense, the profitability of Mobile Doctors' business depends on truck utilization. Such is the importance of this Key Performance Measure (KPI) that a economic analysis was carried out to determine with the initial amount of staff what would be the minimum level of utilization. The results can be seen in the following graph.

Additionally, in order to reduce the amount paid on salaries, each employee will be offered an option to receive shares packets in exchange of a salary reduction. Mobile Doctors expects to lower the amount paid on salaries by 20% by implementing this initiative.

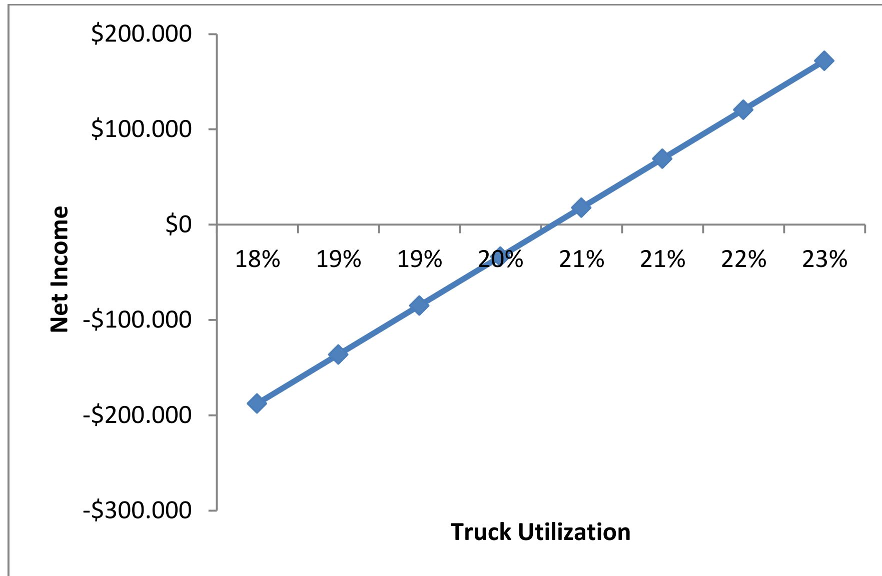

Figure 26.Utilization Analysis

This notion of doctor utilization influencing in the profitability of the business will be of most importance when deciding to add additional doctors to the workforce. An additional doctor will mean a jump in the business fixed costs, an event that if not managed properly could plunge the bottom line to negative figures. For this reason additional doctors should only be hired after a thorough analysis of the level of utilization the new doctor will have. Mobile Doctors could evaluate the possibility of hiring part time doctors when there is not enough business to guarantee a safe utilization rate of an additional doctor.

On the other end, Mobile Doctors cost structure is characterized by the low importance of variable costs. Mobile Doctors has mainly 3 types of variable costs, travel expenditures by each of its three working divisions, the replacement of medical consumables such as bandages, needles and probes, and the rent of additional cloud storage once the business grows. The following table shows an estimation of Mobile Doctors' variable costs for the first years of operation.

Table 17.Mobile Doctors' Variable Costs

Service Operations	
Net travel and entertainment	*$24.960*
Supplies	*$20.000*
Total	*$44.960*
Sales and Marketing	
Travel and entertainment	*$12.000*
Total	*$12.000*
General and Administrative	
Nonbillable travel and entertainment	*$40.000*
Bank Charges	*$7.682*
IT services	*$2.400*
Total	*$50.082*
Total Variable Costs*	*$107.042*

**An extended table with the reasoning behind all estimations can be observed in annex 1*

Regarding economies of scale, while Mobile Doctors will be able to negotiate discounts on gas prices and medical disposable material, it will not be able to cut down its fixed costs as they are constituted mainly by salaries.

9. REVENUE STREAMS

When evaluating revenue streams is important to estimate not only the price at which Mobile Doctors will sell its services but also the acceptance rate of MD's services per facility as well as the maximum utilization of each truck. In this section the number of potential clients per facility will be estimated as well as the reasonable price at which Mobile Doctors should sell its services. On top of this the desired utilization and revenue per truck will also be evaluated.

In order to get a idea of what kind of returns to expect from the business being proposed in this document one would have to look at both the healthcare industry and the mobile health clinic industry. The reason for this is that while Mobile Doctors would definitely classify as a mobile health clinic, the type of services it offers and more importantly the target customers it aims to serve are relatively different from the current offering. In this sense, since MD plans is to draw some of the hospital's current clients its expected returns should fall somewhere between those of the mobile health clinics and the hospitals.

While not much research has been carried out in the mobile clinics sector several projects have shown promising returns that could be extended to other players. One example of this is The Family Van, a mobile health clinic operating in the Greater Boston area, which obtained a $30 return on investment for every $1 invested when adjusted for the saving achieved by preventing unnecessary ED visits. On a more broad scale, the Mobile Health Map Organization estimated a $14 ROI per $1 invested in a mobile clinic (Oriol et al 2009).

On the hospital side, while projects tend to be more capital intensive and with a longer time horizon the average return is 10.2% (Csimarket, 2016).

Based on this numbers, Mobile Doctors should expect a Return on Investment around 7%. However, it is understandable that this rate or return would be difficult to achieve during the first years of operation.

9.1. MARKET SIZING

In order to estimate the number of clients per facility the following assumptions have been used. Nursing homes were estimated to have an average of 70 residents while assisted living facilities 50. Acceptance rate for Mobile Doctors services was 40% for nursing homes and 30% for assisted living facilities. The reason behind this difference in acceptance rate is that residents of assisted living facilities usually have higher levels of mobility and thus may prefer to travel to doctor's offices. Table 18 shows all mentioned assumptions.

Regarding the number of visits per month it was estimated using the results from the average visits to physician offices shown in section 2.

Table18. MarketSizing

Market Sizing	
Nursing Homes	
Average number of residents	70
Service acceptance	40%
Average potential clients	28.00
Procedures per client per visit	2
Estimated procedures per visit	56.00
Estimated visits per month	2
Assisted Living Facilities	
Average number of residents	50
Service acceptance	30%
Average potential clients	15.00
Procedures per client per visit	2
Estimated procedures per visit	30.00
Estimated visits per month	2

9.2. TRUCK OPTIMIZATION

To estimate the maximum revenues each truck can generate per quarter the previously estimated price was used together with the maximum amount of procedures given per day. To arrive at the maximum number of procedures given per day the nations average time spent at a physician office was used (Health, United States, 2014). This time which can be observed in the table below was rounded up to 20mins to prevent double counting paperwork time when providing several services in the same visit. This reduction in average time per procedure can also be explained by the higher complexity of the services offered at hospitals.

Table 19.Average Time Spent at the Physician Office (National Ambulatory Care Survey)

Physician specialty	Mean time in minutes spent with physician[1]	Standard error of mean	25th percentile	Median	75th percentile
All visits	22.6	0.2	14.3	18.9	29.1
Psychiatry	33.0	1.4	15.0	29.4	44.9
Neurology	30.5	1.7	14.9	25.4	39.1
Oncology	26.1	1.1	14.8	20.0	29.7
Internal medicine	24.4	0.5	14.5	19.6	29.6
Cardiovascular diseases	23.5	0.8	14.4	19.5	29.3
General surgery	22.2	1.1	14.1	16.1	29.0
General and family practice	21.4	0.4	14.3	17.4	26.7
Otolaryngology	19.4	1.2	14.1	14.8	20.6
Urology	21.4	0.7	14.3	17.8	24.6
Obstetrics and gynecology	21.5	0.6	14.3	18.4	26.4
Pediatrics	20.3	0.5	14.2	16.7	23.8
Orthopedic surgery	17.7	0.6	10.9	14.6	19.5
Ophthalmology	23.3	1.1	14.1	17.6	27.4
Dermatology	16.6	0.5	10.0	14.5	19.1
Allergy	27.9	0.9	15.0	24.5	31.2
Pulmonology	23.1	0.8	14.4	19.3	29.3
All other specialties	25.5	0.5	14.5	19.7	29.7

[1]Only visits where a physician was seen are included. Time spent with physicians was missing for 37.4 percent of visits where a physician was seen. Estimates presented include imputed values for missing data.
SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

Based on the aforementioned average procedure direction, the amount of working hours per day and transport times, the estimated procedures per day at maximum utilization was established at 63. The table below shows the utilization estimations used in the financial model.

Table20. Utilization Estimations

Service Operation	
Capacity	
Staff members	3
Daily working hours	8
Preparation time	0,5
Transport & prep. time	1,5
Net working hours	6
Average procedure duration	0,33
Maximum procedures per day	54,00
Facilities visited per day	1,8
Revenue Estimation	
Average procedure price	107,05
Working days in a week	5
Working days in a month	20
Months per quarter	3
Ideal Quartely Income	***$1.734.287***

It should be taken into account that this revenue is at maximum utilization, something that will not be achieved from the beginning.

9.3. PRICING

In order to select the appropriate range at which to price the service offered by Mobile Doctors a competitive price strategy will be used. In this sense since most of the procedures offered by Mobile Doctors will be related to preventive care, the average price per service has been calculated using the average cost of POC testing at pharmacy chains such as Wal-Mart, Walgreens. To account for the added comfort and personalized service a mark-up of 20% was added to this average. The following table explains the pricing estimation.

Table 21.Price Estimation

Procedure	Cost ($)
Minor Illness	95.00
Minor Injuries	95.00
Skin Condition	95.00
Vaccinations & Injections	120.00
Screening & Monitorings	70.00
Wellness & Physicals	70.00
Average Cost	**89.21**
Delivery mark-up	**20%**
Final Cost	**107.05**

Although more specialized services, such those related to dental procedures, will have higher prices for the purpose of simplicity the average price of $107 was used to represent all services offered by MD.

9.4. FIRST YEAR REVENUE ESTIMATION

Based on the information above a projection of the first year's revenue was made. In order to project realistic revenues it was estimated that Mobile Doctor's sales force will only be able to add 2 long term care facilities per quarter to its customer base. The results can be observed in the table below.

Table 22.Revenue Estimations for First Year of Operations

Revenue Estimations - Regular Scenario -						
First Year of Operation						
Total Revenues	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Nursing Homes	179.852	251.793	323.734	395.674	1.151.053	2 incremental per quarter
Assisted Living Facilities	38.540	77.079	115.619	154.159	385.397	
Revenue	218.392	328.872	439.353	549.833	1.536.450	
Utilization	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Maximum number of procedures per month	5400,00	5400,00	5400,00	5400,00	5400,00	2 incremental per quarter
Total number of procedures per month	680,00	1024,00	1368,00	1712,00	1712,00	
Total utilization	13%	19%	25%	32%	32%	
Nursing Homes	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Number of facilities Served	5,00	7,00	9,00	11,00	11,00	2 incremental per quarter
Number of potential clients	140,00	196,00	252,00	308,00	308,00	
Number of procedures required	280,00	392,00	504,00	616,00	616,00	
Price per procedure	107,05	107,05	107,05	107,05	107,05	
Visits per month	2,00	2,00	2,00	2,00	2,00	
Revenue	179.852	251.793	323.734	395.674	1.151.053	
Assisted Living Facilities	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Number of facilities Served	2,00	4,00	6,00	8,00	8,00	2 incremental per quarter
Number of potential clients	30,00	60,00	90,00	120,00	120,00	
Number of procedures required	60,00	120,00	180,00	240,00	240,00	
Price per procedure	107,05	107,05	107,05	107,05	107,05	
Visits per month	2,00	2,00	2,00	2,00	2,00	
Revenue	38.540	77.079	115.619	154.159	385.397	

9.5. FINANCIAL MODEL

While the beginnings of the business will be slow due to license processing and governmental procedures MD is expected to see considerable incomes from year two.

On the revenues side, the growth rate of the business the number of facilities served was estimated to grow at a 10% rate for the first 3 years, a rate low enough to be considered realistic.

On the costs side, Mobile Doctors is expected to maintain its workforce stable for the first three years with the only addition of an additional phone operator (assistant) from year two. The reasoning behind this measure is that from at the end of year one the phone operator's utilization reaches the 80% levels and thus another operator is required. The following table shows this reasoning. It should be noted that this is a worst case scenario as by no means will all customers call the call center each month.

Table 23.Phone Operator Utilization Analysis

Number of Potential Clients at End of Year 1	428
Number of Working Days in a Month	22
Number of Clients per Working Day	19.45
Average Time per Phone Consultation	20 mins
Duration of Phone Consultations per Day	389 mins (6.48 hrs)
Working Hours per Day	8
Phone Operator Utilization	81%

With all these factors in mind a three year profit & loss statement was estimated and can be observed in the table below. Due to the tenure of the business it was estimated that a projection longer that three years would be too unrealistic.

Table 24.Three-year Financial Model

P&L Regular Scenario	Y1	Y2	Y3
Revenue			
Nursing Homes	$1.151.053	$1.740.967	$1.915.064
Assited Living	$385.397	$678.299	$746.129
Total Revenue	$1.536.450	$2.419.266	$2.661.193
Expenses			
Operating Costs	$526.520	$552.846	$580.488
General and Administrative	$309.507	$324.982	$341.231
Sales and Marketing	$251.000	$313.550	$329.228
Total Expenses	$1.087.027	$1.191.378	$1.250.947
Profit	$449.423	$1.227.888	$1.410.245
Taxes	$134.827	$368.366	$423.074
Net Income	$314.596	$859.521	$987.172

It should be noted that the jump in revenues and thus in net income is linked to the utilization rate of the truck. Being new in the market and having to build a brand name makes MD's utilization stay at the low 20% levels for the first year. However, as soon as a base of loyal clients is secured the business shows great revenues.

9.6. STRESS TEST

In order to test the robustness of the financial model a stress test based on three possible scenarios was carried out. The different parameters used for each scenario can be observed in the table below.

Table25. Stress Test Scenarios

	Price Mark-Up	Nursing Home Acceptance	Assisted Living Acceptance
Pessimistic	15%	30%	20%
Regular	20%	40%	30%
Optimistic	25%	50%	40%

The first notable difference that the previous hypotheses cause is the amount of potential customers per residence. The different average numbers for each scenario can be observed below.

Table 26.Average Number of Clients for Each Scenario

Market Sizing			
Nursing Homes	*Pesimistic*	*Regular*	*Optimistic*
Average number of residents	70	70	70
Service acceptance	30%	40%	50%
Average potential clients	21,00	28,00	35,00
Procedures per client per visit	2	2	2
Estimated procedures per visit	42,00	56,00	70,00
Estimated visits per month	2	2	2
Assisted Living Facilities			
Average number of residents	50	50	50
Service acceptance	20%	30%	40%
Average potential clients	10,00	15,00	20,00
Procedures per client per visit	2	2	2
Estimated procedures per visit	20,00	30,00	40,00
Estimated visits per month	2	2	2

The average number of clients per facility will undoubtedly affect the revenues that Mobile Doctors will generate during its first years of operation. In this sense, while for the regular case Mobile Doctors was expected to see a positive bottom line from year 1 this is not the case when the stress test is carried out.

In the pessimistic case, Mobile Doctors is expected positive benefits from year 2 onwards while for the optimistic case Mobile Doctors is expected to see benefits from year 1. An important takeout from the stress test is that the pessimistic scenario is the only one in which Mobile Doctors experiences a negative bottom line on year 1. The graph below shows Mobile Doctors revenues under each of the three scenarios.

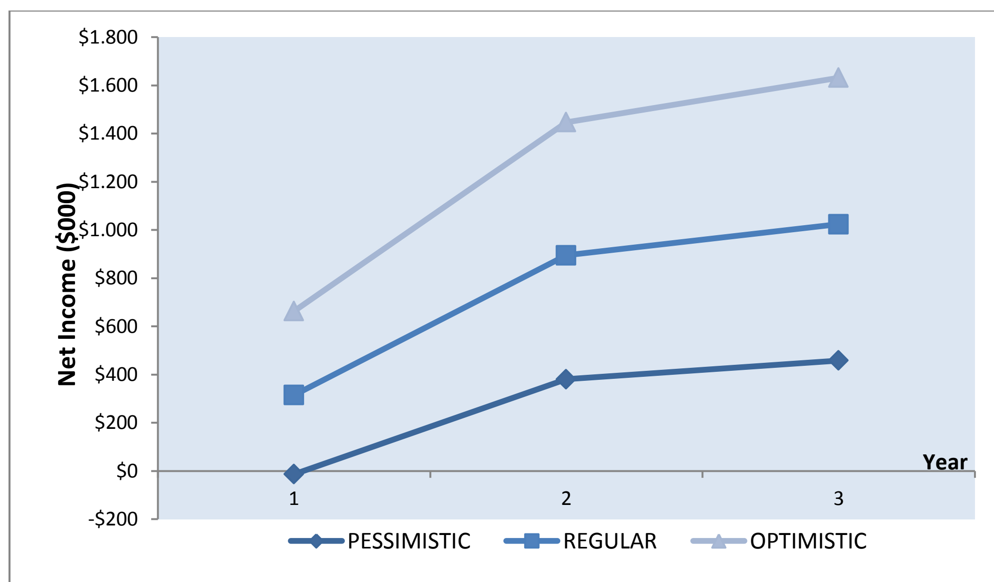

Figure 27. Mobile Doctors Revenue Stress Test

In light of the previous results it could be concluded that in spite of the variations made to the price and attractiveness of the business, Mobile Doctors' revenues look promising. However, in order to attract both financial and strategic partners the returns of the business will have to be examined. To do so the cash flows the business is expected to realize will be of great use, these cash flows can be seen in the following graph.

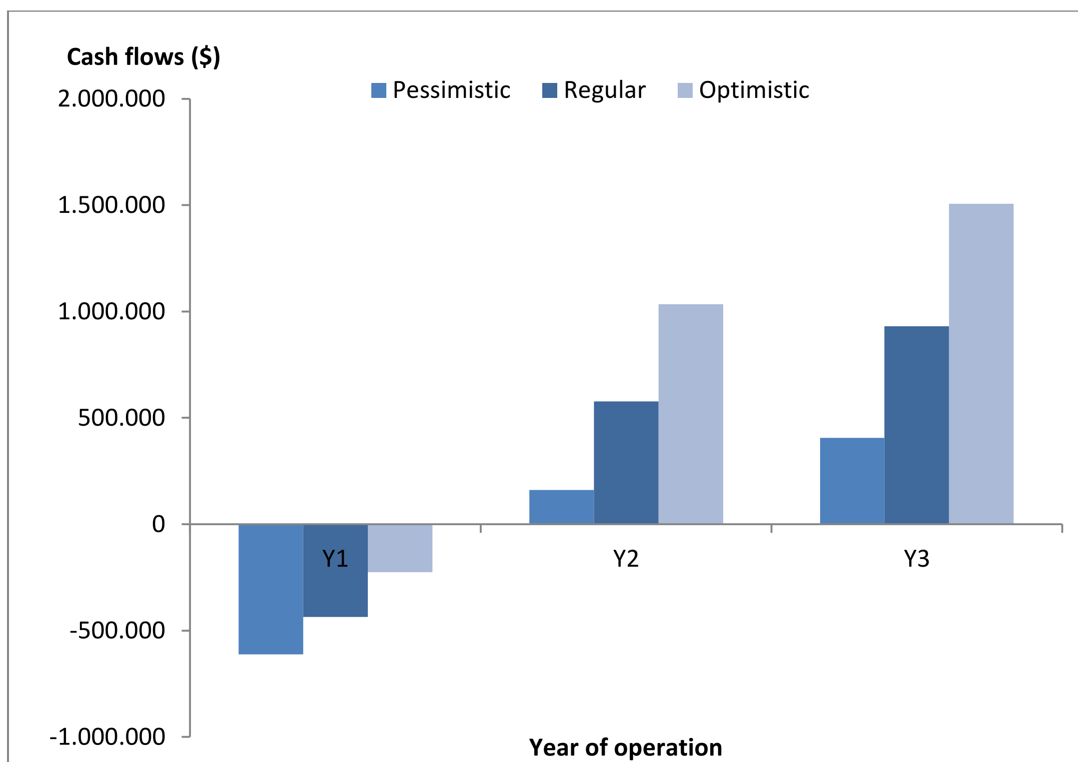

Figure 28.Stress Test Scenario Cash Flows

**Initial investment and setting up costs can be seen in section 6.2*

As it was expected, in all three scenarios, the crucial year of operation is the first, as it will determine the amount of money that the business needs as a buffer to cope with the initial losses (as discussed in section 6.2). These initial losses are due to the fact that all of Mobile Doctors staff have a low utilization and thus their salaries are bigger than the revenue they generate. The aforementioned initial capital must take into account not only the initial negative cash flows but also the size of the initial investment which was covered previously in this document. In this sense, the following table indicates the initial capital needed to launch the business and the expected payout period for each scenario.

Table 27.Average Return Stress Test

	Pessimistic	Regular	Optimistic
Capital Needed	$920,000	$700,000	$460,000
Payout Period	3.3 years	2.1 years	1.4 years

Asa conclusion of this stress test analysis it could be said that Mobile Doctors is an attractive business with a payout period between 1.4 and 3.3 years, from this time on its shareholders will enjoy considerable revenues rounding the six digit figures. Regarding the initial capital needed to launch the business to be on the safe side MD estimates an initial capital of $810k, half way between the pessimistic and regular scenarios. In this sense, Mobile Doctors capital structure after the stress test will be as the one shown in Table 28. As it was mentioned at the beginning of this document, Mobile Doctors business will be characterized for its considerable initial investment and high revenues both characteristics of the healthcare industry.

Table28. Adjusted Capital Structure

Concept	Amount
Initial Line of Credit	$75,000
Shareholders' Equity	$810,000

10. SWOT ANALYSIS

Strengths	Weaknesses
➢ First Mover Advantage ➢ Proximity to Client ➢ Significant Cost Reduction for Clients ➢ Service Offering Range ➢ Multiple Appointment ➢ Instant Results ➢ Coordination with Facility ➢ Variable Costs ➢ Contracts with Facility Companies ➢ Elimination of Appointments ➢ Loyal Customer Base ➢ Connectivity ➢ Customer Service Quality	➢ Preventive Care Level ➢ Available Resources ➢ Labor Cost ➢ Utilization Rates ➢ Client Coordination ➢ Market Dispersion ➢ Initial Cash Flows ➢ High Fixed Costs ➢ Credibility ➢ Initial Investment ➢ Dependence on Facility Management ➢ Supplies Purchasing Power
Opportunities	**Threats**
➢ Untapped Market ➢ Geographical Dispersion ➢ Customized Service ➢ Word of Mouth ➢ Hospital Procedure Automation ➢ Growing Clientele Segment ➢ Growth in Elderly Care Facilities ➢ Niche Market ➢ Data Availability ➢ Non-seasonal Business ➢ Highly Concentrated Target Customers ➢ Several Potential Strategic Partners ➢ Scarce Offer for Increasing Demand	➢ Hospitals Entering the Business ➢ Elderly Care Facilities Entering the Business ➢ POC Reaction ➢ New Movers Into the Industry ➢ Medicare & Medicaid Coverage ➢ Licenses & Permits ➢ Non-cooperative Facilities

STRENGTHS

➢ First Mover Advantage

This could be considered one of the biggest strengths of this business idea. By being the first player in the mobile clinic industry to target elderly care facilities MD will be able to benefit from several advantages.

Firstly the cumbersome process of applying for the permits and licenses will give MD an estimated window of 3 months to react against competitors trying to enter the industry. In this sense, upon the entrance of a new competitor MD has a time window in which to strengthen relationships and secure client loyalty.

Secondly, MD will be able to leverage the power of being the only player in this niche market to sign long term contracts with long term care facilities. These long term contracts will serve as a shield against competitors entering the business.

Thirdly and closely related to the previous point is the possibility of signing exclusivity contracts with the strategic partners mentioned in section 5. However, this action could be a double-edged sword since those partners could demand the same exclusivity back from Mobile Doctors. In order to overcome this situation the cost benefit analysis of each agreement will have to be evaluated.

Fourthly, the amount of client data stored in the company's cloud will serve as a disincentive for customers to change health providers. Although, MD is obliged by law to make all stored records available to the client, the company is not obliged to handle this information to other competitor in a computerized or database friendly form.

➢ Proximity to Client

One of the strengths of MD against traditional forms of healthcare such as hospitals and private clinics is the level of personalization. MD will not only keep a tight record of each patient, as other business do, MD will also actively remind each patient when their next checkups and tests are due. In order to achieve the highest utilization possible and increase service personalization the staff will run through each client's file before showing up at the facility. Clients will see how the doctors assigned to their facility are the same every time and how they have a complete understanding of their personal situation. On top of this, MD will offer the resident the option to let his/her relative know when their next procedures are due so they can also be present. As stated in the mission statement client satisfaction is MD's priority and thus the achievement of this service personalization will be rigorously monitored.

- **Significant Cost Reduction for Clients**

  Mobile Doctors will have the potential of reducing costs for clients. These reductions will come in many forms. Firstly, clients will save money by not having to individually travel to hospitals or private clinics to receive their treatments. This cost savings will be of special relevance for residents with reduced mobility and for residents of facilities in remote areas. On top of this, MD's wide service offering will also reduce the frequency and number of trips to hospitals. Since Mobile Doctors will offer several types of services such as dental and preventive, clients will no longer have to visits different doctors' offices to receive their medical attention and thus will save time and money in transportation.

- **Service Offering Range**

  As opposed to other healthcare providers the range of services that MD offers will not only fall under one specialty. For this reason, MD trucks will serve as a one-stop-service enabling customers to receive different procedures in the same location. The procedures list has been designed after a thorough analysis of hospital outpatient department and physician office trends. To be more precise, the mentioned data was filtered by age and frequency to derive the set of procedures that will best serve MD's client base. In this sense, MD's service offering is based on the most demanded services by the elder community and thus is well suited to perfectly meet all their needs.

- **Multiple Appointments at Once**

  Tightly related to the previous point is the fact that MD will enable its clients to not only receive a wide variety of healthcare services but also to receive them at once. In this sense, the residents won't have to set up one appointment for each of the medical procedures they want to receive as it happens with hospitals. MD will contact each resident prior to visiting the facility and will inform them of the scheduled procedures they need and if they wish to receive any additional ones. Upon the arrival of the truck, the residents will only have to go in and the doctor/nurse will already be ready to perform all the required procedures.

- **Instant Results**

  MD will offer the same advantages that POC testing pharmacies actually offer which are: convenience, cost and time effectiveness. MD will offer its customers all kind of preventive tests such as blood tests, fat tests and glucose tests with immediate results and interpretation. Within a matter of minutes a customer will be able to have is cholesterol checked for example and have the expert opinion of a doctor on the results of such tests. In this sense, MD will cut the transportation time to get to the doctor's office or hospital and the time for needing to have the results elaborated by a tests lab. It should be noted that due to this fact POC facilities such as CVS, Walgreens and Wal-

Mart have been gaining a lot of popularity in the last years and Mobile Doctors plans to benefit from this trend.

- **Coordination with Facility's Schedule**

As stated in its mission statement MD's highest priority is to defend its clients interest and to increase their comfort. For this reason, Mobile Doctors aim to provide its service in such a way to create the least disturbance to its clients daily activity schedule.

In consequence, as it will be explained in the marketing section, Mobile Doctors visits to each facility will be coordinated with each facility's management. This coordination will guarantee that residents will not have to interrupt any of their activities to undergo their medical procedures. Mobile Doctors will coordinate the schedules of the different facilities it serves to cause the least possible disruption to resident's normal living.

Mobile Doctors believes that its clients will appreciate increased comfort its services offer when compared to other healthcare providers such as hospitals and physician offices. Elders will no longer have to stop their activities to make a trip to a hospital or private clinic. At times when they have no important thing going on they will be able to just calmly exit the building's front door and receive their medical treatments.

- **Low Variable Costs**

One of the characteristics of businesses operating in the healthcare industry is the high amount of fixed costs and the almost insignificant variable costs. Mobile Doctors business model will then be characterized for being light on variable costs and intense on fixed costs, especially those related to human capital. MD's variable costs will consist mainly on nursery supplies such as needles, bandages and probes, and the costs related to operating the trucks such as gas and toll fares. The low variable costs will mean that attending an additional client will not involve any additional major cost, in fact, it will greatly help reduce the amount of fixed costs allocated to each procedure.

- **Contracts with Key Facility Management Companies**

The existence of large long term care corporations with whom to sign long term contracts agreements with is seen as positive factor. When permitted MD will try to negotiate contracts at the corporate level to save time and optimize results. It is reasonable to believe that large companies such as Brookdale will be willing to do business with companies that will increase the comfort of its facilities' residents. On top of these, these companies will benefit from a differentiator factor against their peers.

- **Elimination of the Cumbersome Appointment System**

MD's service proposal eliminates the old habit of having to remember to book appointment and the corresponding waiting lists. MD's scheduling system will remind

clients when they need to retake tests or follow-ups and on top of this MD's bimonthly visit system will allow walk-ins for the comfort of its customers. These two features are directly aligned with MD's mission statement of putting client's interest and comfort as the top priority.

- **Loyal Customer Base**

  Given the fact that the target market are the elders of 65 years and older, it is believed that this group is it not in the game of changing between companies to increase benefits but in the game of having a hands-free attitude while maintaining a certain level of control. While this fact could also be considered a threat the current size of the market together with MD's first mover advantage makes it an attractive strength. MD believes that securing a small market share will be enough to realize generous profits and the loyalty of its clients will give an extra level of security on the future of the business. This loyalty will also enable the company to focus all its efforts on generating new business rather than focusing on maintaining the current client base, a desirable feature for a company with desires to grow rapidly.

  On top of this, the comfort of MD's cloud-stored database will serve as a barrier to move to competitors. While other players could also offer this feature the inconvenience of losing past data and to start from scratch will deter clients from reaching out to competitors and thus making them loyal clients.

- **Connectivity and Data Accessibility**

  MD understands that most of the times the relatives are the ones in charge of the residents health and how important is for them to have easy access to their medical reports. For this reason MD will make available all customer records to the people the residents desire to give access to. To do this, MD will use a user friendly portal in which customers and customer's relatives will have access to test results, diagnosis and future appointments. Special emphasis should be put on the fact that this portal will be extremely user friendly as it has to be easily usable by a community with short to none experience with internet and mobile apps. This feature will clearly be one of the company's clear competitive advantages.

- **Customer Service Quality**

  MD will strive to provide the highest quality of service possible and to do so, as opposed to other preventive care providers such as POC clinics, MD will staff its trucks with doctors who can give extended interpretations of the results of each test. While some of the tests customers take at POC clinics are later taken to a doctor for interpretation and diagnosis, MD will eliminate this two-step process and will offer everything under one roof.

WEAKNESSES

➢ Preventive Care Level

MD's service proposal is based on the desire to optimize the space of each truck and to maximize doctor utilization. In this aspect, the employment of highly specialized doctors would not be economically feasible due to their expected low utilization. Also, the size and amount of the medical equipment needed to perform highly specialized procedures will bring the initial investment up to an unjustifiable level. For these reasons, Mobile Doctors will recede from offering services such as time consuming surgeries, rare illness treatments, full size MRIs, full body X-rays and any other time consuming treatments. As an estimate Mobile Doctors will only offer services of an average duration of 30 minutes mainly preventive care and follow-ups.

Mobile Doctors could leverage the weakness of not being able to perform all medical procedures and try to negotiate some kind of deal with hospitals or private clinics in exchange for referrals of patients to their facilities.

➢ Available Resources

As its infrastructure is composed of trucks, Mobile Doctors will have the physical limitation of having to fit all its equipment and personal in one truck or van. This restriction clearly limits the amount of resources each truck will have to attend client's needs. While trucks could use exterior space to serve clients, in a similar way as food trucks do, the space to carry equipment and personnel from one site to another will still be limited. For this reason Mobile Doctors will have to put especial emphasis in design process of each truck and will have to carefully evaluate which equipment will have the highest demand and utilization. In this aspect, it is believed that big machinery such as full body X-ray and MRI machines will not be suitable for the business.

➢ Labor Cost

Due to the elevated salaries Doctors demand, Mobile Doctors' cost structure is dominated by staff salaries, more precisely by the number of doctors in the workforce. Hence the necessity to maximize doctor utilization. Doctors' elevated salaries come from the mixture of their intense formation and the expensive liability insurance they are required to have. This fact is considered a weakness due to the fact that the incremental cost of hiring an additional doctor has the potential to plunge the bottom line of the P&L and thus upset MD's shareholders. Nevertheless, it should be noted that as the business grows, the negative impact of having a doctor with a low utilization rate will be less and less harmful. Therefore, this point will only be considered a strong weakness during the first stage of operation.

- **Utilization Rates**

Given the high salaries paid to doctors the economic feasibility of the business is fully dependent on achieving a utilization rate as high as possible. While a 100% utilization rate is not realistic Mobile Doctors will have to optimize its routes and time duration of services offered to ensure that utilizations rates close to 80-85% are achieved. This fact will create a delicate trade-off between time spent per client and customer satisfaction. While the priority of the business is the later one, the economic survival of the business will depend on the former one. This inevitable pressure posed on doctors will have to be carefully managed in order to stay true to the company's mission statement.

- **Client Coordination**

While the bimonthly service Mobile Doctors plans to implement in each elderly care facility seems like a good and straightforward idea the occurrence of events that require immediate attention might push away some clients. However, given the type of services offered by Mobile Doctors (preventive care, follow ups and dental) it is believed that the probability of requiring them with urgency is considerably small and thus Mobile Doctors should not design an expensive plan to combat such events.

- **Market Dispersion**

While there exists some large players, the long term care industry is highly fragmented with the leading players only enjoying a couple of percentage points of market share. This fragmentation impedes Mobile Doctors from negotiating contracts at the corporate level and thus highly increases the amount of time needed to penetrate the market. Having to negotiate individual contracts with each facility individually takes a lot of time and networking efforts. For this reason is especially important the marketing efforts made in industry focus mediums to speed up the penetration process as much as possible. The longer it takes Mobile Doctors to gain a decent client base the more losses it will incur due to the utilization aspects.

- **Initial Cash Flows**

Due to the low utilization rates due to the slow market penetration at its launch Mobile Doctors will incur losses during the first months of operation. For this reason Mobile Doctors will need to secure enough financing to cope with these losses until a safe level of business is achieved. To reduce the size of these losses Mobile Doctors will star with only one truck as a demo and will add subsequent ones as the business grows.

- **High Fixed Costs**

Due to the level of required accuracy and robustness medical equipment is characterized for having a considerably elevated cost. Also, the fact that in order to give its customers top quality and time saving service Mobile Doctors needs the latest technology available also brings up the cost.

- **Credibility**

  Mobile Doctors' initial low credibility could affect the rate of acceptance of its services amongst the different elderly care facilities. Given the importance that the procedures have on the health of the clients the credibility of the business and its staff is a factor to seriously take into consideration. In this aspect, the partnership with a strategic player such as an insurance company, hospital or private clinic will be of great help. However it should be noted that the nature of the services being offered by Mobile Doctors (preventive care, follow ups and dental) does not require the level of credibility that other procedures such as surgery would. In fact, for preventive care such as vaccines and blood tests it is expected to receive full acceptance as Point of Care facilities offer it without the presence of a doctor.

- **Initial Investment**

  The elevated cost of medical equipment together with the truck and necessary licenses to operate will elevate the initial investment required to a considerable amount. On top of this the cash buffer needed to support the losses of the first months of operations will made the need of exterior financing inevitable.

- **Dependence on Facilities' Management**

  Since the contract with each facility is negotiated with the management instead of the residents there is a strong dependence on management cooperation. In this sense, each facility's management enjoys a reasonable power over Mobile Doctors to negotiate schedules and maybe rates. However, as the business grows, Mobile Doctors services will be considered as basic to stay competitive against other facilities and thus the management of each facility will lose some bargaining power.

- **Supplier'sPurchasingPower**

  Due to its small initial size Mobile Doctors will not be able to negotiate prices with suppliers and thus will have to buy supplies at higher costs than other player. Despite the fact that as mentioned earlier, supplies are almost insignificant in comparison to the fixed cost, if a competitor manages to achieve any sort on discount on this it might be able to offer a more competitive price. It should also be noted how this bargaining power will fade as the business grows and becomes more important for its suppliers. Moreover, if Mobile Doctors was to partner with a healthcare provider it could benefit from its already established negotiating power and thus enjoy discounted prices.

OPPORTUNITIES

- **Untapped Market**

  Currently there is no one targeting the segment that Mobile Doctors intends to do. This brings a wide range of opportunities to Mobile Doctors.

To start with, Mobile Doctors will not have price pressure from direct competitors, at least at its beginning. This factor is of special importance given the negative cash flows the business will have in its first months of operation. In this sense, having some flexibility on pricing will allow Mobile Doctors to reduce those initial losses and thus make the project more attractive for investors.

On top of this, being the only player in the business will allow Mobile Doctors to create a brand name faster. If there were several players clients would have trouble remembering the name of each one but since they will not be contacted by any other players they will only have to remember one player. In this line of reasoning, Mobile Doctors has the potential of becoming an industry reference as it will be the first one to implement all the advantages and customization strategies.

Furthermore, being the pioneer in the business will arise the curiosity of players in the long term business and thus will ease Mobile Doctors ability to get interviews with management teams of both individual facilities and residences. In a crowded industry clients are tired of hearing the same business proposals over and over again and thus making interviews harder to get.

Lastly, being the pioneer in the market will allow Mobile Doctors to spot other existing gaps in the industry either by itself or by operating with long term care players. As Jackie Foss from the Birches Assisted Living explained, management teams are willing to collaborate with anyone that brings higher automation or comfort to their residents.

- **Geographical Dispersion**

Elderly care facilities are dispersed all around the 50 states. This aspect brings many opportunities. For instance, it means that the pie is not only big enough for a diverse number of players but also dispersed enough so players do not have to share the same regions. Moreover, it opens the door for the creation of specialized vehicles depending on the region and necessities. This would increase the value added by Mobile Doctors and thus its attractiveness to customers.

- **Customized Service**

As explained in the previous point the geographical diversity of the elderly care industry brings up many opportunities like tailoring MD's services to specific regions. For instance, Mobile Doctors could operate small and quick vans in urban areas where access to hospitals is not an issue and heavy loaded trucks in rural areas where communities have difficult access to healthcare. The more specialized and necessary a service is for a customer the more he/she is willing to pay and Mobile Doctors could benefit from such opportunity.

- **Word of Mouth in Small Communities**

  Mobile Doctors could easily profit from the publicity of the word of mouth. The cumbersome process of having to escort elders to hospitals and physician offices could push relatives to recommend Mobile Doctors' services to other relatives. In this sense, once Mobile Doctors starts operating in a certain community, the increased comfort its services will bring and the novelty of its approach will surely give citizens a topic to discuss about.

- **Hospital Procedure Computerization**

  As explained by Daniel Klein of Mercer, the current trouble hospitals are having automating all their paperwork bring up an opportunity for Mobile Doctors to set itself as an industry referent of how to integrate connectivity and healthcare. Also, Mobile Doctors could sell its expertise to hospitals once proven effective.

- **Growing Clientele Segment**

  As explained earlier in the document the elder segment of the population is growing at a rate of approximately 3 times that of the rest of the population. This fact undeniably constitutes an opportunity for Mobile Doctors as it means that its target customer segment is growing.

- **Growth in Elderly Care Facilities**

  The growth in the elder segment of the population together with the change in mentality of the population towards long term care alternatives is driving a robust growth in the elderly care industry. This trend directly affects Mobile Doctors as it creates new sources of business for the company.

- **Niche Market**

  The market that Mobile Doctors intends to operate in, while big in size (~$180bn), could be considered a niche market for big healthcare providers and thus deter them from devoting resources to entering it. This would mean that Mobile Doctors would only have to worry about potential competitors of similar size.

- **Data Availability**

  Given the constraints that an aging population poses in the allocation of economic resources to healthcare by the government, lots of research has been conducted on the aging of population and their medical needs. Consequently the increasing popularity of long term care has also been analyzed in full detail. All of this research and analysis will be of great help for Mobile Doctors when planning strategic moves.

One application of this could be when Mobile Doctors wants to evaluate the potential popularity of its services in a new area. Based on the number of residents and their medical needs Mobile Doctors could assess if the region is worth entering or not.

- **Non-seasonal Business**

While illnesses change with the seasons, patients are always in need of medical services. For example the winter season is characterized by a high demand of flu procedures while the spring season has a higher demand of drugs to overcome allergies.

While this aspect could be considereda strength it is believed to be an opportunity due to the fact that having the ability to leverage this aspect is not trivial. In this sense, Mobile Doctors has to be able to adapt its service offering to the different seasons of the year. If the company was able to do this it would fully take advantage of the cyclical characteristics of the industry.

- **Highly Concentrated Target Customers**

The high concentration of clients under one roof brings Mobile Doctor the opportunity to make great profits without having to incur in transportation costs. In this aspect, with a high acceptance rate Mobile Doctors has the potential to make a reasonable profit by just visiting a few facilities per day. On top of this, the low competition derived from long term contracts makes this opportunity even more attractive.

- **Several Potential Partners**

As it is described in section 5 Mobile Doctors' business proposal has the potential of being of high interested to several parties. Some of these parties are hospital chains, private clinics, insurance companies, elderly care companies and even the government.

The reason for its attractiveness does not only come from reduced costs and operating times but also from the ability to refer clients to other institutions. In this sense, Mobile Doctors has several tools with which to negotiate partnerships with.

THREATS

- **Hospitals Developing Similar Businesses**

There is the possibility that hospital companies or individual owners develop initiatives similar to that of Mobile Doctors. These hospitals could take advantage of their know-how and proven credibility to quickly gain clients trust and loyalty.

However, Mobile Doctors' value proposition has one differentiator that will disable hospitals from competing in an equal basis and this is the connectivity facet of the business. Hospitals are struggling to computerize their slow and bureaucratic procedures and thus won't be able to implement a fully connected service such as that

of Mobile Doctors in the short term. In order to do so, hospitals would have to implement an integral transition from a paper-based bureaucracy to a computer-based one, a step considered too expensive to be achieved in a short time.

On top of this, as explained in other parts of this document, Mobile Doctors will have several tools at its hand to react against the competitive reaction of existing healthcare players. Some of these tools are, the negotiation of long term contracts, the time window that the application for licenses give and the time to order customized trucks.

- **Elderly Care Facilities Developing Similar Businesses**

  Mobile Doctors strongly believes this will not be a threat as no synergies will be realized by long term care facilities in making this move. Currently, elderly care facilities have no business in taking care of the health needs of their residents but just in looking after them and making their life easier. For this reason there is little sense for these players making a move into to the healthcare business unless they are looking for diversification. In this aspect, since the market for long term care is still growing and the number of elders looking for elderly care options is growing Mobile Doctors sees no reason for diversification in the short to medium term.

- **Point of Care Facilities Reaction**

  Point of Care facilities competitive reaction is a threat worth evaluating. Point of Care facilities could see their business negatively impacted with the launch of Mobile Doctors. These players could easily evaluate the idea of leveraging their brand name to make an entrance in Mobile Doctors niche market.

  However, as it happens with hospitals, the amount of services these facilities offer and the range of ages serves makes Mobile Doctors believe that the negative impact they will incur will not be big enough to justify the launch of an alternative to Mobile Doctors in the healthcare industry. Moreover, the fact that the Point of Care industry is relatively new makes MD believe that the priority of these player still is to gain strength in their core market rather than tapping adjacent ones.

  On top of this, as explained in other parts of this document, Mobile Doctors will have several tools at its hand to react against the competitive reaction of existing healthcare players. Some of these tools are, the negotiation of long term contracts, the time window that the application for licenses give and the time to order customized trucks.

- **New Movers Into the Business**

  This point makes reference to the entrance of new players to the business, more specifically players that do not have presence in the above mentioned sectors. Examples of this could be entrepreneurs, partnerships and joint ventures. Against this threat

Mobile Doctors only has the tools mentioned in other parts of the document. To react against the possible entrance of a new healthcare supplier to the elder community Mobile Doctors could renew and extend long-term contracts with elderly care facilities and leverage the time window that the application for licenses give and the time to order customized trucks to secure new contracts.

Medicare & Medicaid Coverage

Mobile Doctors has the risk of not having its services covered by Medicare and Medicaid. Account for 61% of total payments in 2012, Medicare the dominant primary sources of payment for medical care in the elder community and without its coverage Mobile Doctors will be unable to operate. Medicaid, on the other hand, covers a smaller portion of total payments (4% in 2012) but still is a source of payment needed to operate in the industry. The following figure shows the evolution of source of payment for the segment of the population 65 years and older.

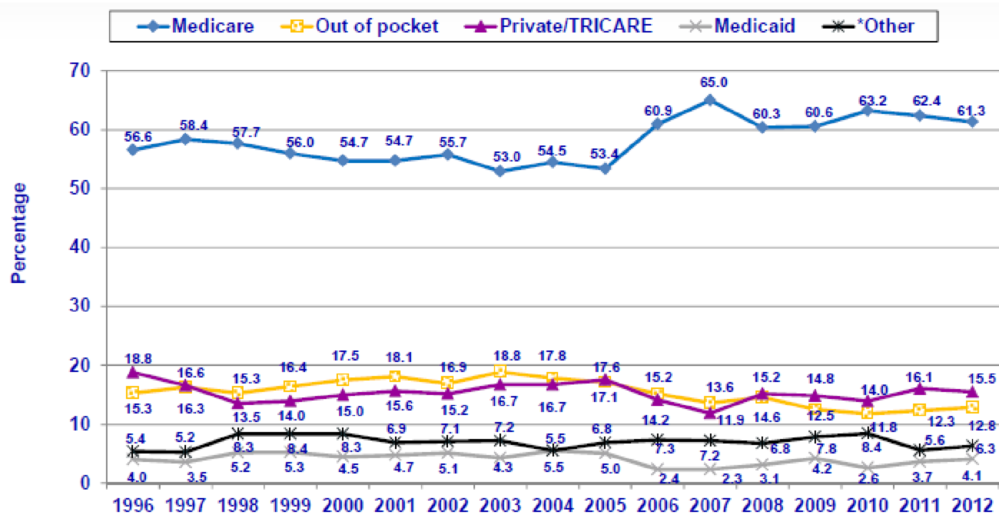

Figure 29.Source of Payment for Healthcare for People of 65 Years and Older(MEPS 2015)

Two comments should be made on this point. First of all, since Mobile Doctors will substantially reduce costs to the government, there is no reason to believe that there will any trouble in obtaining Medicare and Medicaid coverage. Secondly, since the application for the different government medical aids will be done in the initial stage of the launch of the business no major economic losses will be incurred by Mobile Doctors shareholders if the project does not go through. For this reason, MD does not believe this threat will pose any trouble in securing financing from its partners.

- ### Licenses / Permits

Mobile Doctors has the risk of not obtaining the licenses and permits to operate in the healthcare industry. For this reason an specialized legal firm will be hired to run all the process and decrease this probability to the minimum possible.

Nevertheless, the number of mobile clinics currently operating in the United States (around 2,000) makes Mobile Doctors believe that there will not be considerable barriers in obtaining the necessary permits to launch and operate the business.

- ### Non-cooperative Elderly Care Facilities

Mobile Doctors faces the risk of having to treat with long term care facilities that are not willing to cooperate with the business and thus makes MD's mission difficult to implement. In order to prevent this situations both the marketing and sales teams should work together to make sure the management of such facilities understand the benefits that Mobile Doctors would bring both to them and their residents. Here the presence of Mobile Doctors in local trade shows and industry magazines and events becomes extremely helpful. On top of this, MD's strategy of approaching each facility and offering a free trial is aimed at convincing customers of the value its services offer and thus put pressure on the management to sign the corresponding agreements.

11. LEGAL ASPECTS

Starting a business the healthcare industry is not a trivial procedure as many licenses and permits are required. Since the management of the company does not have any expertise in this matter all legal aspects of the business will be outsourced to an specialized firm. Mobile Doctors understands that the fastest way to set up the business and begin operations is by outsourcing all the related paperwork to an specialized firm as opposed to having an in-house lawyer. This will inevitably result in higher costs that will be offset by beginning operations at an earlier date.

On top of this, the risk of litigation linked to accidents and misunderstandings is another reason why MD should rely on an specialized legal firm for its legal protection. As the company grows and if the number of litigations increases to a considerable amount, the possibility of having an in-house lawyer will be studied.

Lastly, it should be noted that the considerably expensive insurance policies required by the medical staff are one of the main factors why staff salaries is the biggest expense that MD is expected to have. For the purpose of clarity these insurance policies have been included in a separate line from the regular salary when doing the financial model.

12. CONCLUSION AND NEXT STEPS

There is no doubt that the elder segment of the population is continuously growing and thus bringing a great future for the elderly care business. The reduced transportation costs together with the increased comfort brought by the shorter waiting times and proximity to clients' residence makes MD believe that the business proposal will have a great impact on the elderly care industry. Moreover, the fact that all customers are located at the same point together with the fact that hospitals do not depend on the services MD will take away from them makes the sustainability of the business more realistic.

Furthermore, MD believes the reduced costs its service offers will be seen with good eyes by a government having trouble to provide medical service to this ever-growing segment of the population. In this sense MD does not expect to encounter additional barriers preventing it from operating under Medicare and Medicare as most of the elderly care industry already does. On top of this, the positive outcome of the preliminary economic analysis of the business will draw the attention of capital investors and thus increase the possibilities of growing faster.

As the base of clients grows, Mobile Doctors will expand its geographical coverage and will begin operating in other counties of California. In this aspect following the analysis carried out in section 3.2 MD will expand its coverage to San Bernardino and Orange Counties once having exhausted all opportunities at San Diego.

As a result of growing the base of clients MD will also add new trucks to its fleet and will adjust their layout to local needs and trends observed. It is estimated that prior to acquiring a new standard truck MD will need an urban truck to be able to satisfy the needs of small communities in a timely manner.

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ANNEX 1. FINANCIAL MODEL

Business Unit Budgets—Service Operations, Sales and Marketing, and General and Administrative

A. Service operations

Service operations expenses	Q1	Q2	Q3	Q4	Annual total	Notes
Salaries	*$97.500*	*$97.500*	*$97.500*	*$97.500*	*$390.000*	Total labor expense pulled from Row 35
Benefits (such as health care, training, 401(k))	*24.380*	*24.380*	*24.380*	*24.380*	*97.520*	Rounded calculation based on input sheet rate
Insurance	*9.750*	*9.750*	*9.750*	*9.750*	*39.000*	Estimated at 10% of salary
Net travel and entertainment	**6.240**	**6.240**	**6.240**	**6.240**	*24.960*	Estimated 1 truck tank per day @ $60/ tank
Supplies	**5.000**	**5.000**	**5.000**	**5.000**	*20.000*	Annual total should equal financial plan target
General and miscellaneous	**0**	**0**	**0**	**0**	*0*	
Total service operations expenses	*$142.870*	*$142.870*	*$142.870*	*$142.870*	*$571.480*	

Service operations headcount analysis by role	Number of full-time employees (FTEs)					Notes
Doctor, General Practice	**1,00**	**1,00**	**1,00**	**1,00**	*1,00*	
Dentist	**1,00**	**1,00**	**1,00**	**1,00**	*1,00*	
Nurse	**1,00**	**1,00**	**1,00**	**1,00**	*1,00*	
TBD	**0,00**	**0,00**	**0,00**	**0,00**	*0,00*	
TBD	**0,00**	**0,00**	**0,00**	**0,00**	*0,00*	
TBD	**0,00**	**0,00**	**0,00**	**0,00**	*0,00*	
Total service operations headcount	*3,00*	*3,00*	*3,00*	*3,00*	*3,00*	

Service operations labor expense breakdown by role	*Annual cost*	Q1	Q2	Q3	Q4		Notes
Doctor, General Practice	**$180.000**	$45.000	$45.000	$45.000	$45.000	*$180.000*	Payscale.com, Time.com
Dentist	**150.000**	37.500	37.500	37.500	37.500	*150.000*	Payscale.com, Time.com
Nurse	**60.000**	15.000	15.000	15.000	15.000	*60.000*	Payscale.com, Time.com
TBD	**0**	0	0	0	0	*0*	
TBD	**0**	0	0	0	0	*0*	
TBD	**0**	0	0	0	0	*0*	
Service total operations labor expense		*$97.500*	*$97.500*	*$97.500*	*$97.500*	*$390.000*	

B. Sales and marketing

Sales and marketing expenses	Q1	Q2	Q3	Q4	Annual total	Notes
Salaries	*$45.000*	*$45.000*	*$45.000*	*$45.000*	*$180.000*	
Benefits (such as health care, training, 401(k))	*11.250*	*11.250*	*11.250*	*11.250*	*45.000*	Rounded calculation based on input sheet rate
Marketing programs	**5.500**	**5.500**	**5.500**	**5.500**	*22.000*	From marketing plan
Public relations	**1.000**	**1.000**	**1.000**	**1.000**	*4.000*	Gifts
Travel and entertainment	**3.000**	**3.000**	**3.000**	**3.000**	*12.000*	Travel & meals
Supplies	**0**	**0**	**0**	**0**	*0*	
General and miscellaneous	**0**	**0**	**0**	**0**	*0*	
Total sales and marketing expenses	*$65.750*	*$65.750*	*$65.750*	*$65.750*	*$263.000*	

Sales and marketing headcount analysis by role	Number of full-time employees (FTEs)					Notes
Sales Director	**1,00**	**1,00**	**1,00**	**1,00**	*1,00*	
Marketing Director	**1,00**	**1,00**	**1,00**	**1,00**	*1,00*	
TBD	**0,00**	**0,00**	**0,00**	**0,00**	*0,00*	
TBD	**0,00**	**0,00**	**0,00**	**0,00**	*0,00*	
TBD	**0,00**	**0,00**	**0,00**	**0,00**	*0,00*	
TBD	**0,00**	**0,00**	**0,00**	**0,00**	*0,00*	
TBD	**0,00**	**0,00**	**0,00**	**0,00**	*0,00*	
Total sales and marketing headcount	*2,00*	*2,00*	*2,00*	*2,00*	*2,00*	

Sales and marketing labor expense breakdown by role	*Annual cost*	Q1	Q2	Q3	Q4		Notes
Sales Director	**$90.000**	$22.500	$22.500	$22.500	$22.500	*$90.000*	
Marketing Director	**90.000**	22.500	22.500	22.500	22.500	*90.000*	
TBD	**0**	0	0	0	0	*0*	
TBD	**0**	0	0	0	0	*0*	
TBD	**0**	0	0	0	0	*0*	
TBD	**0**	0	0	0	0	*0*	
TBD	**0**	0	0	0	0	*0*	
Total sales and marketing labor expense		*$45.000*	*$45.000*	*$45.000*	*$45.000*	*$180.000*	

C. General and administrative

General and administrative expenses	Q1	Q2	Q3	Q4	Annual total	Notes
Salaries	$32.500	$32.500	$32.500	$32.500	$130.000	
Benefits (such as health care, training, 401(k))	8.130	8.130	8.130	8.130	32.520	Rounded calculation based on input sheet rate
Depreciation	9.978	10.008	10.038	10.068	40.092	5 year straight depreciation
Rent	12.000	12.000	12.000	12.000	48.000	$3000 per month
Professional services (not including subcontractors)	10.000	10.000	10.000	10.000	40.000	Licensing + legal support
Dues and subscriptions	0	0	0	0	0	
Bank charges	1.092	1.644	2.197	2.749	7.682	1 % Fee on credit card ussage (50% Sales)
Telephone	1.600	1.600	1.600	1.600	6.400	$50 per month per employee
Recruiting	0	0	0	0	0	
Postage	1.000	1.000	1.000	1.000	4.000	Estimation
Interest expense	124	124	124	124	495	Bank Loan to be paid in 5 years
Nonbillable travel and entertainment	10.000	10.000	10.000	10.000	40.000	Estimation
IT services	600	600	600	600	2.400	CostOwl Estimation
Miscellaneous	2.000	2.000	2.000	2.000	8.000	Buffer
Total general and administrative expenses	$89.024	$89.606	$90.189	$90.771	$359.589	

General and administrative headcount analysis by role	Number of full-time employees (FTEs)					Notes
Chief executive officer	1,00	1,00	1,00	1,00	1,00	
Chief financial officer	1,00	1,00	1,00	1,00	1,00	
Assistant	1,00	1,00	1,00	1,00	1,00	Additional one to be hired after year 1
TBD	0,00	0,00	0,00	0,00	0,00	
TBD	0,00	0,00	0,00	0,00	0,00	
TBD	0,00	0,00	0,00	0,00	0,00	
TBD	0,00	0,00	0,00	0,00	0,00	
TBD	0,00	0,00	0,00	0,00	0,00	
TBD	0,00	0,00	0,00	0,00	0,00	
TBD	0,00	0,00	0,00	0,00	0,00	
TBD	0,00	0,00	0,00	0,00	0,00	
TBD	0,00	0,00	0,00	0,00	0,00	
TBD	0,00	0,00	0,00	0,00	0,00	
Total general and administrative headcount	3,00	3,00	3,00	3,00	3,00	

General and administrative labor expense breakdown by role	Annual cost	Q1	Q2	Q3	Q4		Notes
Chief executive officer	$0	$0	$0	$0	$0	$0	CEO is founder and shareholder
Chief financial officer	80.000	20.000	20.000	20.000	20.000	80.000	
Assistant	50.000	12.500	12.500	12.500	12.500	50.000	
TBD	0	0	0	0	0	0	
TBD	0	0	0	0	0	0	
TBD	0	0	0	0	0	0	
TBD	0	0	0	0	0	0	
TBD	0	0	0	0	0	0	
TBD	0	0	0	0	0	0	
TBD	0	0	0	0	0	0	
TBD	0	0	0	0	0	0	
TBD	0	0	0	0	0	0	
TBD	0	0	0	0	0	0	
Total general and administrative labor expense		$32.500	$32.500	$32.500	$32.500	$130.000	

Depreciable assets	Beginning balance	Q1	Q2	Q3	Q4	Annual total	Notes
		Additional purchases					
Trucks	$134.400	$0	$0	$0	$0	$134.400	
Equipment	52.560	0	0	0	0	52.560	From initial investment section
IT infrastructure	12.000	600	600	600	600	14.400	CostOwl estimation
Other	0	0	0	0	0	0	
Other	0	0	0	0	0	0	
Total depreciable assets	$198.960	$600	$600	$600	$600	$201.360	
Depreciation base	$198.960	$199.560	$200.160	$200.760	$201.360	$201.360	

Regular Scenario - Pro Forma Financial Statements—Income Statement, Balance Sheet, and Cash Flow Summary

Pro forma annual income statement

Headcount summary		**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Service operations		3,00	3,00	3,00	3,00	3,00	
Sales and marketing		2,00	2,00	2,00	2,00	2,00	
General and administrative		3,00	3,00	3,00	3,00	3,00	
Total headcount		8,00	8,00	8,00	8,00	8,00	
Revenues		**$218.392**	**$328.872**	**$439.353**	**$549.833**	$1.536.450	
Cost of sales		**26.761**	**26.761**	**26.761**	**26.761**	107.042	Estimated at variable costs
Gross margin		$191.631	$302.112	$412.592	$523.073	$1.429.408	
Margin contribution %		88%	92%	94%	95%	93%	
Checkpoint: Revenue per employee from this budget						***$192.056***	Compare to financial plan
Targeted revenue per employee						***$300.000***	From Input sheet
Expenses		**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Service operations		$131.630	$131.630	$131.630	$131.630	$526.520	Taken from operations section
Sales and marketing		62.750	62.750	62.750	62.750	251.000	Taken from sales and marketing section
General and administrative		77.377	77.377	77.377	77.377	309.507	Taken from general and administrative section
Total expenses		***$271.757***	***$271.757***	***$271.757***	***$271.757***	***$1.087.027***	
Operating profit		-$80.126	$30.355	$140.835	$251.316	$342.381	
Other gains (losses)		**0**	**0**	**0**	**0**	-217.405	Staff Inoperative costs during launch stage
Other income		**0**	**0**	**0**	**0**	0	
Total income		-80.126	30.355	140.835	251.316	342.381	
Taxes	30,0%	0	9.110	42.250	75.390	126.750	Rounded calculation based on input sheet rate
Net income		-80.126	21.245	98.585	175.926	215.631	

Pro forma annual balance sheet

Assets		**Q1**	**Q2**	**Q3**	**Q4**	**Annual total**	**Notes**	
	Beginning balance							
Cash	**572.040**	438.993	432.752	503.881	652.381	652.381		
Accounts receivable	**0**	65.518	98.662	131.806	164.950	164.950		30%
Other current assets	**0**	**0**	**0**	**0**	**0**	0		
Total current assets	572.040	504.510	531.413	635.687	817.331	817.331		
Depreciable assets	198.960	199.560	200.160	200.760	201.360	201.360		
Accumulated depreciation	**0**	9.978	19.986	30.024	40.092	40.092		
Land	**0**	**0**	**0**	**0**	**0**	0		
Net property, plant, and equipment	198.960	189.582	180.174	170.736	161.268	161.268		
Licenses	**4.000**	**1.000**	**1.000**	**1.000**	**1.000**	4.000	Agency for Healthcare Admin.	
Total assets	***$775.000***	***$695.092***	***$712.587***	***$807.423***	***$979.599***	***$982.599***		
Liabilities and equity							**Notes**	
Accounts payable	**$0**	6.968	6.968	6.968	6.968	$6.968		20%
Accrued liabilities	**0**	**0**	**0**	**0**	**0**	0		
Other current liabilities	**0**	**0**	**0**	**0**	**0**	0		
Total current liabilities	$0	$6.968	$6.968	$6.968	$6.968	$6.968		
Long-term debt	**$75.000**	**$71.250**	**$67.500**	**$63.750**	**$60.000**	$60.000		
Notes payable	**0**	**0**	**0**	**0**	**0**	0		
Other long-term liabilities	**0**	**0**	**0**	**0**	**0**	0		
Total long-term liabilities	$75.000	$71.250	$67.500	$63.750	$60.000	$60.000		
Total liabilities	$75.000	$78.218	$74.468	$70.718	$66.968	$66.968		
Common stock	**$700.000**	**$700.000**	**$700.000**	**$700.000**	**$700.000**	$700.000		
Retained earnings	**0**	**0**	**0**	**0**	**0**	0		
Cumulative net income	**0**	-80.126	-58.881	39.705	215.631	215.631		
Net equity	$700.000	$619.874	$641.119	$739.705	$915.631	$915.631		
Total liabilities and equity	***$775.000***	***$698.092***	***$715.587***	***$810.423***	***$982.599***	***$982.599***		

Pro forma annual cash flow summary				
Sources of funds	**Q1**	**Q2**	**Q3**	**Q4**
From operations	-$80.126	$21.245	$98.585	$175.926
Add depreciation	9.978	10.008	10.038	10.068
Net changes in balance sheet accounts				
Current assets	-65.518	-33.144	-33.144	-33.144
Current liabilities	6.968	0	0	0
Other sources of funds				
Other gains (losses)	0	0	0	0
Other	0	0	0	0
Total sources	-$128.697	-$1.891	$75.479	$152.850
Uses of funds				
Repurchase of stock	0	0	0	0
Debt retirement	-3.750	-3.750	-3.750	-3.750
Purchase of equipment and assets	-600	-600	-600	-600
Other uses	0	0	0	0
Total uses	-$4.350	-$4.350	-$4.350	-$4.350
Net change in cash	-133.047	-6.241	71.129	148.500
Cumulative cash	-133.047	-139.288	-68.159	80.341
Beginning balance	$572.040	$438.993	$432.752	$503.881
Ending balance	$438.993	$432.752	$503.881	$652.381

Summary trend data for chart	**Q1**	**Q2**	**Q3**	**Q4**
Quarterly revenue	218.392	328.872	439.353	549.833
Quarterly margin	191.631	302.112	412.592	523.073
Quarterly net income (loss)	-80.126	21.245	98.585	175.926
Quarterly cash flow	-133.047	-6.241	71.129	148.500
Quarterly total assets	695.092	712.587	807.423	979.599

Regular Scenario - Pro Forma Financial Statements—Income Statement, Balance Sheet, and Cash Flow Summary

Pro forma annual income statement

Headcount summary		Y1	Y2	Y3	Notes
Service operations		3,00	3,00	3,00	
Sales and marketing		2,00	2,00	2,00	
General and administrative		3,00	3,00	3,00	
Total headcount		8,00	8,00	8,00	
Revenues		**$1.536.450**	**$2.419.266**	**$2.661.193**	Y1-Y2 Surge due to slow start (Q1 only 2 facilities)
Cost of sales		**107.042**	**117.746**	**129.521**	Estimated at variable costs & 10% growth
Gross margin		*$1.429.408*	*$2.301.520*	*$2.531.672*	
Margin contribution %		*93%*	*95%*	*95%*	
Checkpoint: Revenue per employee from this budget				***$332.649***	Compare to financial plan
Targeted revenue per employee				***$300.000***	From Input sheet
Expenses		Y1	Y2	Y3	Notes
Service operations		$526.520	$526.520	$526.520	Taken from operations section
Sales and marketing		251.000	251.000	251.000	Taken from sales and marketing section
General and administrative		309.507	359.507	359.507	Taken from general and administrative section
Total expenses		***$1.087.027***	***$1.137.027***	***$1.137.027***	
Operating profit		*$342.381*	*$1.164.493*	*$1.394.645*	
Other gains (losses)		**-217.405**	**0**	**0**	Staff Inoperative costs during launch stage
Other income		**0**	**0**	**0**	
Total income		*124.975*	*1.164.493*	*1.394.645*	
Taxes	*30,0%*	*126.750*	*349.350*	*418.390*	Rounded calculation based on input sheet rate
Net income		*-1.775*	*815.143*	*976.255*	

Pro forma annual balance sheet

Assets	Beginning balance	Y1	Y2	Y3	Notes	
Cash	**572.040**	*136.822*	*714.612*	*1.645.780*		
Accounts receivable	**0**	*460.935*	*725.780*	*798.358*		30%
Other current assets	**0**	**0**	**0**	**0**		
Total current assets	*572.040*	*597.757*	*1.440.392*	*2.444.138*		
Depreciable assets	*198.960*	*198.960*	*198.960*	*198.960*		
Accumulated depreciation	**0**	*40.092*	*80.184*	*120.276*		
Land	**0**	**0**	**0**	**0**		
Net property, plant, and equipment	*198.960*	*158.868*	*118.776*	*78.684*		
Licenses	**4.000**	**4.000**	**300**	**300**	Agency for Healthcare Admin.	
Total assets	***$775.000***	***$760.625***	***$1.559.468***	***$2.523.122***		
Liabilities and equity					Notes	
Accounts payable	**$0**	*0*	*0*	*0*		20%
Accrued liabilities	**0**	**0**	**0**	**0**		
Other current liabilities	**0**	**0**	**0**	**0**		
Total current liabilities	*$0*	*$0*	*$0*	*$0*		
Long-term debt	**$75.000**	**$60.000**	**$45.000**	**$30.000**	5 Year duration	
Notes payable	**0**	**0**	**0**	**0**		
Other long-term liabilities	**0**	**0**	**0**	**0**		
Total long-term liabilities	*$75.000*	*$60.000*	*$45.000*	*$30.000*		
Total liabilities	*$75.000*	*$60.000*	*$45.000*	*$30.000*		
Common stock	**$700.000**	**$700.000**	**$700.000**	**$700.000**		
Retained earnings	**0**	**0**	**0**	**0**		
Cumulative net income	**0**	*-1.775*	*813.368*	*1.789.622*		
Net equity	*$700.000*	*$698.225*	*$1.513.368*	*$2.489.622*		
Total liabilities and equity	***$775.000***	***$758.225***	***$1.558.368***	***$2.519.622***		

Pro forma annual cash flow summary					
Sources of funds		Y1	Y2	Y3	
From operations		$215.631	$815.143	$976.255	
Add depreciation		40.092	40.092	40.092	
Net changes in balance sheet accounts					
Current assets		-460.935	-264.845	-72.578	
Current liabilities		0	0	0	
Other sources of funds					
Other gains (losses)		**-217.405**	**0**	**0**	
Other		**0**	**0**	**0**	
Total sources		-$422.618	$590.390	$943.769	
Uses of funds					
Repurchase of stock		**0**	**0**	**0**	
Debt retirement		-15.000	-15.000	-15.000	
Purchase of equipment and assets		2.400	2.400	2.400	
Other uses		**0**	**0**	**0**	
Total uses		-$12.600	-$12.600	-$12.600	
Net change in cash	-202.960	-435.218	577.790	931.169	Y0 refers to initial investment and set up costs
Cumulative cash		-435.218	142.572	1.073.740	
Beginning balance		$572.040	$136.822	$714.612	
Ending balance		$136.822	$714.612	$1.645.780	

Summary trend data for chart	Y0*	Y1	Y2	Y3
Quarterly revenue		1.536.450	2.419.266	2.661.193
Quarterly margin		1.429.408	2.301.520	2.531.672
Quarterly net income (loss)		-1.775	815.143	976.255
Quarterly cash flow		-435.218	577.790	931.169
Quarterly total assets		760.625	1.559.468	2.523.122

Revenue Estimations - Regular Scenario -

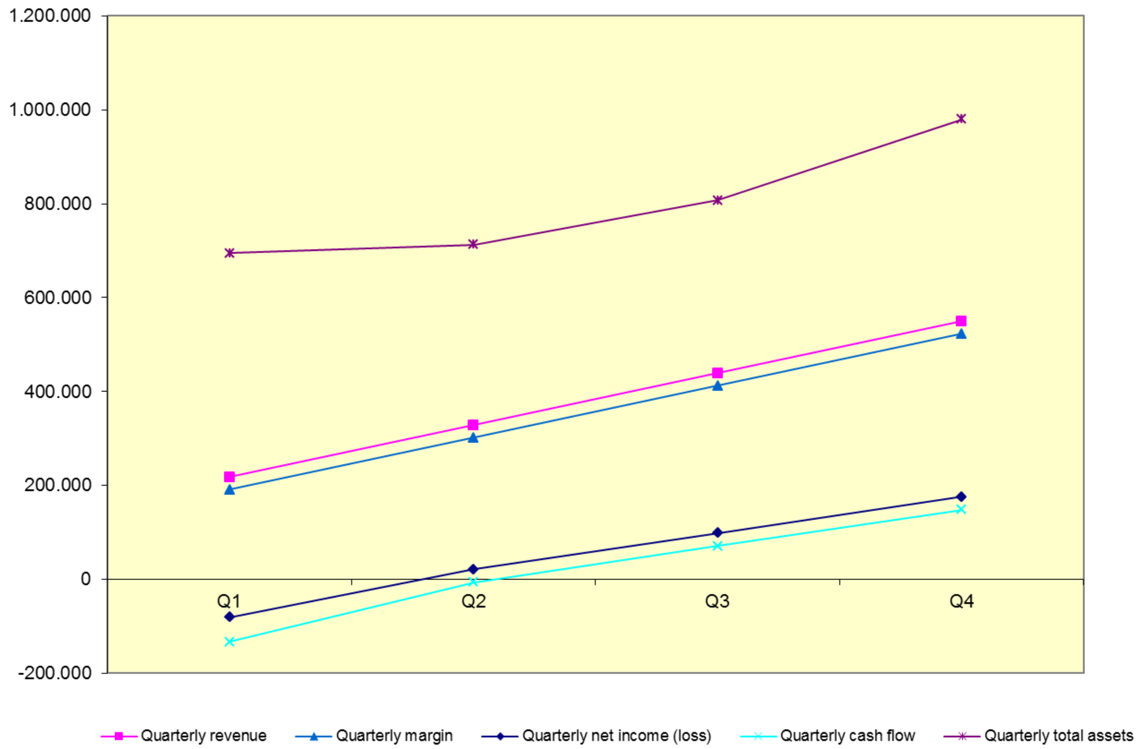
First Year of Operation

Total Revenues	Q1	Q2	Q3	Q4		**Notes**
Nursing Homes	179.852	251.793	323.734	395.674	1.151.053	2 incremental per quarter
Assisted Living Facilities	38.540	77.079	115.619	154.159	385.397	
Revenue	218.392	328.872	439.353	549.833	1.536.450	

Utilization	Q1	Q2	Q3	Q4		**Notes**
Maximum number of procedures per month	5400,00	5400,00	5400,00	5400,00	5400,00	2 incremental per quarter
Total number of procedures per month	680,00	1024,00	1368,00	1712,00	1712,00	
Total utilization	13%	19%	25%	32%	32%	

Nursing Homes	Q1	Q2	Q3	Q4		**Notes**
Number of facilities Served	5,00	7,00	9,00	11,00	11,00	2 incremental per quarter
Number of potential clients	140,00	196,00	252,00	308,00	308,00	
Number of procedures required	280,00	392,00	504,00	616,00	616,00	
Price per procedure	107,05	107,05	107,05	107,05	107,05	
Visits per month	2,00	2,00	2,00	2,00	2,00	
Revenue	179.852	251.793	323.734	395.674	1.151.053	

Assisted Living Facilities	Q1	Q2	Q3	Q4		**Notes**
Number of facilities Served	2,00	4,00	6,00	8,00	8,00	2 incremental per quarter
Number of potential clients	30,00	60,00	90,00	120,00	120,00	
Number of procedures required	60,00	120,00	180,00	240,00	240,00	
Price per procedure	107,05	107,05	107,05	107,05	107,05	
Visits per month	2,00	2,00	2,00	2,00	2,00	
Revenue	38.540	77.079	115.619	154.159	385.397	


Quarterly Trend for Key Financial Metrics
1.200.000
1.000.000
800.000
600.000
400.000
200.000
0
-200.000
Q1
Q2
Q3
Q4
Quarterly revenue
Quarterly margin
Quarterly net income (loss)
Quarterly cash flow
Quarterly total assets

ANNEX 2. STRESS TEST

Pessimistic Scenario - Pro Forma Financial Statements—Income Statement, Balance Sheet, and Cash Flow Summary

Pro forma annual income statement

Headcount summary		Q1	Q2	Q3	Q4		Notes
Service operations		3,00	3,00	3,00	3,00	3,00	
Sales and marketing		2,00	2,00	2,00	2,00	2,00	
General and administrative		3,00	3,00	3,00	3,00	3,00	
Total headcount		8,00	8,00	8,00	8,00	8,00	
Revenues		**$153.891**	**$230.221**	**$306.551**	**$382.881**	*$1.073.545*	
Cost of sales		**26.761**	**26.761**	**26.761**	**26.761**	*107.042*	
Gross margin		*$127.131*	*$203.461*	*$279.791*	*$356.121*	*$966.503*	
Margin contribution %		*83%*	*88%*	*91%*	*93%*	*90%*	
Checkpoint: Revenue per employee from this budget						***$134.193***	Compare to financial plan
Targeted revenue per employee						***$300.000***	From Input sheet
Expenses		**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Service operations		$131.630	$131.630	$131.630	$131.630	*$526.520*	Taken from operations section
Sales and marketing		62.750	62.750	62.750	62.750	*251.000*	Taken from sales and marketing section
General and administrative		77.377	77.377	77.377	77.377	*309.507*	Taken from general and administrative section
Total expenses		***$271.757***	***$271.757***	***$271.757***	***$271.757***	***$1.087.027***	
Operating profit		*-$144.626*	*-$68.296*	*$8.034*	*$84.364*	*-$120.524*	
Other gains (losses)		**0**	**0**	**0**	**0**	*-217.405*	Staff Inoperative costs during launch stage
Other income		**0**	**0**	**0**	**0**	*0*	
Total income		*-144.626*	*-68.296*	*8.034*	*84.364*	*-120.524*	
Taxes	*30,0%*	*0*	*0*	*2.410*	*25.310*	*27.720*	Rounded calculation based on input sheet rate
Net income		*-144.626*	*-68.296*	*5.624*	*59.054*	*-148.244*	

Pro forma annual balance sheet

Assets	*Beginning balance*	**Q1**	**Q2**	**Q3**	**Q4**	**Annual total**	**Notes**
Cash	**672.040**	*493.843*	*408.305*	*396.718*	*438.591*	*438.591*	
Accounts receivable	**0**	*46.167*	*69.066*	*91.965*	*114.864*	*114.864*	30%
Other current assets	**0**	**0**	**0**	**0**	**0**	*0*	
Total current assets	*672.040*	*540.010*	*477.372*	*488.684*	*553.456*	*553.456*	
Depreciable assets	*198.960*	*199.560*	*200.160*	*200.760*	*201.360*	*201.360*	
Accumulated depreciation	**0**	*9.978*	*19.986*	*30.024*	*40.092*	*40.092*	
Land	**0**	**0**	**0**	**0**	**0**	*0*	
Net property, plant, and equipment	*198.960*	*189.582*	*180.174*	*170.736*	*161.268*	*161.268*	
Licenses	**4.000**	**1.000**	**1.000**	**1.000**	**1.000**	*4.000*	Agency for Healthcare Admin.
Total assets	***$875.000***	***$730.592***	***$658.546***	***$660.420***	***$715.724***	***$718.724***	
Liabilities and equity							**Notes**
Accounts payable	**$0**	*6.968*	*6.968*	*6.968*	*6.968*	*$6.968*	20%
Accrued liabilities	**0**	**0**	**0**	**0**	**0**	*0*	
Other current liabilities	**0**	**0**	**0**	**0**	**0**	*0*	
Total current liabilities	*$0*	*$6.968*	*$6.968*	*$6.968*	*$6.968*	*$6.968*	
Long-term debt	**$75.000**	**$71.250**	**$67.500**	**$63.750**	**$60.000**	*$60.000*	
Notes payable	**0**	**0**	**0**	**0**	**0**	*0*	
Other long-term liabilities	**0**	**0**	**0**	**0**	**0**	*0*	
Total long-term liabilities	*$75.000*	*$71.250*	*$67.500*	*$63.750*	*$60.000*	*$60.000*	
Total liabilities	*$75.000*	*$78.218*	*$74.468*	*$70.718*	*$66.968*	*$66.968*	
Common stock	**$800.000**	**$800.000**	**$800.000**	**$800.000**	**$800.000**	*$800.000*	
Retained earnings	**0**	**0**	**0**	**0**	**0**	*0*	
Cumulative net income	**0**	*-144.626*	*-212.922*	*-207.298*	*-148.244*	*-148.244*	
Net equity	*$800.000*	*$655.374*	*$587.078*	*$592.702*	*$651.756*	*$651.756*	
Total liabilities and equity	***$875.000***	***$733.592***	***$661.546***	***$663.420***	***$718.724***	***$718.724***	

Pro forma annual cash flow summary				
Sources of funds	**Q1**	**Q2**	**Q3**	**Q4**
From operations	-$144.626	-$68.296	$5.624	$59.054
Add depreciation	9.978	10.008	10.038	10.068
Net changes in balance sheet accounts				
Current assets	-46.167	-22.899	-22.899	-22.899
Current liabilities	6.968	0	0	0
Other sources of funds				
Other gains (losses)	**0**	**0**	**0**	**0**
Other	**0**	**0**	**0**	**0**
Total sources	-$173.847	-$81.187	-$7.237	$46.223
Uses of funds				
Repurchase of stock	**0**	**0**	**0**	**0**
Debt retirement	-3.750	-3.750	-3.750	-3.750
Purchase of equipment and assets	-600	-600	-600	-600
Other uses	**0**	**0**	**0**	**0**
Total uses	-$4.350	-$4.350	-$4.350	-$4.350
Net change in cash	-178.197	-85.537	-11.587	41.873
Cumulative cash	-178.197	-263.735	-275.322	-233.449
Beginning balance	$672.040	$493.843	$408.305	$396.718
Ending balance	$493.843	$408.305	$396.718	$438.591

Summary trend data for chart	**Q1**	**Q2**	**Q3**	**Q4**
Quarterly revenue	153.891	230.221	306.551	382.881
Quarterly margin	127.131	203.461	279.791	356.121
Quarterly net income (loss)	-144.626	-68.296	5.624	59.054
Quarterly cash flow	-178.197	-85.537	-11.587	41.873
Quarterly total assets	730.592	658.546	660.420	715.724

Pessimistic Scenario - Pro Forma Financial Statements—Income Statement, Balance Sheet, and Cash Flow Summary

Pro forma annual income statement

Headcount summary		**Y1**	**Y2**	**Y3**	**Notes**
Service operations		3,00	3,00	3,00	
Sales and marketing		2,00	2,00	2,00	
General and administrative		3,00	3,00	3,00	
Total headcount		8,00	8,00	8,00	
Revenues		**$1.073.545**	**$1.684.678**	**$1.853.146**	Y1-Y2 Surge due to slow start (Q1 only 2 facilities)
Cost of sales		**85.634**	**94.197**	**103.617**	Estimated at variable costs & 10% growth
Gross margin		$987.911	$1.590.481	$1.749.529	
Margin contribution %		92%	94%	94%	
Checkpoint: Revenue per employee from this budget				$231.643	Compare to financial plan
Targeted revenue per employee				$300.000	From Input sheet
Expenses		**Y1**	**Y2**	**Y3**	**Notes**
Service operations		$526.520	$526.520	$526.520	Taken from operations section
Sales and marketing		251.000	251.000	251.000	Taken from sales and marketing section
General and administrative		309.507	359.507	359.507	Taken from general and administrative section
Total expenses		**$1.087.027**	**$1.137.027**	**$1.137.027**	
Operating profit		-$99.116	$453.454	$612.502	
Other gains (losses)		**-217.405**	**0**	**0**	Staff Inoperative costs during launch stage
Other income		**0**	**0**	**0**	
Total income		-316.521	453.454	612.502	
Taxes	30,0%	0	136.040	183.750	Rounded calculation based on input sheet rate
Net income		-316.521	317.414	428.752	

Pro forma annual balance sheet

Assets	Beginning balance	**Y1**	**Y2**	**Y3**	**Notes**
Cash	**672.040**	60.947	222.513	628.216	
Accounts receivable	**0**	322.064	505.403	555.944	30%
Other current assets	**0**	**0**	**0**	**0**	
Total current assets	672.040	383.011	727.916	1.184.160	
Depreciable assets	198.960	198.960	198.960	198.960	
Accumulated depreciation	**0**	40.092	80.184	120.276	
Land	**0**	**0**	**0**	**0**	
Net property, plant, and equipment	198.960	158.868	118.776	78.684	
Licenses	**4.000**	**4.000**	**300**	**300**	Agency for Healthcare Admin.
Total assets	**$875.000**	**$545.879**	**$846.992**	**$1.263.144**	
Liabilities and equity					**Notes**
Accounts payable	**$0**	0	0	0	20%
Accrued liabilities	**0**	**0**	**0**	**0**	
Other current liabilities	**0**	**0**	**0**	**0**	
Total current liabilities	$0	$0	$0	$0	
Long-term debt	**$75.000**	**$60.000**	**$45.000**	**$30.000**	5 Year duration
Notes payable	**0**	**0**	**0**	**0**	
Other long-term liabilities	**0**	**0**	**0**	**0**	
Total long-term liabilities	$75.000	$60.000	$45.000	$30.000	
Total liabilities	$75.000	$60.000	$45.000	$30.000	
Common stock	**$800.000**	**$800.000**	**$800.000**	**$800.000**	
Retained earnings	**0**	**0**	**0**	**0**	
Cumulative net income	**0**	-316.521	892	429.644	
Net equity	$800.000	$483.479	$800.892	$1.229.644	
Total liabilities and equity	**$875.000**	**$543.479**	**$845.892**	**$1.259.644**	

Pro forma annual cash flow summary			
Sources of funds	**Y1**	**Y2**	**Y3**
From operations	-$99.116	$317.414	$428.752
Add depreciation	40.092	40.092	40.092
Net changes in balance sheet accounts			
Current assets	-322.064	-183.340	-50.540
Current liabilities	0	0	0
Other sources of funds			
Other gains (losses)	**-217.405**	**0**	**0**
Other	**0**	**0**	**0**
Total sources	-$598.493	$174.166	$418.303
Uses of funds			
Repurchase of stock	**0**	**0**	**0**
Debt retirement	-15.000	-15.000	-15.000
Purchase of equipment and assets	2.400	2.400	2.400
Other uses	**0**	**0**	**0**
Total uses	-$12.600	-$12.600	-$12.600
Net change in cash	-611.093	161.566	405.703
Cumulative cash	-611.093	-449.527	-43.824
Beginning balance	$672.040	$60.947	$222.513
Ending balance	$60.947	$222.513	$628.216

Summary trend data for chart	**Y1***	**Y2**	**Y3**
Quarterly revenue	1.073.545	1.684.678	1.853.146
Quarterly margin	987.911	1.590.481	1.749.529
Quarterly net income (loss)	-316.521	317.414	428.752
Quarterly cash flow	-611.093	161.566	405.703
Quarterly total assets	545.879	846.992	1.263.144

Revenue Estimations - Pessimistic Scenario -

First Year of Operation

Total Revenues	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Nursing Homes	129.269	180.976	232.683	284.391	827.319	2 incremental per quarter
Assisted Living Facilities	24.623	49.245	73.868	98.490	246.226	
Revenue	153.891	230.221	306.551	382.881	1.073.545	

Utilization	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Maximum number of procedures per month	5400,00	5400,00	5400,00	5400,00	5400,00	2 incremental per quarter
Total number of procedures per month	500,00	748,00	996,00	1244,00	1244,00	
Total utilization	9%	14%	18%	23%	23%	

Nursing Homes	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Number of facilities Served	5,00	7,00	9,00	11,00	11,00	2 incremental per quarter
Number of potential clients	105,00	147,00	189,00	231,00	231,00	
Number of procedures required	210,00	294,00	378,00	462,00	462,00	
Price per procedure	102,59	102,59	102,59	102,59	102,59	
Visits per month	2,00	2,00	2,00	2,00	2,00	
Revenue	129.269	180.976	232.683	284.391	827.319	

Assisted Living Facilities	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Number of facilities Served	2,00	4,00	6,00	8,00	8,00	2 incremental per quarter
Number of potential clients	20,00	40,00	60,00	80,00	80,00	
Number of procedures required	40,00	80,00	120,00	160,00	160,00	
Price per procedure	102,59	102,59	102,59	102,59	102,59	
Visits per month	2,00	2,00	2,00	2,00	2,00	
Revenue	24.623	49.245	73.868	98.490	246.226	

P&L Pessimistic Scenario	Y1	Y2	Y3
Revenue			
Nursing Homes	$827.319	$1.251.320	$1.376.452
Assited Living	$246.226	$433.358	$476.693
Total Revenue	$1.073.545	$1.684.678	$1.853.146
Expenses			
Operating Costs	$526.520	$552.846	$580.488
General and Administrative	$309.507	$324.982	$341.231
Sales and Marketing	$251.000	$313.550	$329.228
Total Expenses	$1.087.027	$1.191.378	$1.250.947
Profit	-$13.482	$493.299	$602.198
Taxes	$0	$147.990	$180.659
Net Income	-$13.482	$345.310	$421.539

Optimistic Scenario - Pro Forma Financial Statements—Income Statement, Balance Sheet, and Cash Flow Summary

Pro forma annual income statement

Headcount summary		Q1	Q2	Q3	Q4		Notes
Service operations		3,00	3,00	3,00	3,00	3,00	
Sales and marketing		2,00	2,00	2,00	2,00	2,00	
General and administrative		3,00	3,00	3,00	3,00	3,00	
Total headcount		8,00	8,00	8,00	8,00	8,00	
Revenues		**$287.710**	**$434.910**	**$582.110**	**$729.310**	$2.034.040	
Cost of sales		**26.761**	**26.761**	**26.761**	**26.761**	107.042	
Gross margin		$260.949	$408.149	$555.350	$702.550	$1.926.998	
Margin contribution %		91%	94%	95%	96%	95%	
Checkpoint: Revenue per employee from this budget						**$254.255**	Compare to financial plan
Targeted revenue per employee						**$300.000**	From Input sheet
Expenses		**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Service operations		$131.630	$131.630	$131.630	$131.630	$526.520	Taken from operations section
Sales and marketing		62.750	62.750	62.750	62.750	251.000	Taken from sales and marketing section
General and administrative		77.377	77.377	77.377	77.377	309.507	Taken from general and administrative section
Total expenses		**$271.757**	**$271.757**	**$271.757**	**$271.757**	**$1.087.027**	
Operating profit		-$10.808	$136.393	$283.593	$430.793	$839.971	
Other gains (losses)		**0**	**0**	**0**	**0**	-217.405	Staff Inoperative costs during launch stage
Other income		**0**	**0**	**0**	**0**	0	
Total income		-10.808	136.393	283.593	430.793	839.971	
Taxes	30,0%	0	40.920	85.080	129.240	255.240	Rounded calculation based on input sheet rate
Net income		-10.808	95.473	198.513	301.553	584.731	

Pro forma annual balance sheet

Assets	Beginning balance	Q1	Q2	Q3	Q4	Annual total	Notes	
Cash	**251.040**	166.515	223.486	383.527	646.638	646.638		
Accounts receivable	**0**	86.313	130.473	174.633	218.793	218.793		30%
Other current assets	**0**	**0**	**0**	**0**	**0**	0		
Total current assets	251.040	252.828	353.959	558.160	865.431	865.431		
Depreciable assets	198.960	199.560	200.160	200.760	201.360	201.360		
Accumulated depreciation	**0**	9.978	19.986	30.024	40.092	40.092		
Land	**0**	**0**	**0**	**0**	**0**	0		
Net property, plant, and equipment	198.960	189.582	180.174	170.736	161.268	161.268		
Licenses	**25.000**	**6.250**	**6.250**	**6.250**	**6.250**	25.000	Agency for Healthcare Admin.	
Total assets	***$475.000***	***$448.660***	***$540.383***	***$735.146***	***$1.032.949***	***$1.051.699***		
Liabilities and equity							**Notes**	
Accounts payable	**$0**	6.968	6.968	6.968	6.968	$6.968		20%
Accrued liabilities	**0**	**0**	**0**	**0**	**0**	0		
Other current liabilities	**0**	**0**	**0**	**0**	**0**	0		
Total current liabilities	$0	$6.968	$6.968	$6.968	$6.968	$6.968		
Long-term debt	**$75.000**	**$71.250**	**$67.500**	**$63.750**	**$60.000**	$60.000		
Notes payable	**0**	**0**	**0**	**0**	**0**	0		
Other long-term liabilities	**0**	**0**	**0**	**0**	**0**	0		
Total long-term liabilities	$75.000	$71.250	$67.500	$63.750	$60.000	$60.000		
Total liabilities	$75.000	$78.218	$74.468	$70.718	$66.968	$66.968		
Common stock	**$400.000**	**$400.000**	**$400.000**	**$400.000**	**$400.000**	$400.000		
Retained earnings	**0**	**0**	**0**	**0**	**0**	0		
Cumulative net income	**0**	-10.808	84.665	283.178	584.731	584.731		
Net equity	$400.000	$389.192	$484.665	$683.178	$984.731	$984.731		
Total liabilities and equity	***$475.000***	***$467.410***	***$559.133***	***$753.896***	***$1.051.699***	***$1.051.699***		

Pro forma annual cash flow summary				
Sources of funds	**Q1**	**Q2**	**Q3**	**Q4**
From operations	-$10.808	$95.473	$198.513	$301.553
Add depreciation	9.978	10.008	10.038	10.068
Net changes in balance sheet accounts				
Current assets	-86.313	-44.160	-44.160	-44.160
Current liabilities	6.968	0	0	0
Other sources of funds				
Other gains (losses)	0	0	0	0
Other	0	0	0	0
Total sources	-$80.175	$61.321	$164.391	$267.461
Uses of funds				
Repurchase of stock	0	0	0	0
Debt retirement	-3.750	-3.750	-3.750	-3.750
Purchase of equipment and assets	-600	-600	-600	-600
Other uses	0	0	0	0
Total uses	-$4.350	-$4.350	-$4.350	-$4.350
Net change in cash	-84.525	56.971	160.041	263.111
Cumulative cash	-84.525	-27.554	132.487	395.598
Beginning balance	$251.040	$166.515	$223.486	$383.527
Ending balance	$166.515	$223.486	$383.527	$646.638
Summary trend data for chart	**Q1**	**Q2**	**Q3**	**Q4**
Quarterly revenue	287.710	434.910	582.110	729.310
Quarterly margin	260.949	408.149	555.350	702.550
Quarterly net income (loss)	-10.808	95.473	198.513	301.553
Quarterly cash flow	-84.525	56.971	160.041	263.111
Quarterly total assets	448.660	540.383	735.146	1.032.949

Revenue Estimations - Optimistic Scenario -						
First Year of Operation						
Total Revenues	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Nursing Homes	234.182	327.855	421.528	515.201	1.498.766	2 incremental per quarter
Assisted Living Facilities	53.527	107.055	160.582	214.109	535.274	
Revenue	287.710	434.910	582.110	729.310	2.034.040	
Utilization	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Maximum number of procedures per month	5400,00	5400,00	5400,00	5400,00	5400,00	2 incremental per quarter
Total number of procedures per month	860,00	1300,00	1740,00	2180,00	2180,00	
Total utilization	16%	24%	32%	40%	40%	
Nursing Homes	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Number of facilities Served	5,00	7,00	9,00	11,00	11,00	2 incremental per quarter
Number of potential clients	175,00	245,00	315,00	385,00	385,00	
Number of procedures required	350,00	490,00	630,00	770,00	770,00	
Price per procedure	111,52	111,52	111,52	111,52	111,52	
Visits per month	2,00	2,00	2,00	2,00	2,00	
Revenue	234.182	327.855	421.528	515.201	1.498.766	
Assisted Living Facilities	**Q1**	**Q2**	**Q3**	**Q4**		**Notes**
Number of facilities Served	2,00	4,00	6,00	8,00	8,00	2 incremental per quarter
Number of potential clients	40,00	80,00	120,00	160,00	160,00	
Number of procedures required	80,00	160,00	240,00	320,00	320,00	
Price per procedure	111,52	111,52	111,52	111,52	111,52	
Visits per month	2,00	2,00	2,00	2,00	2,00	
Revenue	53.527	107.055	160.582	214.109	535.274	

P&L Optimistic Scenario	Y1	Y2	Y3
Revenue			
Nursing Homes	*$1.498.766*	*$2.266.884*	*$2.493.573*
Assited Living	*$535.274*	*$942.082*	*$1.036.290*
Total Revenue	*$2.034.040*	*$3.208.966*	*$3.529.863*
Expenses			
Operating Costs	*$526.520*	*$552.846*	*$580.488*
General and Administrative	*$309.507*	*$324.982*	*$341.231*
Sales and Marketing	*$251.000*	*$313.550*	*$329.228*
Total Expenses	*$1.087.027*	*$1.191.378*	*$1.250.947*
Profit	*$947.013*	*$2.017.588*	*$2.278.915*
Taxes	*$284.104*	*$605.276*	*$683.675*
Net Income	*$662.909*	*$1.412.311*	*$1.595.241*

ANNEX 3. GOVERNMENT REPORT ON THE LONG TERM CARE INDUSTRY