

**THE EMERGING NEED OF HOME HEALTHCARE FOR
THE GERIATRIC POPULATION OF INDIA**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfillment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management/Pharmaceutical Management/Rural

Management

by

SHREOSEE MUKHERJEE

Under the Supervision and Guidance of

DR. ALOK MATHUR

2021

**THE EMERGING NEED OF HOME HEALTHCARE FOR
THE GERIATRIC POPULATION OF INDIA**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfillment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management

by

SHREOSEE MUKHERJEE

Under the Supervision and Guidance of

DR. ALOK MATHUR

2021

DECLARATION BY STUDENT

I hereby declare that this dissertation titled The Emerging Need of Home Healthcare for the Geriatric Population in India is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

(Signature)

Name of Student: Dr.Shreosee Mukherjee

Date: 2/07/21

CERTIFICATE

This is to certify that Dr. Shreosee Mukherjee in partial fulfillment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur has successfully completed her internship at Portea Medical during March 22, 2021 to June 19, 2021.

Place: Bangaluru
Date: 2/07/21

Preceptor/Head of the Organization:
Mrs. Meena Ganesh
Name of the organization:
Portea Medical

CERTIFICATE

This is to certify that dissertation titled The Emerging needs of Home Health Care Services for the Geriatric Population of India is a record of the research work undertaken by Dr. Shreosee Mukherjee in partial fulfillment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific and analytical.

Faculty Guide: Dr. Alok Mathur
IIHMR University, Jaipur

School: IIHMR University,
Jaipur
Dean- Dr. Dharendra Kumar

Date: 2/07/21

Date:

Dissertation Report

ABTRACT

This study is based on the emerging need of home healthcare services for the elderly population of India. In the past few years and also given the current pandemic situation, home healthcare has been in high demand and most of the people are actively utilizing these services. Among them, mostly are the aging population of India who are the major users of home healthcare services.

Objective: To observe the need for home health care services, among elderly patients in India.

Methodology: The study is descriptive in nature and the data has been collected from a number of secondary sources

Key Results: The geriatric population dependency ratio in India is 14.2 percent.

The Ministry of Health and Family Welfare launched NPHCE in 2011 to address the health requirements of India's senior citizens.

In India, home health care began operations in 2009, and Portea Medical is the current market leader in terms of presence, with 25 locations across the country.

The chronic diseases affecting the aging population in the country, are heart disease (31%), urinary problems (15%), hypertension, and diabetes (12% each).

Patients in home care frequently require help with instrumental activities of daily living (IADL).

Conclusion: The country's population is ageing, and the prevalence of non-communicable diseases is rising. Elderly care services constitute the largest part of the home healthcare services market. Home health care is a widely established technique for a cost-effective approach that results in higher patient satisfaction, reduced hospital bed occupancy rates, and lower hospital infection rates around the world.

Keywords: Geriatric population, home health care, nursing, chronic diseases, higher patient satisfaction, aged, Covid 19, pandemic, India, vulnerable population

Dissertation Report

ACKNOWLEDGEMENT

Presentation, creativity, and encouragement have always been crucial to every project's growth.

Many people have best owned their blessings upon me in the accomplishment of this Dissertation report, and heart promised support. I wish to convey my sincere thanks to all the people directly or indirectly involved in this report.

I am immensely obliged to the management of IIHMR University for giving me the opportunity to complete my summer training.

I feel grateful to my mentor Dr. Alok Mathur, Professor, Institute of Health Management Research, IIHMR University, Jaipur, for her indebtedness and profound sense of appreciation, whose valuable guidance & kind inputs that I received during the Dissertation helped shape the present work as its show.

I would like to extend sincere thanks to Anshul Sir (Placement Committee), IIHMR University for showing encouragement throughout the summer training as a part of my management course.

Last but not the least, my thanks and appreciation goes to those people who were directly or indirectly involved in helping and motivating me throughout the project within the stipulated time period.

(Dr. Shreosee Mukherjee)
BDS & Pursuing MBA (Hospital Management),
IIHMR University, Jaipur

Dissertation Report

Table of Contents

Part	Topics	Page No.
1	The Emerging Need of Home Healthcare for the Geriatric Population in India.	9
	Introduction	10
	Objectives	10
	Review of literature	11
	Methodology	15
	Result	15
	Conclusion/Recommendation	21
	Reference	23
2	Internship Report	25
	Introduction	26
	Objectives	26
	Organization Profile	26
	Services offered	27
	Projects Undertaken	33
	Key Learning's	33

**THE EMERGING NEED OF HOME HEALTHCARE FOR THE
GERIATRIC POPULATION OF INDIA**

Dissertation Report

INTRODUCTION

Geriatrics refers to the medical care of the elderly people. People above 60 are included in elderly. There are more than 100 million elderly people in our country who are suffering from various kinds of physical, psychological and economic problems. The life expectancy rate of our country has gone up from 20 years in the beginning of the 20th Century to 62 years today. With the advancements in our medical care facilities, the fertility rate has reduced and this in turn has made our elderly population the fastest growing sections of the society. As per the reports, in 1901 we had only 12 million old people and by 2025 India is likely to have around 177 million of them. The elderly population is growing at an increasing rate. The predicted rapid increase in our country's ageing population (projected to reach 95 million by 2011 and 120 million by 2014), infers that the major problems faced by the seniors of our society cannot be treated as a family concern alone. Nearly 75 percent of these elderly reside in rural areas. Therefore it's high time that the government takes some firm steps to help the aging population to live a healthy and peaceful life.

While for the younger and middle aged population who are medically fit and functional, it's easy to get an access to the usual healthcare facilities that is provides by our government bodies. However the major problem arises with the older population who need proper healthcare and active aging programs to keep them independent, fit and healthy. In addition to this, if reports are to be believed then the Indian geriatric population faces several social issues such as loneliness, elder abuse, neglect, lack of income security and poor access to health care.

Geriatric population is usually neglected and brings with them a large number of medical, social, psychological and economic problems, creating a huge burden on the country. It is the need of hour to know about problems of geriatrics, for their timely detection and management in order to improve quality of life of the elderly and thus decreasing the burden on the country.

The geriatric population is usually neglected and they bring with them a large number of medical and psychological problems which further adds on to the burden on our country. Therefore it is the need of the hour to know and study about these problems of elderly people so that they can be detected and addressed at the right time. This will further help in improving the quality of life of the aging population and will help in reducing the burden on our country.

OBJECTIVE

- To understand the current home healthcare market in India
- To observe the need for home health care services, among elderly patients in India.

Dissertation Report

REVIEW OF LITERATURE

The top 7 highly cited articles are shown in the table below. Of the top 7 highly cited articles, two studies were original research with a cross-sectional design, four were secondary data analyses, and one was a review paper. The topics ranged from need for home healthcare among elderly population in India and their unmet needs, the major concerns of the geriatric population to the way forward.

NAME OF THE ARTICLE	DATE of Publication	Author	Objectives, Tools, Key findings
Need for home health care services among elderly patients.	20.08.2019	Mr. Adithya. S Mr. Ranganath. C	Objective: To determine whether elderly individuals require home health care services. Tools: 100 senior patients were chosen using a non-probability handy sampling technique. Findings: The majority of the people polled (94 percent) said they needed home health care. The majority of the respondents (45%) stated that their family required home health care once a month, and that they would prefer to have services such as blood pressure monitoring (18%), temperature pulse respiration (TPR) monitoring (11%) and wound dressing available (9 percent).
Geriatric health care in India - Unmet needs and the way forward	16.06.2017	Prabha Adhikari	Objective: To investigate the concerns that Indian senior's experience, which include loneliness, elder abuse, neglect, a lack of financial security, and limited access to health care. To summarize the Government of India's efforts in this regard and the shortcomings in the schemes' execution. Tools: We must divide the elderly into three categories. It is incorrect to categorize people based on their chronological age;

Dissertation Report

			instead, we must categorize them based on their functional and cognitive condition, as the groups' health-care needs would differ. Findings: The government's resources may not be enough to meet the requirements of this massive population. By 2050, India's geriatric population will account for 20% of the total population. Non-governmental organisations (NGOs) must step forward to provide assistance. The government should grant assistance to NGOs so that they can deliver low-cost services. To build geriatric health-care facilities, all medical colleges and private health-care institutions must collaborate with the government. The national programme must be implemented as soon as possible throughout the country. Every hamlet and city must rapidly establish mobile units, day-care centres, active ageing centres, and hospices.
Elderly Care in India: Way Forward	5.09.20 16	Mane Abhay B	Objective: To study the road ahead to manage the aging population of India Findings: From the grass roots to the national level, community-based geriatric services should be envisioned with active engagement of all stakeholders and participants in social, economic, and political leadership. In order to respond to the ageing population, social and technological advances are required. Collaborations between the government, care providers, insurers, and patients are

Dissertation Report

			Necessary before any major changes in aged care can be implemented.
Caring for and keeping the elderly in their homes	15.09.2015	Susan McRoy	Objective: how the elderly are Cared for at home, with a focus on who provides care for the elderly in their homes and how technology aids caregiving. Tools: secondary sources like journals, research papers and articles Findings: More complex healthcare in people's homes, assisted by a range of caregivers, is becoming more necessary and popular. Increased used of technology , such as software systems, networked health monitoring equipment , telephony, has been brought to enable home caregiving to bridge the gaps and help direct and monitor such scenarios
Geriatric health in India: Concerns and solutions	1.07.2008	Anita Nath	Objective: TO study the Strategies to Improve the Quality-of-Life of the Elderly Findings: Screening camps for Cataracts and non-communicable diseases, as well as mobile clinics, could help reach out to the senior population in difficult- to-reach places. Advocacy with non-governmental organizations (NGOs), philanthropic groups, and faith-based organizations could all help.

Dissertation Report

Geriatric health policy in India	18.10.2016	<u>N Sherin Susan Paul, Mathew Asirvatham</u>	Objectives: to study the geriatric policy in our country Tools: review of various research articles and papers Findings: Any programme for the elderly should incorporate and involve the family or caregiver, as this is still the primary source of assistance for the old in India. Aside from the aged pension plan, additional initiatives and policies for caregivers should be established.
Home Health Care: The Missing Link in Health Delivery System for Indian Elderly Population	05.12.2017	Ankit Singh	Objective: To research the current state of India's private home health care business and to promote the benefits of home health care for the elderly. Tools: reviewed various research papers and articles Findings: The increase in the number of private home health service providers in the last decade, as well as the Indian elderly population's increased preference for home health services, clearly indicate that there is a gap in the market for home health services for the Indian elderly population that is still untapped in the public sector.

Dissertation Report

METHODOLOGY-

The study is descriptive in nature and the data has been collected from a number of secondary sources like review article, government reports, websites and research papers. The data has been represented with the help of pie charts and graphical representations.

Search Strategy - database of scientific literature like PubMed, and Google Scholar, including a wide range of publications. The keywords for developing the search strategy were determined using published review articles on Home Healthcare in India. By using asterisks, I tried to retrieve all the possible. Thus, a title search query was performed, considering it avoided large numbers of false positive articles but would have missed only some of the true articles.

Inclusion and exclusion criteria- Studies published in journals and exclusively undertaken in India were included. I screened the title of all identified articles to ensure the reliability of the search and reviewed the abstract in case of any confusion regarding the relevance of the article. In the case of papers without abstracts, I screened the full texts.

Books, book chapters, book series and errata documents were excluded to restrict the analysis to literature in peer reviewed journals. The journals and articles in languages apart from English were excluded.

Data Analysis- The Google Scholar search retrieved 50 documents, all of which were manually reviewed by me and documents were excluded. Of the 20 excluded documents, 12 were not relevant to geriatric population and 8 were from countries other than India. Finally, I retrieved 30 documents for analysis. Of the articles retrieved, the majority were original articles, reviews, editorials, and others such as conference papers. The retrieved documents were published in 10 peer-reviewed journals. The total number of citations for the 30 documents, at the time of data analysis, was 100 excluding self-citations by the authors. The average number of citations per article was 4.50. All the publications were available in English.

RESULTS –

Present scenario

India's population is expanding at a 1.2 percent annual rate. Eighty six percent of the population is over the age of 60. In comparison to the male category that is 8.2% the female subgroup has a higher percentage of those aged 60 (9%). It's also worth noting that the entire population's decadal growth rate is on the down, Whilst the old population's growth rate in the second decade is on the rise.

The geriatric population dependency ratio in India is 14.2 percent. In this context, there have been various studies done which further reveals that by 2050, more than 19 percent of India's

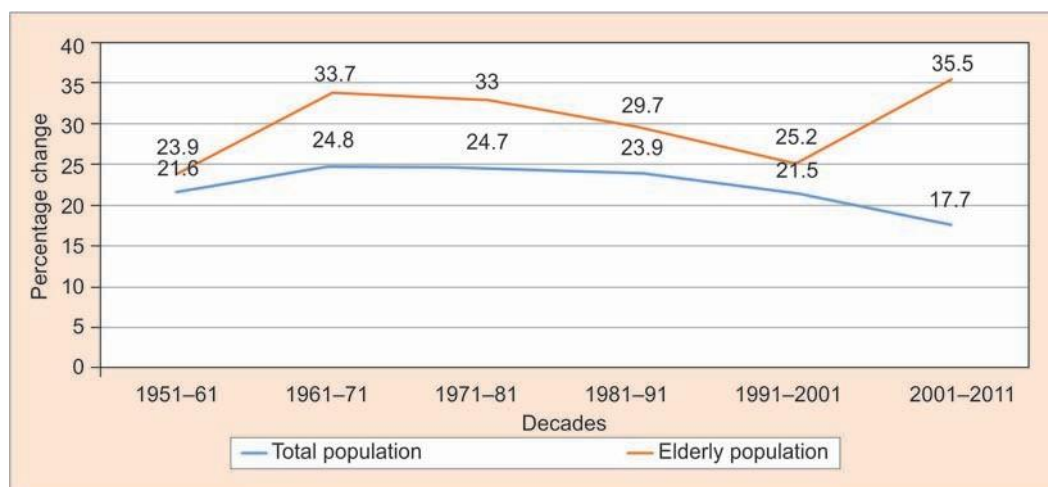
Dissertation Report

overall population will be over 60 years old. Similarly, by 2050, the reliance ratio will have risen to 31%.

According to Indian census data, the number of senior females has outnumbered the number of elderly males in the last two decades, reversing a previous trend. It's also worth noting that this poses a significant risk to older females, who are more dependent than their male counterparts. In 2011, the female old age dependency ratio was 14.5 compared to 13.6 for men.

It was also discovered that women are disproportionately significant users of home healthcare services, and that consumption increases gradually as the age goes up. Both of these tendencies can be seen in Indian demographics, as women's life expectancy increased more than men's between 1990 and 2003, with low mortality, fertility, and high life expectancy listed as explanations for this shift.

India's ageing population contributes significantly to the country's attractiveness as a market for home health care providers.



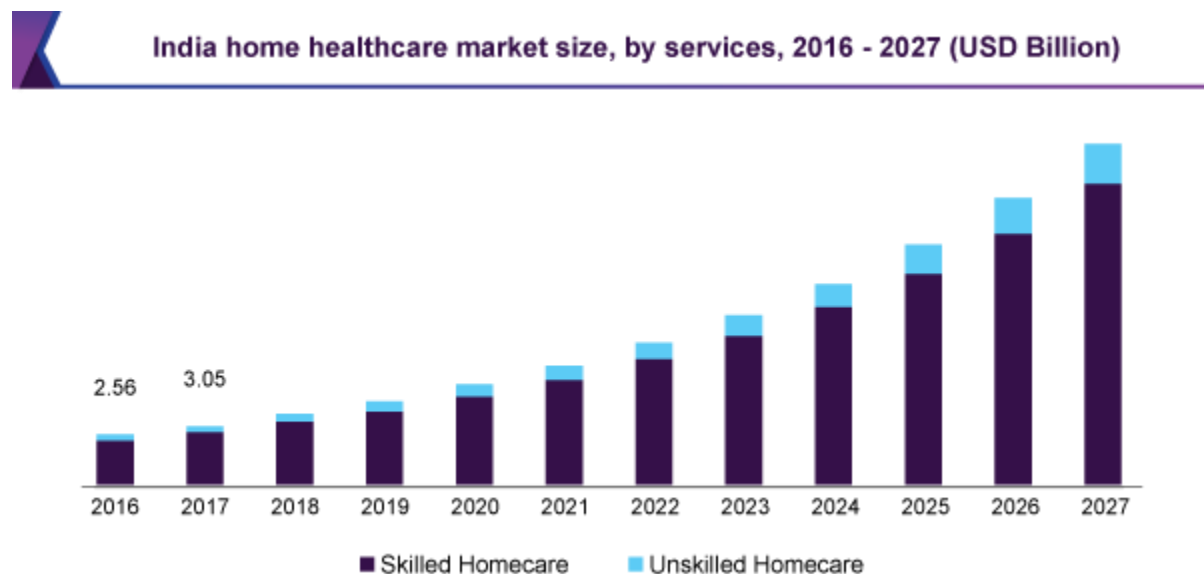
India's Home healthcare & what has the government done

A large number of home healthcare service providers in our country offer geriatric care; however, the service kind, service price, and service packaging differ from one company to the next, and organizations are still working to find the ideal fit for the Indian market.

The Ministry of Health and Family Welfare launched NPHCE in 2011 to address the health requirements of India's senior citizens. The interventions were developed in the geriatric areas like preventative, curative, and rehabilitative domains. It is recognized in NPHCE that India lacks the model, such as home-based care and insurance for the aged, to meet the demands of the elderly. In India, for example, poor insurance schemes only cover persons under the age of 65. Domiciliary visits for home-bound patients at the sub center level are

Dissertation Report

incorporated into NPHCE according to operational criteria, supporting the concept that home health care is now regarded a measure to enhance the situation of old people even by government agencies in India. While NPHCE and IPO address aspects related to institutional healthcare, the rest of the aspects are facilitated by NGOs all over the country with public and private funding. Few NGO initiatives to deal with the health and social problems of elderly in India are Agewell Foundation, Alzheimer's and Related Disorders Society of India, Calcutta Metropolitan Institute of Gerontology, Ekal Nari Shakti Sangathan (ENSS), Guild for Services, HelpAge India, Heritage Foundation, Nightingale Medical Trust, Silver Innings Foundation & Sulabh International services for Widows in Ashrams



Indian health-care system's home health-care segment, is increasingly perceived as an appealing investment opportunity. In the beginning, the bulk of organisations targeted metros and tier 1 cities based on information gathered from their own websites. More home health care firms, such as India Home Health Care, Portea Medical, Nightingales, Apnacare, Health Heal, and others, are located in the southern half of India, primarily in the Bengaluru, Chennai, and Hyderabad areas. In India, home health care began operations in 2009, and Portea Medical is the current market leader in terms of presence, with 25 locations across the country. In the year 2013, it began operations. The year 2013 marked a watershed moment in India's home health care industry, as Bayada a US-based company, entered the market. It purchased a 26 percent ownership in Chennai-based India Home Health Care and then provided funds to a number of additional firms. To mention a few, Portea Medical raised \$8 million from Accel Partners and VentureEast, Medwel Ventures bought Nightingales for an undisclosed sum in 2014, and

Dissertation Report

Homital Medcare got its start with startup money from RR Energy. In 2016, key players made strategic acquisitions such as Portea Medical, further acquired Health Mantra to improve their records management system, and PSTakeCare, which acquired PSTakeCare so that it could enter into a proven platform for getting in touch with their clients such as Super specialists and specialists with patients.

Home health care is now expanding to different areas of our India, such as Mumbai, where Zoctr, Arooj Home Health Care, Portea, India Home Health Care, Nightingales, and Care 24 have extended their presence, and Kolkata, where Tribeca Care and Portea are the leading players. Pramati Care and Health Care at Home are creating a presence in NCR-Delhi.

Socioeconomic Challenges for the Elderly

Geriatric people face a variety of socioeconomic issues, such as the loss of a spouse, economic uncertainty, social isolation, and failure to get pensions on time, among others. In India, the elderly not only labour to sustain themselves, but also contribute financially to their families. Almost 66 percent of persons over the age of 60 are married, 32 percent are widowed, and roughly 3% are separated or divorced (2011 Census). Women are far more likely than males to be widowed, with 48 percent of older women and only 15 percent of older men being widowed. Women experience more adversity because they are more likely to be financially dependent on men. In India, living accommodations for the elderly were not a concern until recently because elderly people were treated with exceptional respect and care in their families. In India, the majority of the elderly still live with their children, but around a fifth live alone or only with their spouse, and must therefore handle their material and physical requirements on their own. As people get older, they become more financially reliant. After retirement, about half of the elderly have some form of personal income in the form of social security benefits such as pensions, provident funds, life insurance policies, post office deposits, savings bank interest, and non-service pensions. People in rural and urban India receive financial incentives as part of various government health programmes and programmes for the aged, which will be described in the following sections. The elderly's income is sometimes insufficient to meet their basic needs, as well as their wishes to purchase gifts for their grandchildren on special occasions. They are frequently perceived as financially reliant on their progeny. Almost one-third of the elderly are completely or somewhat reliant on others, such as relatives, acquaintances, and neighbours, and elderly women are more reliant than males. Overall, it indicates that the elderly continue to rely heavily on their income to sustain themselves and their families. Because of the rapid Covid19 outbreak and subsequent lock-down, lower and middle-class households are currently facing a significant burden in caring for their senior population.

How did COVID-19 affect the geriatric population in India

Many programmes aimed at the senior population have been implemented in our country in recent decades, but we still lack the necessary number of geriatric health clinics, geriatric physicians, and

Dissertation Report

carers to care for our elderly. During this difficult time of the Covid 19 pandemic, it is past time to look forward in a good approach to dealing with these insufficiency issues. In India, geriatrics is a relatively new specialty of medicine, with most practising young doctors knowing little about the clinical and functional implications of ageing. The elderly in India, as well as their caretakers and healthcare providers, acknowledge that bad health is an aspect of senility.

The growing senior population in India, combined with increased public awareness of health issues, is predicted to place significant strain on the health-care system in general, and geriatric care in particular. In 2011, the United Nations Population Fund (UNFPA) conducted a survey in seven Indian states (Himachal Pradesh, Kerala, Maharashtra, Odisha, Punjab, Tamil Nadu, and West Bengal) to gain a better understanding of the socioeconomic and health implications of ageing, as well as the elderly's ability to access and use various government welfare programmes. According to the poll, 7.6% of the elderly in India (about 7.9 million people) have trouble doing

daily activities. Senior women, on average, have more difficulties executing ADLs than elderly males.

Because economic output is usually carried out by youths and adults - the productive forces - the ageing of the population has an impact on society's economic progress. Depending on population variety, socioeconomic situation, cultural and traditional traditions, ageing challenges vary across geographical locations. Despite the fact that India is a country with a diverse demographic and geographical makeup, one thing remains constant among its citizens: love and respect for one another, particularly among the elderly. Individuals at various phases of life rely on their families for social and financial assistance. The move from a joint to a nuclear family had an impact on the elderly's status as well as the family's ability to care for them. Increased mobility for work opportunities, urbanisation, capitalism, labour division, and industrialization all contributed to changes in family structure. This issue could be addressed by community-based voluntary support and viable formal support systems for senior people with chronic diseases and impairments. Providing homes for the elderly, as well as domiciliary care systems and communication technologies, may help to bridge the gap between the young and old generations.

Demographic factors like very old, women, those living alone and unmarried are more likely to enter long term care institutions. Predictors of social placement of an elderly to an institution are mainly social selection and allocation processes in health delivery system and risk factors that delay nursing home placement.

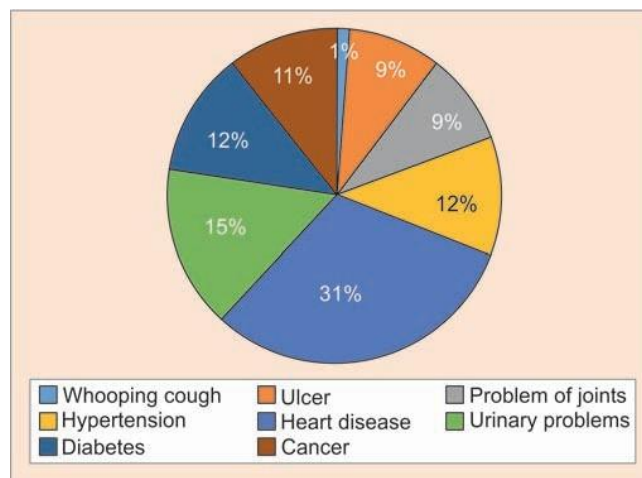
Important reasons for entry into institutions are unavailability and unwillingness of family members to take care of geriatric population as well as availability of care-taker in private as well as government institution. Conditions viz., living arrangement, perception that institutions are good alternatives and persons involved in decision making in family influence institutionalization of elderly. Institutionalized elderly are heterogeneous in terms of demographic characteristics, physical and mental conditions, service utilization patterns, prognosis and life expectancy. Few factors facilitating entry of elderly people in institution are status of elderly within the family, social issues, existence of nursing home, heterogeneity of nursing homes, behavioral ethnography of nursing home life and resident outcomes and attitude and behavior of nursing home personnel.

Dissertation Report

Most prevalent Geriatric health conditions and the most used home healthcare services-

Another study of The National Home and Hospice Care Survey results showed that the Medical/skilled nursing services were the most commonly used service by patients, followed by personal care and therapy services. Other services were used less frequently, such as continuous home care, counselling, pharmaceutical administration, occupational therapy, and social services. Medical/skilled nursing services are generally required for the treatment and management of chronic diseases.

If we discuss about chronic diseases affecting the aging population in the country, then there are a few major health conditions that are seen in our geriatric population. To name them, we have heart disease (31%), urinary problems (15%), hypertension, and diabetes (12% each). Given that the elderly population makes up the majority of home health care patients, it's no surprise that health conditions common among the elderly are among the most common conditions requiring management help.



The skilled Nurses provide not only treatment and management for chronic diseases, but also education and training to assist senior citizens better take care of their health problems. A qualified nurse, for example, may teach a patient with hypertension how to use a blood pressure monitor or a patient with diabetes how to use a glucometer. With age, the need for assistance with personal care, often known as activities of daily living, grows. Eating, bathing, dressing, and getting around the house are examples of ADLs. The percentage of non-institutionalized persons 65 and older who need assistance with ADLs grew as they became older. It was discovered that more than fifty percent of the patients in home care got assistance with minimum 1 ADL. Bathing or showering was the most common ADL that required assistance, followed by dressing, moving to or from a bed or chair, and using the restroom. Patients required assistance walking, which was not considered an ADL. Patients in home care frequently require help with instrumental activities of daily living (IADL). Driving, cooking meals, performing housekeeping,

Dissertation Report

shopping, managing finances, managing medication, and using the telephone are examples of IADLs. Almost half of respondents 65 and older in the National Home and Hospice Care Survey said they needed assistance with at least one IADL.

Doing light housework, making meals, administering medications, and shopping were the most prevalent IADLs for which assistance was provided. Home health care providers not only give direct assistance with ADLs and IADLs, but they also provide training to help home health patients improve their capacity to conduct ADLs and IADLs on their own.

According to another study conducted on elderly people seeking treatment at various Bangalore hospitals, the majority of the subjects stated a need for home health care services. The majority of the participants stated that their family needed home health care once a month and that they mostly would prefer to use services such as blood pressure monitoring, temperature, pulse & respiration (TPR) monitoring and wound dressing and administering injections and medicines. Because of the rising frequency of lifestyle diseases and desire for quality and economical treatment, the skilled sector dominated the market in 2019 with over 85% revenue share. For home-bound patients recovering from an acute accident or illness, skilled services such as nursing care and physician/primary care services provide ongoing and coordinated treatment. Furthermore, by delivering the same level of care at a lower cost, these services minimize unnecessary hospital stays for patients and family caregivers, as well as major medical expense. Grooming, washing, clothing, personal care, and other daily living support are all included in untrained homecare services. Laundry, meal preparation, and housecleaning are all included in this category. These services are booming because they fill in the gaps in care and assist meet unmet needs that aren't covered by trained care. Furthermore, rising disposable income and rising demand for tailored care contribute to the segment's rise.

The number of people infected with the new coronavirus and suffering from respiratory problems is extremely high and growing at an alarming rate. COVID-19 can cause acute respiratory distress syndrome, which can result in serious lung damage in severe cases. Patients with chronic conditions like cancer, arthritis, and diabetes may avoid going to the hospital. Home healthcare services are a lifesaver in the midst of the pandemic. They are safer and effective when compared to hospital services for non-emergent cases.

CONCLUSION & RECCOMENDATION-

The country's population is ageing, and the prevalence of non-communicable diseases is rising. Elderly care services constitute the largest part of the home healthcare services market. Home health care is a widely established technique for a cost-effective approach that results in higher patient satisfaction, reduced hospital bed occupancy rates, and lower hospital infection rates around the world.

Home health care services must be at the national level and coordinated as care packages that are tailored to patients' needs and delivered in their homes.

Dissertation Report

According to the findings, the majority of senior patients felt a need for home health care services in the future, and the majority of them stated that their family needed home

Health care services in the future. The majority of them stated that their family needed home health care services at least once a month. Because the study found that older patients have a high demand for home health care services, it is suggested that a training module be developed and nurses be prepared to give effective home health care services. Access to these services will be important, since high costs are a huge barrier to entry and are pushing the home health care system toward market failure. Indian policymakers should recognize this gap and adopt a home health care policy that emphasizes the building of infrastructure for home health services. Indian policymakers should also design an insurance system to increase the availability of home health services for the elderly in India.

In India, the home healthcare sector is poised to challenge traditional medical services in the near future. Given the present healthcare demographics, socioeconomic transformations, and substantial need gap, venture capitalists and investment firms have identified the industry as being suitable for investment. This important contribution from investment firms is assisting players in achieving size and long-term viability. Players will be able to get a competitive advantage thanks to technological advancements. Emoha, for example, is backed up with a mobile app that improves efficiency and accuracy. Wearable technology is now being investigated for a variety of purposes, including patient medical vitals monitoring. Technology adoption and optimal capacity use will boost operational efficiency and bottom line expansion. Most players' current business model is to collaborate with top hospitals to generate recommendations; a significant number of today's in-home healthcare consumers are referred by doctors and hospital chains.

As the main players reach critical mass in the next 4-5 years, their bargaining power with hospitals is expected to skyrocket. To raise awareness and expand reach, players are substantially investing in marketing operations, including both residential awareness, campaigns and digital marketing (social networking page, blog setup, search engine optimization, mobile app development). Insurance, laws, and service norms are all expected to see significant changes. Market participants are attempting to make home health care a covered benefit under health insurance.

A strong emphasis is also placed on building standard service processes to assure quality consistency, which will help to establish service credibility. This channel will be used as a conduit for all healthcare products and services. The home healthcare industry may not have a large percentage of income now, but it is expected to grow as more medical services are added, including pharmaceutical needs, medical equipment, hospital appointments, patient records, chronic disease management, and other medical services

Dissertation Report

REFERENCES

1. Singh JP. Problems of India's changing family and state intervention. *Eastern Anthropol* 2010 Jan-Mar;63(1):17-40.
2. Bloom DE, Mahal A, Rosenberg L, Sevilla J. Economic security arrangements in the context of population ageing in India. *Int Soc Sec Rev* 2010 Jul;63(3-4):59-89.
3. de Meijer C, Wouterse B, Polder J, Koopmanschap M. The effect of population aging on health expenditure growth: a critical review. *Eur J Ageing* 2013 May;10(4):353-361.
4. Maples MF. Spirituality, wellness and the "Silver Tsunami": implications for counseling. Alexandria (VA): American Counseling Association; 2007 [cited 2007 Aug 28]. Available from: <http://counselingoutfitters.com/vistas/vistas07/Maples.htm>.
5. Maliakkal AV, Sun AZ. Home care program reduces hospital readmissions in patients with congestive heart failure and improves other associated indicators of health. *Home Health Care Manage Pract* 2014 Apr;26(4):191-197.
6. Han SJ, Kim HK, Storfjell J, Kim MJ. Clinical outcomes and quality of life of home health care patients. *Asian Nurs Res (Korean Soc Nurs Sci)* 2013 Jun;7(2):53-60.
7. Singh B. CMR's India Home Healthcare Report 2016. Bengaluru: CMR; 2016 [cited 2016 Jul 22]. Available from: <http://cmrindia.com/cmrs-india-home-healthcare-report-2016/>.
8. Population growth (annual %). (n.d.). Retrieved September 03, 2017, from <https://data.worldbank.org/indicator/SP.POP.GROW?locations=IN>.
9. Government of India, Ministry of Statistics and Programme Implementation, Central Statistics office. Elderly in India. New Delhi: Government of India; 2016.
10. United Nations. World Population Prospects: The 2015 Revision. United Nations Department of Economic and Social Affairs Population Division. Geneva; United Nations; 2015.

Dissertation Report

11. Booth L, Brockway K. Legal and ethical issues in gerontological counselling. Paper presented in CEP780 Class: legal and ethical issues in counselling, University of Nevada, Reno. 2006.
12. Kastor A, Mohanty SK. Associated covariates of functional limitation among older adults in India: an exploration. *Ageing Int* 2016 Jun;41(2):178-192.
13. Population census of India. 2011.
14. Lindsay J, Laurin D, Verreault R, Hébert R, Helliwell B, Hill GB, McDowell I. Risk factors for Alzheimer's disease: a prospective analysis from the Canadian Study of Health and Aging. *Am J Epidemiol* 2002 Sep;156(5):445-453.
15. Heflin MT. Surviving the Silver Tsunami: training a health care workforce to care for North Carolina's Aging Population. *N C Med J* 2016 Mar-Apr;77(2):102-106.
16. Rao KD, Bhatnagar A, Berman P. So many, yet few: Human resources for health in India. *Hum Resour Health* 2012 Aug;10(1):19.
17. Landi F, Onder G, Russo A, Tabaccanti S, Rollo R, Federici S, Bernabei R. A new model of integrated home care for the elderly. *J Clin Epidemiol* 2001 Sep;54(9):968-970.
18. Suter P, Hennessey B, Harrison G, Fagan M, Norman B, Suter WN. Home-based chronic care. An expanded integrative model for Home Health Professionals Home health is poised to become the leader of chronic care disease management. *Home Healthc Nurse* 2008 Apr;26(4):222-229.
19. Cui ZJ. Living arrangements and the health status of the elderly in rural China. Mumbai: International Institute for Population Sciences; 2002.
20. Chen F, Short S. Household context and subjective well-being among the oldest old in China. *J Fam Issues* 2008 Oct;29(10):1379-1403.
21. Ofstedal MB, Reidy E, Knodel J. Gender differences in economic support and well-being of older Asians. *J Cross Cult Gerontol* 2004 Sep;19(3):165-201.
22. Zielinski A, Halling A. Association between age, gender and multimorbidity level and receiving home health care: a population-based Swedish study. *BMC Res Notes* 2015 Nov;8:714.
23. Johnson CS, Stevens A, Rajan I. Promotion of healthy aging in the context of population aging phenomenon: a look at the aging state in India. *Indian J Gerontol* 2005;19(2-4): 181-192.
24. Loh LC, Ugarte-Gil C, Darko K. Private sector contributions and their effect on physician emigration in the developing world. *Bull WHO* 2013 Jan;91(3):227-233.

INTERNSHIP REPORT

Dissertation Report

INTRODUCTION-

After the second year semester exams came to an end, I got placed at one of the leading home health care company in India that is Portea Medical in Bangalore. Ever since then it has been a great learning experience for me where I get to learn new things and enhance my skills every day. The home health care market in India is slowly gaining a lot of importance and post COVID the demand for Home health care services, especially for the aging population of the country has all the more increased. Most of the people are reluctant to go the hospitals and prefer getting a health checkup done at their homes. In the coming years the Home health care market is believed to further expand and become a part of the lives of a major part of the population of our country.

OBJECTIVES-

- To understand the Mission, vision, goals and culture of the organization
- To understand my roles and responsibilities in the organization and improve my networking skills
- To develop an understanding of the product/services that I was going to deal with
- To develop a strategic plan for the services offered by our organization
- To understand the concerns of our clients related to the services offered and come up with a plan to deal with them

ORGANIZATION PROFILE –

Portea Medical delivers quality care with compassion. We bring world class medical care into our patients' homes and aim to make primary healthcare not only more accessible, but also more affordable and accountable to our patients needs.

With Portea, you can be sure that you will receive hospital-quality healthcare in the comfort of your home. We provide doctors, nurses, and physiotherapists for home visits who have passed our rigorous hiring standards and have had their backgrounds and medical knowledge verified by senior doctors. We facilitate lab tests at home and medical equipment rentals, making health care more accessible for our patients.

Portea Medical's clinical procedures were developed in consultation with leading home healthcare professionals in the United States, ensuring that you receive only the highest quality

Dissertation Report

medical care; all of our doctors are members of international medical accreditation bodies. As a result of using our services, our patients are able to stay in their homes longer, save money, and have peace of mind.

SEVICES PROVIDED-

Critical Care at Home

Care plans are personalized for patient needs and are designed to deliver high quality, affordable and easy to implement health services. Home is where healing happens best. Portea ICU@Home services are for Patients who are no longer in the acute phase of their illness but still require intensive care. ICU@Home services include the care and supervision of highly trained critical care therapists, experts and nurses and at a significantly lower price than that of a hospital stay. The clinical procedures have been developed in consultation with leading hospitals and renowned experts, ensuring the highest quality medical care.

Physiotherapy

Portea's physiotherapists heal patients in the comfort of their homes. They assess, diagnose, and develop a treatment plan which varies depending on the patient's needs. A physiotherapy session is usually of an hour, depending on the criticality of the problem. The experts help with basic and advanced movement exercises to improve the patient's mobility. The sessions can be done on both online as well as offline mode as per the clients convenience.

Other Physiotherapy Services

Back Pain Treatment at home
Sports Injury Treatment at home
Post-Surgical Rehab at home
Paralysis Treatment at home
Parkinson Disease Treatment at home
Cerebral Palsy Treatment at home
Spondylosis Treatment at home

Lab Tests At Home

Portea is partnered with the top NABL certified labs in the country. We also have a team of experienced phlebotomists, who collect samples from patients' home. Booking a lab test is quick and easy. Once a patient books a test, the phlebotomist goes as per agreed time slot and collects

Dissertation Report

the blood/urine sample. These are sent to our NABL certified lab partners. Within 24-48 hours, of collecting the sample, we send out accurate reports to patients via email.

We provide complete health check-up packages and individual lab tests for you and your family. Our wide range of lab tests includes Complete Blood Count, Fasting Blood Sugar (FBS), Postprandial Blood Sugar (PPBS), HBA1C, Thyroid Profile (T3,T4 and TSH), Lipid Profile, Urine Test, CRP Blood Test, Cholesterol Test, Dengue Blood Test, Vitamin Test, Kidney Profile and other test as per requirement.

Medical Equipment

Respiratory Care

Respiratory devices like advanced homecare ventilators, BiPAP, CPAP, oxygen concentrator & pulse oximeter

Sleep Therapy

Portea offers diagnostic test package which include Sleep study along with free CPAP titration for 2 days for sleep related disorders and management

Geriatric & Mobility Care

Portea's comprehensive range of geriatric and mobility care includes air mattresses, wide range of hospital beds, wheelchairs, mobility aids like walker, walking stick etc.

Cardiac Care

Cardiac range of medical equipment includes ECG, multipara monitor, syringe pump, infusion pump etc. which are important for people suffering from cardiac problems.

Mother & Baby Care

Both the mother and baby need the best care possible post-delivery. Portea brings to you a range of mother and baby care products like breast pumps, baby weighing scale, bottle sterilizers, infrared thermometers etc.

If the clients need any medical equipment for rent or purchase, they can get it from Portea. They need to check from the exhaustive medical equipment catalogue and rent or buy the required one online, via email or over a phone call. The equipment will be delivered at your doorstep.

Dissertation Report

Trained attendants

The trained attendants provide care to those in need, in the comfort of their homes. They can help with personal grooming, feeding, mobility, oral medication, monitoring of vitals and more. As per requirement, the clients can hire the services of a trained attendant for 12 hours or 24 hours.

Nursing care

Portea's in-home nurses excel in providing services such as

- Post-surgical Care
- Elder care
- Chronic care
- Tracheotomy
- Urinary Catheterization Care
- Wound care
- Injections, and IV infusion
- Diabetic care

They are always supervised by a senior doctor. The clients can opt for a 12 / 24-hr care from a Portea in-home nurse.

Diabetic Care Plan

Portea's Diabetes Care Program is created with a vision to help people manage their Diabetes in a natural and comfortable way. Portea's expert counselors will work with the client to help you track, manage and lower your blood sugar levels. The counselor will create a personalized diet plan for the clients depending on their preferences and lifestyles. Portea's team of Diabetic nurses and nutritionists work closely (on phone) with every patient to help them on a range of issues, with the overarching aim to increase blood sugar levels.

Counseling

Portea provides the services of trained and empathetic counselors to conduct sessions from the comfort of the clients home via Audio calls, Video calls or offer home based counseling services.

Elder Care

Dissertation Report

Portea Health Prime is an annual Healthcare plan, in which every enrolled customer gets a dedicated Health Manager. The Health Manager further takes care of all health requirements for the customer, such as Doctor Visits, specialist consultations, lab test and such.

Depending on patients' needs and Doctor Recommendations, a complete annual healthcare plan is made for each patient, and includes services such as:

- Physiotherapy at Home
- Doctor Home Visits
- Lab Test
- Doctor Tele-consultation
- Complete Bone Assessment
- Specialist Consultations
- Emotional Counselling
- Nutrition counseling
- Diabetes management
- Eye Check-up
- Dental Care and Much More

Doctor Consultation

Find doctors on call through Portea and then they pay a visit at the comfort of the clients home. Not only does the doctor on call service saves time but it is also convenient to do the booking online. They assess, diagnose and treat the client depending upon their need. Portea's general physicians have years of experience in the medical field and will treat the clients with patience and compassion.

Vaccination

Portea's experienced nurses visit patient's home and help with vaccination at home. They also provide vaccination at corporate offices for employees. They offer Flu/H1N1, HBV, HAV, Typhoid, Pneumonia, chicken pox, DTP, MMR, meningitis, cholera, HPV/cervical cancer and Zoster vaccines. Other vaccines can be made available on request

COVID care

People with mild suspected cases or those discharged from hospital post treatment of COVID-19 can seek home care services for continuity of medical care. These medical support services are provided through Portea's experienced nurses, doctors and health professionals. Portea also offer

Dissertation Report

Home Quarantine services for COVID-19 and also provide disinfectant kits.

Portea's Home Isolation Program consists of medical care and advisory services that are required to take care of COVID-19 patients to complete 10 Days of the quarantine period. The program assists both asymptomatic & mildly symptomatic COVID-19 patients. The team of experts provide comprehensive counselling to the patients covering Do's & Dont's during the "Home Isolation" period, at the safety and comfort of their home. The clients are just a call away from an expert consultation through a video/ voice call, who will advise them and monitor all their medical needs remotely.

Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop severe illness. The best way to minimise serious complications is to ensure daily monitoring of the symptoms and vitals through an expert and to get access to critical care as and when required. Portea with its Home isolation program contains the daily follow up of COVID positive patients to reduce any adverse health outcomes.

Portea Medical - India's largest home healthcare service provider presents "COVID Armour," - a specially designed offering to help the apartment or gated societies manage COVID within the community in a much safer, accessible and affordable way.

Portea's COVID Armour, offers Home isolation, 24*7 COVID Helpline, Doctor Tele-Consultation, COVID Consumables, Oxygen Therapy, Home Sample Collection and more at the comfort of the client's community.

Get Tested for COVID at the Safety of Your Home

Firstly the clients have to book an appointment

Doctor Consultation on Call to discuss your symptoms

Clinician Visit for Sample Collection at Home

Sample Processing at an ICMR Approved Lab

Dissertation Report

Reports within 48-72 hours

Diet and Nutrition –

To help you in leading a full life, Portea has designed a comprehensive health management plan called 'PORTEA ACTIV' to make everyday living a healthy and joyful experience. The Portea Activ program with its 3 core offerings is designed to precisely bridge that gap between “What you are doing currently and what should you be doing”. In individuals with medical conditions, example, obesity, thyroid, diabetes, high cholesterol etc. the nutrition plans are customized accordingly.

Portea has specialized nutrition programs for each of the categories listed below:

- Family Nutrition
- Sports Nutrition
- Women Nutrition
- Weight Management
- Clinical Nutrition
- Geriatric Nutrition
- Pediatric Nutrition
- Adolescent Nutrition

New Born and Mother Care-

Portea offers a carefully designed Kanga and Roo program. It is a postnatal care program that takes the workload and the worries away from the new parents.

Under the Kanga and Roo program Portea assigns a medically trained care giver to help the mother with newborn baby care and also offers after delivery care for mother.

Kanga and Roo program will help you cope with:

- The uncertainty of how best to care for your little one
- The initial challenges of feeding and postoperative recovery
- The complete change in life as you knew it before the delivery
- Taking a little time off, while someone trusted takes care of your baby

Portea is present in Bangalore, Mumbai, delhi/ncr, Ahmedabad, indore, Chennai, pune,

Dissertation Report

Kolkata, Hyderabad, Luknow, kochi, Chandigargh, Vizag, Faridabad.

PROJECTS UNDERTAKEN –

- COVID Vaccination drive for the corporates
- SAMHITA- Vaccination program for the underprivileged people living in the semi urban areas across the country
- HealthPrime program for the elderly population in our country
- Doctor tele-consultation

KEY LEARNINGS –

As the pandemic hit the country, with the second wave leading to a large number of deaths, the government wanted most of the citizens to get vaccinated. Due to the pandemic the private offices have been shut for more than a year now. Therefore in order to get their employees back to work, the corporates all around the country are actively getting their employees get vaccinated. They are collaborating with the hospitals and private healthcare organizations like Portea and carrying out the vaccination process.

Portea has also collaborated with many corporates like AECOM, FIS Global, Tetra Pak India, MyGate to name a few to help them accelerate the vaccination process. As a part of the product team, my work has been to initiate a dialogue with the corporates, explain them about the entire process of our corporate vaccination plan, and resolve their issues.

I also had to create a document that had all the details of the COVID vaccination Plan like the commercials, on site requirements, manpower etc.

This project is still in the process of happening and I got an opportunity to improve my communication skills, interact with such big corporates and learn how to resolve their queries. It also gave me an opportunity to improve my internal networking skills since the product management team has to closely work in relation to the operations, marketing, finance and customer support team.

SAMHITA – this is a CSR activity undertaken by Portea under which we are planning to vaccinate the underprivileged BPL card holders living in the semi urban areas across the countries. As a part of this project I had to first do a bit of research about the backward districts in different states in India. Further I had to make a document comprising the various hospitals

Dissertation Report

inn these districts and then connect with them and offer them to collaborate with us so that we together can accelerate the vaccination process.

Further I had to make a proposal to international investors in order to raise funds for our Samhita project wherein I had to pitch to them, explain them about the current status of vaccination in our country, the challenges faced by the government to vaccinate such a huge population, how the underprivileged people had to suffer the most, explain about the role of Portea in bringing about the change and how it can help in accelerating the vaccination process with their support and funding.

Health Prime- It is our product especially designed for the elderly population of our country. Due to the pandemic situation the leads for health prime had reduced and our aim was to increase the demand again so we as a team decided to revamp the product. We conducted a lot many brainstorming sessions to understand the loopholes and ways to resolve the problem. In order to revamp the product we made changes in our already existing packages and plans and curated them depending upon the need of the clients. A lot of market research was done from our side to understand the current requirements of the aging population. We also did a competitor analysis, tried understanding about the services and products that they have to offer and also closely observed their commercials to understand how we can improve upon our commercials and product. We worked closely with the marketing team to decide upon the final design of the brochure and the e-mailer that could be forwarded to the B2C team to attract more clients since presentation of our product was also of prime importance. The revamped product is expected to go on floors by August and we still are working on improving it.

Doctor Tele-consultation –

Portea provides doctor tele-consultations for their in-house patients. Doctor tele-consultation is not a stand-alone product of Portea. However due to COVID, we now have a dedicated helpline number for our corporates like IBM wherein their employees can make a call on our helpline number and we connect them to our doctors. It's only through our portal that the doctor calls the clients. So we decided to sell doctor tele-consultation as a stand-alone product as due to the pandemic situation, it has gained a lot of importance and more and more people are using this service. We are still at the initial stage of developing this project. However I got a chance to prepare the structural plan for doctor tele-consultation wherein I had to do the market research, study about our competitors, their customer segment, presence across the country, their specialties and the services they are majorly providing to their clients. Further I compared them with Portea's offerings and analysed the areas where we need to improvise upon to make this product a success. We further have to make a market strategy keeping in mind the present market requirements.

THANK YOU