

Summer Training Report

On

Part I

COVID-19 pandemic crisis:

**Dual economic burden on private hospital sector
sustainability**

Part II

E-Health: More than just an electronic health record

By

Tasbi Anand

Under the guidance of

Dr. Sandesh Kumar Sharma

MBA Hospital and Health Management

2019-21



ACKNOWLEDGMENT

This report is an exercise to throw some slant on the jolt of corona virus outbreak on private healthcare sector in India,

This work would not have been feasible to come to the present structure without the competent guidance, supervision and embolden of my mentor **Dr. Sandesh Kumar Sharma** (**Associate professor-IIHMR Jaipur**)

I would also like to acknowledge my gratitude towards my family and friends for their support and encouragement.

I sincerely acknowledge the efforts of all the people who have helped me in completing this report.

Thankyou

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ABBREVIATIONS

COVID-19	Coronavirus disease-2019
WHO	World health organization
OPD	Outpatient Department
IPD	Inpatient Department
PPE	Personal protective equipment
EBITDA	Earnings before interest, taxes, depreciation and amortization
IBEF	India Brand Equity Foundation
GDP	Gross Domestic Product
PE FUND	Private Equity Fund
FDI	Foreign Direct Investment
CAPEX	Capital Expenditure
FICCI	Federation of Indian Chambers of Commerce
PBT	Profit Before Tax
PAT	Profit After Tax
ROI	Return On Investment
GST	Goods and Services Tax
TDS	Tax Deduction at Source

COVID-19 PANDEMIC CRISIS:

Dual Economic Burden On Private Hospital Sector Sustainability

Abstract

The Indian healthcare industry is one most competent and rapid expanding sector and the healthcare market in India was expected to reach 372billion\$ by 2022 according to the report of IBEF. The current Covid-19 pandemic crisis have impacted all the sectors drastically and healthcare industry is also catching this virus. This research aims to determine the impact of Covid-19 outbreak over the financial performance of private hospitals in India.

The method used in this research study is secondary data literature review analysis.

The observations revealed that with the stipulation of stringent lockdown measures to contain the outbreak of Covid-19 in India, private hospital sectors witnessed a significant downfall in patient census, elective surgeries and international medical tourism as well as the need to continue operations and investment in additional materials, equipment and manpower to ensure preparedness for the outbreak pushing hospitals into existential crisis.

The Indian government should take supportive measures to help the corporate sector for certain financial forbearance to maximize its capacities and capabilities to serve the mankind during this medical emergency.

Background

The private healthcare sector is the mainstay of healthcare delivery system in India and it's been expanding every year at a steady rate since Independence.

The maximum part of healthcare bed capacity lies with private players. Radiant care, Apollo, Escorts, Max healthcare India, Fortis, Narayana etc. have been the key contributors. With growing economy the demand for treatment with better infrastructure and quality care is increasing day by day, also India serve as a medical hub for my international patients to seek good quality care at affordable prices which increases the demand for private sector bed capacity every year.

Indians are highly dependent on private hospitals for healthcare facilities. Approximately, 75 percent of all the hospitals in India are run by private hospital chains and standalone players. Almost 70 percent of total hospital beds in India are provided by private Hospitals.

considered to be a crucial industry. However, private hospitals are facing financial distress due to shrinking profit margins and reduced margins on implants, drugs and consumables.

This is further deepened by the burden of government healthcare schemes like Ayushman Bharat, Central Government Health Scheme and Employee's State Insurance scheme. In parallel the expenditure and operational cost is also rising due to rent, wages and other factors.

For most of the private hospitals medical tourism, elective surgeries, outpatient department (OPD) services and diagnostic services serve as the major source of revenue generation. The current COVID-19 pandemic has drastically affected the healthcare industry. In the wake of country lockdown to combat with the virus outbreak private hospitals have seen a revenue drop of 50-60 percent since march 2020.

Introduction

India is a developing country with major share of rural capacity. Healthcare delivery system in India is different for everyone depending upon their geographical location. People who lives in urban areas gets access to bigger and better hospitals and healthcare facilities as compare to rural population with remote access. However with increasing economy and per capita income the purchasing power to have access to better healthcare facilities the demand for private healthcare sector is growing at a lightening pace. Meanwhile the healthcare sector is also one the biggest employer of the country.

Private healthcare sector is the back bone of health care delivery system in India.

Below mentioned table briefly explain the financial healthcare layout of different countries:

Country	% Of GDP Given to Health Sector	Per Capita Healthcare Pay-Out	Govt. Share in Health Care Payout	Health Care Payout Ratio to Total Government Expenditure	% OF Healthcare Privatization
USA	18%	8608\$	46%	20%	11%
UK	9%	3609\$	83%	16%	9%
INDIA	4%	60\$	31%	8%	60%
CHINA	5%	278\$	56%	12%	35%
BRAZIL	9%	1121\$	46%	9%	31%
GERMANY	11%	4875\$	76%	19%	12%
RUSSIA	6%	807\$	60%	10%	35%
NIGERIA	5%	80\$	37%	85	60%

Source: www.who.in

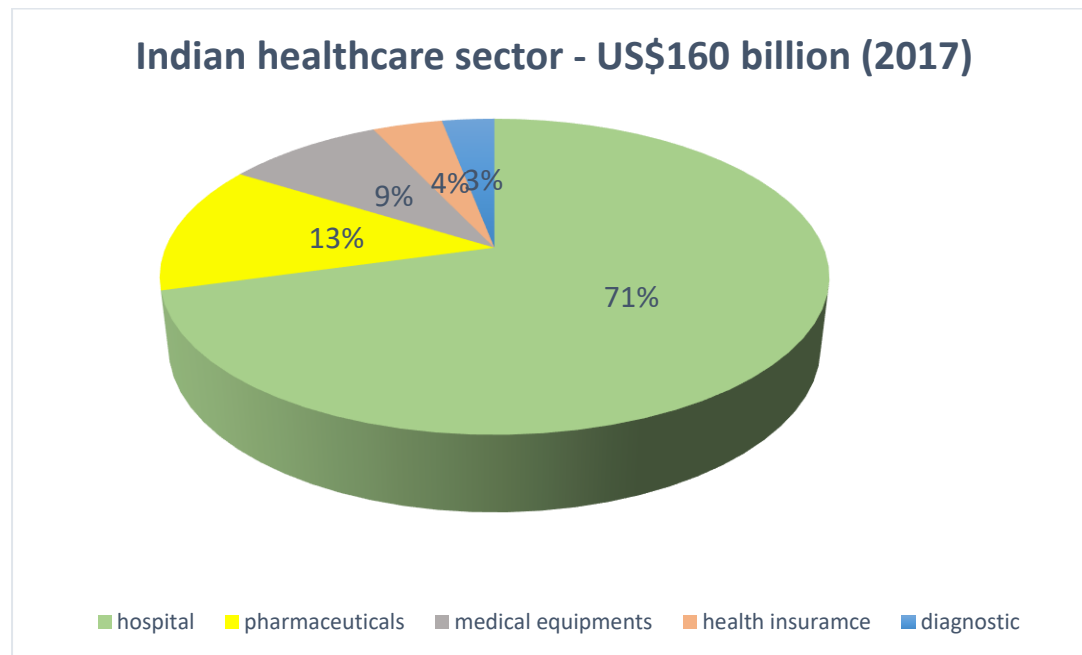
Table 1: Percentage of healthcare spending by various countries

These details appeared in the report of Guidance note on cost management in healthcare sector by **The Institute of Cost Accountants of India**

Indian healthcare sector

Health care sector comprises of hospitals, pharmaceuticals, Medical Equipment, health insurance and diagnostics.

Over the years, the Indian hospital space has remained an area of great interest for leading global private players to invest. Growth in multi-speciality and single-speciality hospitals in the country has taken place mainly on the back of PE funding. A flurry of investments started post 2000, mainly from overseas funds, when Indian government approved 100% FDI policy in the healthcare sector.

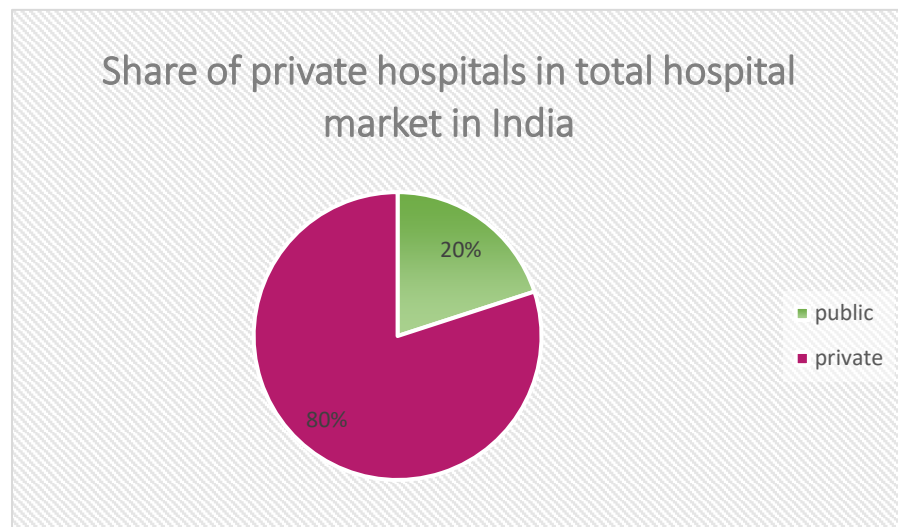


Source: Industry, ICICI Direct Research (Dec 10, 2019)

Fig1: The pie chart shows the percentage distribution of private healthcare sector's components in India

Private hospitals in India

The private healthcare sector reckon for 80% of all the hospitals (up from 8% in 1947), 60% of all the Inpatient treatment capacity, and 80-85% of all the physicians. As much as 75% of outpatient care (OPD) care is exclusively private while more than 55% of IPD care is sought from private hospitals in India.



Source: [Company ICICI Direct Research](#)

Fig 2: pie chart depicts the percentage share of private hospitals in India.

Favourable macro-economic factors

Ever since the government gave room to private players for improving healthcare infrastructure of India and to provide better quality health care to its citizens, India has seen exponential growth in corporate hospitals. Several family-owned and doctor managed private hospitals, with a portfolio approach emerged between 1980-2015. Intense competition and reverse drain of expatriate and highly trained doctors enabled these chains to venture into specialities and super-specialities.

Demand supply mismatch with a combination of macro-economic factors, including expanding population, increasing urbanization, better health awareness, improving living standards and income, changes in the disease profile and rising penetration of health insurance are likely to lead to an increase in demand for quality healthcare services. Apart from this, increasing trend of medical tourism for low cost of surgery and critical care in India are key growth driver for private hospitals in India.

Financial management is the most strategic resource management in case of hospital sectors, hospitals which use it in an efficient and effective way have easier access to it.

Revenue Generation Streams in Hospital

The source of income in a corporate hospital is mainly divided into two categories: Direct medical services and from medical support services such as from blood bank, radiology department, pharmacy and others.

Further these two categories were sub-divided into three parts which include:

1. **Out-patient revenue**
2. **In-patient revenue**
3. **Pharmacy income**
4. **Other operational income**

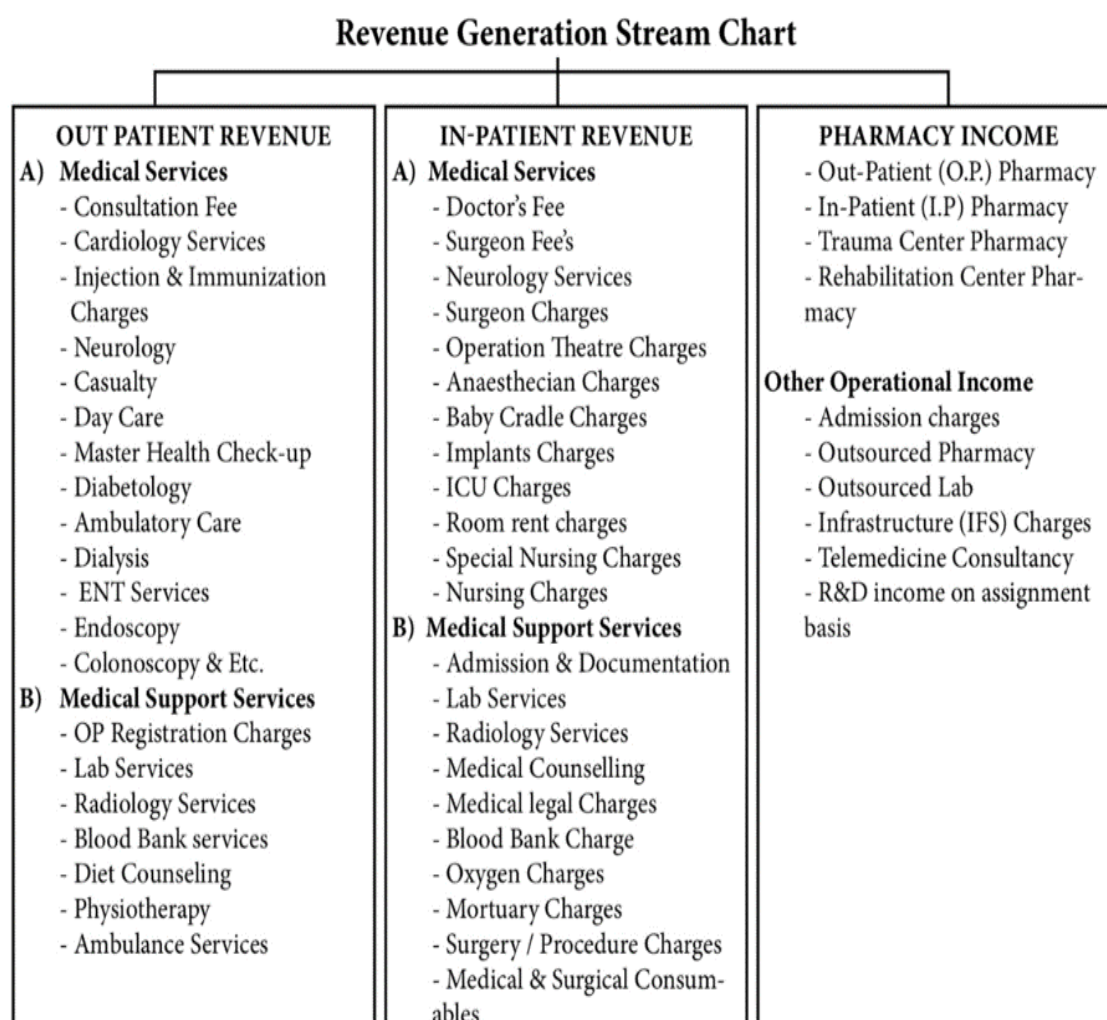


Table 2: Revenue generation streams in hospital.

Expenditure Stream in Hospital Sector

- **Operational expenditure**
 1. Medical department expenses
 2. Medical support service department expenses
 3. Service department
- **Non – Operational expenditure**
 1. Administrative
 2. Others
 3. Capex

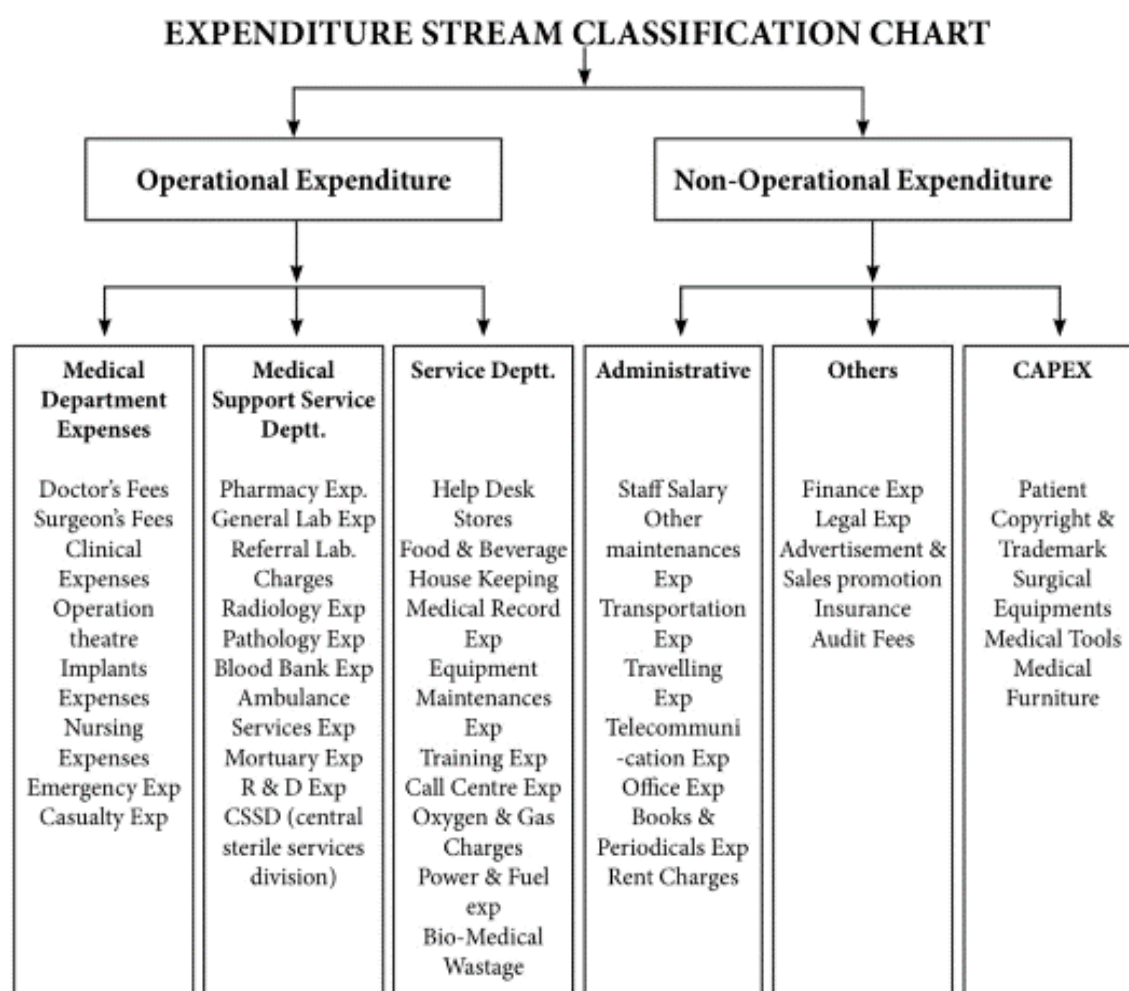
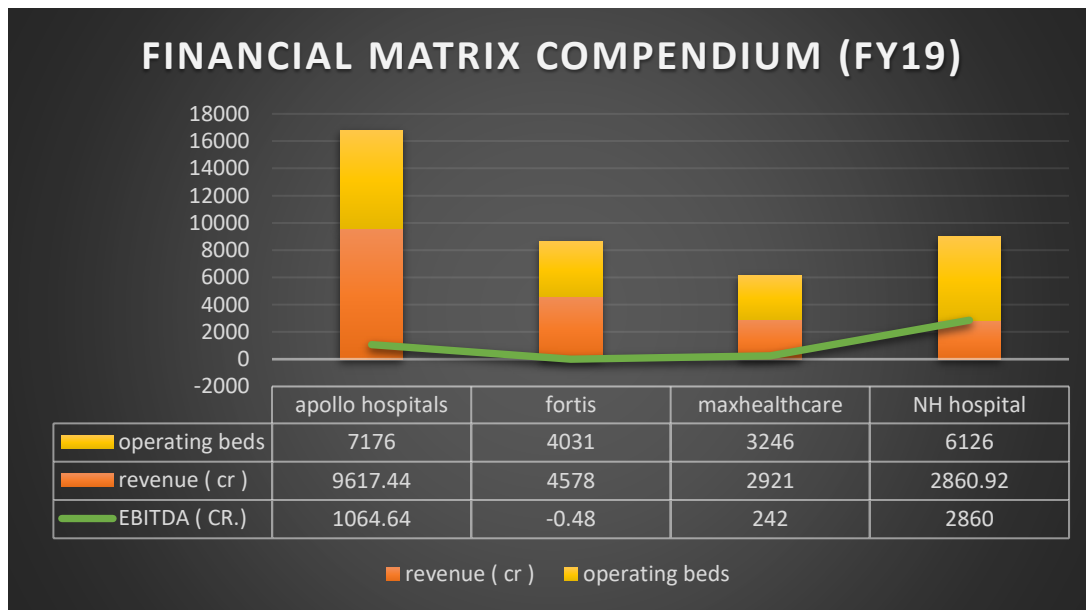


Table 3: Expenditure streams in Hospitals

Top players of the private healthcare sector of the country



Source: ICICI Direct Research, Company; financial report NH-2019; financial report Apollo hospital-2019, Max India limited financial presentation.

Fig 3: The bar graph shows the operating beds, revenue generated and EBITDA levels of top 4 private healthcare players of India.

Occupancy rate for these hospitals is between 65-70%. Even in pre-COVID stage private healthcare companies were not making big profits. PAT margins for private players have been low since last few years and ROI which is capital deployed is between 5-10% for the top players. With strict lockdown measures being imposed to contain the outbreak of Covid-19, hospitals are witnessing a drop in both domestic and international patient footfalls and elective surgeries, resulting in occupancy level to fall to a mere 40% as compared to pre-COVID occupancy level.

Research Question

What is the impact of COVID 19 virus outbreak and lockdown strategy to control it over the financial outcome of private hospitals in India?

Aim

The study aims at assessing the impact of COVID-19 pandemic outbreak over private hospital sector financial sustainability.

Research Objectives

1. To determine the effect of COVID 19 crisis over the private hospital sector financial sustainability in India.
2. To give suggestions regarding financial measures required for the sector sustainability.

Methodology

In this research article to analyze the impact of COVID-19 outbreak on financial outcomes of the corporate private hospitals and its economic sustainability semi-systematic literature review approach is used as the method to make theoretical and practical contribution in the mentioned area.

The aim of semi-systematic review approach (Narrative approach) is to identify all the empirical evidences that fits the criteria to answer our research question. The data for this study was obtained from the secondary source database which includes all the systematic secondary data and articles available on corporate hospitals financial loss due to COVID-19 outbreak.

Key research question

What is the impact of COVID-19 virus outbreak over the financial outcomes of the private hospital sector?

When this remains the key research question for the study, our study gets streamlined to the methodology for identifying the secondary data for assessing the impact of COVID-19 over private hospitals by assessing the performance of different KPI'S of hospitals.

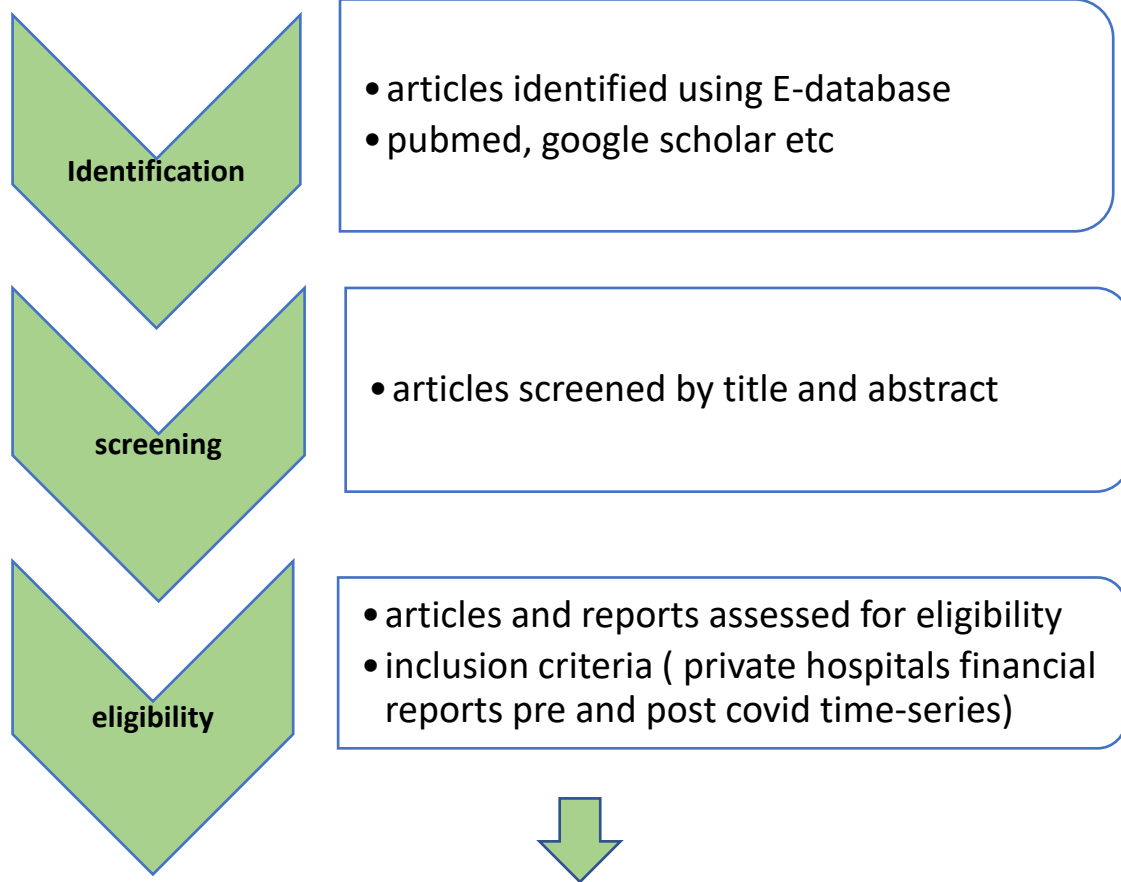
Study Design

Descriptive semi-systematic literature review design.

Sample Size

20 articles and reports were included in this semi-systematic literature review research study.

Research method design



Reports and articles included in the research (n=20)

Fig 4: The flow chart depicts the process of research methodology

Inclusion and Exclusion criteria

- All the research articles and reports which include data regarding private hospitals key financial highlights during COVID-19 outbreak period were included.
- Financial reports of private hospitals with maximum market capital is also included to understand the growth and financial performance of the sector
- Reports and data without any reliable source were excluded from the study.

Data Analysis

Private healthcare sector is the bedrock of capacity and capability in India particularly in higher secondary and tertiary care, constituting more than 60% of beds at ~8.5-9 lac, more than 60% of patient influx and 80% of the physician strength

According to the study done by [FICCI](#) to assess the COVID impact on the corporate hospital sector, during the nationwide lockdown findings include:

Assessment for Immediate COVID impact

	PRE- COVID	DURING LOCKDOWN
FOOT FALL	100	30-20 (70-80%) DROP
OCCUPANCY	70%	50-60% DROP
REVENUE	100	50-40 (50-60%) DROP
EBITDA %	10-15%	4-5% (60-70%) DROP

Source - FICCI Research

Table 4: Immediate COVID-19 impact on private hospitals

To assess the immediate COVID impact in the last week of march P&L study for march week wise revenue and occupancy level for 10 hospitals was done

The total revenue of private hospital sector in India is around Rs. 2.4L Cr with an EBITDA of approximately 13%

CATEGORY	FIXED COST	VARIABLE COST	EBITDA %
Tertiary (n=51)	65-70%	30-35%	13%
SECONDARY (n=23)	75-80%	20-25%	14%
OVERALL (n=74)	65-75%	25-35%	13%

Table 5: percentage of fixed and variable cost along with EBITDA % of 74 private hospitals

- The lockdown is likely to result in significant operating losses around Rs. 13,400 – 22,000 Cr for the quarter and liquidity crunch as evidenced by the impact assessment.

Scenario 1 (Lock down = 1 month)

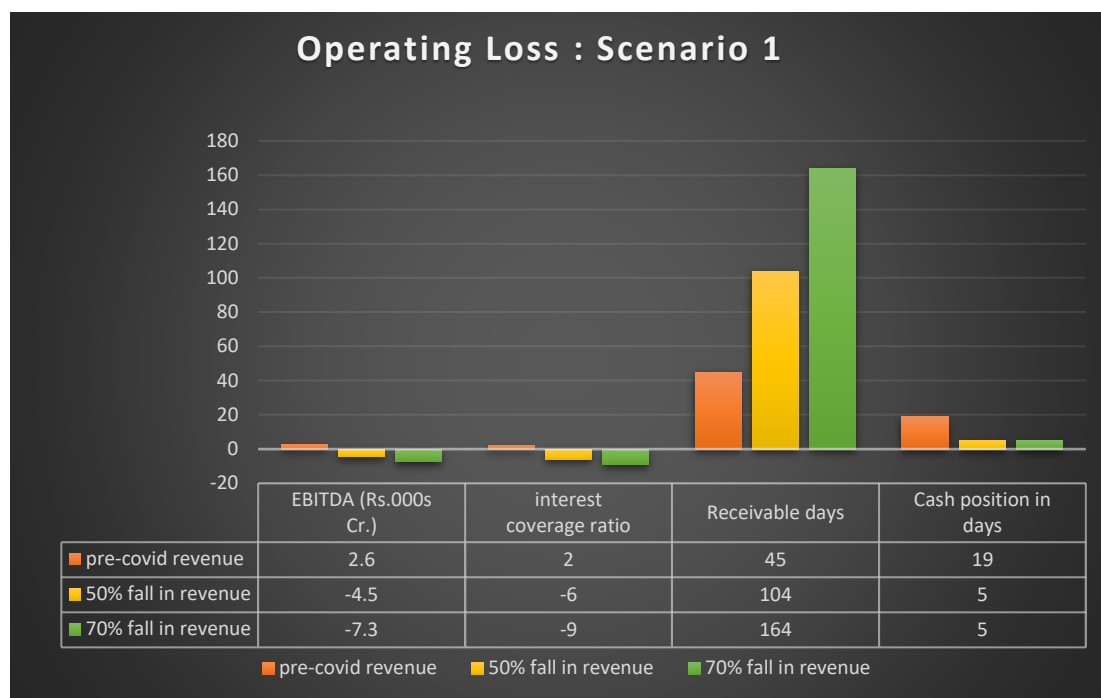


Fig 5: The bar graph showing the detailed impact assessment for private hospitals for 1month lockdown scenario comparing pre-COVID levels, 50% fall in revenue and 70% fall in revenue.

Scenario 2: Lockdown (1 quarter)

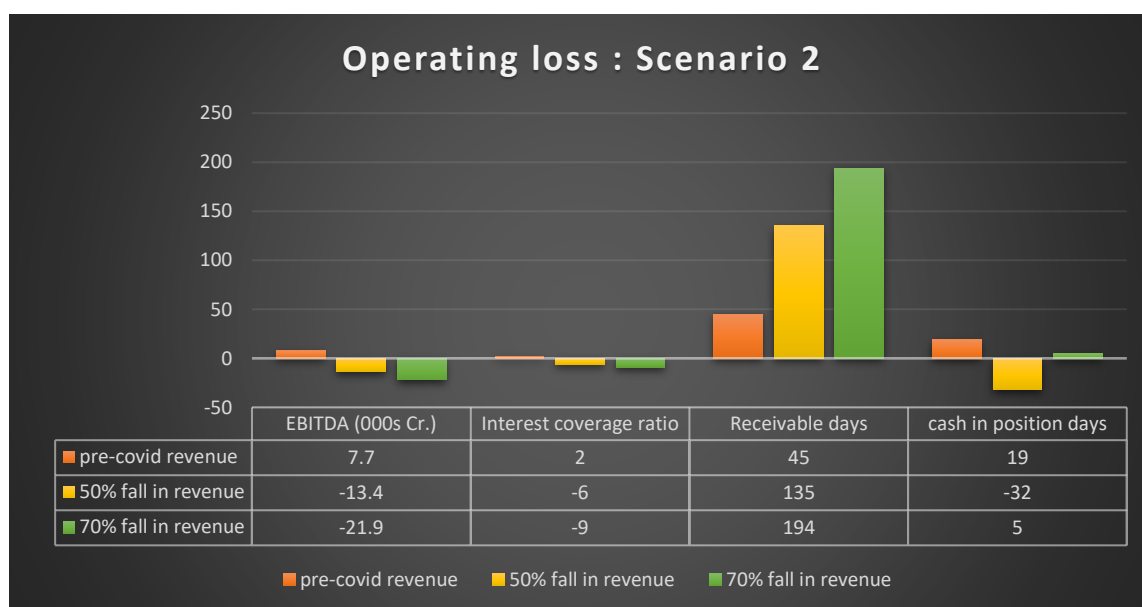


Fig 6: The bar graph showing the detailed impact assessment for private hospitals for 1quarter lockdown scenario comparing pre-COVID levels, 50% fall in revenue and 70% fall in revenue

[Source: FICCI Report 2020](#)

Discussion

The aim of this research study was to understand the impact of COVID 19 on private hospital sector financial sustainability.

With the above mentioned observations we can analyze that with the outbreak of COVID-19 in India and lockdown measure to combat the virus spread, the private hospital sector has witnessed an unprecedented financial down steep.

For the hospital sector which is already chained in terms of liquidity, onset of these losses will create cash imbalance and the economic resources will deplete within a month. Corporate hospitals will experience a loss of around 14,000 to 24,000 crores within the first quarter of the year.

- Given the gilt-edged capital-intensive nature of the sector, **interest coverage ratio (which is already at 2)** will get further constrained to negative value.
- The **revenue generated for the sector** in FY 21 is also expected to experience a down steep by 30-40%.
- This loss will also result in early single digit or negative **EBITDA percentage**.

The COVID-19 came like a violent storm for private hospitals. Braced up by PE funds, many private hospital chains expanded militantly in the last few years. But most of them are now struggling to stay alive.

Even India's biggest private hospital player Apollo hospitals is affected drastically by this outbreak effect and they demand for government support for sustainability.

Private hospital sectors are currently facing a dual burden unlike other sectors, which makes the situation unique:

- The private hospitals in India were already trembling for financial profits in the pre-COVID state, thus this sudden drop in demand impacted the cash flow making it strenuous for the private hospitals to managing payrolls and fixed costs.
- And on the other side of the coin very minute scope to reduce the fixed expenses and increase in costs in context of infection control, need for personal protection Equipment (PPEs) and need to deck up the resources to deal with virus outbreak and serve the nation in the hour of crisis.

Recommendations

In order to help them to sustain government should provide cash flow infusion, direct and indirect tax relief benefits and fixed cost subsidies are among the key recommendations for the financial relief to the industry.

- **Liquidity Infusion**

- a. Short term concessional interest loans to address the cash flow issue of the sector
- b. Relaxation for a period of at least 2years of various debts:
 - Debt EBITDA threshold
 - Debt to equity threshold
 - Relief from dues locked with Central and State government authorities.

- **Direct/Indirect Tax Dispensation**

- a. Relief to hospital sector from ineligible GST credits paid on procurement for few months
- b. Provide custom duty GST exemption on essential medicines, consumables and device for treatment of COVID patients
- c. Reducing TDS for FY21.

- **Fixed Cost Rebate**

Abatement on rate of power supply for a stipulated period. Estimated power cost for the hospital sector is around 6,000-7,000 crore

- **Wavier on License Renewal Fee**

Waiver of renewal fees for license for FY21 and FY22.

Conclusion

The corporate healthcare sector is an integral part of Indian healthcare delivery system. India has one of the largest and fastest growing healthcare market in the world.

Revenue for the private healthcare sector is estimated at ~Rs.2.4L crore, EBITDA is estimated at ~Rs.31K crore (13%). The sector's median return on capital employed is ~7% which is lower than the cost of capital of 14%.

The impact of the coronavirus pandemic and the lockdown it triggered is clearly visible in financial markets. Social distancing being executed as a key effort in the push to slow down the virus transmission.

While the private healthcare sector is fully prepared for every eventuality, it is also a reality that, unlike other sectors, the hospital sector faced a major turmoil as they were directly affected by the disease. Major issues faced by corporate hospitals include

- (a) Adding more manpower surplus, equipment, consumables and other resources to ensure a safe and efficient healthcare delivery model to combat the virus outbreak
- (b) Experiencing a massive drop in elective surgeries and international patients and OPD footfalls

Many hospitals and nursing homes, have been forced to shut down since the lack of cash flows. Any possible upward steep will be slow, taking at least three quarters for return to pre-COVID levels.

With an estimated loss of ₹15,000-20,000 crore for the quarter, the sector need government support for liquidity infusion, indirect and direct tax benefits, and fixed cost subsidies to address the issue.

The Prime Minister's effort to give tribute to frontline healthcare workers has indeed been a morale promoter. However, with decreasing revenues, essential measures in terms of liquidity infusion, tax reliefs and other waivers have become vital for the survival of private health care industry.

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PART – II

Report on Online Course

E-Health: more than just an electronic health record

By

Tasbi Anand

MBA-Hospital and Health Management

2019-21

E-Health is a vast term, and refers to the use of information and communications technologies in healthcare.

E-Health covers a lot of territory, which is why digital health industry experts often contest exactly what the term means – and to add to the confusion, it's also frequently used as a synonym for Health IT.

COURSE NAME

e-Health, more than just an electronic health record. (By The University of Sydney)

PLATFORM USED

Coursera

COURSE DURATION

15 Hours (5 modules, 5 weeks)

COURSE DESCRIPTION

The MOOC, "eHealth: More than just an electronic record", is multidisciplinary in nature, and aims to equip the global audience of health clinicians, students, managers, administrators, and researchers to reflect on the overall impact of eHealth on the integration of care. It explores the breadth of technology application, current and emerging trends, and showcases both local and international eHealth practice and research. The entire eHealth Course consists of 5 modules and takes about 5 weeks to complete.

OBJECTIVES OF THE COURSE

- What is E-health and the direction in which it is steering into
- The type of data we collect in terms of health and how it can be used to alter future
- How consumers can now participate with use of new technology in their healthcare decisions
- Use of E-health in bettering coordination and efficient delivery and the hurdles

COURSE CONTENT

<u>Module-1</u>	What is eHealth? Key question: What are the fundamentals of eHealth and where is it heading? To complete this introductory module you will need to view the video lectures for each lesson and complete the four listed ungraded learning activities. It is also recommended that you sample the module reference and further resource list to consolidate your learning.
<u>Module-2</u>	Health in our Hands How are new technologies helping consumers participate in healthcare? To complete this module you will need to view the video lectures for each lesson and complete the two listed ungraded learning activities. You are also required to complete the graded Peer Review Assignment 1 (40%) for submission as per the assignment instructions. It is also recommended that you sample the module reference and further resource list to consolidate your learning.
<u>Module-3</u>	Data and the Quantified Self What kind of health data do we collect now and how will it transform healthcare in the future?
<u>Module-4</u>	Interacting with Health Professionals using New Technologies How can eHealth improve the coordination and efficiency of healthcare and what are the barriers?
<u>Module-5</u>	E-Health in Professional Practice How can eHealth principles and technologies be applied in my own professional practice?

LEARNING METHODOLOGY USED IN THE COURSE



Video Lecture



**Reading
Material**



Quizzes



**Applicative
Asssignment**

KEY LEARNINGS FROM THE COURSE:

The course in general instils learning about how digital technology, especially apps, data and communication technology, is being used to support health and healthcare management and

how it's being deployed to improve healthcare delivery and quality. It also gives an insight about the framework to rate apps more objectively. For instance, how to use MARS Analysis to rate health apps.

Key learnings from module 1

- Compare definitions of eHealth from both health consumers and professionals.
- Visualise an eHealth model which illustrates how key eHealth domains intersect to impact on health care.
- Gain an insight into the fundamental principles of eHealth.
- Rate your own awareness of eHealth in current practice.
- Appreciate the current and future challenges of eHealth for both health consumers and health practitioners.

Module 2

- Understand the potential of mobile technology to support the shift from healthcare to health.
- Describe examples of wellness and healthcare mobile apps currently in use.
- Consider strategies for including mobile health apps in your professional practice.
- Be aware of issues around the design and evidence for effective health apps.

Module 3

- Understand the potential of mobile technology to support the shift from “healthcare” to “health”
- Describe examples of “wellness” and “healthcare” mobile apps currently in use .
- Consider strategies for including mobile health apps in your professional practice
- Be aware of issues around the design and evidence for effective health app

Module 4

- Describe a range of innovative eHealth interactions between consumers and healthcare professional.
- Evaluate the advantages of technology-based eHealth services in improving access and communication in healthcare.
- Appreciate the differences between online and face to face health service interactions.
- Consider new models of healthcare supported by tele-health, social media and personalised apps.
- Appreciate how eHealth can be used to support professional development.

Module 5

Reviewed a variety of case-based examples of eHealth in professional practice.

- Provided an evidenced based rationale for adopting an eHealth strategy suitable for your own professional practice.
- Described how you would anticipate this strategy improving healthcare services for both yourself and healthcare consumers.
- Used eHealth principles from previous modules to review and comment constructively on those eHealth strategies suggested by other course participants.