

**KOVAI MEDICAL CENTRE AND HOSPITAL LTD**

**Research Report**

**By Sayam Pokharna**

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# Introduction

Kovai Medical Centre and Hospital was incorporated in 1985 and began its operations in 1990, what was started as a 150 bedded hospital, in the small town of Coimbatore, under the leadership of Dr. Nalla G Pallaniswami has turned out to be a multi-disciplinary, super-speciality hospital with a total capacity of around 1000 beds and more than 40 medical departments and 20 operations theatres.

Today KMCH stands as one of the largest corporate hospitals in the state of Tamil Nadu, employing approximately 4000 employees with state-of-the-art infrastructure and advanced medical equipments making it one of the most advanced facilities in India.

It's always been the motto of KMCH to be at par with health standards, whether it's the matter of technology & medical equipments of renowned specialists, this enthusiasm and drive for medical advancements can be deduced from the following unique and commendable achievements of KMCH –

*“The department of cardiac surgery under the leadership of Dr. Prashant Vaijyanath has performed minimally invasive cardiac surgery under 3-D laparoscopy **a first of its kind in Asia.**”*

*“KMCH has introduced **the first** mobile CT stroke unit, it is an ambulance worth 4cr which is like an intensive care unit with a CT in it. KMCH will be the first hospital to start such an ambitious programme in a developing country.”*

“”

Although a lot of these medical equipments and operational procedures would make up for just complicated jargons, it isn't

difficult to make out that KMCH, in its limited communication to its stakeholders, talks a lot about these latest breakthroughs and advancements.

KMCH has its oldest and most sophisticated establishment in Coimbatore – which makes up for around 750 beds, with 4 peripheral centres, 2 in Coimbatore and 2 in Erode.

# Business Model

I will be borrowing the format and 'Business model canvas', of the book 'Business Model Generation' by Alexander Osterwalder and Yves Pigneur, to better explain the business model of KMCH.

The book divides the complicated idea of business model into nine simple categories as follows:

1. Value Proposition
2. Customer Segments
3. Revenue Streams
4. Cost Structure
5. Key Resources
6. Key Activities
7. Key Partnerships
8. Customer Relationships
9. Channels

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## Value Proposition

As I mentioned before KMCH believes in giving its customer the most advanced and sophisticated medical treatment they could possibly imagine to get in Coimbatore.

The hospital has NABH (National Accreditation Board of Hospitals) accreditation for all its departments.

KMCH specialises in the most complicated and scarce surgeries conducted in the medical space, for example cardiac transplant which has been around for four decades, erstwhile

was just practiced in two cities in India viz. New Delhi and Chennai, was started in Coimbatore in 2014.

KMCH is a pioneer in interventional radiology and has emerged as one among the three centres in the country to perform the most complex form of aortic surgery. The latest addition to this list of upper-end treatments is liver transplant and the comprehensive cancer centre.

***In a way KMCH has garnered a niche for itself in practicing complicated surgeries, transplants and operations.***

This drive for innovation keeps KMCH on its toes.

## **Customer Segments**

There aren't any separate customer segments to which KMCH caters.

## **Revenue Streams**

In FY16 KMCH recorded sales revenue of 473cr up from 72cr ten years back, recording a CAGR 22.94% and 16.12% for the past 3 years. The growth in the revenue has come down in the past 3-5 years, this has happened mainly due to complete capacity utilization at the main KMCH centre which accounts for more than 4/5<sup>th</sup> of the revenue, although utilization rates are not giving by the hospital, rating reports have stated utilization rates upwards of 90% in 2010-13.

Revenue streams of KMCH essentially come from three activities – treating patients, pharmacy and dietary.

- **Treating Patients**

In medical parlance a patient who stays in hospital for his/her treatment is called an 'In-patient' and the person who visits the hospital for examination by a consultant or doctor is called an 'Out-patient'. At KMCH In-patients have been forming anywhere between 55-59% of the total revenue for the past decade, while treating Out-patients accounts for anywhere between 19-20% of the revenue. In and all treating patients account for nearly 75% of the revenues.

- **Pharmacy**

Pharmacy revenue accounts for all the pharmacy products sold at the hospitals and at a few pharmacy outlets established by the hospital, it has accounted for anywhere between 19-20% of the total revenue for the past 8 years.

- **Dietary**

Dietary revenues are on the account of consultancy provided by dieticians and from the sale of dietary products. This is the youngest revenue stream and provides for nearly 3% of the hospitals revenue.

In general all the revenue streams have grown proportionately, with no one stream showing differentiated superior growth. All of the revenue streams have proved to be profitable over the years, although all of the costs can't be demarcated into different groups, at the most basic levels pharmacy gross profits i.e. (Pharmacy sales – Pharmacy Consumption) has earned an average of 20% for the past 8 years. At the same time dietary gross margin i.e (Dietary Sales – Dietary Consumption) has grown from around 15% in FY09 to nearly 30% in FY10.

There isn't any variation between the performance of the hospital in different quarters, with all of them contribution

roughly a fourth of the revenue, year after year. All revenue streams generate plenty of cash with receivable and debtors hovering around (25% of sales)

Hospital, quite obviously, should be a recession proof business, which should.. (reconsider)

## Cost Structure

A hospital is a cost intensive business, this leaves KMCH with operating margins (excluding other income) revolving around 20%, generally operating profits is a good measure of operational performance of a company (especially a manufacturing company), however while looking at service providing companies it is better to list down the most crucial cost related to the most important activities for rendering the given service and compare the trend over time. The biggest cost of operating a hospital generally is 'Employee Benefit Expense'.

- **Employee Benefit Expense**

Doctors, Nurses and Para-medics take a large piece of revenue for their services. At KMCH 'Employee Benefit Expense' as an accounting head currently takes 17% of the revenue, up from 12% eight years back.

However there is another expense that the hospital pays to doctors and consultants for their services, which is recorded as 'Consultant Charges' under the heading of other expense. Consultant charges as a % of sales comes out to be 17%, together these two comprise a third of the sales revenue.

*Fact – Cumulative Employee related outflow for past four years = 493cr exceeds the total gross block until now =460cr*

- **Medicines (Pharmacy)**

Expenditure in pharmacy has been around 15-16% of the total revenue, however when compared to just pharmacy revenue – it leaves an operating margin around 20%.

- **Hospital Consumables**

Hospital consumables as a % of sales have come down to 18% in FY09 to 14% in FY16

These 3 costs make up for about 70% of the sales revenue. Hospital consumables and Medicines are purely variable costs and the hospital doesn't carry much inventory as medicines and consumables throughout the year, employee benefit expense may not be purely variable – however over time can be adjusted to the number of patients the hospital generates.

Hence at decent utilization rates there isn't much operating leverage to benefit from as the majority of revenue comes from the original establishment which is already recognised.

## **Key Resources**

### **Human Resource**

It is quite obvious that the most important intangible resource that KMCH possesses is Human Resource, hospital is a very image sensitive business, where the hospital demonstrates the reputation their doctors have, and doctors demonstrate the reputation the hospital has, having said that, India has huge scarcity of medical talent, which should be evident from the following statistics –

Major Infrastructure Indicators	India	US	China	Brazil	Global
Beds per 10,000 population	7	38	23	29	27
Doctors per 10,000 population	7	14.9	18.9	24.5	13.9
Nurses per 10,000 population	17.1	16.6	76	NA	28.6
Dentists per 10,000 population	1	NA	12.2	-	2.8

Source: WHO 2015

KMCH gives utmost important to continuous medical education programme (CME) for training its doctors, nurses and para-medical staff, it also organises a lot of national and international medical conferences.

Dr. Nalla G Palaniswami (Chairman and MD) and Dr. Thavamani D Palaniswami (Vice-Chairman and JMD) have also started 'Kovai Medical Center Research and Educational Trust' – although this organisation is a separate entity in itself and isn't affiliated with KMCH, it still helps nonetheless to acquire scarce medical talent in nursing and medicine. Dr. Nalla G Palaniswami has also incorporated Dr. N.G.P Institute of Technology.

## Infrastructure and Medical Equipment

As mentioned before, KMCH gives utmost importance to advancement of medical equipments, procedures and technologies. This obsession calls for huge and continuous investments for rapid innovation.

Chart

*Are these resources only a product of capital? Or do they require something else ..?*

Definitely these two resources aren't just a product of capital, KMCH employees nationally and internationally renowned specialists like (name...), these specialist form more than 40 operational departments who have over years and decades of

experience and expertise in working with state-of-the-art technology and delivering such difficult and intricate performances in the field of medicine.

## **Key Activities**

The key activity performed by KMCH is to deliver world-class healthcare services to its patients, conduction comparatively difficult and scarce medical procedures and continuously upgrading infrastructure at par with global standards in order to keep its brand name intact.

## **Key Partnerships**

There aren't any formal partnerships, joint-ventures, outsourcing arrangements that the business is a part of. However as mentioned earlier, about the involvement of Chairman and Vice-Chairman in various educational institutes and organisations, *which I believe* help them acquire scarce medical staff with relative ease.

## **Customer Relationship**

The hospitals aim is to provide better quality healthcare to it patients, there isn't any customer relation department or after sale service activity as one isn't required in this business.

## **Channels**

The channels through which the hospital currently reaches its inhabitants, Coimbatore state and various parts of Tamil Nadu are as follows:

### **Advertisements**

The company has started spending on advertisements and promotions in the previous five years for an advertisement expense aggregating to 12.3cr, although as a percentage of revenue this comes out to be just 0.7%

## **Corporate Social Responsibility**

### **Organisations/Trusts/Edu Institutes**

# Industry Analysis

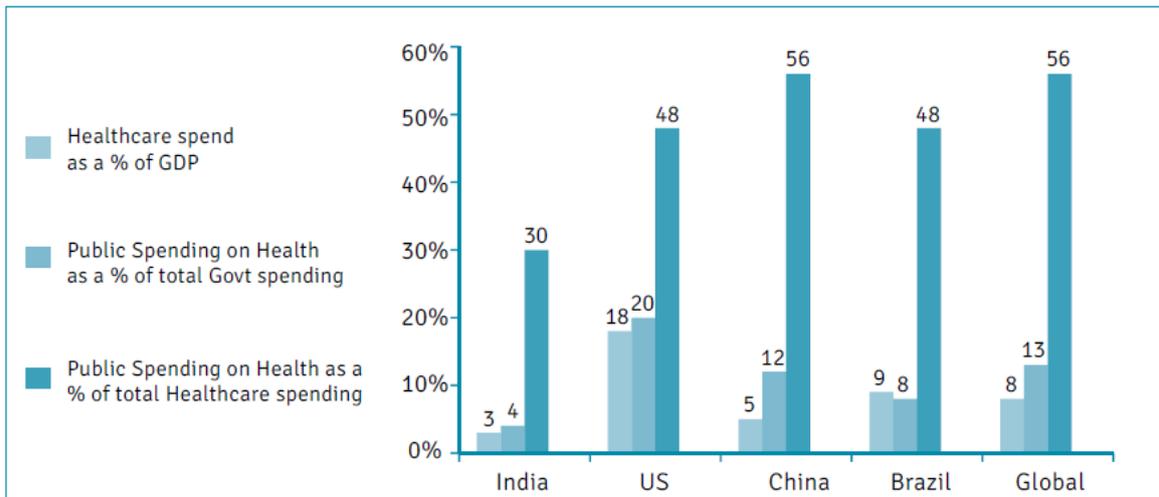
Indian healthcare industry in 2016 had a market value of USD110 billion and is set to reach USD280 billion by 2020; which makes up for CAGR of 17% over 2011-20. Hospitals as a sector in this huge industry account for 71% of the total share, followed by Pharmaceuticals (13%), Medical Equipment (9%), Medical Insurance (4%) and Diagnostics (3%)

I wouldn't break much head in analysing the possibility of growth in the healthcare space, because following facts convince me that more or less this industry is bound to grow in India, whether it is the matter of revenue, investment, people employed or patients treated.

## **Overview**

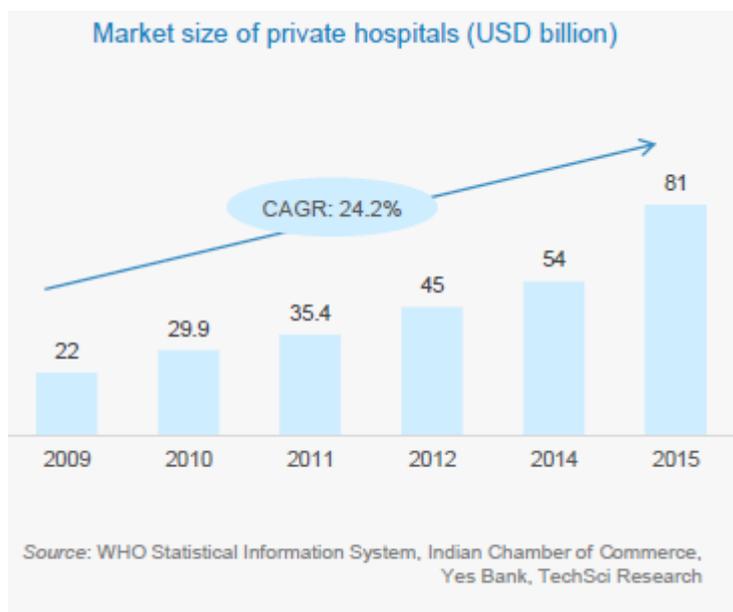
India is an immensely underfunded country in terms of healthcare infrastructure, the global bed density per 10,000 people is 27, while in India its just 7, other developing countries like China and Brazil also have substantially better densities i.e 23 and 29 respectively.

The following chart shows ..



Source: WHO 2015

As seen in the above chart, healthcare spend as a % of GDP in India is just 3% while the global average is 8%, the state of healthcare spend in other developing countries is also far better as compared to India. However what takes all of the attention is the third bar; according to it private sector in India is spending a staggering 70% of the total healthcare expenditure. It is quite clear that despite the poor state of healthcare in India, majority of investments in healthcare space are going to come from private sector, which leaves them with huge opportunities.

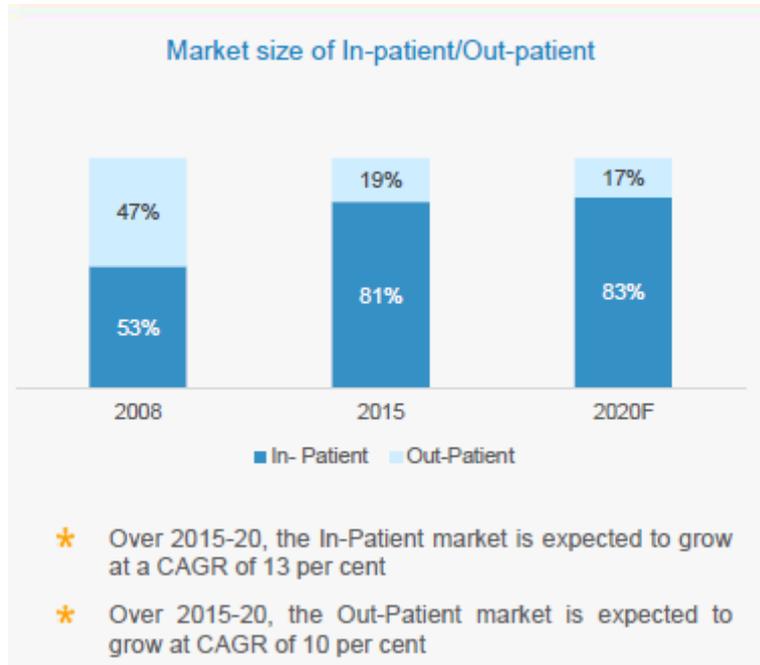


Being the torchbearer of investment in healthcare sector, it is quite obvious that the market for private hospital is going to grow at a tremendous pace.

Private sector's share in hospitals and hospital beds is

estimated at 74% and 40% respectively.

According to 2017 report of Indian Brand Equity Fund on Healthcare industry the number In-Patients (people admitted in a hospital for their treatment) has been on the rise taking up as much as 81% of the total market.

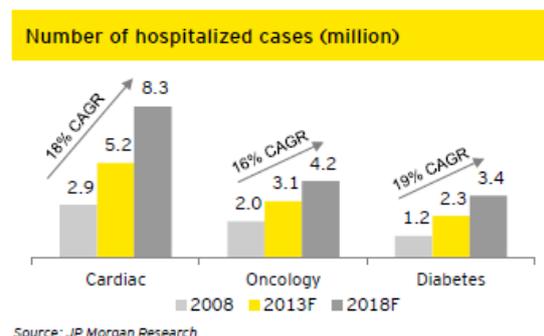


The rise in the number of In-Patients can be accounted to the increasing share of lifestyle diseases like Cardiac, Diabetes, Oncology etc.

And this trend is expected to continue because of the change in

demographics of the country – India’s population above 45 years of age is expected to increase from 22% of total population to 26% by 2021 (Expected), the larger the number of senior citizens and mid-40’s the larger the market for hospitals.

The following diagram shows the growth rate of anywhere between 16-19% in the number of hospitalised cases of the three most occurring lifestyle diseases.

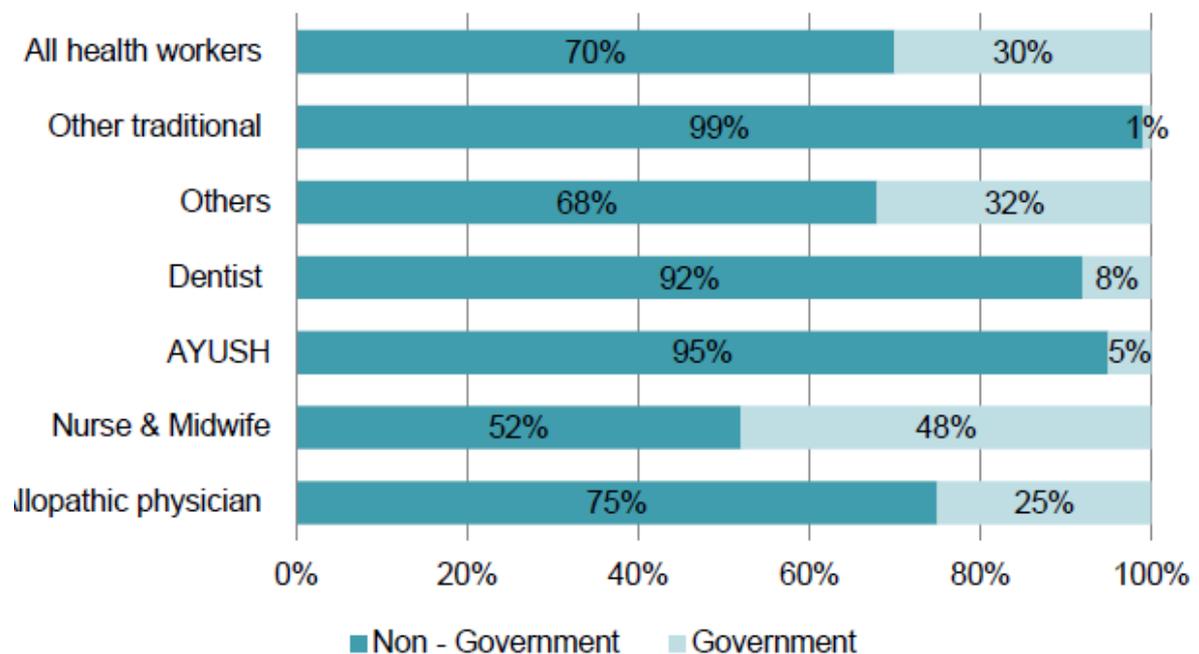


- ▶ Increased incidences of lifestyle diseases contributing to rising healthcare spending by individuals
- ▶ Lifestyle diseases accounted for 48 per cent of the in-patient revenue in 2013 (c.US\$ 17bn)

## What about the Human Resource?

As stated before, Human Resource is one of the most important resources in running a hospital, unfortunately India lags behind in even this aspect. The global average of doctors and nurses per 10,000 people is 13.9 and 28.6 respectively while in India it is 7 and 17.1 as of 2015 (WHO 2015).

Although India produced upwards of 25,000 post graduate medical students till the year 2015, India faces a problem with retaining good talents, mainly due to competitive pay and better working opportunities abroad. Doctors and nurses hardly prefer to work in government hospitals due to their poor pay and infrastructure, which poses as a big challenge for government.



As per the National Skill Development Corporation (NSDC) report (2013-17, 2017-22) about 70% of health workers are employed in Non-government organisations. The problem for lack of medical talent still persists, however it is less severe in the private sector.

## Government Policy

## Michael Porter Analysis

Although Michael porters work – in analysing the competitive advantage, analysing an industry through his celebrated five force model framework – is phenomenal, I for my own understanding have altered it slightly and formed the following checklist to better comprehend the industry and the company's positioning in it.

*Q. Do the suppliers of this industry command bargaining power? If yes, A) Does the industry has the ability to pass on this cost to its customers? If yes, then is this the only time when the company can increase its price? B) Does the switching cost work in the favour of the 'Industry' or the 'Supplier'?*

### **Comments**

- The major suppliers for any hospital are its suppliers for – Medicines (Pharmacy), Hospital Consumables, Medical Equipments and Human Resource.
- Suppliers of generic and the most basic level of supplies may not command pricing price, however specialised patented medicines, advanced equipments – have pricing power, nonetheless the hospital can pass on these cost for specialised treatments to their patients.
- There aren't any switching costs in the Hospital industry with their suppliers, however in certain cases – where the hospitals image is a shadow of a single doctor, or a small group of doctors – there might be a problem.

### **Is the same applicable to the company under study?**

- Given the specialised and niche services provided by the hospital, KMCH posses the power to charge its customers for its services and to compensate any increase in its cost. These niche treatments also make KMCH a good choice and sometimes the only choice for their patients. Pharmacy and Dietary as revenue stream margins are also either stagnant or growing, indicating that KMCH can charge hospital for its cost.
- At KMCH there are numerous doctors and famous

specialists who make up more than 40 different departments, so there isn't any single doctor or departments whose image overpowers the hospital as a whole.

Q. *Is the industry 'Price Taker' or 'Price Maker'?*

Q. *Is the value proposition of this industry undifferentiated, except for price? Do the buyers of this industry command bargaining power? B) Are the switching cost working in favour of 'Buyer' or the 'Industry'?*

### Comments

- Hospital services definitely aren't homogeneous throughout in all hospitals in any city, district or country. Hospitals visits are a factor of the satisfaction and experience that a patient receives during his/her stay, and hence it won't do any good to compare price between any two random hospitals.
- Buyers of healthcare services should be categorised into two categories to make sense out their different set of requirements – one category is the 'lower income group'/poor who form more than a substantial part of India's population, the second category will be the 'middle-class' and the 'upper middle-class'.
- While quite obviously for lower income group – government facilities, trust/charity based hospitals and low cost (although for profit) healthcare providers like Narayana Healthcare becomes more lucrative. These low-cost providers are bound to benefit the most from medical inclusion of the lower-income group.
- Middle-class and Upper Middle-class aren't exactly 'price-sensitive', instead they seek affordable or reasonably priced, **but QUALITY healthcare.**
- As such there aren't any monetary switching costs at place in between a hospitals and its patients, one argument which could be expected is that – patients getting treated for lifestyle disease (whose treatment last over a few years) may find it uncomfortable to shift from their regular doctor or hospital, however a patient

generally considers the cost before getting comfortable with a doctor – as in if the hospital isn't affordable the patient may find a more inexpensive alternative, if it is affordable – the patient will not break his head over saving some money and risk his health.

**Is the same applicable to the company under study?**

- KMCH's motto isn't to serve the lower-income group with the lowest possible cost-structure at place, instead it chooses to provide quality healthcare services (which in many cases are scarce and indigenous) and charge its patients for those services. Hence KMCH's proposition to an extent is differentiated – which keeps the pricing power intact.

*Q. Is this industry very competitive? If yes, A) What form does this competition take? B) Does this competition means taking a hit on price, cost, or both?*

**Comments**

- The industry as a whole isn't very competitive, given that there is a huge gap between demand and supply, however this may not be the case in all the geographies or categories. Some geographies (especially metropolitans) have substantial number of hospitals, which provide although scarce but similar services, this may result in regional competition between a few players.
- The extent of competition hasn't come down to severe price wars even in these cases.

**Is the same applicable to the company under study?**

- Coimbatore may be one such geography. In past few years Coimbatore has become a healthcare hub in southern Tamil Nadu, with many respectable establishments – which are not only older, but even bigger in capacity. Some of the best establishments in Coimbatore are –
- *GKN Memorial Hospital – GKNMH was started way back in 1952, it has more than 580 beds and it was the first hospital in the state of Tamil Nadu to be certified by NABH.*

- *PSG Hospitals – PSG is a multi-disciplinary 900 bedded facility.*
- *KG Hospital – it is 350 bedded multi-disciplinary hospital, with over 250 doctors and surgeons and a supporting staff of 800.*
- *Sri Ramkrishna Hospital – started in 1975, it is a 700 bedded fully equipped hospital. (ask COO what makes their hospital better?)*

*Q. Is the industry visibly very attractive to new entrants? If yes, A) What are the strengths of entry barriers that place existing players at an advantageous position, if any? B) What kind of retaliation should a potential entrant expect, should it choose to enter this industry?*

**Comments**

- Although operating margins are decent, the capital intensiveness and continuous requirement of capital to keep medical at par with industry standards makes it less lucrative. In fact if I were to classify hospital business in Warren Buffett's – Great, good and gruesome category, it would be in the 'Good' category as although it has good returns, it requires continuous investments to grow and maintain those returns.
- Although given the vast size and underfunded investments, there isn't any aggressive retaliation that could be expected from incumbents if a new player were to join this industry.

*Q. Is there any aspect where the value proposition of this industry lacks significantly? If yes, A) Are there any probable substitutes satisfying this problem? If yes, B) Does the benefits of substituting this proposition outweigh the cost, and by what margin?*

**Comments**

- Healthcare services as a value proposition lack significantly lacks in their availability and affordability too public.
- It is hard to think of any kind of probable substitutes to healthcare services.

*Q. Is this industry of strategic importance to the government? If yes, What is the frequency of interference by the government?*

**Comments**

- Definitely this industry is of strategic importance to the government but in a good sense, since the government lacks the resources to build up healthcare services at necessary levels the private sector investments are more than welcome.

*Q. Is this Industry 'Technology Driven' or 'Technology Enabled'?*

**Comments**

- The degree of risk that medical service providers are exposed to depends on the medical services they are catering to.
- Just as an example – hospitals these days (Including KMCH) have started to carry out surgeries using lasers and robots for minimum incursion, compare that to a common medical operation like that of removing appendix. Which hospital poses more risk to technological obsolescence? Definitely the one which is providing services so rare, and whose medical equipments and procedures are far more expensive – such hospitals need to be on their toes all the times when it comes to investment and any improvements in the medical space as such.

*Q. Does this proposition have an autonomous demand? If not then, what are the factors on which it depends?*

**Comments**

- The industry has autonomous demand.

# Quantitative Analysis

## Revenue and Cost Structure

Although already mentioned in business model section, here are the numbers for Revenue Streams and Cost Structure of KMCH:

	Mar-03	Mar-06	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
<b>Sales (Less Other Income)</b>	34.4 2	58.3 3	110. 36	130. 07	174. 64	222. 19	297. 01	334. 02	401. 44	465. 30
<b>1. In-patient revenue</b>			57%	57%	59%	57%	57%	56%	55%	55%
<b>2. Out-patient revenue</b>			20%	20%	19%	20%	19%	20%	20%	20%
<b>3. Pharmacy sales</b>			20%	20%	19%	20%	20%	21%	21%	21%
<b>4. Dietary Sales</b>			3.6%	3.3%	3.0%	3.0%	3.2%	3.5%	3.3%	3.3%

As there is no data available (on account of poor disclosure by the company) regarding number of patients served it becomes hard to judge the source of increase in the revenue of KMCH, however as a proxy if we look at the following table:

Years	Revenue	Number of Beds	Revenue/Bed
2016	465	1000	0.47
2008	87	600	0.15
2006	58	400	0.15

Compared to the previous years the revenue per bed has gone up three-fold, although its hard to find-out when exactly it happened between 2008-16 as the hospital doesn't provide us with that data. (Above mentioned data has been extracted from MDA's – wherever mentioned)

**Concerns** – the revenue streams is very concentrated from a single hospital, although data regarding revenue streams isn't mentioned transparently, in 2012 and 2013 – Erode centre contributed 4.8% and 4.2% respectively, while Erode Specialty Centre contributed 5.9% and 5.8% respectively.

Following are the major costs of KMCH:

	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
<b>Net Sales</b>	<b>110.4</b>	<b>130.1</b>	<b>174.6</b>	<b>222.2</b>	<b>297.0</b>	<b>334.0</b>	<b>401.4</b>	<b>465.3</b>
Less Expenses								
Hospital Consumables	18%	17%	18%	17%	15%	15%	14%	14%
Medicines (Pharmacy)	16%	16%	16%	16%	16%	16%	17%	16%
(A)Employee Benefit Expense	12%	13%	13%	15%	16%	16%	16%	17%
(B)Consultant Charges	18%	17%	17%	16%	16%	17%	17%	17%
Dietary Consumption	3%	3%	3%	3%	3%	3%	2%	2%
<b>=</b>	<b>67%</b>	<b>65%</b>	<b>66%</b>	<b>67%</b>	<b>66%</b>	<b>67%</b>	<b>65%</b>	<b>67%</b>
Depreciation	4%	4%	4%	5%	5%	5%	5%	4%
Interest	4%	4%	6%	7%	9%	7%	5%	4%
<b>=</b>	<b>8%</b>	<b>7%</b>	<b>10%</b>	<b>13%</b>	<b>14%</b>	<b>12%</b>	<b>10%</b>	<b>8%</b>
Others	16%	14%	13%	13%	9%	10%	9%	11%
<b>Profit Before Tax</b>	<b>10%</b>	<b>13%</b>	<b>11%</b>	<b>7%</b>	<b>11%</b>	<b>11%</b>	<b>15%</b>	<b>13%</b>

The 5 major costs of operating KMCH has always been constant leaving KMCH anywhere between 33-35% of its sales – hence I don't see any more operating leverage left to be squeezed from this facility – in fact the net profitability of the hospital depends on interest expenditure (given that the business is significantly leveraged) and on other expenses – which don't follow any observable pattern.

**Concerns** –

### **Capital Intensiveness**

Running a hospital is a very capital intensive business, hospitals require huge money to not only build its infrastructure – but then later to stuff it with advanced medical equipments.

According to a CRISIL report on hospitals (2013) – a 200-300 bedded multi speciality hospital requires around 70-80 lakh of investment per bed, *excluding the cost of land*.

And when it comes to making a multi-disciplinary super speciality hospital like KMCH, the capital outlay tends to be through the roof. While the number of bed in KMCH have compounded at a rate of 8.69% between 2006-16, the gross block and the net block has compounded at a rate of 20.15% and 22.99% (*counting the fact that the company has made no out of its reach capital investments in any subsidiary, land or long-term assets except for the purpose of running a hospital and the fact that the company has 93% of its gross block invested in Buildings and Plant & Machinery*).

The capital outlay per bed has also gone up, indicated in the following table:

Years	Gross Block	Number of Beds	Gross Block/Bed
2016	452.84	1000	0.45
2008	85.43	600	0.14
2006	60.34	400	0.15

## Debt

It is quite obvious that whenever a business requires so much of money to run and expand its operations, in many if not most cases, the operators of business either choose to leverage or raise equity for expansions, instead of waiting for internal accruals to grow at those levels (and in quite a few cases that is the right thing to do).

The oldest annual report I ever could find for KMCH was of the year 1997, the business at that time had 11.85crores of debt against a total shareholder's funds of 10.92 cr, the business

has been levered ever since, needless to say that there hasn't been a single year since '97 to 2016, where the business is completely free of debt, with the lowest D/E ratio of 0.43 in the year of 2001.

Following is the data for the last few years:

	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
Shareholder's Funds	30.3	40.2	50.8	61.1	80.4	102.	138.	175.
Long-Term Borrowings	70.4	108.	174.	203.	179.	154.	127.	120.
<b>Debt/Equity</b>	<b>2.33</b>	<b>2.69</b>	<b>3.45</b>	<b>3.33</b>	<b>2.23</b>	<b>1.51</b>	<b>0.92</b>	<b>0.69</b>

Although the company has paid off its liabilities with the help of its strong operating cash flows, and reduced its debt to comparatively comfortable levels, it is quite obvious that the management isn't hesitant to have debt on its balance sheet.

	Mar-08	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
Consolidated			148.	241.	356.	357.	372.		457.
<b>Tangible Assets</b>	<b>24.9</b>	<b>29.2</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>383</b>	<b>5</b>
LAND	3.1	4.1	6.2	6.2	6.2	6.2	6.2	6.2	8.4
BUILDINGS	21.8	25.1	48	79	142	143	147	156	166
FURNITURE, FIXTURES & PROJECTORS					11.2	11.6	11.7	10.7	12.5
OFFICE EQUIPMENTSS			8.4	9.2	1.7	1.7	2.1	2.1	3.3
PLANT & MACHINERY			80	139	186	188	198	199	257
COMPUTER INSTALLATIONS			4.1	5.3	6.5	4.5	4.8	5	5.6
VEHICLES			2	2.5	2.5	2.4	2.4	4	4.7
<b>Intangible Assets</b>	<b>0</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>0</b>	<b>1.7</b>	<b>1.8</b>	<b>1.9</b>	<b>2.25</b>
Software License						0.5	0.6	0.7	1.05
Goodwill		1.2	1.2	1.2		1.2	1.2	1.2	1.2
<b>Total Gross Block</b>	<b>24.9</b>	<b>30.4</b>	<b>149.</b>	<b>242.</b>	<b>356.</b>	<b>359.</b>	<b>374.</b>	<b>384.</b>	<b>459.</b>
	<b>0</b>	<b>0</b>	<b>90</b>	<b>40</b>	<b>10</b>	<b>10</b>	<b>00</b>	<b>90</b>	<b>75</b>
<b>Long-Term Borrowings</b>	<b>60.3</b>	<b>70.4</b>	<b>2</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>8</b>

It is clear that all of the expansions at KMCH has been funded with substantial parts of debt and accumulated profits.

## Interest

Long-term debt is almost all of the debt the company has availed, the term loans have been availed from mainly two banks – both PSU's i.e Indian Bank and Indian Overseas Bank. KMCH has kept at mortgage all of its assets, which are further personal guaranteed by Chairman-MD i.e Dr. N G Palaniswami and Vice Chairman-JMD i.e Dr. Thavamani Devi Palaniswami.

The term loans carry an interest varying from 10.55% to 11.75%, while other Hire Purchase loans carry an interest varying from 8.2% to 11%.

The company also follows a policy of capitalising borrowing costs for debt which is used in building 'qualifying assets' (assets that take a substantial period of time to build).

The following table shows the amount of interest expensed, interest capitalized and paid:

	Mar-06	Mar-07	Mar-08	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
Long-Term Borrowings	14.36	32.66	37.76	70.38	108.18	174.88	203.45	179.43	154.14	127.59	120.79
Interest Expense	0.96	1.23	3.12	4.43	4.84	11.11	16.58	27.46	23.94	20.38	16.66
Interest Capitalised					5.57	4.99	8.76				
Total Interest											
Interest Outflow (Cash)		1.13	2.40	-4.43	-4.84	11.11	16.58	27.46	23.94	20.38	16.66
Interest cost % of Borrowing (Closing Bal Pr Year)	5.9%	8.6%	9.5%	11.7%	6.9%	10.3%	9.5%	13.5%	13.3%	13.2%	13.1%

Interest Expense – here include other cost in acquiring funds.

Doubt – in the years when the company is capitalising borrowing costs, the equation of Total Interest Expense (i.e. Interest Expense –P&L + Interest Capitalized) = Interest

Outflow (Cash) doesn't match, given the fact that there are no current liabilities outstanding in the name of 'Interest Expense Outstanding' that justify the situation.

## Debtors

Hospitals, if running at fuller capacity, can turn out to be cash cows. At KMCH all In-Patients are billed daily for their services and they are required to pay all the dues with 2 days of billing.

Quite obviously the company doesn't carry any debtors on its balance sheet, in fact in past two decades the ever highest that debtors as % of sales have been is 3.8%, while the recent trend is closer to 2%. Minimum of debtors mean minimum of bad debts and one reason less to worry.

## Investments

There aren't any long-term investments made by the company, in fact all long-term investments just form around 0.9% of the total net block. In absolute terms long-term investments amount to just Rs. 3.72cr, out of which Rs. 3.6cr is on the account of 100% owned subsidiary – 'Idhayam Hospitals Erode Ltd' acquired in year 2008. The financial statements of the subsidiary are consolidated on a line-line basis.

## Tax

	Mar-08	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
Profit Before Tax	8.14	11.03	17.23	19.53	16.24	31.33	37.32	59.43	62.16
Current Income									
Tax (P&L)	2.12	3.11	4.84	4.00	3.25	6.27	9.06	18.76	15.63
Current IT/PBT	26%	28%	28%	20%	20%	20%	24%	32%	25%
PBT-PAT (1)	2.89	3.89	5.65	7.43	4.29	10.09	13.60	20.73	21.73
(1)/PBT	36%	35%	33%	38%	26%	32%	36%	35%	35%
Tax Paid (CFFO)	-1.99	-3.21	-5.16	-3.43	-3.71	-6.75	-7.62	15.29	15.70
% of Current tax	-94%	103%	107%	-86%	114%	108%	-84%	-82%	-100%

The tax expenses and tax outflow seems to be appropriate, with regard to the income.