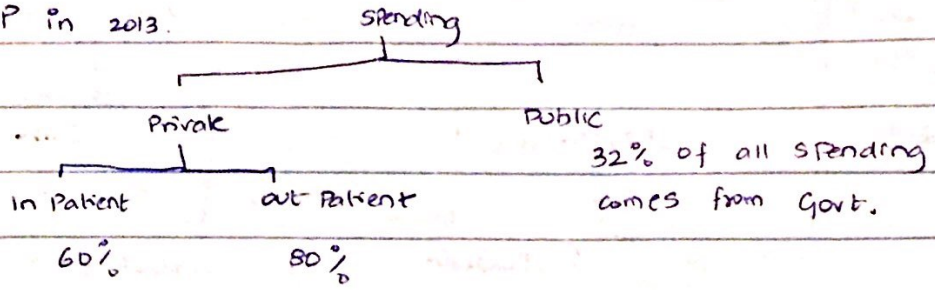
Narayana Health

① India's total expenditure on healthcare was 4 Percent of its GDP in 2013.



② Bed density in India is 7 Per 10,000 Persons. of which rural is 2 and urban is 25. Global bed density is 27 (median).

Rural has a lot of unmet needs than the urban areas.

③ The capital cost to build a hospital is around 70 - 80 lakhs Per bed. My understanding is Narayana should incur a cost of 30 - 40% of this. [Cost Per bed: 25 lakhs]. This is possible because of the asset light model followed by the company.

(a) hospital own and operate

(b) hospital and heart centers that we operate and Pay a revenue share to the owner of the hospital Premises

(c) hospitals, standalone clinics, and Primary care that we operate on lease or license basis

(d) management services for 3rd Party for a mangement fee

④ founded in 2000 by Dr. Devi Prasad shetty, who has over 30 years of medical experience, including as a cardiac surgeon. It is a multi speciality and Primary care facilites.

[Primary → secondary → specialist]

⑤ Strong Presence in Karnataka, East. Emerging Presence in western and Central India (Brand recognition) (Most of revenue comes through Referrals)

⑥ strong legacy in cardiac and renal sciences which formed the foundation of our service offering. The company is expanding its core speciality areas to include: cancer care, neurology, neurosurgery, and orthopaedics, (single) and gastroenterology.

⑦ Packaged offerings to Patients which are typically fixed-fee, all-inclusive Package covering a suite of (consultancy, diagnosis, consumables, medical, Operative, and Post operative Procedures).

⑧ what is the true nature of depreciation expense?

⑨ Crisil estimates that India delivers 3,400 million treatments in volume terms and ₹ 3.8 trillion in value terms in 2014-15. over the next 4 years the industry is expected to grow at 12%

⑩ Primary care facilites are mainly out-Patient units that offer basic, Point of contact medical and Preventive healthcare services. These units do not have ICUs or operation theatres, but act as the Primary Point of contact in the healthcare system, Providing routine health screenings and vaccinations. They acts as feeders for secondary care or tenary hospitals (chronic ailments)

Ailment	Primary	Secondary	Tertiary
Acute infections	Fever	Typhoid / Jaundice	Hepatitis B, C
Heart disease	High cholestrol	strokes	Cardiac arrest / Heart attacks hole in heart Heart transplantations

(11) Revenue streams of health care industry in (2014-15)

IPP	OPD
81%	19%
(3.1 trillion)	(0.7 trillion)

(12) occupancy levels needs to be high.

ALOS should be low (major expenditure happens during the first few days)

cardiac care has the highest average realisation per patient.

Ailment	Average Realisation per Patient (in lakhs)
Cardiac	2 - 3
Ortho Paedics	1 - 2
Opthalmology	0.15 - 0.17
Oncology	0.7 - 1
Neurosurgery	1 - 1.5

(13)

	2000	2012
Non communicable diseases (9.8 million deaths)	48%	60%

NCD (60%)

- Cardiovasular (excl stroke) 28% (1/3rd of NCD is related to heart diseases)
- Neurological (18%)
- Cancer (12%)
- Diabetes (4%)
- others (38%)

why did it increase?

(a) Life style changes due to rapid urbanisation

(b) higher household income levels

(c) Sedentary life style.

(Diabetes) 2009	2014
51	67 million
	CAGR of 6%

(14) Growth Drivers

(a) Low bed density of 7 Per 10,000 Population compared to a global median of 27

(b) Government expenditure of healthcare is low with 4% gdp spent on the healthcare

(c) Increasing Population along with life expectancy

(Age 60+)	2011	2026
	8%	12-5%

	2011	2026
Population in billions	1.2	1.4

(d) 59 Percent of the household have annual income of less than 2 lakhs. This is rising and with that healthcare services get more affordable.

(e) Demand for NCD related healthcare services to increase over the next five years.

(f) only 17% of Indian Population have health insurance coverage

(g) Heart surgery in the US is 20x higher than that of India. This will increase medical tourism.

(15) $$ARPOB = \frac{\text{Revenue} - \text{Other Income}}{\#\text{Beds} * \text{Utilisation Rate}}$$

(16)

Payer Profile	FY 2015
Schemes	21.45 %
Insurance covered	19.25 %
Walk-in Patients	59.30 %

(17)

Hospitals :	23	→	Own and Operate	4	
Heart centers :	7		Operate on lease	7	(+) Acquisition is another strategy.
Primary care :	23		Revenue share	6	
	53		Public - Private partnership	2	
			Management fee	4	
				23	

(18)

"Delivering quality healthcare at affordable prices."

Our brand "Narayana Health" is strongly associated with our mission to deliver high quality and affordable healthcare services to the broader population by leveraging our economies of scale, skilled doctors, and an efficient business model.

Top 3 hospitals	2013	2016
Revenue		
	72 %	54 %
In-patient billed		
outside cardiac and renal sciences	32 %	42 %

(19)

Avg. effective capital cost/bed = Gross Block for fixed assets + capital work in progress / # operational beds

Cost Advantages: We operate our business through a combination of five models in order to expand our market presence while maximising the efficiency of our capital deployment.

Our asset right model has enabled lower capital cost per bed of Rs 26 lakhs as of 31-March-2016. Prof. told me that they are the low cost provider in the world.

(20) Things that can increase revenue are (a) Total no of hospitals and its maturity Profile (b) Total no of surgries can increase along with its complexity (c) Price can be increased. But the company is very reluctant to do this.

(21) The business model has a lot of scope for operating leverage.

(22) Dr. Devi Prasad shetty was born in Mangalore spotted by B.M. Birla and invited him to calcutta. Treated Mother Teresa A normal doctor would do 3-4 surgery a day. Devi Prased would do 6-7. This is unheard of. Left calcutta to found Manipal Hospital. Left that to start Narayana Health.

[Challenge Status quo]

Need: 20 lakh heart surgery

Met: 120,000 to 130,000 heart surgery

Average age of heart surgery in UK is 65 and in India it is 45. Indian hospitals conducted 80,000 to 90,000 surgeries and the need is to perform 2,50,000 surgeries.

NH	Others
₹75,000	₹ 1,50,000

Cost of Cardiac surgery.

came up with the idea of yeshasvini scheme. Contribute Rs 5 Permonth and got 25,000 People covered since inception. This is done in Partnership with Govt of Karnataka.

(23) Don't Pay salary Per surgery. instead Pay a competitive fixed salary of $100 to $200k. then urges them to increase the number of Surgeries Per day.

Prof. Gold → [Dialysis company] Davita.

About 80 Percent Plus receive some form of discount or other. International cell ensures huge inflow of medical tourists for whom Price arbitrage works well.

(24) Partnerships:

Biocon foundation : sells drug 20 to 30 Percent cheaper

Micro insurance schemes : Help low income group to Procure NH services

Texas Instruments : Drive down cost of x Plates from $ 2,000 to $ 200 (Is this so big?)

(25) In healthcare you can't do one big thing and reduce the Price. We have to do 1,000 small things. At NH a simple heart operation costs about $ 53,000 ($900) make it more affordable to many in India.

(26) For competitors and metrics

Check : Apollo, Fortis, Max Healthcare, and Metro Hospitals. Also do look at Manipal Group and Sterling Hospitals.

(27) Attracting and retaining talent is very important. With long ramp-up time and rising costs asset heavy plays are hard. case mix + use of technology increases ARPOB. 50% of capital cost comes from land and buildings. This is a lot.

(28)

Regional Distribution	Karnataka	East	West and Central	North
# of operating beds	2926	1,893	871	70
# of hospitals	7	10	5	1

(29) Expense break down in Pg 29 of the Presentation

	FY 13	FY 16	
Consumables	28%	24%	
Employee	38%	41%	
other	23%	24%	
	2.5%	3%	(Rental / Revenue share)

I need to know the operating Profit margin after true depreciation and amortization expenses. Check Prof. Greenwold method for this.

(30) Debt-to-Equity ratio of 0.26 is reasonable. Overall the debt is going down. The company does manage hospitals and they don't have a P&L responsibility. It acts as a funnel for the Patient flow to our major centers in the region. It works on fixed fee model. Put together they make ₹70 lakhs of management fee in FY16.

Managed hospitals → major centers

(31) 5,347 operating beds (+)

1,300 non-operating beds ± new [Mumbai, Lucknow, Bhubaneshwar] + Kenya (minority stake and management fee)

FY16 6,647 beds without further investments

(32) Shut down hospitals at Hyderabad (195), Suguna and Kuppam (50). why did they shut down? (a) Improper location and hard to attract talent (b) Owner had a medical college hospital and it was impacting the operations.

(+) Call off Proposed facility in Lucknow and exit from Berhampore unit.

(33) ARPOB can't be used for comparing two companies. The main reason is because location impacts ARPOB. Hospitals in whitefield has higher ARPOB compared to Mangalore. Complexity of operations increases ARPOB.

(Schemes like CGHS reduces ARPOB)

(34) (30 months to breakeven at EBITDA level)

As told before Cayman Island location started breaking even. Mature units growing at 15% is really good. Signs of operating leverage. ASP changes are not super impactful. Understand the movement of accounting from financial lease to operating lease.

Invested capital : 950 crores (adjusting for cayman + goodwill)

EBIT : 150 crores

ROCE : 15.1% (annualized)

(35)

	Matured (>5 years)	3-5 years
occupancy rate	60%	53%

More to 75%. There is a large built-in capacity and we expect occupancy to increase over the next 12 months.

Capex of 100 crores for regular maintenance and upgradation.

↳ 35-42 crores on expansion.

Difference between Census and non-Census beds?

(NH)	Census + non-Census	Census (industry)
✓ once again you need to know what goes into the ratios	60%	68.4%

Shrine Board Providing the infrastructure. (Jammu). They board is also absorbing few years of losses.

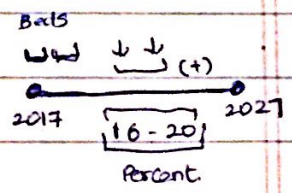
(36) Affordable healthcare can go hand in hand with a Profitable business model and create value for all our Stakeholders.

(37) People in general avoid getting operated during festive season. This is understandable. There is an eye facility in eastern India. Retail in nature. The company doesn't have plans to expand eye facility.

(38) Tertiary care is non-discretionary with 40% emergency and 60% scheduled. cosmetic surgery is an example of discretionary item.

(39)

Beds	
General	Semi-and-Private
60-70%	30-40%
Price low on general and on-Par or higher on semi and Private.	



(40) Expenses

Consumables: 23%

Doctors: 41%

(60% fixed and 40% variable)

Beyond 75% occupancy customer experience gets hit. you need to add more units or expand to new hospitals