Initiating Coverage Report

26th Feb 2020

Narayana Health

Health for all. All for health.

Research Analyst

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Narayana Hrudayalaya Ltd.

Sector: Healthcare facilities

Brief Overview

CMP (INR) (As on 25th Feb 2020)	331
Target (INR)	442
Upside(%)	34
Recommendation	**Strong Buy**

BSE Code	539551
NSE Code	NH
Reuters Ticker	NARY.BO
Bloomberg Ticker	NARH IN

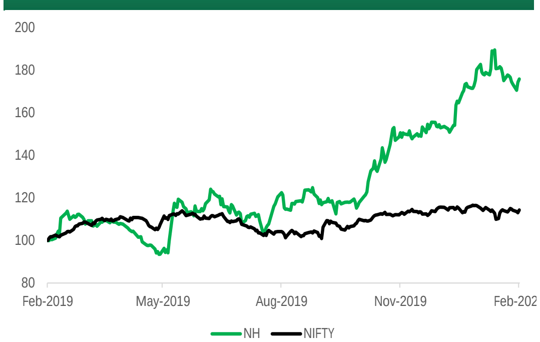
Stock Scan

Market cap (INR Cr.)	6,760
Outstanding Shares (Cr.)	20.29
Face Value (INR)	10.00
Dividend Yield(%)	0.30
P/E (x)	79.52
P/B (x)	5.76
Debt/Equity (x)	0.73
Beta vs. Sensex	0.49
52 Week High/ Low (INR)	389/181
Avg. Daily Volume (NSE)/1yr	157,980

Shareholding Pattern (%)

	Dec 2019	Sep 2019	Jun 2019
Promoters	63.85	63.85	63.85
Institutions	28.89	28.98	28.95
Non-Institution	7.26	7.17	7.20

Stock vs. Nifty (Relative Returns)



Source: NSE

Narayana Hrudayalaya Ltd.: Marching ahead profitably

We initiate coverage on Narayana Hrudayalaya Ltd. (Narayana) with a Strong Buy rating. Narayana is a chain of multi-speciality hospitals, heart centres, and primary care facilities with its headquarters in Bengaluru, India. It was founded by Dr. Devi Shetty in the year 2000. The beginning was humble with focus on cardiac only services and the presence was limited to only 2 hospitals across Bengaluru & Kolkata till 2007. ***Today, Narayana has 47 healthcare facilities with 1 hospital in Cayman Islands. There are 5,770 operational beds catering to 30+ specialities.*** The key aspects which draw attention to Narayana's business are:

- **Asset right business model:** The key differentiator of Narayana is the asset right business model. Narayana ties up with charitable trusts, government bodies and other non profit organisations and these entities invest in the land and buildings connected with the hospitals.
- **Focus on affordable healthcare:** Narayana has brought together quality and affordability. The cost of doing a surgical procedure in Narayana is normally 15-20% lower than its peers as 60-65% bed capacity is normally allotted to general wards.
- **Steady ramp up of new hospitals:** The new hospitals at Dharmshila, Gurugram and Mumbai are ramping up well, with losses coming down. Dharmshila is expected to break even by Q1FY21 while Gurugram and Mumbai are expected to break even in another 18-24 months.
- **Notable improvement in financial metrics:** With no major capex scheduled for the next 24 months and steady ramp up of new hospitals, operating leverage and efficiency should lead to margin improvement and strong free cash flow generation, which should help the Company in debt reduction. All these culminate to strong improvement in ROCE from 7.1% in FY19 to 19.7% in FY22E.

We have valued the stock at 15x FY22E EV/EBITDA to arrive at a **Target Price of Rs 442**, which provides an upside of 34% based on the current market price. We thus recommend a **"Strong Buy"** rating on the stock.

Financial Performance at a glance (Consolidated)

Particulars (INR mln)	FY18	FY19	FY20E	FY21E	FY22E
Net Sales from ops.	22809	28609	31967	35507	39618
Growth %	21%	25%	12%	11%	12%
EBITDA	2123	2878	4454	5536	6212
EBITDA Margin (%)	9.3%	10.1%	13.9%	15.6%	15.7%
Net Profit (Adjusted)	510	592	1449	2540	3232
Net Profit Margin (%)	2.2%	2.1%	4.5%	7.2%	8.2%
EPS (Adjusted)	2.51	2.92	7.14	12.52	15.93
BVPS	51.04	53.28	58.82	70.14	84.57
EV/EBITDA (x)	46.2	34.1	22.0	17.7	15.8
P /E (x)	131.7	113.5	46.4	26.4	20.8
ROE (%)	4.9%	5.5%	12.1%	17.8%	18.8%
ROCE(%)	5.5%	7.1%	12.0%	17.0%	19.7%

Source: Company Data, SMIFS Research

Investment Rationales

Narayana does not invest in land and buildings. It ties up with charitable trusts, government bodies and other non-profit organisations for these investments.

Asset right business model

The key differentiator of Narayana with respect to its peers is the asset right business model. In this model, Narayana does not invest in land and buildings connected with the hospitals, rather it ties up with charitable trusts, government bodies and other non-profit organisations for these investments in order to set up the hospitals. Thereafter, Narayana only invests in medical equipment. ***Only two hospitals, RTIICS Kolkata and NICS Health City are completely owned by Narayana, rest of the hospitals operate within the asset right business model.*** The asset right business model would be one of the contributing factors to a substantially improved ROCE figure of 19.7% in FY22E.

Key figures for Q3FY20

Healthcare facilities	47
Bed capacity	6,579
Doctors	3,682
Specialities served	30+

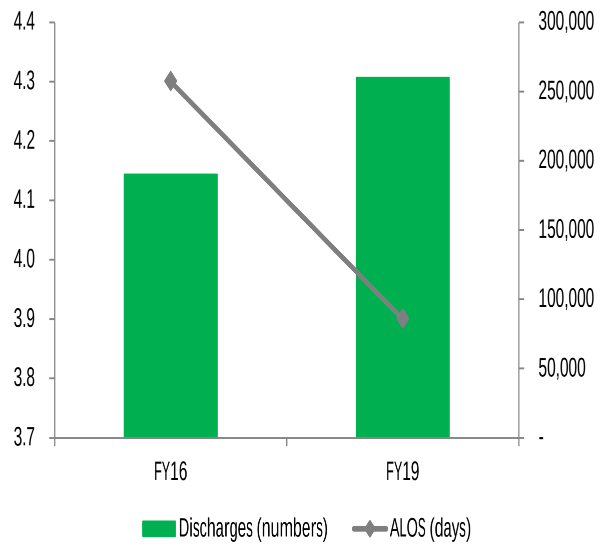
Source: Company Data

Focus on affordable healthcare

The cost of doing a surgical procedure in Narayana is normally 15-20% lower than its peers.

Narayana started with a 225 bed hospital in the year 2000. The bed capacity increased to 7,155 in FY19 with a focus on multi-specialty healthcare services chain that provides superior tertiary healthcare at affordable costs. Headquartered in Bengaluru, Narayana had a network of 23 hospitals (multispeciality and super-speciality healthcare facilities) with 7 heart centres (super-speciality units) across 18 locations in India and 1 multispeciality hospital in Cayman Islands in FY19. In 19 years, Narayana has demonstrated that vision and operational excellence can indeed create a healthcare service that is within the reach of all. Narayana has done so by consistently growing its network of facilities, both through organic and inorganic routes. ***Narayana has brought together quality and affordability and has ensured that technology and accessibility coexist.*** The cost of doing a surgical procedure in Narayana is normally 15-20% lower than its peers as 60-65% bed capacity in a Narayana hospital is normally allotted to general ward.

Investment Rationales



Source: Company Data

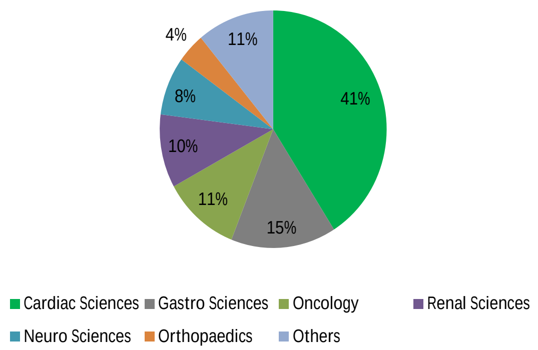
Healthy inpatient discharges growth

Inpatient discharges growth has contributed handsomely to revenue growth of 21.4% and 25.4% in FY18 and FY19 respectively. Hospital bed count as a growth indicator is quickly losing its relevance. As clinical results improve, length of stay is gradually coming down. Newer technologies like surgical robotics have converted procedures that used to require overnight admission into day-care procedures. ***The continuous lowering of Average Length of Stay (ALOS) has reduced Narayana's in-patient occupancy numbers and thus it is under less pressure to keep adding beds.*** With better systems to enable optimal usage of manpower and equipment, Narayana can serve more patients with the same infrastructure. Narayana's ALOS has decreased from 4.3 days in FY16 to 3.6 in FY19, while the number of discharges has increased from 1.9 lakh to 2.6 lakh.

Focus on Centres of Excellence

Narayana has leveraged its leadership position in Cardiac and Renal Sciences to expand services across all the fields. ***Specialities like Gastro Sciences, Oncology, Neurology and Orthopaedics have grown from minor departments to contribute significantly to overall revenues. Narayana has developed Centres of Excellence (COE) across specialities to provide quaternary services across the country without duplicating manpower or infrastructure.*** This strategy is yielding results – Narayana's Raipur and East Delhi hospitals have emerged as Centres of Excellence in Oncology. Similarly, Mazumdar-Shaw Medical Centre in Bengaluru has achieved excellence in Gastro Sciences and Organ Transplants with 17 Liver Transplants and 161 Bone Marrow Transplants done in FY19. Narayana's founding hospitals, NICS Bengaluru and RTIICS Kolkata have retained their pre-eminent status with NICS performing over 8,000 cardiac surgeries and RTIICS performing over 500 kidney transplants in FY19. Narayana will continue to invest in state-of-the-art medical technology to achieve excellence in quaternary care.

Speciality Profile — Q3FY20



Source: Company Data

Investment Rationales

Post Narayana's strategic expansion into Mumbai and NCR, it is now focused on consolidating its operations to capitalize upon the strength of its network and replicating the success achieved in West Bengal and Karnataka. The ramp-up across these new facilities will set the stage for Narayana's growth trajectory in years to come.

Strengthening new hospitals

Post Narayana's strategic expansion into Mumbai and NCR, it is now focused on consolidating its operations to capitalize upon the strength of its network and replicating the success achieved in West Bengal and Karnataka. ***In order to broaden the service offerings at Narayana's Children's Hospital in Mumbai, Narayana has recently commissioned a state of-the-art Bone Marrow Transplant (BMT) department and have successfully performed 10 BMTs during the last 6 months of its commissioning. The hospital also successfully performed an Endoscopic detethering of spinal cord.*** There have been only 7 such reported surgeries in the world and this was the first one performed in India. ***Since Narayana enjoys strong brand recall in cardiac sciences, the unit performed close to 550 cardiac surgeries with less than 2% mortality rate*** as against industry benchmark of around 4% in paediatric cardiac cases.

Narayana's Gurugram unit is a premium quaternary care hospital with a focus on international medical tourism. Around 30% of revenues were from international patients coming from Afghanistan, Pakistan, Iraq and Uzbekistan. The unit performed over 900 surgeries with 1 liver and 1 kidney transplant in its first full year of operations.

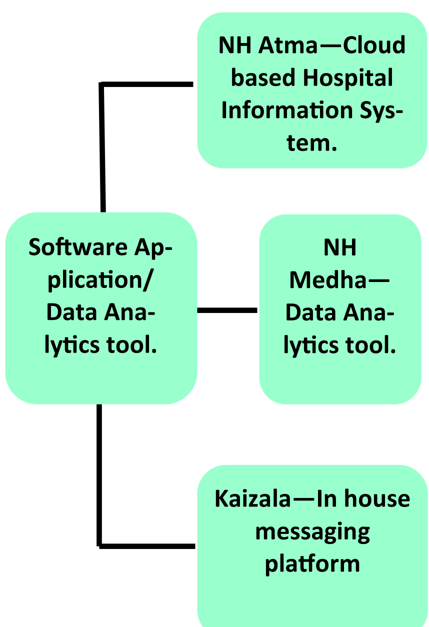
Dharamshila Narayana Superspeciality Hospital has a successful legacy of over 2 decades in oncology, and it is transforming into an advanced multispeciality provider. The unit performed 23 BMTs with less than 10% mortality rate and 21 renal transplants in FY19. The ramp-up across these new facilities will set the stage for Narayana's growth trajectory in years to come.

Narayana's facility in the Cayman Islands was the first attempt by an Indian company to run a Joint Commission accredited hospital in the Western world.

International Operations

Narayana's facility in the Cayman Islands (110 operational beds) was the first attempt by an Indian company to run a Joint Commission accredited hospital in the Western world. Narayana prudently deployed a phased approach to this investment, wherein it started off as a minority partner with 28.6% stake and increased its stake to 100% in the fourth year of operations. ***The hospital registered a 22.3% year-on-year revenue growth in FY19 and an EBITDA margin of 24.1% in Q4 of FY19 translating into an impressive EBITDA margin of 17.4% for FY19. Narayana has also entered into a partnership for operating a cardiac sciences department in a state-of-the-art 350-bed hospital in Chittagong, Bangladesh.*** Narayana is a well-known brand across Bangladesh, which has been Narayana's largest source of international patient footfall. This hospital is the first foray in the country and Narayana will continue to explore other asset-light opportunities that can grow over time.

NH Atma, NH Medha, and Kaizala



The entire Narayana network will transition to a home-grown Hospital Information System built by its team over the next couple of years. ***This software, which has been named as NH Atma, will be the foundation upon which Narayana's digital infrastructure will be developed. NH Atma is cloud-based, fully scalable, and can integrate with the entire existing infrastructure in the hospital.*** It is the first and most important step in Narayana's digital transformation.

As a low-cost healthcare operator, Narayana relies on accurate and timely data to help it make important decisions. It has a large team that can analyse this data and help it to identify inefficiencies in the hospital. With developments in AI and predictive analytics, it will soon be able to identify problem areas before they become serious events. ***Narayana's data analytics product, called NH Medha, has been a valuable tool in helping hospital administrators cut down costs, and doctors to make better clinical decisions.***

Kaizala is an application developed by Microsoft that Narayana has adopted as an in-house messaging platform. Narayana has developed multiple cards that run on top of Kaizala to help

Investment Rationales

its teams communicate better. Narayana's e-ICU cards have made a huge impact on care management for patients in the ICU. ***Narayana's doctors can manage an ICU patient's condition from any part of the world using only their mobile phones. This simple technology has led to better clinical outcomes, shorter patient stays, and lesser medicine consumption in Narayana's tech-enabled e-ICU.*** The digital assets that Narayana has invested in will help it to scale its operations to serve millions of patients across the world without building or owning hospital beds in the future.

- **Renewed Focus on existing Tier 1 Cities**

As doctors' costs are normally more in Tier 2 cities and patient footfall is less, Narayana's strategy of renewing its focus on existing Tier 1 cities for further expansion makes sense in terms of profitability.

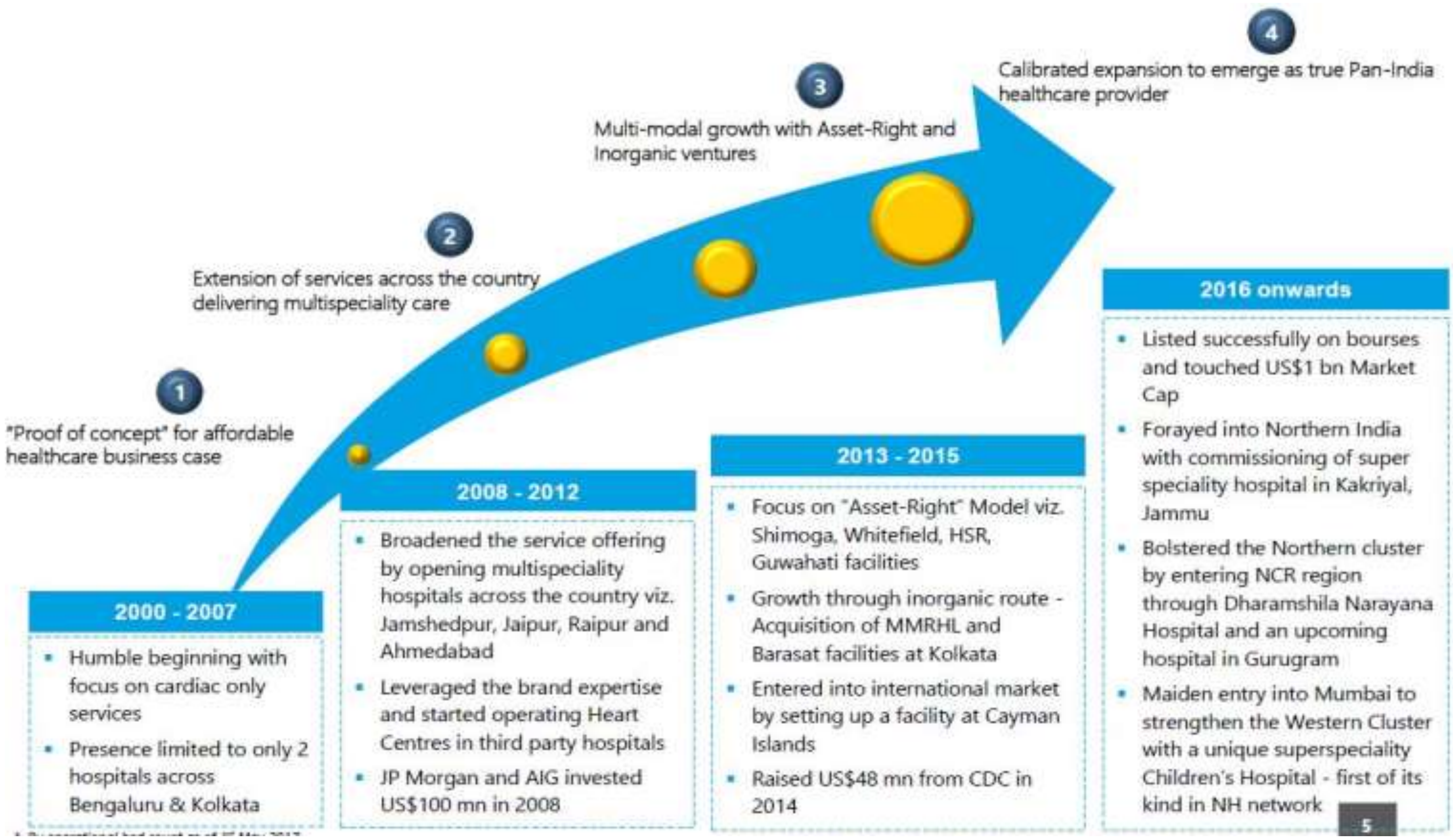
As a strategy, Narayana has decided to renew its focus on Tier 1 cities in India while considering new expansion plans. While Narayana had invested earlier in cities like Jamshedpur and Guwahati, it is continually monitoring profitability metrics for all hospitals to decide if it would be appropriate to close down operations in any of them. Recent closure of the Durgapur heart centre is a case in point. As doctors'costs are normally more in Tier 2 cities and patient footfall is less compared to Tier 1 cities, which makes it difficult to cover fixed costs and make profit, Narayana's strategy of renewing its focus on existing Tier 1 cities for further expansion makes sense in terms of profitability. Narayana may also look at expansion in a new Tier 1 city if it gets a compelling opportunity. However, there are no major expansion plans in the next 24 months.

- **Notable improvement in financial metrics**

No major capex, reduced losses of new hospitals, operating leverage, efficiency improvement and reduction of debt would lead to a substantially improved ROCE of 19.7% in FY22E.

Narayana does not have any major capex scheduled for the next 24 months and losses for the 3 new hospitals are expected to come down with Dharmshila expected to break even by Q1FY21 while Gurugram and Mumbai are expected to break even in another 18-24 months. Operating leverage and efficiency improvement are expected to creep in with EBITDA margin improving from 10.1% in FY19 to 15.7% in FY22E post IND AS 116. Strong expected cumulative free cash flow generation of Rs 8,285 mln between FY20E-FY22E should help in bringing down the debt substantially with Debt to Equity ratio declining from 0.75 in FY19 to 0.21 in FY22E. All these should culminate to a substantially improved ROCE of 19.7% in FY22E from 7.1% in FY19.

Evolution of Narayana over the years

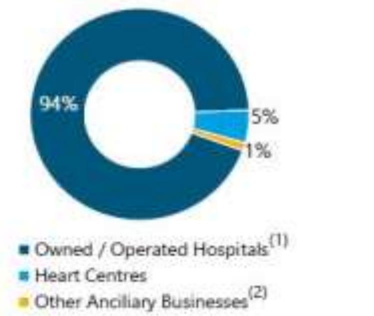


Source: Company Data

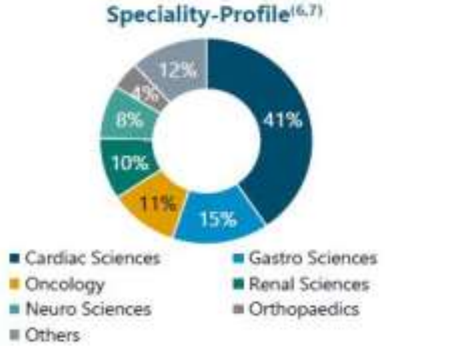
Revenue Mix - India Business (Q3FY20)

Operating Revenues

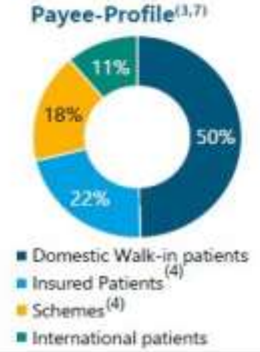
Business Mix



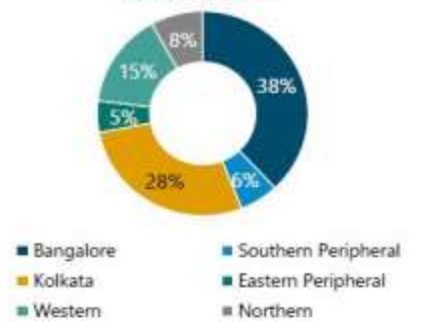
Speciality-Profile(6,7)



Payee-Profile(3,7)



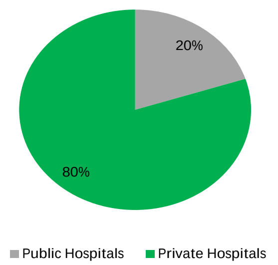
Cluster-Wise(5)



Source: Company Data

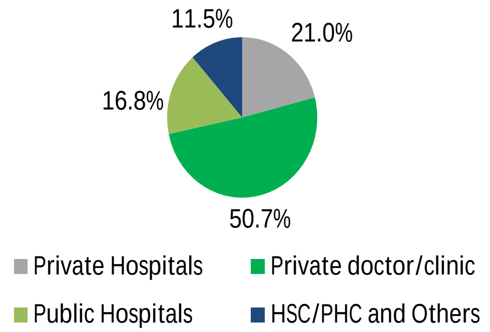
Industry Overview

Share in the Total Health Market



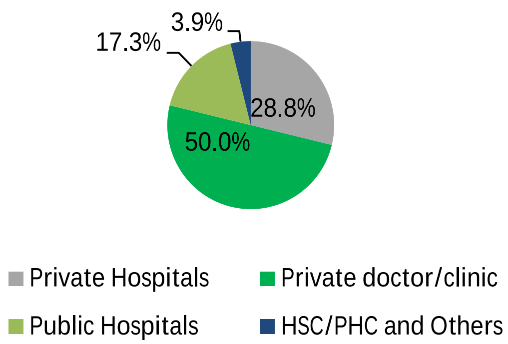
Source: Industry Data

Ailments treated by different care types (Rural Areas)



Source: Industry Data

Ailments treated by different care types (Urban Areas)



Source: Industry Data

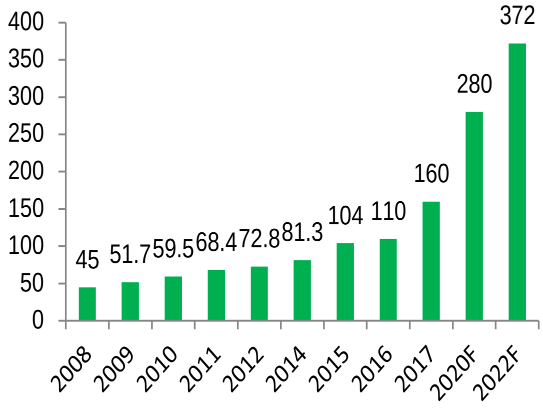
Private sector's contribution to healthcare in India

India's basic/public healthcare infrastructure is very inadequate for meeting the demands of its large population. The unmet opportunity combined with strong fundamentals in the market has led to the emergence of private healthcare service providers. Private healthcare institutions provide world class facilities, employ highly skilled and globally recognized professionals, leverage advanced technology in treatments, and maintain high standards of quality. Admittedly, this is a phenomenon in the Tier I urban areas of the country, but nevertheless, the private sector has done a commendable job in creating these pockets of excellence while simultaneously generating significant value. ***The enduring success of the early movers has encouraged the emergence of multiple players in this space and spawned industry diversification and in-depth specialization***. The Indian healthcare industry has today become a preferred sector for strategic and financial investments.

Private sector players enjoy a market share of nearly 80% of India's healthcare market. They also account for almost 74% of the country's total healthcare expenditure. Their share in number of hospitals is estimated at 74% while the share of hospital beds is estimated at 40%. Based on the success and breadth of services offered by the private sector hospitals, rural populations are increasingly seeking care from this sector. Of all the levels of care mentioned in the charts beside, treatment by a private doctor/clinic is the single most important point of contact for treatment of ailments for rural areas (50.7%) and urban areas (49.3%). This is followed by treatments at private hospitals, public hospitals and health sub centres (HSC), primary health centres (PHC) & others.

Industry Overview

Healthcare sector growth trend (USD bln)



Source: Industry Data

Growing market size

The Indian healthcare sector, which stood at USD 110 billion in 2016 is expected to reach a size of over USD 372 billion by 2022, registering a CAGR of 22%. ***The hospital industry in India stood at USD 62 billion in 2017 and is expected to increase at a 16-17% CAGR to reach a size of USD 133 billion by 2023***. These statistics indicate that there is tremendous scope for enhancing healthcare services penetration in India and ample opportunity for the development of the healthcare industry as a whole. Conducive policies for encouraging FDI, tax benefits, and favourable Government policies coupled with promising growth prospects are helping the industry attract private equity, venture capital and foreign players. Today, Indian companies are entering into alliances with domestic and foreign companies to drive growth and gain new markets.

Increase in population and demographic trends

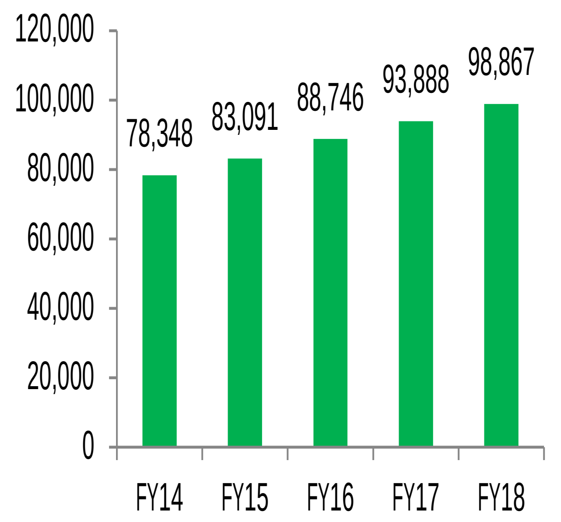
Chronic ailments such as arthritis, hypertension, diabetes, asthma and heart diseases are commonplace among the elderly.

As of 2011, nearly 8% of the Indian population was aged 60 years or more, and this is expected to surge to 12.5% by 2026. According to Report on Status of Elderly in Select States of India 2011, published by the United Nations Population Fund (UNFPA) in November 2012, chronic ailments such as arthritis, hypertension, diabetes, asthma and heart diseases were commonplace among the elderly with 66% of the respective population reporting at least one of these. In terms of gender-based tendencies, while men were more likely to suffer from heart, renal and skin diseases, women showed higher tendencies of contracting arthritis, hypertension and osteoporosis.

With the Indian population expected to grow to ~1.44 billion by 2023 and considering the above mentioned factors, the need to ensure access to healthcare services for this vast populace is an imperative. This provides an attractive opportunity to expand into a sector with huge potential for growth.

Industry Overview

India's per capita income at constant prices



Source: Industry Data

Rising per capita income and widening of income inequalities

The last decade has witnessed remarkable economic development with rise in per capita income which has paved the way for increasing demand of healthcare services and access to better healthcare facilities. However, even as India continues to develop, the difference in earnings is giving rise to wide levels of inequality. The people in the various income slab categories fall into unique baskets typified by varying healthcare needs. Each of these presents a market in terms of the addressable value proposition. The growth in the affordable segment of population, on account of rising income levels, supports the need for quality medical care that comes at a relatively higher price. Growth in household incomes, and consequently, disposable incomes, is, therefore, critical to the overall growth in demand for healthcare delivery services in India. ***The share of households falling in the income bracket above Rs 2 lakhs is expected to go up to 35% in FY22 from 23% in FY17, providing a potential target segment with more paying capacity for hospitals.***

Under consumption of healthcare services

The healthcare service delivery landscape demonstrates a lag with regard to accessibility and geographical reach in meeting the requirements of the nation's 1.3 billion people, almost 70 percent of who live in rural areas. Public health care institutions—ranging from primary health centers that form the backbone of the system in rural areas to larger district-level hospitals are hampered by a lack of manpower and inadequate resources such as diagnostics, pathology services and stock-outs.

With bed availability of 1 per 1,050 persons versus a global average of 2.9 beds per 1,000 persons, the current hospital infrastructure in India is very inadequate.

With bed availability of 1 per 1,050 persons versus a global average of 2.9 beds per 1,000 persons, the current hospital infrastructure in India is very inadequate. ***Approximately 1.7 million beds have to be added by 2025 to meet the rising demand and address the current shortage***. A combination of unaffordability and minimum access to healthcare facilities, especially for the under privileged people belonging to the lower strata of society has led to a massive under consumption of healthcare services in the country.

The contribution of NCDs to the total disease profile has risen from 30% in 1990 to 55% in 2016. NCDs accounted for nearly 62% of all deaths in India in 2016.

Transition in disease profile

Lifestyle related illnesses or non-communicable diseases (NCDs) have been increasing rapidly in India over the last few years in contrast with communicable diseases. The contribution of NCDs to the total disease profile has risen from 30% in 1990 to 55% in 2016. NCDs accounted for nearly 62% of all deaths in India in 2016. ***According to The World Economic Forum, the world will lose nearly 30 trillion USD by 2030 for NCD treatments and India's share of this burden will be 5.4 trillion USD***. CRISIL Research believes that NCDs exhibit a tendency to increase in tandem with rising income levels. WHO projects an increasing trend in NCDs by 2030, following which CRISIL has forecast rising demand for healthcare services associated with lifestyle related diseases such as cardiac ailments, cancer and diabetes. Another emerging market in the country is orthopaedics, which currently comprises a very small proportion as compared with NCDs. The orthopaedics market can be classified into four different segments, viz., knee, hip, trauma and spine, of which the knee replacement market holds the biggest share, followed by trauma and spine. As opposed to other countries, hip replacement in India is still a very small segment as compared to knee replacements.

The current healthcare facilities in Tier II and Tier III cities still remain far behind in comparison to urban areas with many rural areas lacking even basic amenities.

Health infrastructure is skewed towards urban areas

Healthcare infrastructure is very asymmetric between rural and urban India. The current healthcare facilities in Tier II and Tier III cities still remain far behind in comparison to urban areas with many rural areas lacking even basic amenities. Rural infrastructure has largely been supported by public health facilities which are ill equipped to deal with the massive need for healthcare access. The concentrated healthcare facilities in urban areas are not so easily accessible for most of the people living in rural and remote areas of the country. ***Low per capita income, low expenditure on healthcare, and low number of doctors coupled with poor insurance penetration in rural areas are reasons for the vast disparity in offerings when compared with urban and semi-urban areas***. Apart from these issues, drinking water facilities, nutritional intake, sanitation facilities, awareness about diseases, etc. are also important factors that influence the health of a person. Urban areas are believed to have a better score on these parameters. Today, there exists a substantial unmet demand for high-quality and specialist healthcare services in Tier-II & Tier-III cities.

Industry Overview

Country wise cost of ailments

Treatment	USA	Korea	Singapore	Thailand	India
	US $				
Hip Replacement	50,000	14,120	12,000	7,879	7,000
Knee Replacement	50,000	19,800	13,000	12,297	6,200
Heart Bypass	144,000	28,900	18,500	15,121	5,200
Angioplasty	57,000	15,200	13,000	3,788	3,300
Heart Valve Replacement	170,000	43,500	12,500	21,212	5,500
Dental Implant	2,800	4,200	1,500	3,636	1,000

Source: Industry Data

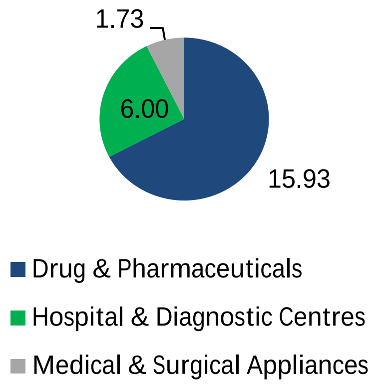
Medical Value Travel (MVT)

MVT is a burgeoning multi-billion dollar industry and likely to grow further due to the many benefits offered to patients. India has emerged as a preeminent destination for medical tourism and is one of the major hubs in the world (along with Thailand, Singapore, Malaysia and South Korea). A rare combination of world-class hospitals, equipped with best-in-class technology, skilled medical professionals, low treatment costs, and process improvements like e-medical visa, have made India a preferred destination for medical tourism. ***Treatments that are most in demand include heart surgeries, knee implants, cosmetic surgeries and dental care—all of which are largely driven by the private sector. India had 38 JCI accredited hospitals in 2018, and witnessed close to 5,00,000 medical value travellers in 2017***. Nearly 95% of the medical tourists are from countries in Africa, West Asia and South Asia. However, numbers from countries like the UK and Canada are also steadily increasing because of high costs and long waiting periods for treatment in these countries. ***The Government estimates that the size of the medical tourism market would be around 9 billion USD by 2020 amounting to 20% of the global share; up from a size of 3 billion USD in 2015***.

The Government of India has undertaken several initiatives to support medical tourism which in turn is enhancing India's image as a preferred destination for medical tourists. For e.g. the e Visa facility now covers practically all the countries of the world (166 countries). E -Medical visa facility for the attendant has also been introduced. Further process simplifications will strengthen India's position as an attractive destination for medical travellers.

Industry Overview

Cumulative FDI (Apr2000-Dec2018) USD bln



Source: Industry Data

Increasing investments in the Indian Healthcare space

Over the past few years, Indian healthcare funding has witnessed a dynamic growth by venture capitalists and private equity funds. Foreign investors have been playing a significant role in the development of the healthcare sectors. These multinational players have been trying to deepen their presence through partnerships and investments. These trends indicate rising investor confidence in the Indian healthcare space and deepen the perception of India as an attractive healthcare investment destination. FDI in the health care sector has gathered momentum in recent years. ***During April 2000-December 2018, FDI inflows into the drugs and pharmaceuticals sector stood at a figure of USD 15.93 billion***. Demand growth, cost advantages and policy support have played a very important role in attracting FDI in the healthcare sector.

Key Risks

- **Slow ramp up of new hospitals, assumptions on average revenue per occupied bed (ARPOB), inpatient discharges growth, average revenue per person (ARPP) average length of stay (ALOS), not converging in actual terms**

  Our model has assumed steady ramp up of new hospitals, ARPOB, increasing from Rs 8.9 mln in FY19 to Rs 10.6 mln in FY22E for the India business, ARPP and inpatient discharges growth each increasing at the rate of 5% in each of the years between FY20E and FY22E and ALOS decreasing slightly to 3.5 days in FY20E-22E from 3.6 days in FY19. If these assumptions made in our model do not fructify then there is a risk to our earnings estimates.

- **Price regulation**

  The intrinsic value of a service is more than just the cost of inputs. Any attempt to regulate the prices of healthcare inputs without addressing and providing for the comprehensive costs of providing quality services, will cripple the sector's finances, and compromise quality of care. While traditionally, regulations have focused on licensing and approvals, recently, the Government has also begun regulating prices of drugs and consumables. While the intent to make healthcare more affordable is laudable, it is important to ensure that healthcare providers are able to remain financially sustainable in the long-term.

- **Increase in competitive intensity**

  Competitive intensity and presence of speciality hospitals have increased, especially in key markets in the country. Over capacity has also been observed in some pockets. Every player from the organised and unorganised sectors, particularly in metros and Tier 1 cities, is striving for market leadership. This could lead to cut-throat competition and unfair practices for survival.

- **Shortage of skilled manpower**

  There is an acute shortage of skilled healthcare resources across the board. At 8 physicians and 12 nursing personnel per 10,000 people, India alarmingly trails the global median of 14 physicians and 29 nursing personnel. Unless immediate steps are taken to increase the number of doctors, nurses and paramedics, the shortage of manpower will lead to prohibitive costs and derail the delivery of healthcare services.

Key Risks

Incidents of vandalism

Increasing incidents of vandalism against hospitals are being reported every now and then. While the core reason for such vandalism is negligence by doctors, other reasons include supposedly excessive billing. Proper attention is necessary to ensure that doctor negligence is reduced to 0% and billings are as per norms. Till such time these issues are redressed, vandalism by patients' relatives and mob in general would continue to be a key risk.

SWOT Analysis

Strengths

- Strong brand position.
- Asset right business model.
- Focus on affordable healthcare.

Weaknesses

- Regulatory burden.
- Shortage of experienced doctors and skilled professionals.

Opportunities

- Steady ramp up of 3 new hospitals at Mumbai, Delhi and Gurugram.
- Renewed focus on Tier 1 cities.
- Medical Value Travel undertaken by international patients.

Threats

- Heightened competitive intensity.
- Incidents of vandalism.

Company Overview

Narayana Hrudayalaya is a chain of multi-speciality hospitals, heart centres, and primary care facilities with its headquarters in Bengaluru, India. It has 46 healthcare facilities spread across India with 1 facility in Cayman islands.

Narayana Hrudayalaya is a chain of multi-speciality hospitals, heart centres, and primary care facilities with its headquarters in Bengaluru, India. It was founded by Dr. Devi Shetty in the year 2000. ***The beginning was humble with focus on cardiac only services and the presence was limited to only 2 hospitals across Bengaluru & Kolkata till 2007.***

Between 2008 and 2012, Narayana broadened the service offerings by opening multispeciality hospitals across the country, viz., Jamshedpur, Jaipur, Raipur and Ahmedabad. It also leveraged on the brand expertise and started operating heart centres in third party hospitals.

Between 2013 and 2015, Narayana adopted the asset – right business model to start operations in Shimoga, Whitefield, HSR, and Guwahati facilities. It also embarked on growth through the inorganic route by acquiring MMRHL and Barasat facilities in Kolkata. It also entered the international market by setting up a facility in Cayman islands.

Narayana listed successfully on Indian bourses in January 2016 and raised Rs 613 crore at an issue price of Rs 250.

2016 onwards, Narayana forayed into Northern India with commissioning of super speciality hospital in Kakriyal, Jammu. It further bolstered the Northern cluster by entering the NCR region through Dharamshila Narayana Hospital and a hospital in Gurugram. It also entered Mumbai with a superspeciality children's hospital.

Business Snapshot of Narayana as on December 31, 2019

As on 31st December 2019

	Healthcare Facilities	Operational beds
47	Healthcare Facilities	Operational beds
20	Owned / Operated Hospitals[1]	5,216 Beds
1	Managed Hospital[2]	112 Beds
6	Heart Centres	322 Beds
19	Primary Healthcare Facilities[3]	10 Beds
1	Hospital in Cayman Islands	110 Beds

6,579	Capacity Beds
5,770[4]	Operational Beds
3.2 mn[5]	Average Effective Capital Cost per Operational Bed
30+	Specialities
17,261	Full-time Employees and Associates including 3,682 doctors

NH's footprint in India

Source: Company Data

Key Management Team

- **Dr. Devi Prasad Shetty**

  Dr. Devi Prasad Shetty is the Chairman of Narayana, and also an Executive Director. He is a cardiac surgeon with around 34 years of experience. He founded Narayana in the year 2000. He is the recipient of a number of awards and honours most noteworthy being 'Padma Shri' and 'Padma Bhushan' Award in 2003 and 2012 respectively.

- **Dr. Emmanuel Rupert**

  Dr. Emmanuel Rupert assumed office as Managing Director and Group CEO on 11th February 2019. He is an alumnus of Banaras Hindu University, Varanasi. He joined Narayana in 2000. He has over 25 years of clinical experience and 10 years of experience as administrator in healthcare delivery.

- **Mr. Viren Shetty**

  Mr. Viren Shetty is the Executive Director and Group COO. He has completed his Masters in Business Administration from Stanford Graduate School of Business in 2012. He has also completed his graduation in Civil Engineering from Visvesvaraya Technological University (VTU), Belgaum, Karnataka. He has been responsible for identifying new growth opportunities for the Group Companies.

- **Mr. Kesavan Venugopalan**

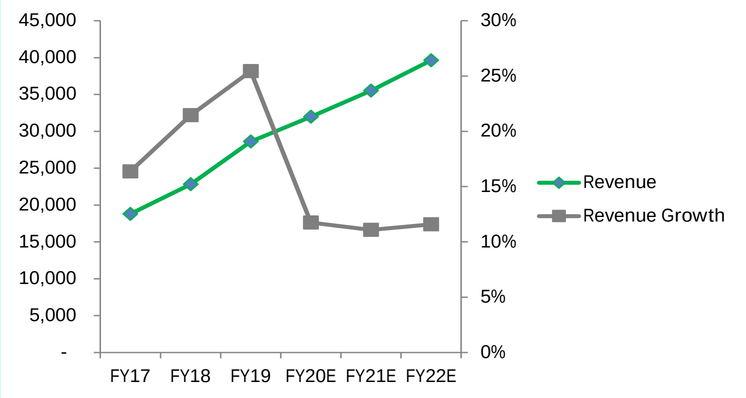
  Mr. Kesavan Venugopalan is the Group CFO since February 18, 2013. He holds a Bachelor's degree in Mathematics from the University of Madras. He is also a chartered accountant and holds associate membership of Chartered Institute of Management Accountants, United Kingdom. Prior to joining Narayana, he worked with Wipro Limited and has around 25 years of experience.

- **Mr. Sumanta Ray**

  Mr. Sumanta Ray is the Chief Marketing Officer of Narayana. He joined Narayana on May 28, 2012. He holds a Post-graduate Diploma in Management from the Goa Institute of Management and graduated from Banaras Hindu University with a Bachelor's degree in Science. He has around 18 years of experience across industries such as healthcare, telecom, financial services and retail in India and international markets.

Key Performance Indicators

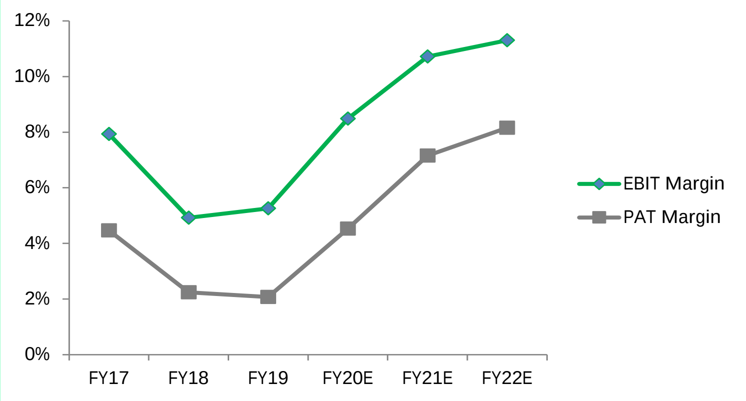
Revenue & Revenue Growth



Source: Company Data, SMIFS Research

Revenue from operations is expected to grow at a CAGR of 11% between FY19 and FY22E.

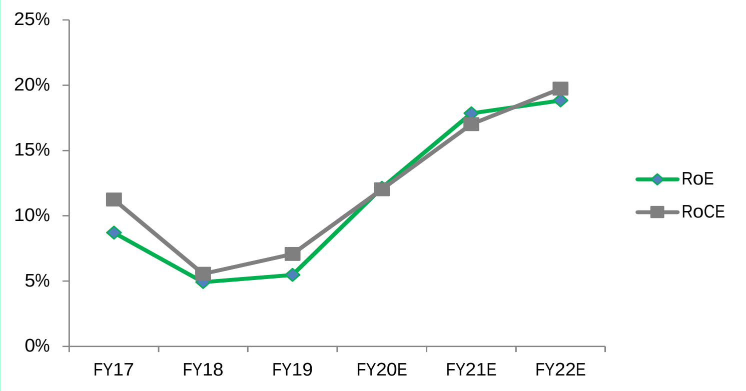
Profit Margins



Source: Company Data, SMIFS Research

EBIT Margin is expected to improve from 5.3% in FY19 to 11.3% in FY22E. PAT Margin is expected to improve from 2.1% in FY19 to 8.2% in FY22E.

RoE and RoCE

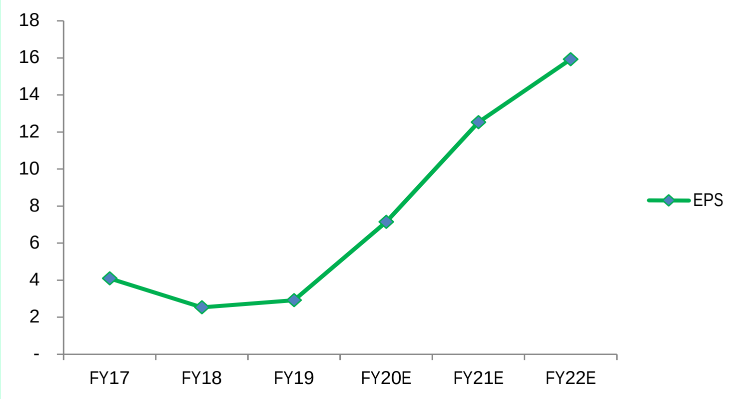


Source: Company Data, SMIFS Research

RoE and RoCE are expected to improve from 5.5% and 7.1% respectively in FY19 to 18.8% and 19.7% respectively in FY22E.

Key Performance Indicators

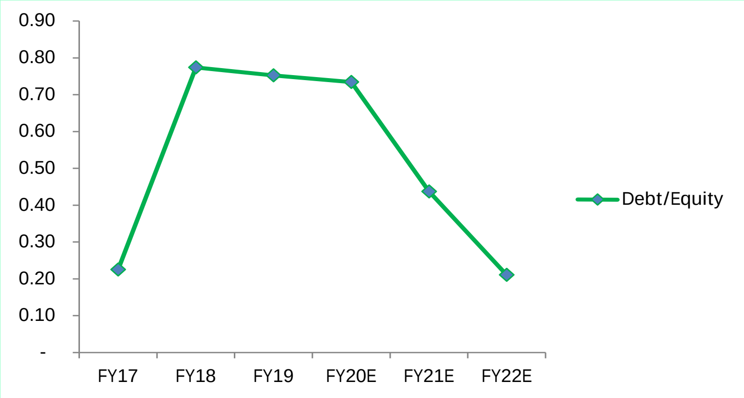
EPS Growth



Source: Company Data, SMIFS Research

EPS is expected to grow at a CAGR of 76% between FY19 and FY22E.

Debt/Equity Ratio



Source: Company Data, SMIFS Research

Our assumptions indicate a steady decrease in Debt/Equity ratio from 0.75 in FY19 to 0.21 in FY22E. From FY20E onwards IND AS 116 impact has been considered.

Free Cash Flow Generation

Source: Company Data, SMIFS Research

Due to steady improvement in cash flow from operations and low capex, free cash flow is expected to steadily improve from Rs 1,291 mln in FY19 to Rs 3,236 mln in FY22E.

Outlook and Valuation

Narayana has created a niche for itself by adopting an Asset Right approach and focusing on affordable healthcare. In the Asset Right approach, Narayana does not invest in land and buildings connected with the hospitals, rather it ties up with charitable trusts, government bodies and other non-profit organisations for these investments in order to set up the hospitals. Thereafter, Narayana only invests in medical equipment. Narayana has brought together quality and affordability and has ensured that technology and accessibility coexist. The cost of doing a surgical procedure in Narayana is normally 15-20% lower than its peers as 60-65% bed capacity in a Narayana hospital is normally allotted to general ward.

Narayana has leveraged its leadership position in Cardiac and Renal Sciences to expand services across all the fields. Specialities like Gastro Sciences, Oncology, Neurology and Orthopaedics have grown from minor departments to contribute significantly to overall revenues. Narayana has developed Centres of Excellence (COE) across specialities to provide quaternary services across the country without duplicating manpower or infrastructure.

Narayana's facility in the Cayman Islands was the first attempt by an Indian company to run a Joint Commission accredited hospital in the Western world. Narayana has also entered into a partnership for operating a cardiac sciences department in a state-of-the-art 350-bed hospital in Chittagong, Bangladesh.

As a strategy, Narayana has decided to renew its focus on Tier 1 cities in India while considering new expansion plans. As doctors' costs are normally more in Tier 2 cities and patient footfall is less compared to Tier 1 cities, which makes it difficult to cover fixed costs and make profit, Narayana's strategy of renewing its focus on existing Tier 1 cities for further expansion makes sense in terms of profitability.

Narayana does not have any major capex scheduled for the next 24 months and losses for the 3 new hospitals are expected to come down. Operating leverage and efficiency improvement are expected to creep in with EBITDA margin improving from 10.1% in FY19 to 15.7% in FY22E post IND AS 116. Strong cumulative free cash flow generation of Rs 8,285 mln between FY20E-FY22E would help in bringing down the debt substantially with Debt to Equity ratio declining from 0.75 in FY19 to 0.21 in FY22E. All these would culminate to a substantially improved ROCE of 19.7% in FY22E from 7.1% in FY19.

We have valued the stock at 15x FY22E EV/EBITDA to arrive at a **Target Price of Rs 442**, which provides an upside of 34% based on the current market price. We thus recommend a **"Strong Buy"** rating on the stock.

Peer Comparison

Peers	EV/EBITDA			P/E			P/B			RoE(%)		
	FY20E	FY21E	FY22E	FY20E	FY21E	FY22E	FY20E	FY21E	FY22E	FY20E	FY21E	FY22E
Narayana Hrudayalaya	22.0	17.7	15.8	46.4	26.4	20.8	5.6	4.7	3.9	12.1%	17.8%	18.8%
Apollo Hospitals	19.2	17.1	14.9	76.5	48.5	32.5	7.0	6.3	5.4	9.2%	13.0%	16.6%
Fortis Healthcare	19.9	16.3	13.8	80.2	44.3	29.1	1.8	1.7	1.6	2.0%	4.1%	5.6%
Shalby	10.1	8.6	7.4	19.5	16.5	13.5	1.3	1.2	1.1	6.3%	7.3%	8.2%
Healthcare Global	8.9	7.6	6.4	NA	NA	NA	2.1	2.3	2.4	-12.4%	-7.6%	-4.4%

Source: SMIFS Research, Bloomberg

Financial Details

Income Statement (Consolidated)					
Particulars (INR mln.)	FY18	FY19	FY20E	FY21E	FY22E
Revenue from operations	22809	28609	31967	35507	39618
Revenue Growth	21%	25%	12%	11%	12%
Cost of goods sold	5565	6875	7600	8487	9451
Employee benefits expenses	9445	12139	13268	14788	16473
Other expenses	5677	6717	6645	6696	7482
EBITDA	2123	2878	4454	5536	6212
EBITDA Margin	9.3%	10.1%	13.9%	15.6%	15.7%
EBITDA Growth	-7%	36%	55%	24%	12%
Depreciation & Amortisation	1000	1374	1743	1731	1734
EBIT	1123	1505	2712	3806	4478
Interest Cost	468	714	860	572	332
Other Income	189	167	177	171	176
PBT (Adjusted)	798	934	1989	3394	4318
Tax expense	288	342	540	854	1086
PAT (Adjusted)	510	592	1449	2540	3232
PAT Margin	2.2%	2.1%	4.5%	7.2%	8.2%
PAT Growth (Adjusted)	-39%	16%	145%	75%	27%

Balance Sheet (Consolidated)					
Particulars (INR mln.)	FY18	FY19	FY20E	FY21E	FY22E
Share Capital	2044	2044	2044	2044	2044
Reserves & Surplus	8317	8772	9899	12201	15135
Networth	10360	10815	11943	14245	17179
Long term Borrowings	6963	7253	7506	4995	2384
Other Non-Current Liabilities	2929	3198	3100	3134	3129
Short term Borrowings	376	115	115	115	115
Other Current Liabilities	4728	4988	5426	5926	6474
Total Equity & Liabilities	25356	26370	28090	28415	29281
Net Tangibile Asset	17385	17486	19110	19054	19277
Other Non Current Assets	3178	3611	3411	3467	3502
Inventories	836	832	1031	1151	1282
Trade Receivables	2790	2664	3443	3825	4268
Cash and Cash Equivalents	333	965	364	187	169
Other Current assets	834	812	731	731	783
Total Assets	25356	26370	28090	28415	29281

Source: Company Data, SMIFS Research

Financial Details

Cash Flow Statement Extract (Consolidated)					
Particulars (INR mln.)	FY18	FY19	FY20E	FY21E	FY22E
PBT	804	934	1989	3394	4318
Depreciation & Amortisation	1000	1374	1743	1731	1734
Interest expense	468	714	860	572	332
(Increase)/Decrease in CA	(988)	(78)	(853)	(679)	(741)
Increase/(Decrease) in CL	722	161	(39)	567	543
Taxes Paid	(339)	(539)	(537)	(849)	(1079)
Cash Flow from Operating Activities	1823	2786	3202	4748	5111
Capital Expenditure	(5572)	(1495)	(1325)	(1575)	(1875)
Cash Flow Investing Activities	(5,338)	(1,613)	(1,329)	(1,564)	(1,881)
Increase/(Decrease) in Borrowings	3,466	276	(1,369)	(2,544)	(2,611)
Dividend payments including tax	0	0	(244)	(244)	(304)
Cash Flow from Financing Activities	3151	(273)	(2473)	(3360)	(3248)
Net Cash Flow	(364)	901	(601)	(177)	(18)
Closing Balance	333	965	364	187	169

Key Ratios (Consolidated)					
Particulars	FY18	FY19	FY20E	FY21E	FY22E
Margins					
Gross Margin	75.6%	76.0%	76.2%	76.1%	76.1%
EBITDA Margin	9.3%	10.1%	13.9%	15.6%	15.7%
PBT Margin (Adjusted)	3.5%	3.3%	6.2%	9.6%	10.9%
PAT Margin (Adjusted)	2.2%	2.1%	4.5%	7.2%	8.2%
DPS (INR)	0.00	1.00	1.20	1.50	1.80
Solvency Ratios					
Current Ratio	0.9	1.0	1.0	1.0	1.0
Debt/Equity	0.8	0.8	0.7	0.4	0.2
Net Debt/Equity	0.7	0.7	0.7	0.4	0.2
Interest Coverage	2.4	2.1	3.2	6.6	13.5
Profitability Ratios					
RoE	4.9%	5.5%	12.1%	17.8%	18.8%
RoCE	5.5%	7.1%	12.0%	17.0%	19.7%
Valuation Ratios(x)					
EV/EBITDA	46.2	34.1	22.0	17.7	15.8
EV/Sales	4.3	3.4	3.1	2.8	2.5
P/E	131.7	113.5	46.4	26.4	20.8
P/B	6.5	6.2	5.6	4.7	3.9

Source: Company Data, SMIFS Research

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