



## IPO Note – Krishna Institute Of Medical Sciences Limited

14-June-2021

## Issue Snapshot:

Issue Open: June 16 – June 18, 2021

Price Band: Rs. 815 –825 (Discount of Rs.40 for all eligible employees)

\*Issue Size: 25,984,780 eq shares  
(Fresh issue of 2,424,242 eq sh  
+offer for Sale of 23,560,538 eqs h )

Issue Size: Rs.2117.8 – 2143.7.2cr

Reservation for:

QIB	atleast	75% eq sh
Non Institutional	Upto	15% eq sh
Retail	Upto	10% eq sh
Employees	Rs.20 cr	

Face Value: Rs 10

Book value: Rs 115.36 (Mar 31, 2021)

Bid size: - 18 equity shares and in multiples thereof

100% Book built Issue

## Capital Structure:

Pre Issue Equity: Rs. 77.59 cr

\*Post issue Equity: Rs. 80.02 cr

Listing: BSE & NSE

Book Running Lead Manager: Kotak Mahindra Capital Company Limited, Axis Capital Limited, Credit Suisse Securities (India) Private Limited, IIFL Securities Limited

Registrar to issue: Link Intime India Private Limited

## Shareholding Pattern

Shareholding Pattern	Pre issue %	Post issue %
Promoter and Promoter Group	46.8	38.8
Public & Employee	53.2	61.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

\*=assuming issue subscribed at higher band  
Source for this Note: RHP

## Background & Operations:

Krishna Institute of Medical Sciences Ltd (KIMS) is one of the largest corporate healthcare groups in AP and Telangana in terms of number of patients treated and treatments offered. It provides multi-disciplinary integrated healthcare services, with a focus on primary secondary & tertiary care in Tier 2-3 cities and primary, secondary, tertiary and quaternary healthcare in Tier 1 cities and operates 9 multi-specialty hospitals under the “KIMS Hospitals” brand, with an aggregate bed capacity of 3,064, including over 2,500 operational beds as of March 31, 2021, which is 2.2 times more beds than the second largest provider in AP and Telangana. It offers a comprehensive range of healthcare services across over 25 specialties and super specialties, including cardiac sciences, oncology, neurosciences, gastric sciences, orthopaedics, organ transplantation, renal sciences and mother & child care.

KIMS has grown from a single hospital to a chain of multi-specialty hospitals through organic growth and strategic acquisitions under the leadership of Dr. Bhaskara Rao Bollineni, its founder and Managing Director, and Dr. Abhinav Bollineni, its Executive Director and CEO. Its First hospital in its network was established in Nellore (AP) in 2000 and has a capacity of approximately 200 beds. Its flagship hospital at Secunderabad (Telangana) is one of the largest private hospitals in India at a single location (excluding medical colleges) with a capacity of 1,000 beds as of March 31, 2021. KIMS has significantly expanded its hospital network in recent years through its acquisitions of hospitals in Ongole (AP) in Fiscal Year 2017, Vizag (AP) and Anantapur (AP) in Fiscal Year 2019 and Kurnool (AP) in Fiscal Year 2020. Approximately one-third of its 3,064 beds were launched in the last four years. It has added over 940 beds, in aggregate, in its hospitals in Visakhapatnam (Vizag) (AP), Anantapur (AP), Rajamundry (AP) and Kurnool (AP) in Fiscal Years 2019 and 2021, and improved the overall bed occupancy rate in these hospitals from 71.83% to 78.60% in the same period. KIMS strive to provide quality service to more patients, and has scope for additional patients and improved occupancy rates. It strategically focus on the southern India healthcare market where it has a strong understanding of regional nuances, customer culture and the mindset of medical professionals and where there is significant and growing need for quality and affordable healthcare services. Each of its hospitals also has integrated diagnostic services and pharmacies that cater to its patients.

KIMS operates and manage all of its hospitals, which provides with greater control over its facilities and helps to better deliver high quality and affordable healthcare services. In Fiscal Year 2021, its nine hospitals recorded ARPOB of Rs. 20,609, a bed occupancy rate of 78.60%, and an ALOS of 5.53 days, on an aggregate basis. In Fiscal Year 2021, ARPOB for its hospitals situated in Tier 1 cities was Rs. 39,571 and ARPOB for its hospitals situated in Tier 2-3 cities was Rs. 11,187. It has taken significant efforts to create a culture that nurtures its medical talent and encouraged doctors to become stakeholders in the KIMS hospitals where they work. This culture of empowerment and ownership has led to good talent retention and allowed patients to create long-term relationships with its doctors. Since inception in 2000, KIMS has retained over 80% of its doctors. Revenue of KIMS is diversified across specialties and its doctors. In Fiscal Year 2021, its total income mix was 17.82% from cardiac sciences, 12.55% from neuro sciences, 9.30% from renal sciences, 4.64% from orthopaedics, 5.25% from gastric sciences, 5.71% from oncology, 6.11% from mother & child care, 1.86% from organ transplant, 35.28% from other specialties and 1.48% from other income. In the same year, its top 10 doctors contributed 21.80% of its total income and the top 25 doctors contributed 36.10% of its total income.

KIMS also conduct medical education programs through its affiliations with state medical boards and universities, for various broad and super specialties at its hospitals in Telangana at Secunderabad and Kondapur, including for DNB and post-doctoral fellowship programs. As of March 31, 2021, there were 230 students enrolled in DNB and post-doctoral fellowship programs. It also offers post-graduate, undergraduate and diploma programs that are affiliated with Kaloji Narayana Rao University of Health Sciences and the Telangana Para Medical Board.

	As of and for the year ended March 31,			2019-2021 CAGR
	2021	2020	2019	
Bed Capacity	3,064	3,004	2,804	4.53%
Bed occupancy rate <sup>(1)</sup> (%)	78.60%	80.49%	71.83%	-
Inpatient Volume	116,592	140,676	111,382	2.31%
Outpatient Volume	830,211	1,137,560	900,043	(3.96)%
Total Income (₹ in millions)	13,401.02	11,287.28	9,238.69	20.44%
Profit/(loss) before tax expense (₹ in millions)	2,790.15	1,405.26	(153.81)	-
Adjusted Profit Before Tax Expense (₹ in millions) <sup>(2)</sup>	2,790.15	1,405.26	837.47	82.53%
Profit/(loss) for the year (₹ in millions)	2,054.79	1,150.72	(488.07)	-
Adjusted EBITDA (₹ in millions) <sup>(2)</sup>	3,810.48	2,510.79	1,739.51	48.00%
Adjusted EBITDA Margin <sup>(2)</sup>	28.43%	22.24%	18.83%	-

(1) Number of beds occupied divided by number of operational census beds (i.e. excluding day care beds like dialysis, endoscopy, emergency etc.) as of the last day of the relevant year.

(2) Adjusted EBITDA, Adjusted EBITDA Margin, adjusted profit before tax expense are non-GAAP measures. These non-GAAP measures are not meant to be considered in isolation or as a substitute for profit before tax expense, profit after tax or any other financial measure prepared in accordance with Ind AS. The non-GAAP measures presented here may not be comparable to similarly titled measures presented by other companies. Other companies may calculate similarly titled measures differently, limiting their usefulness as comparative measures to the data. It encourage investors and others to review financial information in its entirety and not rely on a single financial measure.

It experienced a negative CAGR of (3.96)% for its outpatient volume from 2019 to 2021 mainly due to COVID-19 related lockdown, quarantines and other travel related restrictions, which resulted in fewer people traveling to its hospitals to seek outpatient treatment. Negative outpatient volume CAGR was offset by 2.31% growth of inpatient volume, which resulted in growth of total income, as a large proportion of its inpatients during the COVID-19 pandemic were critical and complex cases with longer stays as well as multiple procedures and treatments being administered throughout the patient's hospitalization.

The following chart sets forth corporate structure of KIMS



## Objects of Issue:

The Offer comprises the Fresh Issue and the Offer for Sale.

## Offer for Sale

KIMS will not receive any proceeds of the Offer for Sale by the Selling Shareholders. Each of the Selling Shareholders will be entitled to the respective proportion of the proceeds of the Offer for Sale after deducting their portion of the Offer related expenses. Other than the listing fees for the Offer and expense on account of corporate advertisements of the Company which shall be solely borne by the Company, all cost, fees and expenses in respect of the Offer will be shared amongst the Company and the Selling Shareholders, respectively, in proportion to the proceeds received for the Fresh Issue and their respective portion of Offered Shares, as may be applicable, upon the successful completion of the Offer.



## Fresh Issue

KIMS proposes to utilise the funds which are being raised through the Fresh Issue, up to Rs. 2,000.00 million, after deducting the Offer related expenses to the extent payable by the Company with respect to the Fresh Issue, towards funding the following objects:

- repayment/pre-payment, in full or part, of certain borrowings availed by KIMS and by its Subsidiaries viz KHKPL, SIMSPL and KHEPL (Rs.150 cr); and;
- General corporate purposes

In addition to the aforementioned Objects, the Company expects to receive the benefits of listing of the Equity Shares on the Stock Exchanges. The listing of Equity Shares is intended to enhance visibility and brand name amongst existing and potential customers.

## Competitive Strengths

**Regional leadership driven clinical excellence and affordable healthcare:** KIMS is one of the largest corporate healthcare groups in AP and Telangana in terms of number of patients treated and treatments. It has 3,064 beds across nine multi-specialty hospitals in AP and Telangana as of December 31, 2020, which is 2.2 times more beds than the second largest provider in AP and Telangana. Also it has over 20 years of expertise in AP and Telangana since opening its first hospital in Nellore (AP) in 2000. It strategically focus on the southern India healthcare market where it has a strong understanding of regional nuances, customer culture and the mind-set of medical professionals and where there is significant and growing need for quality and affordable healthcare services. Its leadership in AP and Telangana are driven by (i) clinical excellence and (ii) affordable pricing.

**Clinical excellence:** KIMS deliver clinical excellence through quality healthcare services, supported by a combination of top medical talent, strong clinical and patient safety protocols and investments in new medical technology. It provide treatment for complex and chronic diseases covering primary, secondary, tertiary and quaternary healthcare. In addition to providing core medical, surgical and emergency services, it provide complex and advanced quaternary healthcare in various specialties. All of its hospitals provide comprehensive healthcare services across a range of specialties and super-specialties. These include cardiac sciences, oncology, neurosciences, gastric sciences, orthopaedics, organ transplantation, renal sciences and mother & child care. It is a leader in some of these specialties. It had the largest cardiac and cardiothoracic surgery and cardiology treatments programs in AP (in terms of patients treated in 2018), with an 18.20% share of cardiology treatments. It also ranked first in genito urinary surgeries performed, neurosurgery and poly trauma treatments and first among private hospitals (second overall) in nephrology treatments in AP in 2018. Also it has one of the largest neurosciences programs for epilepsy among private hospitals in India.

KIMS hire doctors, some of whom have been trained in premier medical institutions and have received accolades and awards for their work in their respective fields. It is accredited by the National Board of Examination and operates its DNB student program, which provides a deep pool of doctors to support its hospitals. Its continuous investment in medical technology and equipment has enabled it to offer advanced healthcare services that few other hospitals in India can match.

**Affordable pricing:** KIMS strive to offer quality healthcare services at affordable prices, regardless of the markets, specialty or service type. It has successfully implemented its affordable pricing model in its hospitals in both Tier 1 and Tier 2-3 markets, even though hospitals in different markets face different competitive landscapes and pricing pressures, serve patients from different economic backgrounds and offer a different mix of specialty offerings. In Fiscal Year 2021, its capital expenditure per bed was Rs 6.91 million for hospitals in Tier1 cities and Rs 2.21 million for hospitals in Tier 2-3 cities. In Tier 1 cities, its prices across medical procedures are on average 20% to 30% lower than other private hospitals in India

To sustain affordable pricing while still generating strong returns, KIMS rationalizes its doctor, procurement and other administrative costs. It manages its doctor costs by using a mix of fixed and variable compensation arrangements, based on patient volumes, costs and other factors at each of its hospitals. It also have access to a deep pool of doctors from its DNB student programs and nursing staff through affiliations with in-house nursing schools and colleges.

**Ability to attract, train and retain high quality doctors, consultants and medical support staff;** KIMS maintain its standard of high quality healthcare by consistently employing a diverse pool of talented doctors, nurses and paramedical professionals. Its multi-disciplinary approach, combined with affordable cost for treatment, a high-volume tertiary care model, and its focus on teaching and research, has helped to attract and retain high quality doctors and other healthcare professionals. Many of its specialists, physicians and surgeons have been trained in premier medical institutions across the world and have received accolades and awards. It has taken significant efforts to create a culture that nurtures its medical talents and encouraged doctors to become stakeholders in the KIMS hospitals where they work. This culture of empowerment and ownership has encouraged learning and training in its hospitals, and led to good talent retention and allowed patients to create long-term relationships with its doctors. Since inception in 2000, it has retained over 80% of its doctors. Its doctors have been involved in the growth of its hospitals by actively participating in the equity ownership in the Company and Subsidiaries. As of March 31, 2021, KIMS had 230 doctors in its DNB and postdoctoral fellowship programs. It continuously endeavors to undertake initiatives to ensure that the attrition rates for its doctors remain low. It has also taken certain premises on lease for the purpose of allotting residential accommodation to its nurses.

**Track record of strong operational and financial performance:** KIMS have grown from a single, approximately 200-bed hospital at Nellore (AP) in 2000 to a leading multi-disciplinary integrated private healthcare service provider with nine multi-specialty hospitals and over 3,000 beds today. It has consistently delivered strong operational and financial performance through strong patient volumes, cost efficiency and diversified revenue streams across medical specialties. Also it has achieved healthy profitability in both Tier 1 and Tier 2-3 markets by identifying markets with significant underserved healthcare demand and delivering quality healthcare services at affordable prices, which in turn drives patient volumes. Its multispecialty healthcare platform has resulted in diversified revenue streams, with no single specialty accounting for more than 25% of its total income in any of the last three years. As of December 31, 2020, its debt-to-Adjusted EBITDA ratio was 0.95x and its gearing ratio was 0.37x compared to the industry range of 0.1 to 5.2. It has achieved strong free cash flow levels, in terms of its cash flows from operations relative to its capital expenditures, by effectively managing its capital expenditures as its business and hospital network have grown, resulting in attractive cash flow conversion, in terms of free cash flow compared to Adjusted EBITDA. KIMS is one of only three hospitals in India that are rated AA by CRISIL.

**Well positioned to consolidate in India's large, unorganized yet rapidly growing and underserved affordable healthcare market:** The healthcare industry in India is poised for growth. The Indian healthcare delivery industry is expected to grow at a 17-18% CAGR (2020 - 2024E) and reach Rs 7.07 trillion by 2024. In Fiscal Year 2020, 68% of hospital treatments, in terms of the treatment value, were carried out in private hospitals, and the number is expected to reach 72% in Fiscal Year 2024. There is a significant and growing need for quality and affordable healthcare services across the country, particularly in AP and Telangana where KIMS hospital network is concentrated. AP and Telangana also ranked among the top three in terms of overall health index score. Demands from patients and doctors for high quality facilities, modern technologies, and multi-disciplinary care are the key factors driving healthcare industry consolidation. Larger hospital brands typically have stronger financial disciplines and negotiating power with suppliers, better ability to attract medical talent, and greater capital and administrative resources to meet these needs over standalone hospitals. In addition, consolidation of hospital brands in India's Tier 2-3 cities in the last few years have formed regional clusters that provide a base for further expansion and consolidation. Given KIMS leading position in AP and Telangana as a provider of quality and affordable healthcare services, as well as its track record of growth, it is well positioned to be a consolidator in the region. It has grown from a single, approximately 200-bed hospital at Nellore (AP) in 2000 to a leading multi-disciplinary integrated private healthcare services provider with nine multi-specialty hospitals and over 3,000 beds today. Between Fiscal Year 2017 and Fiscal Year 2020, KIMS completed four significant hospital acquisitions, namely KIMS Ongole, KIMS Vizag, KIMS Anantapur and KIMS Kurnool, to consolidate the healthcare market in AP, growing at a pace much faster than its competing brands, in terms of year-on-year revenue growth in Fiscal Year 2020 and operating margin from Fiscal Years 2017-2020.

**Disciplined approach to acquisitions resulting in successful inorganic growth:** KIMS has a successful history of sourcing, executing and integrating acquisitions. It has a disciplined, low-leverage approach to acquisitions that has enabled to maintain its affordable pricing model as it has grown in both Tier 1 and Tier 2-3 markets. Since Fiscal Year 2017, it has expanded its hospital network primarily through acquisitions of other hospitals. KIMS seeks to acquire hospitals that can fit into its hospital network and match its existing hospital profile in terms of specialties, technologies and healthcare professionals. It has encouraged doctors at the hospital it acquires to stay with it, participate in the equity ownership of the hospital and contribute to the hospital's future growth. Many of the doctors at the hospitals that it acquires remain with it after the hospitals are integrated into its network.

**Experienced senior management team with strong institutional shareholder support:** KIMS benefit from an experienced senior management team which has made significant contributions to its growth and has a long and proven track record in the healthcare services industry. A professionally managed team with a commitment to patient care and ethical standards enables it to operate its facilities efficiently while at the same time providing quality affordable healthcare to its patients. Its largest shareholder, General Atlantic, is a leading global growth investor with a track record of providing strategic, practical, and impactful support to high-growth companies in India and globally. Its senior management team and strong shareholder support have been key to driving its business strategy and financial growth through the efficient rollout of its greenfield hospitals, the integration of its hospital acquisitions and the successful execution of its affordable healthcare model in Tier 1 and Tier 2-3 markets.

## Business Strategy:

**Strengthen existing hospitals and specialties:** KIMS intends to strengthen its existing hospitals by further balancing its specialty mix and deepening expertise in select specialties. It has identified cardiac sciences, neurosciences, gastric sciences, orthopaedics, renal sciences, interventional pulmonology, palliative care, immunology and palliative care as specialties that it intends to further strengthen and grow. In the area of organ transplantation, it has recently expanded its clinical team in Secunderabad (Telangana) to provide heart and lung transplants in addition to other organ transplant services (liver and kidney, among others). It intends to offer organ transplantation services in more of its hospitals in the future. It also aims to strengthen its oncology services by adding radiation and surgical services and introducing oncology services at more of its hospitals. KIMS plan to continue to focus on, and expand its ability to provide, complex and advanced quaternary healthcare in various specialties, and to launch mother & child care services in more of its hospitals. It also plans to focus on developing complicated specialist-skill driven clinical areas of organ transplant, mother & child care and oncology, to enhance its brand name particularly at hospitals where it observe strong growth inpatient volumes

**Strategically grow presence in adjacent markets:** KIMS plans to expand its hospital network into markets that are adjacent to its core markets of AP and Telangana, initially focusing on the following areas:

**Karnataka (Bangalore and greater Karnataka)** –There is potential for Bangalore and greater Karnataka to support new hospitals that offer quality and affordable healthcare. It has observed both cash patients and insurance patients traveling from the districts of AP bordering Karnataka (Anantapur, Kurnool and Chittoor) to seek treatment at larger hospitals in Bangalore (Karnataka).

**Odisha (Bhubaneswar)** – Bhubaneswar is a natural extension of existing hospital network northward given the state's proximity to KIMS hospitals in Vizag and Srikakulam in northern AP that already serve a significant number of patients traveling from south Odisha for treatment.

**Tamil Nadu (Chennai)** – Chennai is a major city on the border of Tamil Nadu and AP that already attracts patients from AP's four southern border districts of Chittoor, Kadapa, Nellore and Ongole and has a large Telugu-speaking population. KIMS has acquired a parcel of land in Chennai for construction of a new facility in the future.

**Central India (Indore, Aurangabad, Nagpur and Raipur)** – KIMS flagship hospital KIMS Secunderabad in Hyderabad (Telangana) attracts patients in need of complex care, as well as doctors seeking to develop their career, from across central India, which has further raised the familiarity with its KIMS brand among patients from the region. As a result, there is strong KIMS brand awareness in the region that can support smaller, KIMS-branded hospital units in the future.

As it enters into these new markets, its strong existing brand recognition among patients in these regions can accelerate the growth of new hospitals that it establishes or acquires. It intends to leverage its acquisition experience to successfully identify, execute and integrate new opportunities that may arise in the future, including by entering into O&M arrangements with third party healthcare service providers. It also intends to explore opportunities for expansion via asset-light models or models involving no ownership of assets.

**Implementation of initiatives to improve existing operational efficiencies:** Maximizing operating efficiencies across KIMS network is critical to maintaining and improving the affordability of healthcare services and, ultimately, profitability. It aims to improve its occupancy rates and the utilization of key equipment and operating theatres by expanding delivery of tertiary care services, growing preventive healthcare and health screening programs and increasing community outreach programs. It intends to undertake initiatives that help to improve daily ARPOB (Average Revenue Per Operating Bed) and minimize ALOS (Average of length of stay) at its hospitals. It focusses on reducing ALOS at its hospitals and increasing patient turnover rate in order to drive revenue growth because a significant portion of in-patient revenues are derived from medical services provided in the initial two to three days of a patient's stay in the hospital. To do this, it plans to improve its patient management and discharge processes, expand home care offerings, implement time- and cost-saving medical technologies and perform more minimally-invasive surgeries. It targets to further centralize and optimize its procurement costs by leveraging on its growing scale. It intends to continue emphasizing training of its employees in best practices and implementing programs to provide incentives for performance.

**Invest in digital health care and technology:** KIMS is focused on developing a healthcare ecosystem that utilizes digital healthcare technologies to offer patients a fully integrated approach to manage journey towards health and wellness. Incorporating new technologies into its operations and expanding digital capabilities will improve patient care, expand the scope of treatments that it offers and lead to greater affordability, efficiency and cost savings. There is growing interest in digital health platforms that enables patients to manage their own personal health and wellness journeys, access their medical records and get prescriptions online and obtain online consultations, particularly for routine and minor consultations. KIMS also intends to invest in the infrastructure and technology necessary to perform technology-enabled operating procedures in its hospitals. Investing in the latest technologies for medical equipment and procedures is necessary to serve the increasing demand for sophisticated clinical care and procedures and attract and retain skilled doctors. Greater integration of technology in operations can reduce its costs by streamlining its processes and allow to use human interventions with patients more selectively, while also providing patients with around-the-clock access to care. Currently, it is in the process of adopting and enhancing end-to-end automation in key operational procedures such as outpatient registration, billing, admissions and discharge. On the clinical side, it is piloting a new digital nursing portal to better optimize time and resource allocation at nursing stations and enhance patient care satisfaction.

## Industry

### GDP Outlook For Fiscal 2021 And 2022

#### Healthcare-related fiscal measures

India's COVID-19 emergency response and health system preparedness package of Rs. 150 billion was announced in three phases until Mar 2024 to address immediate needs in the wake of the pandemic. A separate health-worker life insurance cover of Rs. 5 million under Pradhan Mantri Garib Kalyan Yojana (PMGKY) was also announced to offer support to families of frontline health workers fighting the virus. In addition to emergency funding for the pandemic response, the economic package includes long-term measures to improve healthcare infrastructure. The government's emphasis on healthcare offers substantial opportunities for private investment to create affordable healthcare facilities and services. To boost private investment in social infrastructure, the government has announced an outlay of Rs. 81

billion with viability-gap funding (VGF) limits enhanced from 20% to 30% of project cost for both the Central and state governments to attract private investments in the social infrastructure space. VGF support will aid in the development of hospitals and healthcare centres under public-private partnership (PPP). It creates an investment opportunity of Rs. 150-200 billion under the social-infrastructure space. Support to private investments via enhanced VGF will help grow the current health infrastructure by 4-5%. Increased public expenditure on health (National Health Policy targets public health expenditure at 2.5% of GDP by 2025) also means increased government focus on development of health systems and research centres. Development of healthcare infrastructure will gain preference in the current situation with a rise in healthcare spending / demand in India.

## Impact of Union Budget 2021-22 on healthcare and wellbeing: Positive

### Key budget proposals

- Budgetary allocation towards health and well-being increased to Rs. 2.23 lakh crore in fiscal 2022
- Provision of Rs. 35,000 crore for COVID-19 vaccines in fiscal 2022
- Government healthcare expenditure will now cover preventive and curative health and well-being. Of this, healthcare related measures will account for 71% of the budgeted expenditure of Rs. 94,452 crore for fiscal 2021. A large part of the remaining spending on well-being will be contributed by the Jal Shakti Abhiyan.
- Revised core healthcare expenditure for fiscal 2021 is 24% higher than BE fiscal 2021 because of a Rs. 13,857 crore allocation towards a one-time COVID-19 Emergency Response and Health System Preparedness Package. BE for fiscal 2022 is 47% higher than RE fiscal 2021 due to a Rs. 35,000 crore allocation for COVID-19 vaccination and financial grant of Rs. 13,192 crore to states for health-related expenditure. While details about vaccine funding are awaited, a large part is expected to be spent on expanding the coverage and developing-related infrastructure, including cold storage. If the entire corpus of Rs. 35,000 crore is spent on vaccine procurement (with limited spending on vaccine-related infrastructure), the initiative can cover almost 50% of the population (~590 million people with two doses, each procured at Rs. 300 centrally by the government). Vaccines currently account for only 2-3% of the domestic pharma market and the increased allocation will boost the market share and revenue of pharmaceutical manufacturers. The increased devolution of funds to states will further strengthen healthcare infrastructure and services at the grassroots level.
- On the well-being front, under the Ministry of Jal Shakti, allocation for drinking water and sanitation is up 3.5 times compared with RE fiscal 2021. Provision of potable drinking water via functional tap connections to rural households will impact health and hygiene positively.

## Andhra Pradesh promoting universal healthcare through Dr. YSR Aarogyasri Health Insurance Scheme

To achieve universal health coverage for below poverty level families whether defined in terms of financial protection or access to and effective use of health care, the Andhra Pradesh government is implementing state-sponsored Dr. YSR Aarogyasri Health Insurance Scheme. The scheme is a PPP model in the field of health insurance, and provides end-to-end cashless services for identified diseases under secondary and tertiary care through a network of service providers from government and private sector. Primary care is addressed through free screening and outpatient consultation in both health camps and network hospitals as part of scheme implementation. The information, education & communication (IEC) activity during health camps, and screening, counselling and treatment of common ailments in these camps and out-patient services in network hospitals are supplementing the government health care system in preventive and primary care. To facilitate the effective implementation of the scheme, the state government set up the Dr. YSR Aarogyasri Health Care Trust.

### Services Included in the scheme

- End-to-end cashless services offered through a NWH from the time patient reporting till 10 days post discharge medication, including complications if any up to thirty (30) days post-discharge, for those patients who undergo a listed therapy.
- Free OP evaluation of patients for listed therapies who may not undergo treatment for listed therapies. All the pre-existing cases under listed therapies are covered under the scheme.
- Food and transportation.
- Follow-up services are provided for a period of one year through fixed packages to patients who require long-term followup therapy to get optimum benefit from the procedure and avoid complications.

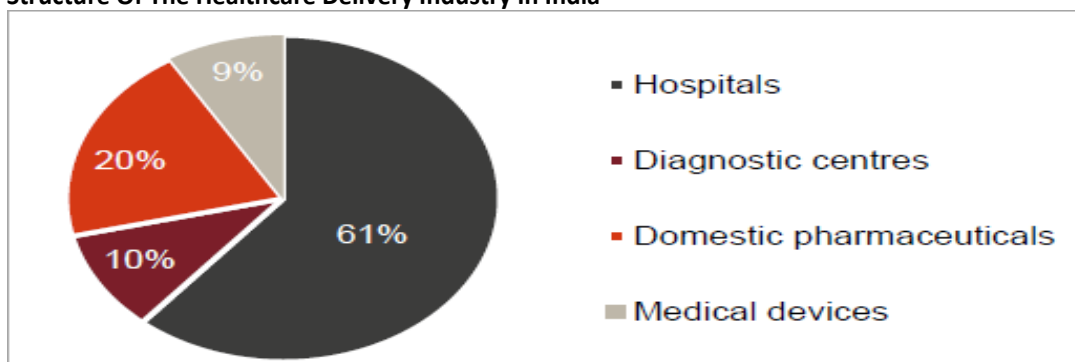
### Impact of the scheme on the state's health scenario

- Changing tertiary care profile: As the scheme progressed, the pre-existing load of diseases is coming down, particularly in relation to high-end diseases in cardiology, neurosurgery, gynaecology and obstetrics, etc. This may be attributed to a decrease in preload which is contributed by procedures under the scheme such as valve replacement surgeries and congenital cardiac defects, SOLs in brain and chronic disorders in gynaecology.
- Improvement in documentation and regulatory effect on hospitals: The empanelment procedure, defined diagnostic and treatment protocols, capturing of admission notes, daily clinical notes, operation notes, discharge summary and uploading of diagnostic reports including films, WebEx recording of angio and laparoscopic procedures and other photographic evidences have resulted in a profound improvement of medical documentation in the state and regulatory effect on the hospitals.



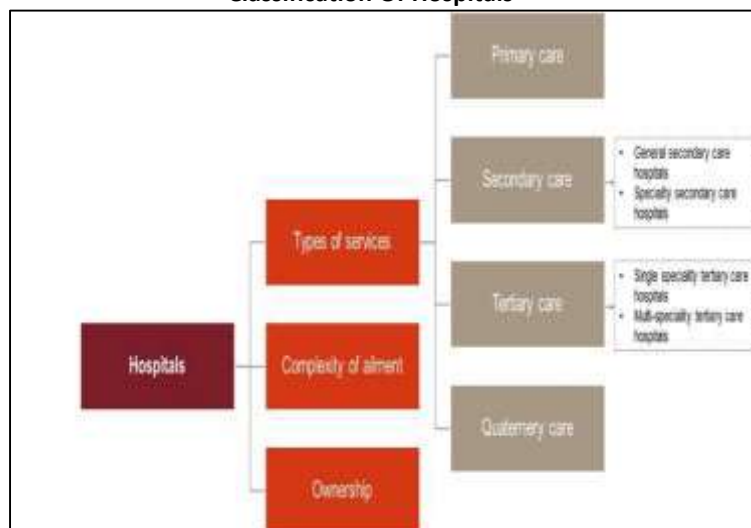
- Improvement in the quality of services: Continued monitoring of the services both online and in the field through an elaborate mechanism, coupled with disciplinary action against erring hospitals, is greatly enhancing the quality of treatment under the scheme.
- Establishing medical protocols tailor-made to local situations: The scheme considers availability of local infrastructure and standard medical practices defined by standard medical protocols with the help of senior specialists in each field.
- Employment generation: The scheme generated indirect employment potential as the insurance company, network hospital and other stake holders have to employ many people in different cadres such as Vaidyamithra, MEDCO, VMCCO, duty doctors, paramedical technicians, staff nurses, etc.
- Health awareness: Since implementation of the scheme, health camps held in rural areas not only screened people but also played a key role in bringing health awareness among the population through IEC activity. Counselling by field staff and paramedical staff is also contributing to health awareness among rural poor. As pre-evaluation of patients is also cashless under the scheme, people are motivated to approach network hospitals as and when they notice symptoms of identified diseases.
- Morbidity pool and disease mapping: As the entire patient data of people attending health camps, network hospital OP, inpatient treatment details and treatment details of the beneficiaries approved under the scheme are captured online, it created a huge morbidity data pool of the population.
- Early recognition and disease IEC activities, health camps, counselling by field staff and awareness campaigns by the Trust and district administration are helping in early recognition and prevention of diseases.
- Performance of government hospitals: Government hospitals with requisite infrastructure are empanelled to provide services under the scheme and they are entitled to receive the same payment as private and corporate hospitals. This is helping government hospitals to earn much needed finances to improve infrastructure and provide quality care to patients. This system is motivating more and more government hospitals to participate in the scheme and utilise the revenue earned to improve facilities to provide quality medical care. The government decided to retain 20% of earnings by government hospitals to create a revolving fund to regularly assist these hospitals improve their infrastructure and decided to utilise a part of these funds to bring reforms in tertiary medical care.

## Structure Of The Healthcare Delivery Industry In India



CRISIL Research estimates the healthcare delivery market, consisting of hospitals and diagnostic centres, to account for a major share of the healthcare pie (71%), followed by domestic pharmaceuticals (20%) and medical devices market (9%) as of fiscal 2020.

## Classification Of Hospitals



## Classification of hospitals by facilities/ services offered

	Primary care	Secondary care	Tertiary care
Services	Provides all services as required for the first point of contact	Provides all services as required, including organised medical research	Provides all services as required, including provision for experimental therapeutic modalities and organised research in chosen specialities
Multi-disciplinary	Yes	Yes	Single- or multi-speciality
Type of service	Only medical services and excludes surgical services	Overall medical and surgical services	Complex surgical services with sophisticated equipment
Type of patient	Only outpatient	Inpatient and outpatient	Primarily inpatient
No of beds	0 beds	50-200 beds	>200 beds
Dependent on	Secondary and tertiary care hospitals for further diagnosis and support	Tertiary care hospital for diagnostic and therapeutic support on referral and for patient transfer	Tertiary care/secondary hospital for referrals for its workload
Investment	Low investment required	Medium	High



## Classification based on complexity of ailment

Healthcare delivery may also be classified as primary, secondary and tertiary, on the basis of the complexity of ailment being treated. For instance, a hospital treating heart diseases may be classified as a primary facility if it addresses conditions such as high cholesterol; as a secondary facility if it treats patients suffering strokes; or as a tertiary facility if it deals with cardiac arrest or heart transplants.

Ailment/ condition	Primary	Secondary	Tertiary
Acute infections	Fever	Typhoid/ jaundice	Hepatitis B,C
Accidents/ injuries	Dressing	Fracture	Knee/ joint replacements / brain haemorrhage
Heart diseases	High cholesterol	Strokes	Cardiac arrest/ heart attacks/ heart transplantation/ heart defects like hole in heart
Maternity	Diagnosis/ check-ups	Normal delivery/ caesarean	Normal delivery/ caesarean/ post-delivery complications such as brain fever
Cancer	Lump diagnosis/ check-ups	Tumour – medical, surgical, and radiation therapy	Medical, surgical and radiation therapy

Source: CRISIL Research

Classification based on ownership

## Review Of Business Models For Healthcare Delivery

### Emerging business models



### Lease contracts

In the hospitals sector, the ownership model has become costly because of the sharp increase in land prices, especially in metros and tier 1 cities, over the past few years. This has compelled private players to look for alternative models such as lease contract. In a lease contract, the land owner develops the hospital building as per specifications given by the private player, who, in turn, enters into a long-term lease agreement with the land owner. For example, Apollo Hospitals has acquired land and building on lease from Orient Hospital, Madurai, Tamil Nadu, for 60 years. However, lease renewals pose a major risk for private players.

### O&M contracts

Under this model, a large private player (or a hospital chain) undertakes a contract for managing a standalone hospital and overseeing functions such as marketing, operations, finance, and administration. In return, the private player receives a fixed annual management fee and share in revenue or profits from the standalone hospital's owners. Apollo and Fortis (with Cauvery Hospital in Mysuru in Karnataka) have entered into such contracts to expand their base in India.

## Medicity (one-stop centres)

Medicity is an integrated township of super-speciality hospitals, diagnostic centres, medical colleges, research and development (R&D), ancillary, and supporting facilities. The concept of medicity is based on models already operating in countries such as Scotland, the US, France, and Algeria. In India it has Medanta (Gurgaon, Haryana), Narayana Hrudayalaya (Bengaluru, Karnataka), and Chettinad Health City (Chennai, Tamil Nadu). However, the success of a medicity depends on its location and the ability to attract patients. Due to large land requirements, health cities are often located on the outskirts of a city and, hence, attracting patients could be a challenge unless transportation is available.

## Franchise arrangements

In this model, franchisees obtain the premises (owned or leased) and infuse capital (both fixed and working), while the franchisor lends the brand name to the healthcare facility for a fee. The franchisor has to ensure that the service quality is maintained across all healthcare centres that use its brand. It may also help the franchisee in training and recruiting staff, procuring equipment, designing the facility, etc. In India, Apollo Hospitals has expanded its network of primary clinics through this model.

## Expansion into tier 2/ 3 cities through primary and secondary hospitals

Private players are now foraying into tier 2 and 3 cities as income levels in these cities are fast catching up with those in metros and tier 1 cities, and these regions hold a big share of unmet healthcare demand. Some of the major hospital chains are also expanding into these regions at different price formats, thereby creating a continuum of care, with provision of higher super specialty services in metros/ tier 1 locations. KIMS hospitals have also expanded to tier-II cities in Andhra Pradesh like Anantapur, Kurnool, Vizag amongst others.

## Emerging Technologies In Healthcare Delivery

The healthcare industry, like other industries, is constantly evolving in terms of technology. Developments in information technology have helped create systems that ensure faster and reliable services. While, on the one hand, these systems help increase reach and quality of healthcare delivery systems across the country, on the other, they enable healthcare delivery providers to improve efficiency by helping them in resource planning, maintaining patient records, etc. CRISIL Research expects the advent of 5G, smartphone penetration, and increasing health-conscious population to deepen digital healthcare penetration.

## Electronic health records (“EHRs”)

EHRs are designed to manage detailed medical profile and history of patients such as medication and allergies, immunisation status, laboratory test results, and radiology images. EHRs can be shared between multiple systems allowing doctors from various specialties and hospitals to share the same set of patient data. This feature helps improve coordination between doctors, saves time, and prevents redundancy of recreating medical records.

## Artificial Intelligence (AI) and blockchain

Healthcare establishments like hospitals are looking at opportunities to deploy AI or/and blockchain in improving their operating efficiency – scheduling appointments depending on the gravity of the issue, healthcare monitoring, etc, thereby minimising human error through technological intervention. For instance, NITI Aayog has extended its support to an AI-based project - Radiomics, which is also supported by Tata Memorial Centre Imaging Biobank.

## Radiology information system

RIS is a tool that allows managing digital copies of medical imagery such as X-ray, MRI, ultrasound, and associated data on a network. RIS is used by doctors to access medical imagery data from multiple locations. It is connected to medical equipment such as X-ray, MRI and ultrasound machines, which generate diagnosis results in the form of images and graphs. Implementation of RIS allows hospitals eliminate the need of generating and maintaining medical imagery on expensive films. RIS enable hospitals to store complete radiology history of patients together. This feature allows generating detailed analytical reports on patient's medical history.

## Clinical decision support system

CDSS is a software designed to assist doctors in taking decisions pertaining to the diagnosis and treatment of patients. A CDSS is supported by a large database that has detailed information on ailments with data aspects ranging from symptoms to diagnosis. The database is supported by a set of rules that help generate accurate results for the query made by the user. It also contains patient specific information such as medical history, allergies, etc, which helps doctors to make effective decisions on the treatment. CDSS databases are open-ended to allow addition of information on newly discovered diseases, procedure and medications, rectification of erroneous procedures, and updating of patient information.

## Mobile-based application

Healthcare delivery is also seeing an influx of mobile-based applications (mobile apps) to assist doctors as well as patients. These apps provide features such as self-diagnosis, drug references, hospital/doctor search, appointment assistance, electronic prescriptions, etc. While certain apps allow doctors to obtain information on drugs, dosage, contradictions, disease/ condition references and procedures; others allow patients to locate doctors, fix appointments, and opt for video consultations.

## Telemedicine

Telemedicine is a technology designed to improve accessibility of healthcare services from remote locations. Telemedicine, through its extensive use of information technology, creates a connection between doctors at the main hospital and patients at remote locations or telemedicine centres. The doctor analyses the patient through telephonic conversation or video conferencing and is assisted by a junior doctor or health worker who is physically present at the telemedicine centre. The junior doctor physically examines the patient and conveys the information, based on which the doctor confirms the diagnosis and prescribes medication.

## Robotic surgery

Robotic surgery or robot-assisted surgery (RAS) is a surgery conducted by using a robotic arm that is controlled electronically by a control pad. The pad may be located at a local or remote place and is equipped with high-definition cameras allowing surgeons to take a closer look at the areas being operated. Since RAS can be performed from remote locations, it allows patients to avail the treatment from the desired specialist surgeons across the globe without having to travel.

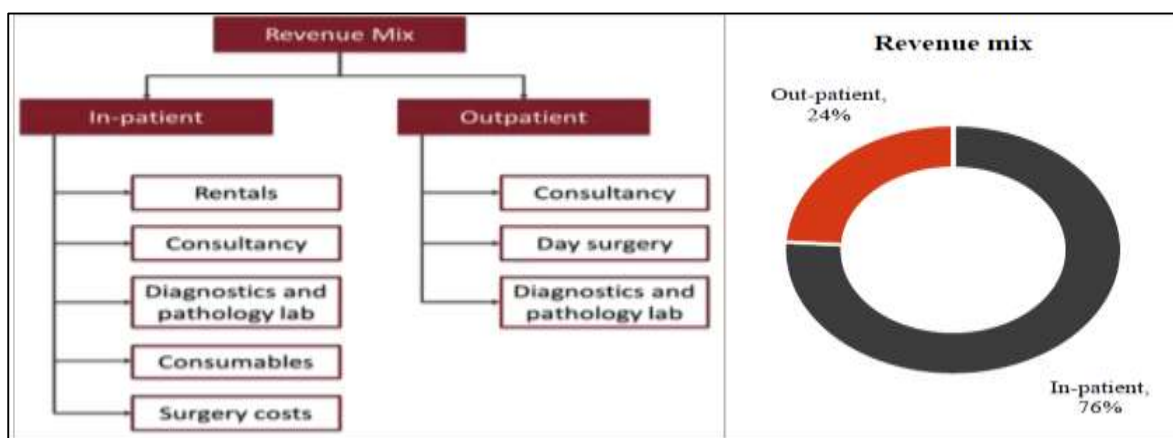
## Wearables and sensors

With awareness on healthcare increasing, people have started adopting wearables and sensors that keep a track of the vitals of the user. Wearables and sensors also have data about the user's historical health records and sends out alerts in case of any irregularities. Some sensors are used solely from a curative healthcare perspective, to lead a healthy life with a proper fitness routine.

## Revenue And Cost Structure Review Of Hospitals

### Hospitals derive bulk of their revenue from IPD

The primary revenue streams of hospitals are the IPD and out-patient department (OPD) segments. Typically in most hospitals, the OPD contributes to three-fourths of total volumes; whereas, the IPD accounts for as much as 76% of the overall revenue. This ratio could vary with hospitals, depending on the type of services rendered and the ailment mix.



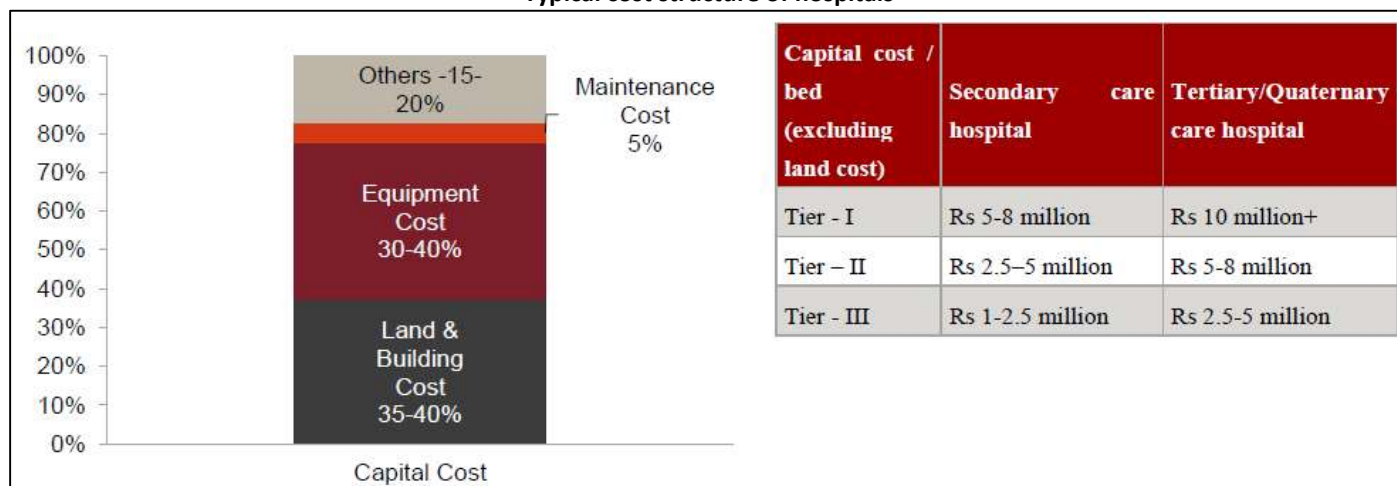
### Ailment-wise realisation

Ailment	ALOS	Remarks
Cardiac	5 days	In complex, surgical cases, ALOS is 7-8 days Angiography – day care; and angioplasty – 2 days
Orthopaedics	3-4 days	
Oncology	5-6 days	Hospitalisation is for surgical cases only. For chemotherapy, there are day-care beds and for radiotherapy, no stay is required
Neurosurgery	8-10 days	Would vary on case-to-case basis depending on the complexity of the case
Ophthalmology	1 day	Day care

## Capital costs

For secondary care hospitals in tier-I cities, the capital costs would hover around Rs 5-8 million per bed and the costs for superspecialty tertiary care hospitals would be higher as high-end technology and equipment costs are involved. Use of imported equipment can further drive up equipment costs. Capital costs to build tertiary care hospitals in tier-I cities are in the range of Rs 10-12 million per bed, excluding land cost. For a secondary care hospital in tier II cities, the capital cost would hover around Rs 2.5-5 million per bed followed by Rs 1-2.5 million per bed in the remaining Indian cities and towns (other than tier I & tier II). The table below depicts the capital cost per bed across tier-I, II & III cities for secondary and tertiary care hospitals.

Typical cost structure of hospitals



The two key capital cost components are land and building development costs and equipment costs.

**Land and building costs:** These costs usually form 35-40% of the total project cost. Land cost usually constitutes 20-30% of the total project cost as land cost varies with location. In some cases, land is offered at a concessional rate by the government. However, after obtaining land at cheaper rates, hospitals may have contractual obligations to treat a certain percentage of patients (belonging to the lower income category) free of charge and/ or at a subsidised rate every year.

**Equipment costs:** These costs form 30-40% of the total project cost (subject to variations depending on the sophistication of the equipment purchased). MRI, linear accelerators and CT scan machines are some of the expensive equipment, each costing Rs. 50-100 million. As these equipment rapidly become obsolete, hospitals need to set aside resources periodically for technology upgradation (as it directly impacts patient outcomes). Moreover, the maintenance cost for high-end equipment is typically around 5% of the capital costs. In the case of tertiary care hospitals, most of the high-end diagnostic and surgical equipment are imported. Equipment costs vary across hospitals, depending on the ailment type the hospital specialises in.

## Tier II cities hold good potential for players to expand

Tier-II cities, such as Jaipur, Rajasthan and Indore, Madhya Pradesh indicate comparatively higher bed densities due to the presence of large number of hospitals whereas in other tier-II cities, such as Bhubaneswar in Orissa, Chandigarh, Nellore and Vishakhapatnam in Andhra Pradesh and Lucknow in Uttar Pradesh, there are lesser number of hospital beds compared to the population they cater to. However, tier-II cities like Indore in Madhya Pradesh, located at the centre of India, still holds a good potential to expand further in terms of healthcare facilities because of demand arising from both within the city and districts/cities of neighbouring states. On the other hand, cities such as Bhubaneswar in Orissa and Chandigarh that lack sufficient number of hospitals also have room for players in the healthcare services to strengthen their foothold and improve healthcare infrastructure of these cities.

## Increasing penetration of hospital chains in tier 2 and 3 locations

The Indian healthcare delivery system has seen consolidation in recent years. A highly competitive industry, coupled with tightening of healthcare regulations, has made it difficult for smaller players in the industry to stay profitable. Larger hospital brands typically have stronger financial discipline and negotiating power with suppliers, better ability to attract medical talent, and greater capital and administrative resources to meet these needs over standalone hospitals. Many of the established players in the healthcare delivery industry follow inorganic growth to expand into the geographies where they have limited presence. In terms of supply creation, major hospital chains have expanded into the next level of creamy tier 2 and 3 locations (with ~67% aggregate bed additions by 10 large hospitals players in the past four years being in these areas). KIMS Ltd has acquired four hospitals over the last four years to further strengthen presence in Andhra Pradesh and Telangana, across tier-II micro-markets in Andhra Pradesh such as Ongole, Kurnool, Anantapur and Vizag. Rise in demand for health infrastructure, modern technologies and multi-disciplinary healthcare have been some of the key driving factors for consolidation in the industry. Investment by private equity (PE) players is also gaining traction. Majority of the PE deals in the industry in the past 2-3 years have been towards hospital portfolio consolidation, also enabling formation of regional clusters that provide base for further expansion and consolidation. Recently, Manipal Health acquired 100% stake in Columbia Asia hospitals, strengthening its presence in southern India. IHH health also has gained stake in Fortis Healthcare in 2018. In the past two years, deals worth ~Rs. 126 billion and ~Rs. 22 billion have taken place in multi-speciality and single-speciality hospitals, respectively.

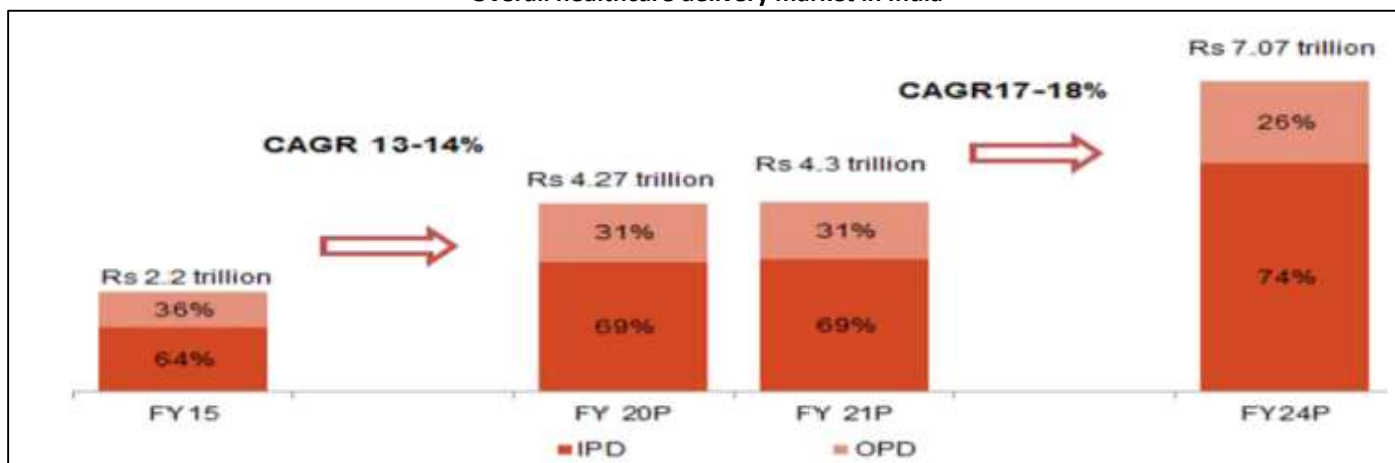
## Review And Outlook

### Momentary blip for private hospitals this fiscal; but poised for robust growth in the medium term

Barring the momentary setbacks in fiscal 2021, CRISIL Research estimates the Indian healthcare delivery industry to post a healthy 17-18% CAGR between fiscals 2021 and 2024, driven by strong fundamentals, increasing affordability and Ayushman Bharat Yojana.



## Overall healthcare delivery market in India



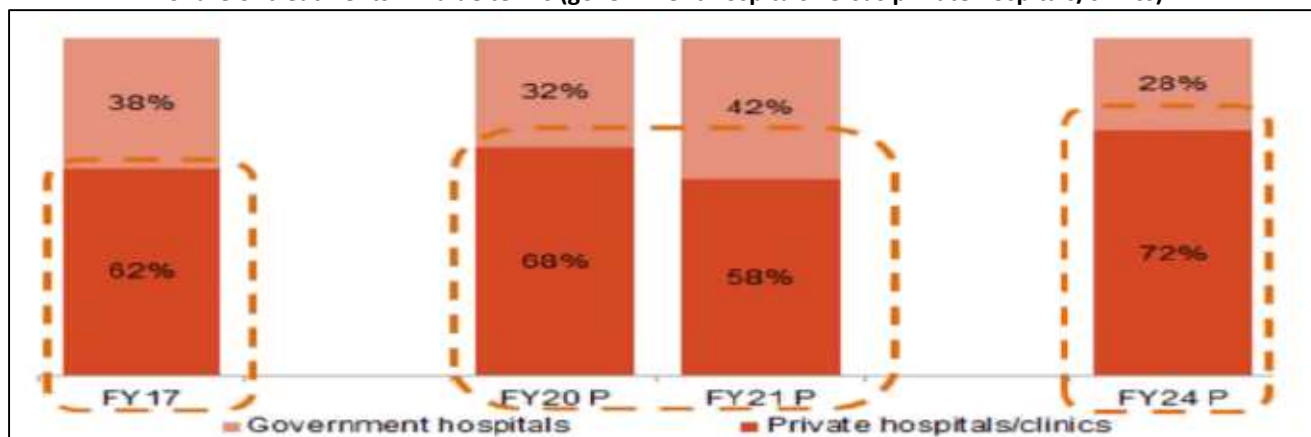
### The Indian Healthcare delivery market is estimated at Rs. 4.3 trillion in fiscal 2021

CRISIL Research estimates the Indian healthcare delivery market at Rs. 4.3 trillion in value terms and 1.7 billion treatments in volume terms (inclusive of both in-patient and out-patient) in fiscal 2021, with the growth being contributed by the increased government expenditure onto the sector to combat Covid-19 as private hospitals are expected to witness a decline in revenues. In value terms, the IPD is expected to account for nearly 69%, while OPD is likely to account for the remaining. Though in terms of volumes, OPD is estimated to outweigh IPD volumes, with the latter contributing the bulk of the revenues to healthcare facilities. The share of IPD (in value terms) is expected to grow from 69% in the current fiscal year to nearly 74% in fiscal 2024.

### Healthcare delivery industry to grow 17-18% over next four years

With renewed impetus from the PMJAY, the healthcare delivery market is expected to log a CAGR of 17-18% and reach Rs. 7.07 trillion in fiscal 2024. Over the last four years, major hospital chains have added supply (~67% of their incremental supply during the period) in Tier-2 and -3 locations, to create a referral network into their main centre by tapping into the under-served creamy Tier-2 areas. The other contributors to demand are more structural in nature, such as increase in lifestyle-related ailments, growing medical tourism, rising incomes and changing demographics. In India, healthcare services are provided by the government and private players, and these entities provide both IPD and OPD services. However, the provision of healthcare services in India is skewed towards the private players (both for IPD and OPD). This is mainly due to the lack of healthcare spending by the government and high burden on the existing state health infrastructure. As of fiscal 2020, around 68% of the treatments in value terms were carried out by private hospitals/clinics in the country. The skew is more towards the private players owing to the expansion plans of private players being centered on it, further supported by coverage of hospitalisations under the PMJAY scheme. However, going forward, the share of private hospitals/clinics in treatments (in value terms) is expected to increase to nearly 72% by fiscal 2024. The additional demand to be unleashed by the recently launched PMJAY can be met only by private participation as government facilities are already over-burdened. Hence, going forward, a major share of treatments would be inclined more towards the private sector. Further, in fiscal 2021, revenues of private hospitals are expected to decline by 10-15% due to reduction in both out-patient and inpatient footfalls (with Occupancy rate (OR) falling to 25-30% in April). The extent of revenue loss is wholly dependent on recovery in footfalls and resolution of deferred surgeries, as the spread of Covid-19 cases is varied across the country. Between the two halves of the fiscal, the second half is expected to see much of the unmet demand coming onto the system.

### Share of treatments in value terms (government hospitals versus private hospitals/clinics)



## Trade-off between Covid-19 and non-Covid-19 care sullies industry outlook in near term

As the nation continues to grapple with COVID-19, like others sectors, the healthcare delivery market is also witnessing a loss of revenue, despite this being a healthcare-related emergency. Till date, the major burden of combating this contagious virus has been handled by the government, with some private facilities being roped in to meet the shortfall in bed infrastructure. The nationwide lockdown in response to the pandemic restricted movements of people impacting OPD footfalls at hospitals as well as in-patient conversion from OPD. This also ensured that conveyance of people to urban hospitals was restricted. Many private hospitals chose to delay elective surgeries (some had shut operations for some time) in order to minimise the risk to patients, especially those, whose immunity was already compromised due to varied illnesses, thereby leading to a drop in occupancy levels. Some hospitals started teleconsultations and adopted telemedicine for OPD treatments (at similar costs), but have been unable to shift their entire OPD patient load onto this mode due to factors such as patients being unaware of this facility and some still preferring the traditional face-to-face consultation.

As per primary interactions, occupancy in private hospitals had fallen up to 25-30% in April, but witnessed a gradual pick-up in the following months. Most of the pent-up demand is likely to be met in the second half of the fiscal. Major listed hospitals have seen an improvement in occupancy, both from deferred treatments as well as COVID treatments. However, a renewed surge in COVID cases and consequent diversion of critical beds towards COVID care could hamper revenue prospects from regular channels that are a higher revenue contributor. Visa curbs and grounding of inbound airlines is expected to wipe out revenues (to the tune of 8-10%) from the high-margin medical tourism business for major hospitals in metros. Prospects for this vertical remain bleak this fiscal, as people would continue to exercise caution while travelling even though travel bans have been lifted and India has entered into a travel bubble arrangement with some countries.

As COVID has curved downwards, return to normalcy has begun in most parts of the country during the second half of the fiscal. Even as private hospitals find it difficult to set course to their erstwhile growth levels, hospitals focused on critical specialties are expected to be able to recoup their lost revenues faster, making them relatively lesser vulnerable to the pandemic at the end of the fiscal. As the impact of COVID-19 is touted to be greater in urban areas, where major hospital chains have greater presence, smaller hospitals may stand to benefit from volume impetus provided by government schemes as this ensures at least some level of occupancy. The impact would be limited further for those hospitals who have tighter control on their operating costs (hospitals with higher EBITDA/bed). CRISIL Research estimates revenues of private hospitals to decline by 10-15% in the near term. This decline would vary across geographies, with a caveat that private hospital revenues could witness a potential upside from increasing COVID cases being treated at private hospitals (which could bring in revenues, but price capping will restrict any gains on margins), as levels, recovery could be delayed vis-a-vis IPD treatments.

## Private hospitals have also witnessed higher demand due to increase in Covid cases

Private players have also fought the battle against Covid-19. They reserved some of their beds exclusively for treating Covid patients. Some private players have gone ahead and converted their whole facility into a Covid centre, adhering to the standard operating procedures.

## Hospital industry margins to erode by 400-500 bps this fiscal

Loss of revenue will translate into margin erosion for hospitals as the sector has higher share of fixed operating costs. CRISIL Research estimates an erosion of 400-500 basis points in margins in fiscal 2021. While the government has released an emergency fund of ~Rs. 15,000 crore for a three-year period to procure personnel protective equipment (PPE), N-95 masks and fund Covid treatment costs, an observation has been that states which traditionally had relatively inferior government bed density have not been able to combat or control the pandemic to the extent of states that have a better public healthcare infrastructure in place. And with some of those former states witnessing a faster increase in the number of cases and subsequent increase in fatalities (the national case fatality rate is 3-5%), the reliance of these states on the private sector will be greater for testing as well as treatment facilities. Some of the private facilities in places such as Mumbai and Pune in Maharashtra, and Ahmedabad in Gujarat have been converted into Covid-only hospitals. As of October 30, 2020, insurers received claims worth Rs. 7,700 crore owing to the rising number of cases in the country, with the average claim translating to ~Rs. 1.5 lakh. The decline in average claim amount from ~Rs. 2 lakh in May could be attributed to price capping measures adopted by some state governments.

## Online spends during COVID-19 towards healthcare sector

On account of the nationwide lockdown imposed to contain the COVID-19 pandemic in India during the last week of March 2020, there has been higher dependence on the internet to serve basic healthcare needs of individuals. Convenient, affordable and personalised treatments have been preferred as opposed to traditional hospital-based treatments. Increasing use of e-pharmacy websites/apps has been evident as the number of users using e-pharmacy website/apps shot up nearly 2.5-3 times between March and June 2020. E-consultation/tele-medicine also gained traction as they omitted the need to visit hospitals. As per a recent report 'Rise of Telemedicine - 2020', published by the Telemedicine Society of India, the number of people using online health consultations increased three times between March to November 2020. The advent of 5G, artificial intelligence and machine learning is expected to further accelerate online spending towards healthcare.

## Key Growth Drivers Of Healthcare Delivery Industry

India lags global benchmarks in healthcare infrastructure, both in terms of physical infrastructure as well as personnel. However, the picture is bleak even on the healthcare indicators front. In case of life expectancy at birth, which reflects the overall mortality of the population, India stands at a distant 68.8 years in comparison with the global average of 71.4 years. This is despite life expectancy at birth growing at 0.6% CAGR between 2000 and 2017.

## Government policies to improve healthcare coverage

The government has raised its healthcare budget by ~10% for fiscal 2021 to Rs. 69,000 crore, keeping in line with its goal to raise its healthcare spending to 2.5% of GDP by 2025 under the National Health Policy, 2017. According to the government, inpatient hospitalisation costs have risen by 300% over the past 10 years and nearly six million families had to sell assets or borrow money to undertake treatment, thereby driving them to poverty

## Strengthening of physical health infrastructure: Sub-centres

Upgradation of 1.5 lakh 'Health and Wellness' centres to provide comprehensive healthcare, including coverage of noncommunicable diseases and maternal and child health services. These centres would also provide essential medicines and diagnostic services free of cost. Inclusion of new ailments under the ambit of the scheme would go a long way in ensuring focus on preventive care as opposed to only curative care. A strong referral network is vital in providing a continuum of care.

## Strengthening of physical health infrastructure: Government hospitals

Setting up of 24 new government hospitals and medical colleges and upgradation of existing district hospitals. The intention is to have at least one medical college for three parliamentary constituencies. The government already has a scheme in place, Pradhan Mantri Swasthya Suraksha Yojana (PMSSY), to correct the geographical imbalance in the availability of tertiary healthcare. Six All India Institute of Medical Sciences (AIIMS), one each at Patna (Bihar), Raipur (Chhattisgarh), Bhopal (Madhya Pradesh), Bhubaneswar (Odisha), Jodhpur (Rajasthan), and Rishikesh (Uttarakhand), have been set up. An AIIMS is under construction at Rae Bareilly (OPD services have started) and 13 new ones have been announced by the government. The aim is to tackle issues of inadequate healthcare infrastructure and personnel.

## Expansion of health insurance coverage: Ayushman Bharat

This involves a provision of Rs. 0.5 million assured healthcare coverage to each family that is eligible, selected on the basis of inclusion under the Socio Economic Caste Census (SECC) list. Nearly 10.74 crore families will be covered under the scheme. All existing central and state health insurance schemes will be subsumed under Ayushman Bharat. The model of implementation of the scheme (via insurance company, trust or mixed model) is the state's prerogative.

However, healthcare delivery at affordable prices would require a shift in focus towards capitalising on volumes (with nearly 165 million new people coming under a healthcare scheme) rather than on value (via margins). The government has started an initiative of National Health Stack (NHS), a shared digital framework for both private and public hospitals. It is expected to digitise all health records and keep track of all details concerning healthcare enterprises in the country. The scheme is well-intentioned and holds huge potential for the healthcare delivery and allied industries, but the mechanism for quality control and monitoring along with raising resources for implementation will be a key monitorable.

## With life expectancy improving and changing demographic profile, healthcare services are a must

With improving life expectancy, the demographic profile of the country is also witnessing a change. As of 2011, nearly 8% of the Indian population was of 60 years or more, and this is expected to surge to 12.5% by 2026. However, the availability of a documented knowledge base concerning the healthcare needs of the elderly (aged 60 years or more) remains a challenge. Nevertheless, the higher vulnerability of this age group to health-related issues is an accepted fact.

## Rising income levels to make quality healthcare services more affordable

Though healthcare is considered a non-discretionary expense, considering that ~83% of households in India had an annual income of less than Rs. 0.2 million in fiscal 2012, affordability of quality healthcare facilities remains a major constraint. Growth in household incomes and, consequently, disposable incomes, are critical to the overall growth in demand for healthcare delivery services in India. The share of households falling in the income bracket above Rs. 0.2 million is expected to go up to 35% in fiscal 2022 from 23% in fiscal 2017. They provide a potential target segment (with more paying capacity) for hospitals.

## Increasing health awareness to boost hospitalisation rate

Majority of healthcare enterprises in India are more concentrated in urban areas. With increasing urbanisation (migration of population from rural to urban areas), awareness among the general populace regarding presence and availability of healthcare services for both preventive and curative care is expected to increase. CRISIL Research, therefore, believes that the hospitalisation rate for in-patient treatment as well as walk-in out-patients will improve with increased urbanisation and increasing literacy.

## Growing health insurance penetration to propel demand

Low health-insurance penetration is one of the major impediments to the growth of the healthcare delivery industry in India, as affordability of quality healthcare facilities by the lower-income groups remain an issue. Health insurance coverage has increased from 17% in fiscal 2012 to 36% in fiscal 2020. As per the Insurance Regulatory and Development Authority (IRDA), nearly 499 million people have health insurance coverage in India (as of fiscal 2020), as against 288 million (in fiscal 2015), but despite this robust growth, the penetration in fiscal 2020 stood at only 36%.

## Population-wise distribution among various insurance businesses (million)

As is evident, the share of government-provided insurance is greater than that due to insurance policies availed of by individuals not covered under any schemes. Government or government-sponsored schemes, such as the Central Government Health Scheme (CGHS), Employee State Insurance Scheme (ESIS), Rashtriya Swasthya Bima Yojana (RSBY), Rajiv Arogyasri (Andhra Pradesh government), and Kalaigarnar (Tamil Nadu government) account for ~75% of health insurance coverage provided. The remaining is through commercial insurance providers, both government (Oriental Insurance and New India Assurance.) and private (ICICI Lombard and Bajaj Allianz) players.

## Healthcare infrastructure across key micro-markets in andhra pradesh and Telangana

### Hyderabad

Based on hospital beds available per thousand people, Hyderabad in Telangana has better healthcare facilities than Andhra Pradesh and Telangana. The number of beds per thousand people in Hyderabad is 3.6, which is higher than the state average of both Andhra Pradesh and Telangana. Apollo Hospitals, Yashoda Hospitals, and Global Hospitals are some of the key hospital chains in Hyderabad. Apollo Hospitals is one of the first corporate hospitals to be established in India. It has two hospital facilities in Hyderabad with a total bed capacity of 959. Yashoda Hospitals is a Hyderabad-based hospital chain having two facilities in Hyderabad with a bed capacity of ~904. Global Hospitals is a network of super-specialty hospitals specialising in organ transplants. It has two hospital facilities in Hyderabad with a total bed capacity of 500.

Secunderabad is the twin city of Hyderabad in the Indian state of Telangana. It has an estimated total population of around 0.2 million. Secunderabad is well-connected to all the cities in Telangana. KIMS Hospitals, Sunshine Hospitals, and Yashoda Hospitals are some of the key private hospitals in the city. KIMS Secunderabad is one of the largest private hospitals in India at a single location (excluding medical colleges) with a capacity of ~1,000 beds. KIMS Secunderabad has key department in areas of cardiac sciences, gastro sciences, orthopaedic sciences, renal sciences, oncological sciences, neuro sciences, mother & child, and organ transplantation, among others. It was the second hospital in the city of Hyderabad in Telangana to install a robotic system within its premises in June 2011. Sunshine Hospitals in Secunderabad is NABH-accredited, and it offers services across key specialties such as microvascular and reconstructive surgery, neurology, and orthopaedics. Yashoda Hospitals in Secunderabad with around 1,500 beds also offers services across key specialties such as cardiology, surgical oncology, orthopaedics, and vascular surgery. These hospitals also provide emergency admission services to patients. Emergency services form a crucial aspect of any hospital, as it is that medical treatment facility that specialises in acute medical care of patients. Patients are treated in an emergency room without any prior appointment. As on January 30, 2021, KIMS Secunderabad is the only hospital in Andhra Pradesh and Telangana to have an emergency department complying with NABH standards.

### Nellore (Andhra Pradesh)

Nellore, with a population of ~0.6 million, is one of the prominent cities in Andhra Pradesh. Nellore has around 45-50 hospitals and nursing homes with ~1,900 beds. KIMS Hospitals and Apollo Speciality Hospitals are some of the key private hospitals in the city. KIMS Nellore has a total bed capacity of 250 with six laminar flow operation theatres and six advanced intensive care units. It is one of the top-three hospitals in Nellore by bed capacity. Some of the key specialties offered by KIMS Nellore are cardiology, cardiothoracic and cardiovascular surgeries, and endocrinology. Apollo Hospitals' facility in Nellore has a total of 200 beds and is equipped with cath lab and cardiac surgery operation theatres. The facility also houses two specially equipped labour suites. Some of the key specialties provided by Apollo Hospitals Nellore include haematology, endoscopy, and colonoscopy.

### Rajahmundry (Andhra Pradesh)

Rajahmundry has a total population of ~0.6 million. It is estimated to have a total of 50 hospitals and nursing homes with ~1,650 beds. KIMS Hospitals and Delta Hospitals are some of the key private hospitals in the city. KIMS Rajahmundry is a multi-specialty hospital having a total bed capacity of 180. It has three operation theatres and an advanced intensive care unit. KIMS Rajahmundry is the largest private hospital in Rajahmundry in terms of bed capacity as of January 2021. Some of the key specialties offered by KIMS Rajahmundry are joint replacements, medical gastroenterology, and cardiothoracic and cardiovascular surgeries. Delta Hospitals in Rajahmundry has a total of 220 beds and is equipped with cath lab and cardiac surgery operation theatres. Some of the key specialties provided by Delta Hospitals Rajahmundry are orthopaedics, joint replacements, and vascular and endovascular surgeries.

### Srikakulam (Andhra Pradesh)

Srikakulam, with a population of ~0.2 million, has around 30 hospitals and nursing homes with ~1,100 beds. KIMS hospital is the largest private hospital in Srikakulam by bed capacity as of January 2021. KIMS Srikakulam is a multi-specialty hospital with a total bed capacity of



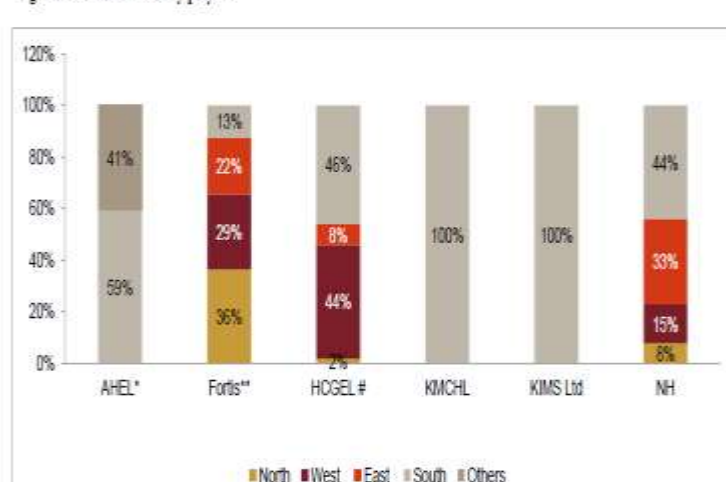
200. It has five operation theatres and an advanced intensive care unit. Some of the key specialties offered by KIMS Srikakulam are cardiothoracic and cardiovascular surgeries, endocrinology, infertility treatment, gastrointestinal oncology, and joint replacements.

## Vizag (Andhra Pradesh)

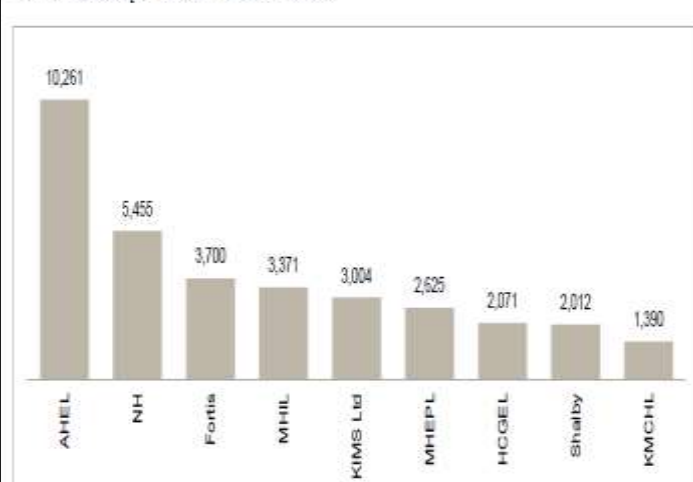
Vishakhapatnam is one of the prominent industrial centres of Andhra Pradesh. It has a population of nearly 1.8 million. Vishakhapatnam is estimated to have around 130 hospitals with ~5,450 beds. KIMS Hospitals, Care Hospitals, and Apollo Hospitals are some of the key private hospitals in the city. KIMS Vishakhapatnam is a multi-specialty hospital with a total bed capacity of 434. It has 12 operation theatres and a blood bank. Some of the key specialties offered by KIMS Vishakhapatnam are cardiology, hepatobiliary surgery, medical oncology, and gynaecological oncology. Care Hospitals in Vishakhapatnam has three facilities with a total bed capacity of 307. Some of the key specialties provided by Care Hospitals Vishakhapatnam are cardiology, gastroenterology, and orthopaedics. Some of the key specialties of Apollo Hospitals Vishakhapatnam are cardiothoracic surgery, orthopaedics and joint replacements, and urology.

## Competition scenario:

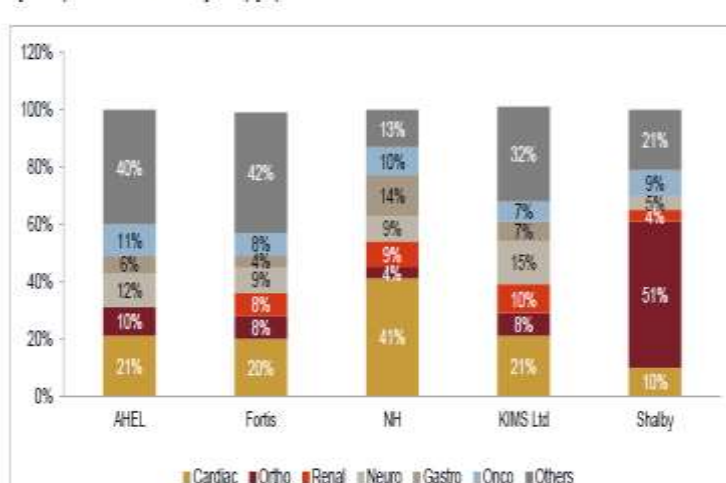
Regional revenue mix of key players



Total number of hospital beds available as of fiscal 2020



Speciality-wise revenue break-up of key players as of fiscal 2020



9 months period (YTD) financials for fiscal 2021

Key financials (\$M FY20)	Operating income (\$m million)	Y-o-Y growth (%)	Income from healthcare service (\$m million)	EBITDA (\$m million)	Y-o-Y growth (%)	PAT (\$m million)	Y-o-Y growth (%)
AHEL	76,921	-4%	34,634	3,672 **	-56%	(531)	-113%
Fortis	21,777	-21%	21,463	2,773	-53%	(1,185)	-188%
HCGEL	7,154	-13%	7,154	998	-30%	(1,073)	NM
KIMCHL	4,900	-8%	4,800	1,424	3%	508	-17%
KIMS Ltd	9,714	13%	9,714	2,760	48%	1,449	68%
MHIL *	25,400	-16%	25,400	1,110	-72%	(2,040)	-344%
NH	17,446	-27%	17,446	534	-84%	(823)	-177%
Shalby	2,770	-27%	2,770	612	-38%	319	-39%

## Key Concerns:

- Highly dependent on healthcare professionals, including doctors that it engage on a consultancy basis, and its business and financial results could be impacted if it is not able to attract and retain such healthcare professionals.
- The COVID-19 pandemic has affected KIMS' regular business operations and may continue to do so, depending on the severity and duration of the COVID-19 pandemic.
- Revenues are highly dependent on hospitals in Hyderabad (Telangana). KIMS is also significantly dependent on certain specialties for a majority of its revenues. Any impact on the revenues from these hospitals or earnings from top specialties could materially affect the business, financial condition, results of operations and cash flows.

- KIMS has ceased operations at some of its facilities in the past, and may continue to do so in the future.
- One of the hospital buildings taken on lease, KIMS Kondapur, does not possess the requisite occupancy certificate from the relevant municipal authority and fire NoC from Telangana State Disaster Response and Fire Services Department. It may be subject to adverse regulatory action and may be required to vacate this facility, which may materially and adversely affect its business, reputation and financial condition.
- Certain lands on which KIMS hospital buildings and ancillary facilities are operating are not owned by it and not leased on a perpetual basis. Any adverse impact on the title or ownership rights of the owner or breach of the terms or nonrenewal of the license agreement may lead to disruptions and affect its business operations.
- Indebtedness and the conditions and restrictions imposed by KIMS financing arrangements may limit the ability to grow business and may adversely impact the business.
- KIMS operates in a highly regulated industry, and compliance with applicable safety, health, environmental and other governmental regulations and any violations of existing regulations may adversely affect its business, results of operations and cash flows.
- Ability to provide affordable healthcare to KIMS patients is dependent its ability to effectively estimate, price and manage healthcare costs.
- Business depends on the strength of brand and reputation. Failure to maintain and enhance brand and reputation, and any negative publicity and allegations in the media against KIMS may materially and adversely affect the level of market recognition of, and trust in, its services, which could result in a material adverse impact on the business, financial condition, results of operations and prospects.
- Faces intense competition from other healthcare service providers. If it is unable to compete effectively, its business, results of operations and cash flows may be materially and adversely affected.
- If KIMS is unable to maintain bed occupancy rates at sufficient levels, it may not be able to generate adequate returns on its capital expenditure, which could materially and adversely affect the operating efficiencies and its profitability
- If KIMS is unable to keep pace with technological changes, new equipment and service introductions, changes in patients' needs and evolving industry standards, its business and financial condition may be adversely affected.
- KIMS may fail to protect its intellectual property rights and may be exposed to misappropriation and infringement claims by third parties, either of which may have a material adverse effect on its business and reputation.
- KIMS may not be successful in expanding its operations to other parts of India which could have an adverse effect on its business, financial condition, results of operations and cash flows.
- KIMS is exposed to legal claims and regulatory actions arising from the provision of healthcare services and may be subject to liabilities arising from claims of malpractice and medical negligence which could materially and adversely affect its reputation and prospects.
- Relies on third party suppliers and manufacturers for its supplies and equipment. Failure of such third parties to meet their obligations could adversely affect its business, results of operations and cash flows.
- KIM may not be able to grow its business due to a failure in successfully implementing all growth strategies, including due to a failure in managing its Subsidiaries which run certain of its hospitals, which could adversely affect the business, financial condition, results of operations and cash flows
- May not be able to successfully integrate acquisitions or investments, which may negatively affect the performance and respective contributions to the results of operations.
- Could be exposed to risks relating to the handling of personal information, including medical data.
- If KIMS fails to achieve favorable pricing on medical consumables, pharmacy items, drugs, and surgical instruments from its suppliers or are unable to pass on any cost increases to its payers, its profitability could be materially and adversely affected.

- Reforms in the healthcare industry and the uncertainty associated with pharmaceutical pricing and other matters could adversely affect the business, results of operations and cash flows.
- Adverse regulatory changes in the healthcare industry, including related to pharmaceutical pricing, could adversely affect KIMS' business, results of operations and cash flows.
- KIMS is vulnerable to failures of its information technology system, which could adversely affect the business.
- Failure to obtain or renew approvals, licenses, registrations and permits to operate KIMS business in a timely manner, or at all, may adversely affect the business, financial condition, results of operations and cash flows.
- Lack of health insurance in India may adversely affect KIMS' business, cash flows, results of operations and cash flows.
- Outsources some of the service functions to third-party contractors. Any lapse by such third party service providers may have adverse consequences on KIMS' business and reputation.
- Hospitals are susceptible to risks arising on account of fire and other incidents.
- If KIMS is unable to establish and maintain an effective internal control, its business and reputation could be adversely affected.
- Challenges that affect the healthcare industry will have an effect on KIMS' operations.
- Changing laws, rules and regulations and legal uncertainties, including tax laws and regulations, may adversely affect the business and financial performance.
- Business is dependent on the Indian economy. Any adverse development or slowdown in Indian economy may have an adverse impact on its business, results of operations and financial condition.
- Conflicts of interest may arise out of common business objects shared by KIMS, certain of our Group Companies and its Promoters, which may affect its business, results of operations and financial conditions.

## Profit & Loss

Particulars (Rs in million)	FY21	FY20	FY19
Revenue from Operations	13299.4	11226.5	9180.1
Other Income	101.7	60.8	58.6
<b>Total Income</b>	<b>13401.0</b>	<b>11287.3</b>	<b>9238.7</b>
<b>Total Expenditure</b>	<b>9590.5</b>	<b>8776.5</b>	<b>8370.5</b>
Purchase of medical consumables, drugs and surgical instruments	2826.4	2572.2	2169.3
(Increase)/ decrease in inventories of medical consumables, drugs and surgical instruments	62.9	-30.5	-67.2
Employee benefits expense	2202.1	1980.5	1630.3
Other expenses	4499.1	4254.4	4638.1
<b>PBIDT</b>	<b>3810.5</b>	<b>2510.8</b>	<b>868.2</b>
Interest	325.0	399.4	457.5
PBDT	3485.5	2111.4	410.7
Depreciation, amortization and impairment expense	695.4	706.1	564.6
<b>PBT</b>	<b>2790.2</b>	<b>1405.3</b>	<b>-153.8</b>
<b>Tax (incl. DT &amp; FBT)</b>	<b>735.4</b>	<b>254.5</b>	<b>334.3</b>
Net Current Tax	778.4	433.0	386.1
Deferred Tax	-33.0	-154.8	-54.0
Adjustments of tax relating to earlier years	-10.0	-23.7	2.2
<b>PAT</b>	<b>2054.8</b>	<b>1150.7</b>	<b>-488.1</b>
EPS (Rs.)	26.5	15.4	-6.6
Equity (Latest)	775.9	744.9	744.9
Face Value	10.0	10.0	10.0
OPM (%)	27.9	21.8	8.8
PATM (%)	15.5	10.3	-5.3

(Source:RHP)

## Balance Sheet

Particulars (Rs in million) As at	FY21	FY20	FY19
<b>Assets</b>			
<b>Non-current assets</b>			
Property, plant and equipment	7706.3	7488.8	7079.9
Capital work-in-progress	92.4	22.3	2.3
Goodwill	847.8	847.8	751.9
Other intangible assets	247.4	262.4	264.1
Right-of-use assets	509.3	560.8	556.1
Financial assets			
- Loans	163.7	47.2	39.8
- Other financial assets	28.5	1.1	24.4
Non-current tax assets (net)	103.7	386.6	328.0
Deferred tax assets (net)	29.4	14.2	38.0
Other non-current assets	121.1	129.5	374.1
<b>Total non-current assets</b>	<b>9849.6</b>	<b>9760.6</b>	<b>9458.6</b>
<b>Current assets</b>			
Inventories	240.9	303.8	268.6
Financial assets			
- Trade receivables	1098.2	1322.7	1232.7
- Cash and cash equivalents	521.3	405.1	80.6
- Bank balances other than above	2323.1	52.1	21.4
- Loans	22.6	17.5	15.2
- Other financial assets	235.0	54.3	87.6
Other current assets	70.9	42.8	32.4
<b>Total current assets</b>	<b>4512.0</b>	<b>2198.3</b>	<b>1738.5</b>
<b>Total assets</b>	<b>14361.5</b>	<b>11958.9</b>	<b>11197.1</b>
<b>Equity and Liabilities</b>			
<b>Equity</b>			
Share capital	775.9	744.9	744.9
Other equity	7861.4	5236.4	4661.7
<b>Equity attributable to equity holders of the Company</b>	<b>8637.3</b>	<b>5981.3</b>	<b>5406.6</b>
Non-controlling interests	124.6	133.1	262.5
<b>Total equity</b>	<b>8762.0</b>	<b>6114.3</b>	<b>5669.1</b>
<b>Liabilities</b>			
<b>Non-current liabilities</b>			
Financial liabilities			
- Borrowings	1846.0	2687.2	2427.3
- Lease Liabilities	433.4	455.5	455.2
- Other financial liabilities	5.6	7.1	5.8
Deferred tax liabilities (net)	358.3	356.7	515.7
Other non-current liabilities	12.4	12.9	13.5
Provisions	160.6	137.1	101.9
<b>Total non-current liabilities</b>	<b>2816.3</b>	<b>3656.5</b>	<b>3519.3</b>
<b>Current liabilities</b>			
Financial liabilities			
- Borrowings	552.7	101.1	175.5
- Lease Liabilities	25.6	24.0	28.3
- Trade payables			
<i>total outstanding dues of micro enterprises and small enterprises</i>	17.9	25.1	1.4
<i>total outstanding dues of creditors other than micro enterprises and small enterprises</i>	1300.8	1209.3	1039.2
Other financial liabilities	467.3	628.1	476.7
Provisions	104.9	73.5	60.5
Current tax liabilities (Net)	87.0	0.0	95.3
Other current liabilities	227.1	127.1	131.9
<b>Total current liabilities</b>	<b>2783.3</b>	<b>2188.1</b>	<b>2008.7</b>
<b>Total equity and liabilities</b>	<b>14361.5</b>	<b>11958.9</b>	<b>11197.1</b>

(Source:RHP)



## Disclaimer:

This report has been prepared by HDFC Securities Ltd and is meant for sole use by the recipient and not for circulation. The information and opinions contained herein have been compiled or arrived at, based upon information obtained in good faith from sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. This document is for information purposes only. Descriptions of any company or companies or their securities mentioned herein are not intended to be complete and this document is not, and should not be construed as an offer or solicitation of an offer, to buy or sell any securities or other financial instruments.

This report is not directed to, or intended for display, downloading, printing, reproducing or for distribution to or use by, any person or entity who is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, reproduction, availability or use would be contrary to law or regulation or what would subject HSL or its affiliates to any registration or licensing requirement within such jurisdiction.

If this report is inadvertently sent or has reached any person in such country, especially, United States of America, the same should be ignored and brought to the attention of the sender. This document may not be reproduced, distributed or published in whole or in part, directly or indirectly, for any purposes or in any manner.

Foreign currencies denominated securities, wherever mentioned, are subject to exchange rate fluctuations, which could have an adverse effect on their value or price, or the income derived from them. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies effectively assume currency risk.

It should not be considered to be taken as an offer to sell or a solicitation to buy any security. HSL may from time to time solicit from, or perform broking, or other services for, any company mentioned in this mail and/or its attachments.

HSL and its affiliated company(ies), their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.

HSL, its directors, analysts or employees do not take any responsibility, financial or otherwise, of the losses or the damages sustained due to the investments made or any action taken on basis of this report, including but not restricted to, fluctuation in the prices of shares and bonds, changes in the currency rates, diminution in the NAVs, reduction in the dividend or income, etc.

HSL and other group companies, its directors, associates, employees may have various positions in any of the stocks, securities and financial instruments dealt in the report, or may make sell or purchase or other deals in these securities from time to time or may deal in other securities of the companies / organizations described in this report. HSL or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

HSL or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from the date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction in the normal course of business.

HSL or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither HSL nor Research Analysts have any material conflict of interest at the time of publication of this report. Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. HSL may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report.

Research entity has not been engaged in market making activity for the subject company. Research analyst has not served as an officer, director or employee of the subject company. We have not received any compensation/benefits from the subject company or third party in connection with the Research Report.

HDFC securities Limited, I Think Techno Campus, Building - B, "Alpha", Office Floor 8, Near Kanjurmarg Station, Opp. Crompton Greaves, Kanjurmarg (East), Mumbai 400 042 Phone: (022) 3075 3400 Fax: (022) 2496 5066 Compliance Officer: Binkle R. Oza Email: [complianceofficer@hdfcsec.com](mailto:complianceofficer@hdfcsec.com) Phone: (022) 3045 3600

HDFC Securities Limited, SEBI Reg. No.: NSE, BSE, MSEI, MCX: INZ000186937; AMFI Reg. No. ARN: 13549; PFRDA Reg. No. POP: 11092018; IRDA Corporate Agent License No.: CA0062; SEBI Research Analyst Reg. No.: INH000002475; SEBI Investment Adviser Reg. No.: INA000011538; CIN - U67120MH2000PLC152193

Mutual Funds Investments are subject to market risk. Please read the offer and scheme related documents carefully before investing.

Disclaimer : HDFC securities Ltd is a financial services intermediary and is engaged as a distributor of financial products & services like Corporate FDs & Bonds, Insurance, MF, NPS, Real Estate services, Loans, NCDs & IPOs in strategic distribution partnerships. Investments in securities market are subject to market risks, read all the related documents carefully before investing. Customers need to check products & features before investing since the contours of the product rates may change from time to time. HDFC securities Ltd is not liable for any loss or damage of any kind arising out of investments in these products. Investments in Equity, Currency, Futures & Options are subject to market risk. Clients should read the Risk Disclosure Document issued by SEBI & relevant exchanges & the T&C on [www.hdfcsec.com](http://www.hdfcsec.com) before investing. Equity SIP is not an approved product of Exchange and any dispute related to this will not be dealt at Exchange platform.

**This report is intended for non-Institutional Clients only. The views and opinions expressed in this report may at times be contrary to or not in consonance with those of Institutional Research of HDFC Securities Ltd. and/or may have different time horizons. Mutual Fund Investments are subject to market risk. Please read the offer and scheme related documents carefully before investing.**

**Disclaimer:** HDFC Bank (a shareholder in HDFC Securities Ltd) is associated with this issue in the capacity Banker(s) to the Offer / Escrow Collection Bank(s) / Refund Bank(s) / Public Offer Account Bank and will earn fees for its services. This report is prepared in the normal course, solely upon information generally available to the public. No representation is made that it is accurate or complete. Notwithstanding that HDFC Bank is acting for Krishna Institute Of Medical Sciences Limited, this report is not issued with the authority of Krishna Institute Of Medical Sciences Limited. Readers of this report are advised to take an informed decision on the issue after independent verification and analysis.