Recommendations and Highlights
‘Healthcare Transformation: Driving India’s Economic Growth’

October 10-12, 2022

FICCI (Federation of Indian Chambers of Commerce and Industry), India’s apex industry chamber, has been organising its annual healthcare conference, FICCI HEAL since 2007 supported by Ministry of Health & Family Welfare and NITI Aayog, Government of India (GoI). Over the years, this has evolved as a landmark event and a credible platform for health industry stakeholders for sharing knowledge and best practices. The 16th edition of FICCI HEAL was scheduled from Oct 10-12, 2022 at FICCI Federation House, New Delhi. The central theme of the conference was ‘Healthcare Transformation: Driving India’s Economic Growth’.

COVID-19 pandemic has led extensive collaborations beyond borders and enabled us to work towards new approaches, solutions and innovations to not just tackle the pandemic but also build a more reformed and resilient healthcare ecosystem. At the same time, it has brought the long-awaited and crucial focus on ‘healthcare- as the economic driver’ of a country, which needs to be further reinforced in our approaches, policies as well as future strategies.

Healthcare has become one of the largest sectors of the Indian economy, in terms of both revenue and employment. According to NITI Aayog (GoI) Report, the sector has been growing at a CAGR of 22% since 2016, employing 4.7 million people directly and has the potential to generate over 500,000 new jobs per year. Apart from this, the sector has a multiplier effect and indirect impact on employment generation in the country, with additional advantage of employment for women.

The crisis due to COVID-19 pandemic has further opened the flood gates for innovation and entrepreneurship in healthcare sector, with accelerated development of low-cost, scalable, and quick products and solutions- whether pharma, medtech or services.

FICCI HEAL 2022 was an endeavour to converge all stakeholders- national and international, and provide a forum for sharing of learnings and experiences as well as deliberate on the opportunities for transforming our healthcare systems, while underscoring its significance for economic growth.

The three-day conference included Keynote Addresses, Panel discussions as well as Plenary Sessions covering the entire spectrum of healthcare delivery- primary healthcare, quality in care, healthcare workforce strengthening, infrastructure for NCDs with focus on cancer care, health insurance, digital health as well as diagnostics and medical technologies. This year we brought back our pre-conference Master Classes on two very pertinent and sought-after topics- Design Thinking and AI in healthcare.

The conference proceedings are available on the below links-
Day 0 (Master Classes): https://youtu.be/i7nXBsooiik
Day 1: https://youtu.be/GfX4oUaxv3w
Day 2: https://youtu.be/GcBCo3jE7v8
General

- **Primary and preventive healthcare** need to form the focus for the sector and should be taken as the responsibility of both public and private sector.
  - To provide adequate focus on the segment, preventive healthcare needs to be promoted as a discipline in the country.
  - Our focus should be on creating a ‘Fit for Purpose’ Primary health system, with the building blocks being skilled HR, technology enabled solutions, innovations, scalability, and a participatory approach.

- It is crucial to implement a technology backbone to the entire system, rather than standalone innovations. There is a need for broader vision, along with higher aspiration, for the sector.

- **Medical value travel is a high potential area** which needs to be tapped adequately to provide immediate income and growth for the country. The momentum and push achieved by ‘Heal in India, Heal by India’ is remarkable, we now need to work towards gap identification and come up with innovative methods to make the campaign a mission for the country.

- India is still importing more than 80% of its medical devices. We need to enhance the ability of India to manufacture and generate income as well as employment and provide the much-needed spur to growth. This can happen only when public and private sector work together.

- While we create accessible and affordable technologies, we should also focus on scaling up of technologies both in quantity and the reach to serve the patient.

- **Integrated diagnostics**- through convergence of imaging, pathology and laboratory tests with advanced information technology- has an enormous potential for revolutionizing diagnosis and therapeutic management of human diseases

- There is an immediate need to promote cybersecurity measures across the sector. To become globally competitive, our technologies should match international cybersecurity guidelines, since safeguarding patient information is critical aspect of the healthcare system.

- Over the time healthcare organizations have realized the potential of accreditation and its significance to any healthcare institution as well as professionals. However, there is still a strong need to promote accreditation of healthcare facilities across public and private sector, especially for standalone facilities in smaller towns and cities.

- While we work towards augmenting our healthcare workforce, there is a need to enhance our focus on quality of medical training being provided across institutions at all levels.

- **Forecasting future workforce requirements** is important with both- medium as well as long-term approach, based on service demands and emerging service models.

- **Cancer care**- we need to work on the key aspects of Detection and Diagnosis, Treatment (Access, Affordability, Cancer Health records)

- **Partnerships are key to a robust healthcare system**
  - Criteria for PPPs need to be revisited to become mutually beneficial. Scope of services should be comprehensive to not only cater to hospital/facility patients but also the nearby community.
• Private partner needs to ensure that costs are under control and give subsidy to those who cannot afford.

• Private-private partnerships need to be promoted in the system wherein new age players collaborate with smaller hospitals to bring in standardisation and enhance care outcomes.

For Government

• The government should adopt the role of an enabler by removing the supply side constraints, providing insurance coverage to every citizen, and understanding the challenges faced by the industry while making policies to help enhance the investments. The policies should be able to incentivise scaling-up and expansion in not only India but also across borders.

• There is an urgent need to increase the public spending on healthcare by the Centre as well as States.

• For strengthening primary care through Ayushman Bharat-Health & Wellness Centres (HWCs), we need to overcome design challenges for different models of engagement with the private sector and also review the CSR Rule 2 (e) of the Companies Act 2014 to enable companies engaged in the business of health services to provide these services free of charge at HWCs.

• Ayushman Bharat-PMJAY-
  • should include expanded dental services as well as new age healthcare providers to help improve access
  • With the advancements in healthcare and new innovative technologies like robotic surgery, it is important to have a scientific model of cost for services to fulfil the expectations of these high-end services.

• “National Priority Status” needs to be accorded to health sector in order to facilitate increased viable financing and enhancing infrastructure development.

• A PLI scheme for land procurement would encourage investors to build facilities in rural areas

• Healthcare should be provided a zero rating of GST to enable health services providers to avail the input tax credit on the input services, which they are unable to avail in the current regime.

• To increase the healthcare workforce, there is a need for policies for leveraging private hospitals for enhancing the UG Courses, and mid-level hospitals for PG Courses, as well as utilize private sector faculty to impart education.

• It is critical to introduce cadres such as Nurse Practitioners and Physician Assistants to enable task-shifting for doctors thus allowing them to focus on specialized services.

• The existing dental workforce should also be appropriately utilized in the healthcare system. Further, there is a need to set up specialized dental services at district level, integrated with PHCs and CHCs as well as a parallel Directorate of Dental Services in all states with adequate manpower.

• There is a strong need for education of public as well as regulatory authorities about the ‘cost of quality’. A comprehensive system to establish the scientific cost of healthcare services is required to help understand the cost of quality.

• Cancer Care-
  • Government supported diagnostic centres are needed to reduce the average diagnosis time
• Government should **evaluate centralised procurement of Linear accelerators** in bulk for the districts with highest disease burden
• **Tumour boards** should also include participation from radiology, pathology and nuclear medicine departments

**For Industry**

- Given that government has come up with numerous **financing schemes** over the past few years, industry should come forward to **utilise these financing mechanisms or share their feedback** on these schemes to help the healthcare infrastructure especially in smaller towns and cities.
- To address the issue of scalability, a key shift in the mindset of people who are involved in the healthcare operations is required to enable them to **start thinking of the scale as an asset and not as a liability**.
- Private healthcare providers need to **increase their participation** in the AB-PMJAY scheme.
- Devise **cost effective models** for ensuring affordable treatment options for referrals from HWCs, especially in case of NCDs, ensuring a continuum of care.
- Private health insurance companies should develop **tailored and affordable medical insurance products** for the middle-class population.
- Private sector needs to take **greater responsibility in PG training as well as in developing infrastructure** across the country to cater to the healthcare needs and opportunities.
- **Cancer Care**-
  - Pharma companies must offer **subsidized products** to government funded patients also, they can also offer medicines for targeted therapies on **instalment** basis (Monthly EMI)
  - In therapeutic side, we should have modalities which are **cost effective while increasing the outcome sizably** as far as survival is concerned.
- The role of the private sector is very crucial in creating a strong **health system cost database** since they have very good systems to capture and share patient-centric data.
Inaugural Session

Chief Guest: Shri Jagdeep Dhankhar, Vice President of India and Chairman, Rajya Sabha

Inaugurating FICCI HEAL 2022, Chief Guest, Shri Jagdeep Dhankhar, Vice President of India and Chairman, Rajya Sabha called for a collective effort and a greater public-private partnership for healthcare infrastructure expansion in the country.

The Vice President lauded the healthcare industry and trade bodies such as FICCI for the thriving medical tourism in India and said that “the health sector has to play a crucial role in achieving the objective of a USD 5 trillion economy. The sector is intimately intertwined with health and economic growth.”

He further invited everyone to work on the goal of universal healthcare, stating, “let us work together, public and private, centre and state, citizen and government for our collective dream of universal health care, affordable accessible, advanced and quality healthcare for our people.”

Noting the government’s initiative in positioning India as a global hub for medical and wellness tourism through the ‘Heal in India’ initiative, Shri Dhankhar called for redoubling the efforts to utilise India’s potential to become a ‘prime health tourism destination’.

Recalling India’s experience with the COVID pandemic, the Vice President paid rich tributes to the healthcare workers and scientists for their contributions and added that India has not only vaccinated its citizens in a short period, but also exported vaccines to many nations. The Vice President also acknowledged the tireless efforts of healthcare sector due to which India has registered a significant decline in health indicators such as the Infant Mortality Rate since 1990 and is on the course for achieving the Sustainable Development Goals (SDGs) targets.

Referring to the mega health program, ‘Ayushman Bharat’, Shri Dhankhar said that the scheme has been instrumental in bridging the gap between rich and poor in terms of accessibility of healthcare services in the country.
Stressing that healthcare is one of the most important pillars of nation-building, the Vice President said that “Health and Education are twins that need to be well looked after and nurtured for our present and future well-being”.

Welcome Address: Dr Sangita Reddy, Past President, FICCI and Joint MD, Apollo Hospitals

Talking about the revolution and expansion of health access in the last five to seven years, Dr Sangita Reddy shared that this provides “a glimmer of optimism that universal healthcare will become a reality.” The pace of inclusion, involvement and the push toward universal healthcare in our country is here to stay, she said, referencing the eSanjeevani platform with six crore teleconsultations, approximately 17.7 Crore beneficiaries under Ayushman Bharat, and 219 Crore COVID doses facilitated through the COWIN platform.

Further, Dr Reddy identified three issues facing the business that requires the government to take action. First, she stated, was the designation of health as a “National Priority Status” in order to facilitate increased finance and infrastructure development. She also emphasized the importance of “support for hospitals that are established in tier three and tier four cities as well as rural India. Finally, healthcare must be able to enjoy the input tax credit through a zero rating or even a low rating of 3 to 5%.”
She averred that besides ‘Heal in India’, there is a tremendous opportunity to ‘Heal from India’. “Whether it is skilling, medical outsourcing, using the power of AI to provide tech-enabled care borne out of India and serving as a model for the world is yet another opportunity,” she said.

**Theme Address: Mr Gautam Khanna, Chair, FICCI Health Services Committee & CEO, PD Hinduja Hospital & MRC**

We have always heard that ‘healthier citizens build a healthier nation’. However, it has taken the pandemic to make us deeply realize the importance of this statement. FICCI has been advocating that a robust healthcare system drives GDP growth in the presence of adequate investments and a conducive environment by not only acting as a productivity and employment generator, but also as a magnet to attract foreign exchange earnings and provide opportunities for innovation and entrepreneurship. Given the significance of healthcare to the economic growth, the FICCI Healthservices Committee prudently crafted this year’s Conference Theme as “Healthcare Transformation: Driving India’s Economic Growth”.

**FICCI has been working on all the key theme areas or six pillars** that the government had envisioned for the healthcare sector- preventive healthcare, offering services beyond large cities, augmenting medical colleges, increasing the number of doctors and paramedics, supporting and innovating new technologies and ensuring availability of affordable medicines.

The pandemic has also provided an impetus to expansion of telemedicine, digital tools and home healthcare market in the country, apart from catalyzing reforms in healthcare infrastructure, capacity building as well as operations and supply chains.

Hence, we believe, it is **now crucial to view healthcare as the contributor to our overall economic growth** and lay a greater emphasis on our healthcare spending as well as favourable policies for increased investment and research in the sector.

**Concluding Remarks and Vote of Thanks: Dr Harsh Mahajan, Co-Chair, FICCI Health Services Committee and Founder & Chief Radiologist, Mahajan Imaging**
Dr Sunil Kumar, Provost and Senior Vice President for Academic Affairs, Johns Hopkins University, USA

Dr Kumar highlighted in his address that the underlying challenge in healthcare operations lies in scalability. He suggested that “for effective implementation, it is important to tackle the issue of the large population of the country. There is a need for a key shift in the mindset of people who are involved in the healthcare operations, the shift should be to start thinking of the scale as an asset and not as a liability”.

He encouraged the audience to think of areas where having significantly more patients makes the problem easier and not harder. To this, he presented an example of the application of data science in healthcare which can help in achieving three key principles—quality, efficiency, and scale. He inspired the audience to work effectively and produce predictive models and then use these models to deliver efficient and effective care.

Dr Kumar shared an exemplary case study conducted by the academicians at John Hopkins University, USA. Given the rising concerns of Sepsis disease, the team created a predictive model for its early detection, based on the identification of people susceptible to developing organ dysfunction and septic shock. They deployed routine tests that are simple, straightforward, and can be applied at scale, collected data on patients in ICU, developed a machine learning algorithm and built a scoring system that predicts when a person will develop organ dysfunction and septic shock. This not only helped in ascertaining early detection, reduced ICU stay as well as mortality, but also enhanced the economics of hospital. Scale plays a significant role, as the magnitude of patients increases, the learning is enhanced, hence improving the scoring system as well as the predictions.

This early detection system was launched as an operations system in five John Hopkins hospitals. India with the patient volume and incredible amount of data that is yet to be fully collected and analysed, along with its commendable IT and data science talent, is in a favourable situation to implement such systems.

However, he also highlighted that India need not imitate the systems of western countries completely, as they are not a good example of being able to produce quality care in an efficient manner at the scale that India needs. Dr Kumar also encouraged the need to be innovative, with long-term approach, while dealing with huge numbers to help bring in the desired quality of care. He also suggested the use of cheaper and simpler mechanisms wherever possible, and not just follow a monolithic and expensive approach. He also emphasised on the applicability of predictive models in different sectors and its use for optimising resources in healthcare.

Reference papers shared by Dr Kumar:
2. https://www.nature.com/articles/s41591-018-0253-x
"Call for Action: Making cancer care more accessible and affordable in India"

The paper titled “Call for Action: Making quality cancer care more accessible and affordable in India” was one of the two reports released during the Inaugural Session of FICCI HEAL 2022.

Given the backdrop of a growing burden of cancer across India, this Report by FICCI Task Force on Cancer Care Infrastructure, in collaboration with EY, is an initiative to highlight the need for more effective policy measures aimed at proactive cancer prevention and treatment.

The paper intends to serve as a beacon of light to strengthen India’s strategy for cancer care and help it serve as a model for other non-communicable diseases. The detailed epidemiology of various types of cancer in every state of India and global comparisons described in this report highlight the substantial variations between the states for different types of cancer and serve as a useful reference for more targeted planning of cancer control, commensurate with the trends of different cancers in each state of India.

"Strengthening healthcare workforce in India: the 2047 agenda"

As a focus area for 2022, FICCI formed a task force on ‘Healthcare Workforce Strengthening’ to provide inputs on the present and futuristic requirements for addressing the demand-supply challenges and developing a strategy for enhancing the numbers of specialists, nurses and paramedics in the country. The Task Force, in collaboration with KPMG, developed the publication on ‘Strengthening Healthcare workforce in India: the 2047 Agenda’, highlighting the recent reforms in governance structure and regulations in medical, nursing and allied healthcare workforce.

Further, an in-depth assessment was conducted to understand the journey and transformation of healthcare education in the country and the looming healthcare workforce gaps in
various states. This report provides recommendations on how the workforce can be strengthened by bringing in technological innovations to build concrete solutions in order to address the shortage and vacancies in current positions at various delivery levels.

**Theme Session - Role of healthcare industry in driving India's economic growth**

India's demand for healthcare services has been growing given the increasing incidence of non-communicable diseases (NCDs), along with communicable and infectious diseases. COVID adversity has added urgency and accelerated the process of change in the sector. Telemedicine and e-health, innovation & technology, and entrepreneurship, backed by policies and strategic steps by the government are playing key role in making healthcare more affordable, accessible and advanced.

With the growing demand, healthcare has become one of the largest and fastest growing sectors of the Indian economy with high contribution not only in terms of revenue but also in employment-creating over 5,00,000 new jobs per year, with ample opportunity for women. There is also an opportunity to create 1mn more jobs in the sector.

Healthcare is not just a growing sector, the health of a country's citizens is one of the key drivers of its economy, which is evident from the facts like:

- we deliver incremental economic benefit of USD 3-4 for every USD spent on vaccines and preventive healthcare
- every USD spent on healthcare results in additional 0.75USD contribution to economic growth
- for each year of increase in life expectancy, we can increase our economic growth by 4%
- on the contrary, if we do not focus on healthcare, India loses approx. 1% of GDP to illness and deaths due to diseases like TB

Hence, there is a direct co-relation between healthcare and economy, which makes it a mega contributor to the economic growth of any nation.

The Indian healthcare market is projected to reach USD 372Bn in 2022 and going further we have numerous areas of growth opportunity such as advanced tech-based healthcare delivery models, emerging avenues like personalized medicine, genomics and advanced therapeutics as well as medical value travel.

At the same time, there are challenges like dearth of healthcare professionals along with growing demand for new skills, less emphasis on preventive care, lack of access to quality healthcare in remote rural areas, high out of the pocket spending as well as some regulatory frameworks.

**Special Address: Dr V K Paul, Member, NITI Aayog, Government of India**

Addressing the session on the 'role of healthcare in driving India's economic growth', Dr Paul highlighted the various measures that government has been taking towards betterment of healthcare in the sector. He also shared that the public health cadre, which was a long-standing demand from the industry, is being operationalised which will help bring on board professionals trained in public health.
Talking about public funding, he alluded to the two major medium-term investment programmes on the infrastructure front, one being the Rs 77,000 crore of total grant to be disbursed over five years for primary healthcare, infrastructure, and diagnostics under the 15th Finance Commission. The other is Ayushman Bharat Infrastructure Mission, which has Rs 64,000 crore for disbursal over five years for infrastructure development. “If you add this up and divide by the number of districts, each district has a potential of Rs 200 crore of investment over five years,” he said.

Dr Paul also shared that the government has, over the past few years, brought out schemes like Priority sector lending, Viability gap funding as well as loan guarantee scheme for the healthcare sector. However, these schemes have not seen much traction or acceptance. He urged the industry to share their feedback on the schemes and come forward to utilise these financing mechanisms for improving the healthcare infrastructure especially in smaller towns and cities given that we need to urgently increase the ratio of beds from 1:1000 population to 2 beds per 1000 population.

Dr Paul also noted that “Medical Value Travel is a very high priority for the government, and major engagement, facilitators and enablers would come up in a short span of time”. He also emphasised the importance of AYUSH sector for the country.

He underscored the need for a tailored medical insurance product for the middle class in the country, saying only 6.8 per cent of individuals have private insurance. The Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) and state government schemes cover 70 crore individuals and NITI Aayog has been talking about the “missing middle” of 30-40 crore who need health insurance that is affordable and without too many exclusions. Dr Paul also encouraged greater private sector participation in the PMJAY scheme as well as partnerships for using technologies in the Health and Wellness Centres across the country.

He also persuaded the private sector to take greater responsibility in PG training and develop infrastructure to cater to the country’s healthcare needs and opportunities. He insisted that every bed in a tertiary care hospital in India offers a teaching opportunity and it needs to be availed of, to solve the crisis of specialist doctors in the country. He further urged the industry to work collectively to increase the DNB seats to 3 times the current seats over next 2-3 years. He also urged all hospitals with more than 100 beds to open nursing colleges and create respectful working conditions, including compensation, for them.

Key recommendations:

- Although the industry is growing at a tremendous pace, there is a lot that needs to be achieved in the healthcare space.
- Affordability, Quality and Accessibility are the three greatest challenges as well as the opportunities for Indian healthcare. These avenues can help achieve additional economic growth since all of them will have financial outputs.
- Primary and preventive healthcare need to form the focus and should not be a responsibility of only the public sector. There are immense opportunities for private sector to contribute beyond their organised set-ups, especially through Ayushman Bharat- Health
and Wellness Centres (HWCs). Further, democratising primary care deliver to Primary Health Centres (PHCs) will help improve the secondary and tertiary care delivery at the hospitals.

- The **government should adopt the role of an enabler** - by removing the supply side constraints, providing insurance coverage to every citizen, and understanding the challenges faced by the industry while making policies to help enhance the investments. The policies should be able to incentivise scaling-up and expansion in not only India but also across borders.

- Given that government is the biggest owner of land in the country, there is a need for **better strategies for Public Private Partnerships** as well as financing for augmenting the healthcare infrastructure. A **PLI scheme for land procurement** would encourage investors to build facilities in rural areas.

- Together we need to envisage an industry that is not just a wealth-creator but a **‘health-creator’**. There is a need to see the industry from a lens that is not just focussed on hospitals but goes beyond the treatment.

- India is still importing more than 80% of its medical devices. We need to **enhance the ability of India to manufacture and generate income as well as employment** and provide the much-needed spur to growth. This can happen only when public and private sector work together.

- There is an urgent need to augment our healthcare workforce which is not just the doctors but also the nurses and paramedics. The country has seen a leap in medical colleges as well as post graduate seats over the past decade and the momentum needs to continue.
  - For increasing the Specialists, the public and private sector need to figure out ways to increase the DNB seats and motivate **senior doctors to enhance their role for teaching** in private facilities.
  - Attrition has been a concern but mostly for nurses and technicians and can be resolved at the facility level.
  - The inequity of healthcare workforce needs to be addressed through **redistribution strategies and provisioning of better living facilities for workforce** in rural and remote areas.

- **Medical value travel is a high potential area** which needs to be tapped adequately to provide immediate income and growth for the country.

- Although government is making efforts to increase the public spend to 2.5% of GDP, but there has been a reversal in actual figures, especially in the richer states, over the last couple of years. The budgetary increase in the spend has been on water and sanitation, nutrition etc. which does not necessarily lead to healthcare spend. There is an **urgent need to increase the public spending on healthcare** by the centre as well as states. Further, there has been a disconnect between the central and local governments. Healthcare needs to be looked at in a federal way to be able to achieve the vision of ‘healthcare for all’.
One of the key challenges for the country has been that the share of organised healthcare sector is very small, approximately 25%, hence accountability and quality is difficult to achieve. With limited reach of corporate sector, which is mostly hospital centric, the larger sector remains poorly organised and is not driven by digitization. Hence, it is important to implement a technology backbone to the entire system, rather than standalone innovations. There is a need for broader vision, along with higher aspiration, for the sector.

Under Ayushman Bharat Health and Wellness Centres (HWCs) Programme, the Government has announced creation of 1.5 lakh HWCs across India by 2022. This is an endeavour to shift from selective primary care to Comprehensive Primary Health Care (CPHC). While more than 1.2 lakh HWCs have already been operationalized, most of these HWCs are not providing the full suite of services envisioned in the scope of CPHC.
As more than 70% of all outpatient health services are provided by the private healthcare providers, it is imperative that the private sector contributes its experience and expertise in successful running of the HWCs. During the announcement of HWCs in the Union Budget 2018, the government also sought participation from the private sector to partner in these centres.

**FICCI is leading an industry-wide movement with NATHEALTH and OMAG**, to partner with the government to transform primary healthcare through ‘Smart HWCs’. In July 2022, the partners organised a seminar on ‘Transforming Primary Healthcare through HWCs’, which was chaired by Mr Rajesh Bhushan, Secretary, Health and Family Welfare, GoI. This session was a sequel, where experts from primary health further deliberated on the roadmap for future collaborations between the government and the health industry to successfully run HWCs.

**Session Chair: Ms Roli Singh, IAS, AS and MD (NHM), MoHFW, GoI**

- The Government plays a major role in public healthcare. With deadlines and watershed years staring us on face for elimination of communicable diseases (Malaria by 2030, TB by 2025 Kala Azar by 2023, Sickle Cell Disorder in tribal pockets, amongst others), the efforts need to be doubled up as we are at the verge of reaching the milestone. Additionally, we face the rise of non-communicable diseases and mental health conditions.

- Creation of 150,000 HWCs under Ayushman Bharat program to provide Comprehensive Primary Health Care (CPHC) is well timed and poised to our health care challenges in the right earnest, as it concurrently focuses on expanded range of service delivery, infrastructure upgradation with a boost from ABHIM, and addition of the new cadre Community Healthcare Officers (CHOs).

- Government spending on healthcare is also consistently on the rise, from 1.15% of GDP in 2013-14 to 1.28% of GDP in 2018-19. What is notable is that the government share of Total Health Expenditure has increased from 28.6% in 2013-14 to 40.6% in 2018-19.

- Of the two aspects of Primary Healthcare- preventive care and health services, community level preventive care can be best delivered by the Government machinery with support from development partners. However, for provision of health services, the government must work with the private sector in PPPs to bring in efficiencies.

- PPPs in primary health cannot be revenue-driven, they must be outcome-driven.

- There is a need to design dynamic PPP models and contracts that are pragmatic and viable for both- the government and the private partner, with clearly defined roles for both parties, outcomes to be achieved, disincentives for failure to perform by either party as well as checks to prevent any frauds.

- Provision of primary health in different states vary widely. Health being a state subject, it is of utmost importance to build capacities at the State level, through technical and management trainings.

- While there is availability of sufficient funding for primary healthcare, utilization of these funds at different levels of primary healthcare needs to be ensured.

**Key highlights from Panel Discussion:**

- The true potential of Indian Economy cannot be unlocked by addressing the country’s healthcare challenges, for which primary healthcare is a cornerstone.
Our focus should be on creating a ‘Fit for Purpose’ Primary health system, with the building blocks being skilled HR, technology enabled solutions, innovations, scalability, and a participatory approach.

While ABHWCs have given a new fillip to transform primary health from selective to comprehensive care with addition of seven new services, only 15% of the 120,000 operationalised HWCs are fully functional.

Several challenges exist, including

- Funding: Delays in disbursement of funds to district and HWC level and under-utilisation of allocated funds, in spite of states being provided the flexibility by the centre to utilise funds as per ground level needs.
- HR: Shortages and vacancies in staff nurse, ANM and allied healthcare workers positions. Existing HR needs trainings to improve technical and management skills.
- Drugs and Diagnostics: Poor supply chain management due to poor planning and forecasting, delays in procurement and payments, severely impacts availability of essential drugs and diagnostics.
- Digital Health: Low adoption rate of digital solutions due to limitations of internet connectivity, poor IT infrastructure, multiple apps with lack of interoperability commanding data to be captured in duplicates, lack of training and confidence amongst health workers to use technology.

These challenges can be tackled at three levels-

- State Govt. Level: Building capacities for better management and adoption of innovative solutions
- Health Facility Level: Leverage technology to improve performance of HR and bridging gaps
- Community Level: Enhance health seeking behaviour to shift from sick-care to health-care

To lay a roadmap for public-private collaboration, for the first time in the history of Indian Healthcare- the private sector has come together led by FICCI, with NATHEALTH and OMAG to partner with State Governments to work at the grassroots level and uplift select existing HWCs as demonstration models of fully functional HWCs or ‘Smart HWCs’. Two states have been selected- UP and Chhattisgarh, both of which are High Focus States in terms of health. In this not-for-profit collaboration, the private health sector will contribute its expertise, experience, and financial resources in the form of CSR and philanthropic funds to create these model ‘Smart HWCs’.

Key recommendations:

for Government-

- Need to overcome design challenges for different models of engagement with the private sector in HWCs- for profit, not-for-profit or other forms of partnerships. This can be done in the form of Model Concession Agreements.
- The Central Government can facilitate partnerships between State Governments and private health sector, for e.g., the proposed FICCI-NATHEALTH-OMAG collaboration for ‘Smart HWCs’.
To garner greater participation from private healthcare providers, relook at the CSR rules. Rule 2 (e) of the Companies Act 2014 (Corporate Social Responsibility Rules) requires the CSR policy of a company to exclude “activities undertaken in pursuance of normal course of business”. This rule can be suitably amended, or a clarifying Circular can be issued by the MCA, to enable companies engaged in the business of health services to provide these services free of charge at HWCs and account them under their CSR activity.

For the multiple Apps and portals being used for capturing information for various national health programs, a horizontal integration needs to be executed urgently, to avoid duplication of data, reduce the burden on community health workers and enable better utilization of data.

For Industry-

- Devise cost effective models for ensuring affordable treatment options for referrals from HWCs, especially in case of NCDs, ensuring a continuum of care.
- Strive for integration of health solutions developed and used by private sector with the public health system.

L to R: Dr Bulbul Sood, Senior Strategic Advisor, Jhpiego; Maj Gen (Prof) Atul Kotwal, Executive Director, NHSRC, MoHFW, GoI; Mr Karan Singh, Managing Partner, Bain and Company India; (Hony) Brig Dr Arvind Lal, Chair, FICCI Swasth Bharat Task Force and Managing Trustee, ALVL Foundation; Mr Himanshu Sikka, Chief Strategy & Diversification Officer and Lead- Health, Nutrition & Wash, IPE Global

Virtual: Ms Roli Singh, IAS, AS and MD (NHM), MoHFW, GoI
The evolving landscape of Diagnostics: A glance into the future!

Healthcare has improved with evidence-based treatment methodologies, and it has become possible with advanced diagnostics enabled by expertise in genomics, proteomics and bioinformatics. The diagnostics ecosystem has been witnessing a paradigm shift and achieving rapid advances in technology that can be experienced both in incremental and disruptive ways, leading to improved quality of care across each stage of the healthcare continuum.

COVID-19 also provided immense opportunities for manufacturing of various devices and technologies and the sector witnessed remarkable number of collaborations between the government, academic institutions and the industry to innovate as well as manufacture.

As, diagnostic plays a vital role in deciding the treatment by allowing timely diagnosis of the disease, it is important to strengthen the diagnostic ecosystem and also enable diagnostic MedTech companies and diagnostic laboratories to develop futuristic technologies and innovative diagnosis assays.

India is becoming a favourable destination for both the international players as well domestic manufacturers. While the government has been proactively taking steps to attract investments from MNCs with the launch of various PLI-type schemes for medical parks, the ‘Atmanirbhar Bharat’ initiative has encouraged the domestic manufacturing.

This session was divided into two panels- MedTech and Diagnostics, and the panelists shared their experiences, challenges as well as learnings accrued so far. They also deliberated on the solutions and suggestions for the future of the diagnostic technologies.

Special Remarks: Dr Ravi Kant Sharma, Deputy Drugs Controller (India), Ministry of Health and Family Welfare, Government of India

- Indian Healthcare system is predominantly characterized by non-communicable diseases like cancer, diabetes, cardiovascular diseases. It is very important to develop new technology and manufacture new diagnostics tools/IVDs for timely diagnosis and prognosis of such diseases. We need to focus on newer technologies like AI, Nanotechnology enabled Biosensors and diagnostic technologies. It is also important to ensure to develop accessible and affordable technologies supporting healthcare system.

- We should aim to reduce the import dependency for critical diagnostic technologies and also aim towards exploring opportunities for export as India has potential to produce world class medical technologies. CDSCO has been working to prepare a regulatory roadmap for Medical Devices, currently regulating 37 categories. Going further, all classes of devices viz. A, B, C and D, will be included under regulation in a phased manner.

- In-order to facilitate and enable development of innovative technologies, Ease of doing business (EoDB) is being considered by government.

- Public Private partnership models are being created like collaboration of research institutions viz. ICMR, CSIR etc. with industry for developing innovative technologies in predicted timelines.

- It is important to generate data and implement tracking and tracing of technologies. We should work towards SOPs for any corrective as well as preventive action steps to be taken to minimise error and ensure that good quality products are available for the public. For
tracking and reporting adverse event associated with medical devices the government has put in place the Materiovigilance Programme of India (MvPI) which aims to analyze, scrutinize, and prevent the recurrence of harmful events that occur due to the use of medical devices.

- It is also critical to focus on developing resilient supply chain for Diagnostics. Since most diagnostic kits are temperature sensitive, test results may get deviated with variation in storage conditions. Hence, along with manufacturing, we need to ensure a good supply chain including cold storage so that appropriate physical conditions are maintained throughout the sample or product lifecycle.

- We need to encourage the Indian companies to manufacture in the country by developing an innovation ecosystem (Discovery), including all stakeholders Government, Industry & Academia (Demography) for collaborative efforts as well as understanding the market size and creating opportunity (Demand).

**Key recommendations**

- **Diagnosis** plays a major role in determining treatment for a patient, as almost 70% data of patient at any hospital/clinic constitute of diagnostic reports and opinion. Hence, it is important to focus on not only providing diagnosis but also engage with clinicians by generating enabling reports, that are outcome oriented, which will allow clinicians to take right decision to start treatment.

- **Strengthening of Integrated Diagnostics**- convergence of imaging, pathology and laboratory tests with advanced information technology has an enormous potential for revolutionizing diagnosis and therapeutic management of human diseases. Hence, it is important to strengthen this area for improvement in healthcare management.

- **Indian manufacturers in diagnostics** should focus on making technologies that have demand in global market.

- **MedTech companies** should focus on becoming a healthcare company by focusing on the patient interest and safety first. They should also focus on developing solutions that can be integrated into healthcare system like development of technologies that do not vary with geographical changes. This will allow us to adopt such technologies in both public and private healthcare ecosystem.

- **EoDB** should be coupled with ease of doing innovation, focus of companies should be on addressing problem faced by patients. It is also important to innovate faster.

- It is also important for manufacturers of diagnostic technologies to have robust supply chain to ensure storage conditions are maintained throughout the lifecycle of the product.

- **Data harnessing** is critical to ensure diagnostic data is accurately captured and shared with clinicians for prognosis and treatment of a disease. Diagnostic companies need to work towards harnessing and managing diagnostic data as well as sharing of accurate information.

- Manual interface in diagnostic procedures needs to be minimized- newer technologies should be automated as manual interface has chances of manual error and repeat analysis leads to delay in report generation. Usage of digital interface for reducing the time frame for report generation needs to be encouraged.
While encouraging digital solutions we need to implement adequate and appropriate cybersecurity measures. To become globally competitive, our technologies should match international cybersecurity guidelines, since safeguarding patient information is critical aspect of the healthcare system.

Radiology should form an integral part of diagnostics as imaging technologies are critical in many situations. Only pathological evaluations are not sufficient to provide status of infection on few occasions and doctors need ultrasound or other imaging.

While we create accessible and affordable technologies, we should also focus on scaling up of technologies both in quantity and the reach to serve the patient. Virtual care needs to be fostered with innovative technologies to further harness remote- or tele-health monitoring of a patient.

We should aim for making India self-reliant in MedTech sector, but currently for many critical diagnostic technologies where we are dependent on imports, government should reconsider elevated custom duties as it eventually increases the cost to patient.

The government should also allow availing of input tax credit under GST on services provided by laboratories to help make diagnostics more affordable.

It is important that all diagnostic laboratories are developed according to guidelines specified under Clinical Establishment Act.

Non-Communicable Diseases (NCDs) is a major concern in Indian population. Timely diagnosis is crucial for proper management of NCDs like CVDs, Diabetes, Cancer. Generating awareness on timely testing to allow early diagnosis amongst the population as well as regular testing for members who have disease history in the family is important.
The agenda for the panel discussion was in line with the FICCI-KPMG Report on “Strengthening healthcare workforce in India: the 2047 agenda,” released during the conference. The panel discussion highlighted the current scenario of Indian healthcare workforce and a roadmap for the next 25 years, cutting across public and private sectors, to bridge the existing gaps and strengthen the workforce. The discussion further focused on how India can become a global export house for skilled medical and paramedical workforce.

Remarks by the Session Chair: Dr Manohar Agnani, Additional Secretary, Ministry of Health & Family Welfare, GoI

As one of the youngest countries in the world, India has the opportunity to serve the global community through Heal by India initiative. However, the focus needs to be on improving the quality of medical teaching and educational institutes must be provided with the requisite government support for enabling these institutions to impart quality education.

In the recent years, there has been a 67% increase in number of medical colleges, 70% to 80% increase in the number of UG seats, and significant increase in the number of PG and DNB seats. However, it is critical to focus on nursing and paramedical education as well. Teaching and training various cadres such as doctors, dentists, physiotherapists, nurses, allied health professionals etc.
within the same campus can help in optimizing the resources and promoting the concepts of task shifting and task sharing.

The nation’s aim should not just be limited to meeting the recommended ratios such as doctors to population, nurses to population etc. We must strive to exceed these ratios with an aim of serving the global community.

Steps taken by National Board of Examinations in Medical Sciences (NBEMS) to tackle the challenges of healthcare workforce in India:

- **Maintaining Standard and Uniformity**: With the aim of swiftly and drastically ramping up the DNB seats, it is critical to focus on maintaining the standard and uniformity of the course. Acknowledging this challenge, NBE has included case-based scenarios, complex case discussions, interactive sessions, procedure videos etc. in the curriculum. Further, for skilling of residents, NBE will collaborate with 25 to 30 large skilling centres, while a national level skilling centre spread across 45,000 sq ft. is being established.

- **Group Accreditation**: For rapid expansion of the DNB program, accreditation of hospitals is critical. To promote the same, group accreditation can be introduced for hospitals, allowing two or more hospitals to complement their deficits thus becoming eligible for course accreditation in terms of case mix, hospital beds, and teacher eligibility criteria.

- **Consortium Formation**: NBE is promoting Consortium formation by large corporate hospitals can facilitate the learning of residents through an internship program where the resident can work on a rotational basis thus gaining clinical, hands-on experience.

- **Increasing the number of courses**: NBE has preemptively identified the specialties which are likely to be required in the coming years and will be introduced as courses soon. These are - Emergency Medicine, Family Medicine, Infectious Diseases, and Critical Care.

- **International Fellowships**: A portal listing all hospitals offering international fellowships along with other important details is being developed by the Government, thus strengthening the fellowship programs through increased international visibility.

**Key recommendations**

- **Attracting Local Talent**: The skewed distribution of medical, nursing, and allied health professionals has been urban focused and to attract the younger generation, it is important to reach out to the talent existing in rural India. Targeting the local talent in rural and remote areas will yield benefits such as easier retention of workforce and economic upliftment of the region.

- **Leveraging Private Hospitals**:
  - **For UG Courses**: Private hospitals can be utilized to increase the number of MBBS seats in the country. However, as hospitals are clinically oriented setups, there is a lack of pre and para clinical services which are a part of the MBBS curriculum. To overcome this challenge private hospitals can collaborate with medical colleges and enter an arrangement where pre and para clinical courses are conducted at the medical colleges whereas clinical courses are conducted at the hospitals.
  - **Involving Mid-Level Hospitals for PG Courses**: Private sector involvement has been primarily focused on postgraduate medical education. However, majority of DNB seats are currently
available in larger hospitals. Thus, there is a need to devise a strategy to leverage mid-level hospitals for DNB courses.

- Leveraging Private Sector Faculty to Impart Education: Shortage of skilled and qualified faculty is a challenge faced by the medical educational institutes currently. The faculty available in private sector should be optimally utilized to impart quality medical education.

- Continuous Skill Upgradation: With the available resources and expertise, private sector can play a critical role in skill upgradation of multiple cadres of healthcare workforce through short-term or long-term programs. Further, private sector can set-up skill labs and simulation labs, in collaboration with the government sector, to facilitate regular upgradation of clinical knowledge and skills of the existing workforce.

- Paramedical Training: There’s a huge opportunity available for private sector hospitals to offer paramedical training courses, contributing to paramedical workforce generation for the country.

- Enhanced emphasis on quality: Out of the 600+ medical colleges present in India, very few are NAAC-A accredited. Further, only 2% of all accredited colleges in India are government, highlighting the lack of focus on quality of medical education. While there are batches as large as 250 students in major medical colleges, most colleges don’t have any skill labs, which raises questions regarding the employability of medical graduates. Hence, there is a need to enhance our focus on quality of medical training being provided across institutions at all levels. Further, technology needs to be adequately leveraged to enhance the hands-on learning of students.

- Dental workforce:
  - Utilizing the Existing Dental workforce: Approximately three lakh dentists are currently available in the country looking for opportunities. However, due to lack of opportunities this readily available workforce is foraying into alternative careers. Thus, it is imperative to utilize the dental workforce through creating more positions for dentists at public health facilities. Further, given the overlap in medicine and dentistry curriculums, an interdisciplinary approach can be adopted to utilize dental workforce for providing allied healthcare services.
  - Directorate of Dental Services: It is important to set up a parallel Directorate of Dental Services in all states with adequate manpower.
  - Specialized Dental Care: With nine dental specialties existing, there is a need to set up specialized dental services at district level, integrated with PHCs and CHCs. Thus, primary dental services can be provided at PHC/CHC level, whereas advanced care can be availed at district hospitals.
  - Expansion of Dental Services Under AB-PMJAY: Presently, only nine dental procedures are covered under AB-PMJAY and these are all surgical, inpatient procedures. Increasing the number of dental services included under AB-PMJAY will help improve access to dental services.

- Introducing Cadres such as Physician Assistants and Nurse Practitioners: Global surveys of healthcare professionals, especially doctors and nurses, suggest that they spend 80% of their time occupied with tasks for which they are overqualified. This is indicative of the existing latent capacity within the workforce which is not being optimally utilized. To unlock this potential, it is critical to introduce lower qualified staff or other cadres such as Nurse Practitioners and Physician Assistants. This will enable task shifting thus allowing doctors to focus on specialized services. Further, the nurse practitioner course will provide career progression opportunities to
nurses. While sporadic attempts were made by a few institutions to introduce Physician Assistant courses, the uptake was limited due to lack of government recognition.

- **Micro-Credentialing**: Micro credentialing of medical procedures will allow individual professionals to get specific training for undertaking certain procedures at volume, whilst ensuring quality. However, to introduce micro credentialing, the approach to professional regulation will have to evolve.

- **Non-Qualified Doctors for Modern Medicine**: Due to the shortage of medical workforce, non-qualified doctors are being utilized for modern medical treatment. This practice is being allowed in many States. However, it can have grave consequences as it can affect the quality of expected clinical outcomes. This needs to be checked at the policy making level.

- **Forecasting Future Workforce Requirements**: In the medium and long-term approach, the ability to forecast future workforce requirements based on service demands and emerging service models must be adopted. Integrated workforce planning with service and demand planning is being leveraged in the UK currently and can be adopted in India as well. Medical Associations for different professions/specialties need to be involved for creating projections regarding the requirement of graduates/postgraduates across multiple specialties.

- **Building Digital Capability and Expertise**: With the increasing penetration of technology in healthcare service delivery and treatments, the future health outcomes will be equally dependent on the capability of doctors as well as data scientists and tech experts. Thus, it is critical for healthcare systems to focus on creating a pipeline for experts in digital technology and data science.

- **Digital Universities and Online Education**: It is also important to leverage digital solutions for imparting online education. There is a need to establish the required infrastructure for imparting quality medical, nursing, and paramedical education through online mode.
Communication Between Private and Government Sectors: There is a need for consistent communication between public and private sectors to find common ground, discuss existing challenges, and adopt a solution-oriented approach.

Call for Action: Making quality cancer care accessible and affordable

Today, Healthcare has become an important cornerstone in India’s development plan, with various comprehensive initiatives including Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY), Ayushman Bharat- Health and Wellness Centres (HWCs), Pradhan Mantri Swasthya Suraksha Yojana (PMSSY), Swachh Bharat, etc. While these initiatives are gaining traction, India continues to face a grave challenge of rising non communicable disease burden with contribution of diseases such as cancer increasing with time. We are aware that cancer is a disease that has the potential to debilitate the life of a person, physically, emotionally and economically, in a manner few other ailments can. The challenge of high incidence in India is further compounded by late detection, sub-optimal and skewed access to multimodal treatment and low affordability resulting in a significant mortality burden. The unfortunate reality of a rapidly increasing incidence of cancer can potentially become a calamity if not addressed in an effective and urgent manner.

Hence it is imperative to understand the issue at hand in a holistic way and propose an action plan that attempts to correct the gaps and comprehensively addresses the cancer care challenges in India across themes such as reducing overall burden of disease (through awareness, prevention and screening), improving quality of outcomes (through timely detection, augmenting and reducing geographical skew in healthcare infrastructure, leveraging viable and scalable technology and innovation) and delivering right quality of care at the right cost which is affordable for all sections of the community.

The session focused on the themes of reducing disease burden, improving quality of outcomes and delivering quality care at right cost for enhanced cancer control in India. The discussions were also based on the FICCI-EY Report that was released during the conference.

Key recommendations

Detection and Diagnosis

- Government supported diagnostic centres are needed to reduce the average diagnosis time of 2 months.
  - These diagnostic centres need to be technology driven to address the delay of diagnosis
  - Clubbing GP around these diagnostic centres and facilitating discussions among them can help in early detection of cancer
Screen only in places where we’re likely to save lives. And screen with a modality that does not increase diagnostic numbers. i.e., over diagnosis is to be avoided. The objective should be **reducing cost and increasing efficacy** without increasing the numbers

- VIA or PAP smear is good enough for cervical cancer
- Either physical examination (30% reduction in deaths with no overdiagnosis) and judicious mammography (30% reduction in deaths with 30% cases of over diagnosis) is needed for breast cancer (For women of age > 50)
- Visual inspection for oral cancer

**Treatment - Access**

- **Define outcomes** expected before commencement of treatment. Measure cost from the perspective of outcome and the quality of life
- Criteria for **PPPs** need to be revisited and should be mutually beneficial. Scope of services should be comprehensive to not only cater to hospital/facility patients but also the nearby community. Private partner needs to ensure that costs are under control and give subsidy to those who cannot afford
- Government should **evaluate centralised procurement of Linear accelerators** in bulk for the districts with highest disease burden. Government can have a holistic program on purchase of linear accelerators with a vendor qualification criteria on localization of technology
- There should be sufficient checks and balances in the government procurement and buying cycle completion process and a review system from date of announcement to commissioning should be put in place with accountability for implementation of the government policies and programs. Few states struggle to procure equipment despite having adequate financial resources
- **Tumour boards** should also include participation from radiology, pathology and nuclear medicine departments along with representation from radiation, medical and surgical oncology departments

**Treatment - Affordability**

- Pharma companies must offer subsidized products to government funded patients also, they can also offer medicines for targeted therapies on instalment basis (Monthly EMI)
- Cost capping should be introduced for diagnostic tests such as PET Scans, NGS

**Treatment – Cancer health records**

- In therapeutic side, we should have modalities which are **cost effective while increasing the outcome sizably** as far as survival is concerned
  - Evaluate if each institute, each facility delivering care should have the responsibility of recording and reporting the number of patients treated, staging, compliance to clinical guidelines predefined, 5-year disease free survival rate of patients online. This will increase awareness of patients and enable them to take informed decision while selecting hospitals for treatment
With India becoming a preferred destination of medical value, the special session was objected to bring out and understand the key strengths of India for medical tourism and understand the challenges posed by the pandemic and how they can be tackled. The session also aimed at discussing the government’s initiative of ‘Heal in India, Heal by India’, and how public-private partnerships play a significant role in making the initiative a grand success.

Special Remarks: Shri Lav Agarwal, Joint Secretary, Ministry of Health & Family Welfare, GoI

‘Heal in India, Heal by India’ can be a game-changing event in the Indian healthcare sector. Due to pandemic, the world has realized the notion of One earth, One family, which lies at the core of Indian traditions. The ‘Heal in India’ initiative is aimed at enhancing patient mobility from foreign countries to seek integrated and holistic healthcare in India—which is a mix of modern and traditional practices. With ‘Heal by India’, the nation is ready to heal the world through the incredible talent of Indian healthcare workforce.

The three key pillars of Medical Value Travel (MVT) in India are- availability of excellent modern medical treatment, traditional medical intervention (AYUSH & therapeutics), wellness & rejuvenation. India’s market of MVT is expected to grow exponentially to USD 13 billion dollars by 2026, which indicates the potential of the nation in the sector.
India has treated over 5.5 lakhs patients from over 50 countries, it has more than 13 lakhs+ allopathic and 8 lakh+ doctors and 40 JCI accredited & 1400+ NABH accredited hospitals. India also is popular in cardiovascular, diabetes, and kidney treatments. India provides all these quality services to global patients at a one/third cost. Thus, making India a preferred destination for medical tourism. India’s wellness economy has a market share of 7 million dollars. India is globally recognized for its medical value travel, with a global ranking of 10 in the medical value tourism index worldwide, India is also ranked 12th in the wellness tourism market worldwide and 5th in the Asia Pacific region.

The MVT digital portal which is a single-window approach for global patients helps in locating a particular doctor, procedure, and MVT facilitator. This portal also comes with a mobile app, transparent online package pricing, multilingual, WhatsApp integration, and allows government-government, government-hospital, hospital-hospital, and patient-MVT facilitator collaboration. All these strengths of India help in positioning the nation as a destination of choice for quality healthcare services and are aligned with the mission of “Sewa & Athithi Devo Bhava”.

The Heal by India component of the initiative is aimed at facilitating Indian health professionals to provide their services globally. With a global shortage of healthcare professionals, India’s strength in traditional medicines can help in strengthening and supporting health service delivery. Bringing and converging all stakeholders together from the Ministry to health professionals, various commissions, recruiting agencies, and foreign employers is at the core of heal in India. The initiative’s key strengths include transparency, trust, and accessibility.

**Key recommendations**

- The momentum and push achieved by ‘Heal in India, Heal by India’ is remarkable, this has helped India to be placed as a destination of medical value. There is also a lot of traction in human resources, and a lot of collaboration is being witnessed. However, it is now time to **work towards strengthening the nurses and technician workforce through legislation**.

- Post-pandemic, the biggest challenge lies in the mobility of patients traveling from different parts of the world. With the flight restrictions and long waiting time for medical visas, suffering patients have started looking for alternatives that could benefit competitor countries. What is needed right now is **gap identification and tracking down countries with lower patient traffic** to India and coming up with innovative methods to make ‘Heal in India, Heal by India’ a mission for the country. There is also a strong need for a **good promotional campaign and user-friendliness of the portal**.
The strongly debated topic of Cost, Quality and Access is of prime importance in health economics. The definition of quality includes aspects of appropriate services, good communication, and shared decision-making with cultural sensitivity and the most important - efficiency. Patient safety which is relatively a newer concept is also crucial in providing quality healthcare, it is objected at preventing and reducing risks, harms, and errors.

While talking about Cost, Quality, and Access it is important to note the position of India as compared to other neighbouring countries. India scores highest in out-of-pocket expenditure with 62.67% and India ranks 112 out of 191 in health effectiveness. However, post-pandemic a positive shift has been observed as political parties have become much more vocal about the needs and improvements required in the healthcare sector.

The Indian healthcare sector faces many challenges - quality and patient safety being one of them. While India as a young population is getting serious about healthcare, there have been emergence of innovations in healthcare that will help addressing many challenges. Leveraging technology can further fill the divide and various government initiatives like Ayushman Bharat Digital Mission (ABDM) provide a clear road map for digital health.

Yet, quality is crucial for any healthcare delivery process and hence the role of accreditation is important. While assessing the quality an accreditation organisation needs to use a very structured approach with an amalgamation of the patient- as well as facility-centric approaches.

Earlier, there were apprehensions against getting accreditation since hospitals were not fully aware of the benefits. They were also reluctant to get involved in the extensive paperwork given that it is time consuming. However, with a gradual understanding of accreditation, we have realized the potential of accreditation and how it can help in achieving quality healthcare.

The session deliberations were an attempt to answer the fundamental challenges of reducing the cost while providing quality services.

**Recent steps taken by the government to address the Costing of healthcare services:**

- **Development of the national health system cost database.** The system is based fundamentally on costing carried out in both private and public hospitals ranging across the types of hospitals-tertiary as well as secondary. Based on this the new Health Benefits package was introduced where we have increased the prices of 800+ packages under the PM-JAY.

- **Differential pricing** - a significant variation is observed in prices based on the location and level of the hospital, along with the patients’ condition. A scientific analysis has been done by NHA to undermine the varying factors and a pilot study has been initiated in five states aimed to transform the pricing system or provider payment system to the DRG payment system, wherein the payment given to a hospital is not just for the case being treated but in cognizance of the presence of co-morbidities or any complications. The government has already introduced ICD 11 classification into the transaction management system through which four primary diagnoses and unlimited secondary diagnoses can be added by the hospital.

- **Value-Based Incentivization** - The government is moving towards incentivizing better patient outcomes among the patients being treated by hospitals empanelled under PM-JAY. It is proposed that the hospitals will be assessed for the care being provided, as they should be incentivised based on patient-reported outcomes and not just based on accreditation as it is being done traditionally. NHA has tried to identify the indicators to measure a hospital’s
performance. Indicator selection was determined based on three factors: congruent with the philosophy of Universal Health Coverage, easy to collect, and that cannot be manipulated. Five indicators finalized and a pilot is being done in five states to undermine the model of incentivization.

- **Health Technology Assessment**- To incentivize good quality care, the government is looking at incentivizing products/technologies that provide better outcomes and price them accordingly. Processes of health technology assessment have been set up along with a portal on NHA website inviting applications from all stakeholders on recommendations which are inclusive of interventions, drugs, devices, and technologies to be included in the health packages. These submissions will be reviewed based on the cost-effectiveness, impact on reducing out-of-pocket expenditure, assessing the equitability in providing access, and the budget impact it will likely have. Based on the assessment a policy decision will be taken on the inclusion of those services in the package. This exercise is not limited only to the inclusion and exclusion of such intervention in the policy but will also be used to make standard treatment guidelines.

**Key recommendations**

- **Sustainability of Healthcare Institutions**- Quality has been one of the most important aspects for consumers of any product even if it comes at a cost. But when it comes to healthcare the dynamics of providing quality while not exploiting cost has always been pertinent. However, it is crucial that providing quality healthcare at a rational cost must not compromise the sustainability of any healthcare institution.

- **Accreditation for delivering quality care**- Over the time healthcare organizations have realized the potential of accreditation and its significance to any healthcare institution as well as professionals. However, there is still a strong need to promote accreditation across the facilities—hospitals and diagnostic labs, especially for standalone facilities in smaller towns and cities.
  - Accreditation of small hospitals- Most of the small hospitals are still unaware of the importance of quality and accreditation. Small hospitals are usually run by pure clinicians who lack expertise in management and administration, and it is important to make them realize the returns and outcomes they can yield by following quality practices and provide them training on how the various activities and expenses should be distributed for better results.
  - Implementing good practices and sharing them with other organizations and industry bodies can be a great exercise to help achieve the goal of delivering quality services.
  - Accreditation not only gives us standardisation of services, but the organizations get readily available data on the services delivered and their outcomes, which can be helpful in further improving the services.
  - Quality services provide better customer satisfaction and yield longitudinal benefits. The goal should be to reduce the stay time of any patient as well as lower the hospital infection cases.
  - Involvement of all healthcare professionals and stakeholders is necessary for the quality processes.

- **Health Economics Education**- A lot of awareness has been established about the expected standards, regulations, and accreditations in healthcare sector, along with public awareness about quality. However, there is a strong need for education of public as well as regulatory authorities about the ‘cost of quality’. We need to work towards economy of services and adjusted pricing rather than just the competitive and comparative analysis of the cost of services.
in the private sector. Similarly, in public hospitals an estimate of actual expenditure incurred by the institution on providing services needs to be worked out.

- **Comprehensive System for Cost of Quality**- FICCI and other industry bodies have made several attempts to bring out a costing mechanism where the cost of quality has been determined. Further, with the advancements in healthcare and new innovative technologies like robotic surgery, it is important to have a scientific model of cost for services to fulfil the expectations of these high-end services.
  - a comprehensive system to establish the **scientific cost of healthcare services** is crucial
  - a **strong health system cost database** is required to address the scarcity of evidence on cost-for both private and public hospitals across geographies
  - since, the cost of care is extremely heterogeneous and the cost data is skewed data, parameters like hospital characteristics and patient profile play a major role in determining the cost of care. For bringing in larger pricing reforms there is a need to include the patient profiling data to the cost database which will allow the pricing to be sensitive to the patient's condition. The role of the private sector is very crucial to get this data since they have very good systems to capture and share **patient-centric data**
  - an outcome-related, **value-based model** will have to be worked upon- both in terms of user satisfaction as well as the clinical quality of life of patients
  - all stakeholders need to work together to identify and establish the actual cost of healthcare delivery.

- **Elimination of Waste**- All forms of financial audits are performed in any institution, but there is no established procedure to analyze and determine the wastage of resources. As shown in multiple reports ~38% of hospital revenue is wasted in some form or the other. Determining the wastage and fixing that can help compensate for the quality component.

- **Unlocking the potential of Technology**- It is evident now that with technology it is possible to have deliverables that are good in quality, cost-effective as well as fast. Irrespective of a sector, it has been observed that digital innovation has helped in 5-10% improvement in cost-effectiveness. Similar opportunities exist in the healthcare sector that revolutionarily help in solving the issue of providing quality healthcare in a cost-effective manner. It is important that we view technology as an overall systematic approach that will yield improvement.
  - **E-Records in hospitals**- It can be challenging for doctors and institutions to maintain and follow electronic health records; they can also be seen as an added cost. But understanding and realizing the long-term benefits like patient satisfaction, improved performance levels of professionals, information about specific patient conditions, and improved overall efficiency can help in better acceptance of technology.
  - **Increase in revenue**- More than cost reduction, technology can help institutions in enhancing the revenue by bringing more reputation to the business and increasing the ability for healthcare facilities to provide add-on services that otherwise may be missed upon. Further, the payments and reimbursements become easier as capturing patient data helps in tracking the costs. However, the institutions should not expect immediate short-term results and should understand that the gains will be seen in long-run.
  - **Key performance indicators**- It is important that any facility or professional should identify key indicators and make sure these metrics are improving. It is also important to note that any
transformation in technology will yield the best of outcomes only if professionals are using it consistently and are following required process and protocols.

- **Preventive healthcare as a discipline** - Preventive healthcare is crucial to reduce the burden of the healthcare system. Early detection and treatment can help reduce healthcare costs significantly. To provide adequate focus on the segment, preventive healthcare needs to be promoted as a discipline in the country.

The COVID-19 pandemic brought in the adoption of digital solutions across industries at breakneck speeds. The healthcare industry underwent a similar digital transformation in order to keep pace with changing consumer behaviour. However, with normalcy setting in, the existing digital health landscape needs to realign itself to co-exist with the traditional approaches to healthcare. Revisiting the appropriate regulations that came into effect during the pandemic; taking into consideration the influx of digital insurgences, solutions and practices is a good place to start. Interestingly, we are also witnessing consolidation across the digital health value chain brought about by the changing demand and supply equation. This session discussed the challenges and opportunities emerging from the changing landscape in Digital Health post pandemic.

**Remarks by the Session Chair: Dr R S Sharma, CEO, National Health Authority, GoI**

- India has taken massive strides in mobile internet infrastructure and digital adoption, in the last few years, which has led to initiatives like digital KYC, digi-lockers, e-signatures etc.
India already has the infrastructure and capabilities to take up the digital health initiative on the back of the digital India initiatives for e.g., digital identity verification, payment, e-sign prescriptions, health record storage etc.

This digitization will result into several desirable attributes like making healthcare more affordable, accessible (already over 2 lakh e-consultations are done per day via e-Sanjeevani alone) and by improving the quality of care.

Over 25 Crore Ayushman Bharat health accounts have already been created and the government is now starting a campaign wherein they will be able to create the health accounts in schools, colleges, and other institutions.

Interoperability is critical when it comes to digital health, and this is the focus of Ayushman Bharat Digital Mission (ABDM) so that the providers and patient do not need to be on the same application or platform. It should be as seamless as making a phone call irrespective of the mobile carrier of the caller or the recipient.

The government is currently experimenting the use case in Lady Hardinge Medical College wherein a person with Ayushman Bharat health account can scan a QR code and their profile is transferred to the hospital’s HMIS and the OPD card is generated without the need to queue.

Due to the large number of stakeholders involved (patients, hospitals, laboratories, pharmacies etc.), ABDM is a very challenging project and will require the support of the private sector to be successful.

The COWIN platform will be an open-source software and exported to countries free of cost. COWIN is also being repurposed to become a universal immunization application, not just for COVID vaccines. It would contain all immunization information about the individual and even the blood banks can leverage the same network.

Key highlights from the panel discussion

Indian healthcare is at an inflexion point and there are many opportunities to make healthcare seamless and scalable—

**Seamless patient-centric healthcare**
- The panelists unequivocally asserted the importance of a seamless customer journey from diagnosis to post-care follow-ups. This journey should be seamless not just for the patient themselves but also their family as healthcare is a family affair in India.

**Partnerships are key to a robust healthcare system**
- Traditional hospitals have the advantage of a large footprint which the new age insurgents lack. On the other hand, they are slow to move and change unlike the insurgents. This presents an opportunity for partnerships between traditional and new age providers.
- Partnership between the government and the private players is also equally essential. For e.g., the Government of Indonesia has been a key catalyst in the success of telehealth in Indonesia. Being flexible on the regulatory framework and by partnering with private players led to 40% of patients, who contracted COVID, using telemedicine.

**Unique solutions for the Indian market**
- Most of the hospitals in India are small and only have 30-40% effective utilization. They also lack the latest medical equipment. This has presented an opportunity for the new age players to collaborate with smaller hospitals by ensuring their healthcare protocols are up
to the standards and by providing them with the equipment and well-trained healthcare professionals to perform the level of care that the top hospitals provide.

- **Value-based care**
  - Current healthcare system in India is transactional with little to no incentives for quality-of-care outcomes. There needs to be a continuity of care management almost like a health concierge and at the same time the financial compensation of providers needs to be linked to the quality-of-care outcomes on a mass scale.

**Key recommendations**

**for Government:**
- It is important for any government to have frequent dialogue with the private sector before implementing a new set of standards to get their feedback.
- Government should be open to experiment and partner with private players in implementing various initiatives.
- The new age healthcare providers need to be considered as mainstream and be integrated in the current ecosystem including Ayushman Bharat-PMJAY or direct empanelment with insurance companies. Since companies offering new age models do not own any assets, they are unable to get empaneled with insurance companies directly even though they may provide more care.
- Reimbursements for providers or hospitals should be enabled based on the quality-of-care outcomes and this needs to be scaled up throughout the country.
- To ensure the patients are not misappropriated, it is critical to have a digital layer which captures the patients’ longitudinal data and ensures that there is a digital trial for any care provided, which can be audited.

**for Industry:**
- Industry needs to have an open approach for private-private and private-public partnerships and innovate through new healthcare models that are value-based and scalable.
- Private players should bring their ideas and roadmap to the government and help them implement similar initiatives on a larger scale via partnerships instead of keeping those ideas secret.
During the conference, two Master Classes were organized on new-age topics of interest in healthcare. Both the sessions were very well received by the attendees. The two topics were—

A- Design Thinking in Hospitals - Improving outcomes and experiences
B- AI in Healthcare

**Master Class A - Design Thinking in Hospitals - Improving outcomes and experiences**

This session was conducted with the aim to give practical exposure to the participants on multiple facets of design thinking and how it leads to better outcomes and experiences in the healthcare industry.

The concept of designing is very commonly misinterpreted by people, it is usually linked with an artistic ability. However, in reality, design thinking is a very creative approach to solving complex problems that do not necessarily require artistic ability. At the core of designing are innovation and collaboration along with delivering value-based care.

One of the main objectives of the masterclass was to realize the challenges in the healthcare ecosystem and innovatively acknowledge them through design thinking. Major challenges identified in the healthcare ecosystem include high attrition rates, low waiting time, lack of trust, gaps in communication, the quantum of people, and keeping up with tech. Hence, an integrated approach to design thinking to solve the complexities in the healthcare ecosystem was discussed.

The eight steps of the design process were broken down into four phases—

- **Discovering** - understanding the key problem areas and empathizing with the beneficiary’s needs
- **Defining** the problem, simplifying and reframing the situation to work towards a solution
- **Developing** a prototype to run a pilot
- **Delivering** the service and taking responses from the users.

The masterclass enabled the participants to understand the problem with an open mindset and conceptualize ideas creatively. Engaging stakeholders of multidisciplinary backgrounds and involving the user in key discussions was also encouraged as good practices in the design thinking process.

**Ms Tulika Puri Katyal**, BArch, MSc; Design Thinking Mentor & Facilitator- GSB, Stanford University; Founder, CDI; Partner, Urbane-The Design Workshop; **Dr D S Nicholas**, NCIDQ, AIA, NCARB, LEED GA; Associate Professor, Drexel University, Westphal College; Founding Director, MS Design Research
Master Class B- **AI in Healthcare**

With the exponential increase in technology, the popularity of AI (Artificial Intelligence) amongst the masses has grown multi folds. Hence, it is crucial to understand the basic concept of AI and what are its practical implications in healthcare. The masterclass was intended to explore the broad horizon of AI in healthcare.

“AI is ever-evolving and currently, it is narrowly intelligent and can decently perform a single task at a time. Learning and training are the fundamentals of artificial intelligence. The two types of learning- supervised and unsupervised- supervised learning involves labelling which leads to automatic detection, and unsupervised learning helps in the automatic detection of patterns which is more like human behaviour.”

AI has now percolated in all aspects of the healthcare industry which include preventive and population health, diagnostics, and therapeutics. AI has empowered the diagnostics sector drastically by accelerating access. The speakers presented multiple exemplary case studies of therapeutic companies and how AI has evolved over time. AI in healthcare helps in forecasting and measuring outcomes, which can help in preventive healthcare, but it has ethical conundrums. To understand the implications of AI in radiology, a workflow of radiology was discussed along with the possible interventions of AI.

1. **patient scheduling** - AI can help in predicting patient wait time which will increase patient satisfaction and help avoid disruptions in clinical management
2. **scanning image accusations** - AI can help with the automation of the protocol process which will help even low-skilled technologists to perform and thus reduce the workload
3. **diagnosis** - where the quality of scans has a pivotal role and enhancing the quality can help in early and better detection
4. **analysis** - which when assisted with AI can help enhance report generation.

A live demo was also presented on the use of artificial intelligence in diagnostics. Discussion around AI replacing radiologists was initiated and the speakers concluded on the fact that AI can assist the human workforce but cannot replace it.
FICCI has been organising Healthcare Excellence Awards since 2009 aimed at felicitating organizations and individuals for their contributions to the industry by innovating for increased efficiency, affordability, and improved performance of healthcare delivery at large. The Awards have emerged as a definitive recognition in the Indian healthcare industry, based on innovation, impact, sustainability, and scalability which form the four criteria for evaluation.


This year in the post-pandemic world innovation in healthcare has been transforming. With the emergence of dedicated healthcare start-ups and digital transformation, the healthcare ecosystem of India has seen tremendous changes. To celebrate the contributions of those who have set benchmarks of excellence in the healthcare space and continue the long legacy of recognizing best practices in the industry, the 14th edition of the FICCI Healthcare Excellence Awards was held.

The awards ceremony was graced by:

Chief Guest- Smt. Smriti Zubin Irani, Cabinet Minister, Ministry of Women and Child Development and Ministry of Minority Affairs, Government of India

Jury Chair- Mr C K Mishra, Former Secretary, Ministry of Environment, Forest and Climate Change, Government of India
AWARDS JURY

GRAND JURY

Jury Chairman
Mr CK Mishra
Former Secretary, Ministry of Health & Family Welfare and
Advisor to the Prime Minister, Cabinet of India

Jury Co-Chair
Mr Gautam Khanna
Chair, FICCI Health Services Committee and
Chief Executive Officer, D’O Hiranandani Hospitals & MHC

GRAND JURY MEMBERS

Dr Harsh Mahajan
Co-Chair, FICCI Health Services Committee
& President & Chief Executive Officer,
Max Super Speciality Hospital

Dr Ajay Roy
Vice President, FICCI Health Services Committee
& Chief Executive Officer, Fortis HealthCare

Dr Mahesh Verma
Vice Chancellor, Surya Gopal Singh Institute of Management & Technology

Dr Narottam Puri
Principal Advisor, IQS HealthCare and Senior Consultant
Max Healthcare, Chairperson, FICCI Health Services Committee

Dr Nandkumar Jalaram
Director, SYLかな Trustee & President,
Max Super Speciality Hospital

Dr R K Chhiman
Director, Naroda Surgical Hospital & Apollo Hospitals

Dr Y P Bhatia
Chair, Avanse Core Group & Managing Director,
Apollo Hospital & Healthcare Consultants Pvt Ltd

Mr Ashok Kakkar
Chairman, Max Healthcare

INTERIM JURY

Dr Y P Bhatia
Chair, Avanse Core Group & Managing Director

Dr Ravj Saha
Co-Chair, FICCI Health Services Committee
& Director 

Dr Sanjeev Singh
Vice President, FICCI Health Services Committee
& CEO, Medanta - The Medicity

Dr Bidhnu Panigrahi
Vice President, FICCI Health Services Committee
& CEO, Kalinga Institute of Medical Sciences

Dr Muzaffar Ahmad
Chairman, FICCI Health Services Committee
& Chairman, Max Healthcare

Mr Raj Gora
Director, Fortis Healthcare

Prof. Arnab K. Lahar
Chairman, FICCI Health Services Committee
& Director, Naroda Surgical Hospital

Dr Arati Verma
Chairwoman, FICCI Health Services Committee
& CEO, Aastha

Dr Murali Srinivas
MD, Narada Surgical Hospital

Mr Ayush DeBhagwati
Co-Founder & Group President,
Max Healthcare

Mr Harsimran Rawat
Vice President, Naroda Surgical Hospital

Mr Jagdeep Chauhan
Member, FICCI

Prof (Dr) Ramesh Bhalla
Chairman, FICCI Health Services Committee
& Secretary, Ministry of Health & Family Welfare,
Government of India

Dr S L Meena
Vice Chairperson, FICCI Health Services Committee

Dr Sunil Bajaj
Vice Chairperson, FICCI Health Services Committee

Mr Richa Singh Debnath
Vice Chairperson, FICCI Health Services Committee

Dr Vidur Mahajan
Chairman, FICCI Health Services Committee

Mr Jatin Mahajan
Chairman, FICCI Health Services Committee

Mr A. V. Vijayam
Vice Chairperson, FICCI Health Services Committee

Dr S B Bhattacharyya
Chairman, FICCI Health Services Committee

Mr Vikas Malhotra
Chairman, FICCI Health Services Committee

Mr Mohammad Ameed
Chairman, FICCI Health Services Committee

38
15 winners and 6 special jury recognitions were shortlisted. Doyens of the healthcare industry were also felicitated with:

- **Healthcare Humanitarian Award** - *Dr P Namperumalsamy*, Chairman- Emeritus, Aravind Eye Care System, Director- Research, Aravind Eye Hospital
- **Healthcare Personality of the Year Award** - *Dr Ashutosh Raghuvanshi*, MD & CEO, Fortis Healthcare
- **Lifetime Achievement in Healthcare Industry Award** - *Dr (Prof) Ashok Seth*, Chairman, Fortis Escorts Heart Institute

### AWARDS WINNERS

<table>
<thead>
<tr>
<th>Category</th>
<th>Award</th>
<th>Name of the Organization</th>
<th>Project Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellence in Service - Private Hospitals</td>
<td>Gold winner</td>
<td>Healthcare Global Enterprises (HCG Cancer Centre - KR Road, Bengaluru)</td>
<td>Improve the percentage of planned admissions of medical, surgical and radiation oncology specializations, and thereby enable the improvement of average TAT of admissions.</td>
</tr>
<tr>
<td>Excellence in Service - Public Hospitals</td>
<td>Gold winner</td>
<td>Department Of Health &amp; Family Welfare, Government of West Bengal</td>
<td>ChokherAlo</td>
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<tr>
<td></td>
<td>Special Jury Recognition</td>
<td>U.N Mehta Institute Of Cardiology &amp; Research Centre, Ahmedabad</td>
<td>CALL 666</td>
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<tr>
<td></td>
<td>Special Jury Recognition</td>
<td>Department of Health &amp; Family Welfare, Government Of West Bengal</td>
<td>Swasthya Ingit</td>
</tr>
<tr>
<td>Excellence in Service - Other healthcare providers</td>
<td>Gold winner</td>
<td>Stanplus Technologies, Hyderabad</td>
<td>Golden Hour Response</td>
</tr>
<tr>
<td></td>
<td>Silver winner</td>
<td>Inox Air Products, Mumbai</td>
<td>INOX Air Products contribution at the time of Medical Oxygen Crisis during COVID-19 pandemic</td>
</tr>
<tr>
<td>Excellence in Patient Safety - Private Hospitals</td>
<td>Gold winner</td>
<td>Sri Ramachandra Medical Centre, Chennai</td>
<td>A Safety culture approach to prevent process variables, cultural and clinical dilemmas which resulted in identification of anticipated and preventable DVTs in a quaternary care setting</td>
</tr>
<tr>
<td></td>
<td>Silver winner</td>
<td>Kauvery Hospital, Chennai</td>
<td>Enhancing patient safety by reducing Code Blue events</td>
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<tr>
<td></td>
<td>Special Jury Recognition</td>
<td>Ramkrishna Care Hospital, Raipur</td>
<td>Reduction in VAP rate by adopting measures on early detection, proper positioning, VAP care bundle compliance improvement</td>
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<tr>
<td>Category</td>
<td>Award</td>
<td>Name of the Organization</td>
<td>Project Name</td>
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<tr>
<td><strong>Excellence in Social Initiatives- Corporates &amp; Other Healthcare providers</strong></td>
<td>Gold winner</td>
<td>Glocal Healthcare Systems Private Limited, Noida</td>
<td>Establishment and Management of Telemedicine Services in Madhya Pradesh (Rewa, Sagar and Jabalpur Divisions), National Health Mission, Madhya Pradesh</td>
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<tr>
<td></td>
<td>Silver winner</td>
<td>Aster MIMS, Calicut</td>
<td>Go Green for Sustainability with Community Engagement Bucket Programme- a noble initiative, first of its kind in our state, to adopt an urban slum colony and renovate it to an independent, healthy, and self-sufficient society.</td>
</tr>
<tr>
<td></td>
<td>Special Jury Recognition</td>
<td>Johnson &amp; Johnson Private Limited, Mumbai</td>
<td>Enhancing child survival and development in India: Through stronger and resilient primary health care during COVID-19 (J&amp;J in partnership with UNICEF)</td>
</tr>
<tr>
<td><strong>Excellence in Social Initiatives- NGO/ Not for profit organisation</strong></td>
<td>Gold winner</td>
<td>The Akshaya Patra Foundation, Bengaluru</td>
<td>A pioneer in undertaking large scale feeding efforts through technology, process developed running the largest school lunch program in the world, the foundation opened its 61 kitchens across 14 states to answer call of hunger during the pandemic, cautiously moving from serving &quot;Nutrition for Education&quot; to ensuring &quot;Nutrition for All&quot;.</td>
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<tr>
<td><strong>Capacity Building</strong></td>
<td>Gold winner</td>
<td>Fresenius Medical Care, Gurugram</td>
<td>REACH (A Renal Education Program for enhancing Dialysis Quality in India)</td>
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<tr>
<td></td>
<td>Special Jury Recognition</td>
<td>Impact Guru Foundation, Mumbai</td>
<td>ANGEL (Advance Nurses Growth, Excellence and Learning) #ThankANurse</td>
</tr>
<tr>
<td><strong>Digital Innovation in Healthcare - Health care Providers</strong></td>
<td>Gold winner</td>
<td>Glocal Healthcare Systems Private Limited, Noida</td>
<td>Hellolofy HX Acute Care Digital Hospital, Dimapur, Nagaland</td>
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<tr>
<td></td>
<td>Silver winner</td>
<td>HCMCT Manipal Hospitals, New Delhi</td>
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<tr>
<th>Category</th>
<th>Award</th>
<th>Name of the Organization</th>
<th>Project Name</th>
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</thead>
<tbody>
<tr>
<td>Gold winner</td>
<td>Turtle Shell Technologies Private Limited, Bengaluru</td>
<td>Dozee contactless remote patient monitoring and AI-Based early warning system for health care</td>
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<tr>
<td>Silver winner</td>
<td>Medikabazaar, Gurugram</td>
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Day 0 - Oct 10, 2022

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<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>2:00 pm - 3:30 pm</td>
<td><strong>Master Class A - Design Thinking in Hospitals - Improving outcomes and experiences</strong></td>
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<tr>
<td></td>
<td>Convenor and Presenter: <strong>Ms Tulika Puri Katyal</strong>, BArch, MSc; Design Thinking Mentor &amp; Facilitator - GSB, Stanford University; Founder, CDI; Partner, Urbane-The Design Workshop</td>
</tr>
<tr>
<td></td>
<td>Co-Speaker: <strong>Dr D S Nicholas</strong>, NCIDQ, AIA, NCARB, LEED GA; Associate Professor, Drexel University, Westphal College; Founding Director, MS Design Research</td>
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<tr>
<td>4:30 pm - 6:00 pm</td>
<td><strong>Master Class B - AI in Healthcare</strong></td>
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<tr>
<td></td>
<td>Convenor and Presenter: <strong>Dr Vidur Mahajan</strong>, Chair, FICCI Digital Health Task Force; Chief Executive Officer, CARPL.ai and Associate Director, Mahajan Imaging</td>
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<tr>
<td></td>
<td>Co-Speakers: <strong>Dr Bhanushree Bahl</strong>, Senior Analyst (Operations &amp; Strategy), CARPL.ai; <strong>Ms Shraddha Mittal</strong>, Implementation Associate, CARPL.ai</td>
</tr>
<tr>
<td>6:00 pm - 6:30 pm</td>
<td><strong>High Tea</strong></td>
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Day 1 - Oct 11, 2022

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>10:00 am – 11:00 am</td>
<td><strong>INAUGURAL SESSION</strong></td>
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<tr>
<td></td>
<td><strong>Welcome Address</strong></td>
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<tr>
<td></td>
<td>Dr Sangita Reddy, Past President, FICCI and Joint MD, Apollo Hospitals</td>
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<tr>
<td></td>
<td><strong>Theme Address</strong></td>
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<tr>
<td></td>
<td>Mr Gautam Khanna, Chair, FICCI Health Services Committee &amp; CEO, PD Hinduja Hospital &amp; MRC</td>
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<td></td>
<td><strong>Release of Knowledge Papers:</strong></td>
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<tr>
<td></td>
<td>• FICCI-EY Paper: “Call for Action: Making cancer care more accessible and affordable in India”</td>
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<td></td>
<td>• FICCI-KPMG Paper: “Strengthening healthcare workforce in India: the 2047 agenda”</td>
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<tr>
<td></td>
<td><strong>Inaugural Address</strong></td>
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<td></td>
<td>Hon’ble Vice President of India, and Chairman, Rajya Sabha, Shri Jagdeep Dhankhar</td>
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<tr>
<td></td>
<td><strong>Concluding Remarks and Vote of Thanks</strong></td>
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<tr>
<td></td>
<td>Dr Harsh Mahajan, Co-Chair, FICCI Health Services Committee and Founder &amp; Chief Radiologist, Mahajan Imaging</td>
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<td><strong>On Dais</strong></td>
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<td>(Hony) Brig Dr Arvind Lal, Chair, FICCI Swasth Bharat Task Force; Executive Chairman, Dr Lal PathLabs and Managing Trustee, ALVL Foundation</td>
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<td></td>
<td>Mr Arun Chawla, Director General, FICCI</td>
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<td></td>
<td><strong>Closing of Inaugural Session</strong></td>
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<tr>
<td>11:00am – 11:30am</td>
<td><strong>Conference Keynote Address</strong></td>
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<tr>
<td></td>
<td>&quot;Technology in Healthcare: Achieving Quality Care at Scale&quot;</td>
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<td></td>
<td>Dr Sunil Kumar, Provost and Senior Vice President for academic Affairs, Johns Hopkins University, USA</td>
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<tr>
<td>Time</td>
<td>Session</td>
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<tr>
<td>11:30am-12:00noon</td>
<td><strong>Break</strong></td>
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<tr>
<td>12:00noon – 1:30pm</td>
<td><strong>Theme Session: Role of healthcare industry in driving India’s economic growth</strong></td>
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<tr>
<td>1:30 pm – 2:15 pm</td>
<td><strong>Lunch Break</strong></td>
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<tr>
<td>2:15 pm – 3:30 pm</td>
<td><strong>Panel Discussion I: Smart HWCs: Collaborate, Operate and Transform</strong></td>
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<tr>
<td>3:30 pm – 3:45 pm</td>
<td><strong>Tea Break</strong></td>
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<tr>
<td>3:45 pm – 5:40 pm</td>
<td><strong>Plenary Session I: The evolving landscape of Diagnostics: A glance into the future!</strong></td>
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<td>Time</td>
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<tr>
<td>7:00 pm onwards</td>
<td><strong>FICCI Healthcare Excellence Awards</strong></td>
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<td><strong>Venue:</strong> Hotel The LaLit, New Delhi</td>
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<td></td>
<td><strong>Welcome Remarks</strong></td>
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<td></td>
<td>Mr Gautam Khanna, Chair, FICCI Health Services Committee &amp; CEO, P D Hinduja Hospital &amp; MRC</td>
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<td></td>
<td><strong>Chief Guest</strong></td>
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<td>Smt. Smriti Zubin Irani, Cabinet Minister, Ministry of Women and Child Development and Ministry of Minority Affairs, Government of India</td>
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<td></td>
<td><strong>Jury Chair</strong></td>
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<td></td>
<td>Mr C K Mishra, Former Secretary, MoEFCC and MoHFW, Government of India</td>
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<tr>
<td>9:00 pm</td>
<td><strong>Networking Dinner</strong></td>
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</tbody>
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**Day 2 - Oct 12, 2022**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:30 am – 11:15 am</td>
<td><strong>Panel Discussion II – Strengthening the Healthcare Workforce</strong></td>
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<td><strong>Chair:</strong> Dr Manohar Agnani, Additional Secretary, Ministry of Health &amp; Family Welfare, GoI</td>
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<tr>
<td></td>
<td><strong>Convenor:</strong> Mr Karthik Rajagopal, Co-Chair, FICCI Health Services Committee and Chief Operating Officer, Manipal Hospitals</td>
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<td><strong>Moderator:</strong> Mr Lalit Mistry, Partner and Co-Head, Healthcare Sector, KPMG, India</td>
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<tr>
<td></td>
<td><strong>Speakers:</strong></td>
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<td></td>
<td>• Prof Minu Bajpai, Honorary Executive Director, NBEMS and Head of Department of Pediatric Surgery, AIIMS- New Delhi</td>
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<td></td>
<td>• Dr Narottam Puri, Principal Advisor-QCI; Board Member &amp; Former Chairman- NABH; Advisor- FICCI Health Services; Advisor- Medical Operations, Fortis Healthcare Ltd.</td>
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<td></td>
<td>• Mr Michael Allen, Global Lead, Future Workforce in Healthcare, KPMG International</td>
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<td></td>
<td>• Prof Mahesh Verma, Chairman, NABH and Vice-Chancellor, GGS Indraprastha University</td>
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<td></td>
<td>• Dr Sanjeev Singh, Medical Director, Amrita Institute of Medical Sciences &amp; Research Center</td>
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<tr>
<td></td>
<td>• Dr Santosh Shetty, CEO &amp; ED, Kokilaben Dhirubhai Ambani Hospital</td>
</tr>
<tr>
<td>11:15 pm – 11:30 am</td>
<td><strong>Tea Break</strong></td>
</tr>
<tr>
<td>11:30 am – 1:00 pm</td>
<td><strong>Panel Discussion III – Making cancer care more accessible and affordable in India</strong></td>
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<tr>
<td></td>
<td><strong>Convenors:</strong></td>
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<tr>
<td></td>
<td>• Mr Ashok Kakkar, Chair, FICCI Task Force on Cancer Care and Managing Director, Varian Medical Systems International India Pvt. Ltd</td>
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<td></td>
<td>• Mr Raj Gore, Co-Chair, FICCI Task Force on Cancer Care and CEO, Healthcare Global Enterprises Limited (HCG)</td>
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<td></td>
<td><strong>Moderator:</strong> Ms Srimayee Chakraborty, Partner-Healthcare, EY Business Consulting, India</td>
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<tr>
<td>Time</td>
<td>Session</td>
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<tr>
<td>1:00 pm – 1:45 pm</td>
<td>Special Session - Heal in India, Heal by India</td>
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<tr>
<td>1:45 pm – 2:30 pm</td>
<td>Lunch Break</td>
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<tr>
<td>2:30 pm – 3:45 pm</td>
<td>Plenary Session II - Cost Quality Conundrum</td>
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<tr>
<td>3:45 pm – 4:15 pm</td>
<td>Tea Break</td>
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<tr>
<td>4:15 pm – 5:45 pm</td>
<td>Panel Discussion IV - Digital Health Changing Landscape - Opportunities &amp; Challenges</td>
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<tr>
<td>5:45 pm – 6:00 pm</td>
<td>Closing</td>
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</table>
Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organisation, FICCI is the voice of India’s business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies.

FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

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