

Conference Recommendations

FICCI HEAL 2016

FICCI's Annual Healthcare Conference – Health Enterprise And Learning


NATIONAL HEALTH MISSION
10
A DECADE OF SUCCESS
FICCI HEAL 2016
HEALTH - ENTERPRISE AND LEARNING
August 31 - September 1, 2016 | FICCI, New Delhi
'Re-engineering Indian Healthcare'
Network ■ Learn ■ Grow
FICCI


Network ■ Learn ■ Grow
C K MISHRA
J P NADDA
150+
Organizations
350+
Delegates
60
Speakers
10
Interactive Sessions
3
Knowledge Papers
20
Poster Presentations


Urge private sector to give priority to innovations and best practices: J P Nadda
Call for more private-public partnerships in health sector
Nadda calls for common platform for public, pvt sector professiona
'Rise of startups to boost Indian healthcare space'
HOSPITAL BEDS THAT ARE REQUIRED TO MEET WHO RECOMMENDATION
FUNDING IN STARTUPS DURING 2009-2016 ($ MILLION)
एनसीडी के लिए उपायों की तरफ तुरंत ध्यान देने की जरूरत : नड्डा
न्यूज डायरी
आईएमए महासचिव क सम्मानित किया
FICCI: There are 1.7 nurses per 1K people, needs curriculum revision

Overview

A strong healthcare system is an important landmark in a country's growth journey - from a developing to a developed nation. India has come a long way from where it was a decade ago, and has embarked on a journey of healthcare reforms, but many challenges remain.

We house 16% of world's population and 21% of world's disease burden equaling loss of ~6% of India's GDP due to premature deaths and preventable illnesses. It is estimated that the increasing NCD burden will cost India USD 4.58 trillion due to loss of productivity. At the same time, our total health spend is only ~4.7% of GDP and out of pocket expenditure (OOP) is 62% of the total health spend. This is very high when compared to other countries such as Brazil 25%, China 32%, South Africa 6%, USA 11%, UK 9%. Therefore, providing access to quality healthcare for 1.2 billion plus population is a huge challenge that the country has to deal with.

Advances are underway on several fronts, from expanding health insurance coverage for the poor and building hospitals in smaller towns, to using technology for safer drinking water and improving treatment outcomes. However, solving India's healthcare affordability and accessibility problems is possible only if we bring in a complete paradigm shift and re-engineer our healthcare ecosystem. Today, we cannot just focus on building hospitals and follow the traditional methods of caring for the ailing through treatment. We need to move beyond. We need to prioritize our focus to move towards integrated care through robust primary and promotive care with comprehensive screening for prevention of ill health, and promotion of healthy living.

One of our urgent needs is to strengthen our healthcare human resources, both in quantitative terms as well as performance enhancement. Our workforce requirements will double from 3.5 million in 2013 to 7.4 million 2022. In order to fill the current healthcare workforce gap, India needs to focus not only on increasing the educational institutes, but also the quality of education.

Indian government and the private sector have become increasingly conscious of 'quality' in healthcare in the past decade. But there is a long way to go. Out of more than 20,000 hospitals in India, only 19 are accredited by JCI and ~400 by NABH. We need to constantly encourage our health care organizations to pursue accreditation as a means to improve the safety and quality of health care provided.

The technology reforms throughout the world have brought in a technology transformation in healthcare too. We've witnessed breakthrough innovations like wearable gadgets and fitness apps have become ubiquitous. In addition, there have been significant enhancements in back-end healthcare applications and platforms in hospitals and clinics, supporting better capture and sharing of patient health information.

India's healthcare information technology market is expected to hit USD 1.45 billion in 2018, more than three times the USD 381.3 million reached in 2012. Healthcare technology solutions have been

able to modernise medical care, reduce costs, avoid redundant or duplicate tests, procedures and mechanise manual processes. Healthcare informatics, telemedicine, HIS, electronic health records, remote diagnostic and therapeutic tools have pivoted the first step towards tech enabled healthcare and can be further leveraged to effect new modalities of healthcare.

Today, healthcare organizations need to streamline their IT infrastructure, to be able to provide simple, quicker and more efficient healthcare service or delivery. The healthcare solutions promote a new productivity model whereby the ultimate winner is the patient, who will now have instant equitable access to the best clinical expertise, hence driving us to a more patient-centric system.

Globally, the healthcare industry is spending millions on research and development in areas like genome editing, genetic or DNA testing and personalized medicine. Stem cell research is a promising frontier in biomedical research and therapeutics that will permanently transform the way medicine is being practiced. India definitely possesses the initiative, resources and pragmatism to acquire leadership in these areas.

India has a huge potential to integrate its traditional systems of medicine, whether allopathic or AYUSH, with the new age clinical and biotechnological advancements to bring in a completely reformed outlook on holistic healthcare.

India also has the potential to become the powerhouse of healthcare innovations. Innovation holds the capacity to both accelerate healthcare through more effective, safer and more affordable products and services, as well as through improved design of health programmes and delivery of healthcare services. With an ever evolving Indian healthcare landscape, there is immense need for innovations that are not only unique in addressing the current healthcare challenges but are cost effective, scalable and easy to deploy. “Start-up India, Stand-up India”, launched by the Hon’ble Prime Minister is a welcome initiative of the Government of India to foster innovation and entrepreneurship in India.

Federation of Indian Chambers of Commerce and Industry (FICCI) has been at the helm of brining in reforms in all these areas. FICCI has been working very closely with the government for more than six decades. Our **Health Services Committee**, that was constituted in 2006 has been supporting and partnering with the Health Ministry and other stakeholders towards creating the building blocks for achieving quality healthcare through various initiatives.

FICCI’s 10th annual healthcare conference, FICCI HEAL, brought together a galaxy of eminent experts with an aim to create a road map for further reforms and move towards a complete re-engineering solution for the sector.

The Conference

Federation of Indian Chambers of Commerce and Industry (FICCI) organized the **tenth edition of FICCI HEAL**, the annual flagship healthcare conference of FICCI on the theme, **'Re-engineering Indian Healthcare'**. The conference, held on **Aug 31 -Sep 1, 2016** at FICCI Federation House, New Delhi, was supported by the **Ministry of Health & Family Welfare**, Government of India.

The two-day conference, attended by over 350 delegates, brought together various stakeholders of health sector encompassing healthcare providers, government officials, policy makers, representatives of embassies and multilateral agencies, medical technology and pharmaceutical companies, healthcare education providers, health insurance companies, financial institutions etc. It also provided a platform for discussions and deliberations by eminent Speakers drawn from Government and Industry.

The conference was addressed by **Mr J P Nadda, Union Minister for Health and Family Welfare**, **Government of India**, who stated that "there was an urgent need to develop a forum for healthcare providers and professionals to engage in meaningful and interactive discussions with the government entities to enable the transformation and re-engineering of the Indian healthcare industry. The healthcare sector was moving in the right direction and 'Speed, Scale and Skill' were needed to keep the momentum of the drive alive."



Mr Nadda said that the biggest challenge for the government was to provide quality and affordable healthcare services in far-flung corners of the country as healthcare services were concentrated in urban areas and not available to vulnerable sections of the society. Hence, he urged the private sector to create a common platform for deliberations on enhancing qualitative and quantitative aspects of healthcare services and making it accessible and affordable for all.

Alluding to the government's initiatives, the Minister said that medical colleges and institutions such as AIIMS were being opened all over the country to meet the rising demand of professionals for the sector. He called upon the private hospital players to open medical institutions to deliver effectively to the Indian citizens. The Minister assured the private players that they would be facilitated by the government and policies would be framed to enable them to function seamlessly in the domain.

Mr C K Mishra, **Secretary for Health & Family Welfare, Government of India** gave the Keynote Address in the Opening Session of the conference. He said that there was a need to radically improve the medical delivery system, make the provision of healthcare patient centric and reassess the fundamentals of domestic healthcare system in India. Mr Mishra also said that there was a need to bring in new technology and adapt it according to the requirements of the Indian healthcare system, and added that re-engineering in thought process was needed to bridge the gap between the available technology and its use.



The Secretary also said that the public and private sectors must work in tandem to scale up innovations in the sector and reach out affordable and quality healthcare to all. He added that the government alone could not provide healthcare to all and needed active participation of the private sector. The government, on its part, would ensure that the private sector was well facilitated. He said that the stakeholders should encourage 'Make in India' in fields of medical devices and pharma. Also, 'Made in India' should be the call where healthcare stakeholders can study the Western nations practices and draw from the domestic learnings and then re-engineer the healthcare system to meet the Indian healthcare requirements.

Mr Sunil Kant Munjal, Joint Managing Director, Hero Motocorp Ltd. & Chairman, Hero Corporate Service Ltd., who also addressed the opening session of the conference, said that there was a need to re-imagine and create a balance between caring and business before re-engineering the sector. He said that customized healthcare for individuals was required and this could be achieved with widespread use of technology, data and data analytics. The healthcare system should also be strengthened by providing a sound backend with the help of technology. Also, patient's confidentiality needed to be beefed up to enhance the trust factor among the customers.



Mr Munjal also said that instead of completely relying on the Western medicine, the Indian healthcare providers should look at traditional medicines such Unani to create a holistic system. Speaking about the regulatory framework, he said that the regulators for healthcare should act as facilitators and support the stakeholders rather than policing it.

Mr Harshavardhan Neotia, President, FICCI, highlighted the key recommendations from FICCI with respect to 'Ease of Doing Business' to ensure quality care. Currently healthcare is exempted from service tax and this benefit should continue in the GST regime, he said and added that at present,

Foreign Trade Policy 2015-2020 (FTP) provides for export beneficial schemes to healthcare sector. This benefit must continue under the proposed GST regime.



Mr Neotia requested government's intervention in getting banks to provide low interest loans and long term moratorium to healthcare providers. The healthcare business is highly capital intensive apart from having a long gestation period. It was therefore imperative to restore the weighted deduction of 150% of the capital expenditure, from the current 100%, incurred for setting up a new hospital.

He said that the benefit of deduction under Section 35AD under the IT Act should be extended to a 50-bedded specialty centre which is focused on treatment of NCDs. He added that with the right regulatory and policy framework, this industry can leapfrog to achieve substantial growth and provide access to quality healthcare to our people.

Ms Sangita Reddy, Chairperson, FICCI National Services Council and Joint MD, Apollo Hospitals Groups, said that earlier healthcare was regarded as the responsibility of public and private sector but it must be understood that healthcare is the responsibility of the society and every individual. She added that there is a need for an ethical framework from the government. She also said that there should be guidelines issued to schools with regard to health of children with emphasis on healthy eating habits as well as lifestyle.



Ms Reddy said that the private sector was ready to scale up both quantity and quality of health services and needed an enabling environment from the government. She suggested that interventions like a health app on every phone could help in enhancing the spectrum of healthcare coverage. Ms Reddy added that it was critical to anchor scalable and sustainable transformations in technology for the health sector.

In his presentation on the thematic paper, **Mr Muralidharan Nair, Partner, EY,** said that the results of the survey done as a part of this study indicated that the aspirations of the middle and upper classes are evolving and their demands for convenience, participation and transparency in the healthcare delivery process are indicative of the shift from being a docile patient to an informed "health consumer."



Mr. Nair said that sick care-based health system, primarily funded by institutions and focused on health services and not health performance, manifests itself in a vicious cycle of health expenditure, where most stakeholders are beneficiaries of sickness and not health. This leads to spiraling costs, which even the most advanced economies of the world are struggling to cope with. Hence, it is imperative to avoid this pitfall and create a healthcare ecosystem focused on prevention of diseases.

Dr Nandakumar Jairam, Chair, FICCI Health Services Committee; Chairman, NABH & Chairman & Group Medical Director, Columbia Asia Hospitals India, pointed out that there was a need to double the number of quality professionals in healthcare sector. The sector at present is being served by 3.5 million medical professionals and this number must reach to 7.4 million before 2022 to cater to the rapidly increasing population of India.



Dr Jairam said that it is time to leverage technology in the sector to reduce costs, optimize manpower, avoid redundant processes, enable diagnostics and maintain records. Besides, there is a need to step up research and encourage innovation and integrate it with the present healthcare delivery system.

In his theme address **Mr Vishal Bali, Chair, FICCI HEAL 2016 Organizing Committee; Co-Chair, FICCI Health Services Committee & Asia Head - Healthcare, TPG Growth,** gave an overview of the sessions to be held during the two-day conference and the broad outline of the themes to be deliberated upon. He added that financing, technology, start-ups and innovation would be buzzwords that will be echoed at HEAL 2016.



Mr Bali said that to transform the Indian healthcare sector, it was time for the professionals and stakeholders to think boldly, innovatively and disruptively to create a new healthcare ecosystem. There was a need to manage the sector based on the expectations of the consumers and eliminate the trust deficit in consumers.



In his concluding remarks, **Mr Ashok Kakkar, Co-Chair, FICCI Health Services Committee and Senior MD, Varian Medical Systems International India Pvt Ltd.,** said that the conference would focus on access to quality healthcare to every Indian citizen; assurance of right clinical processes being followed at hospitals and re-establishment of trust and credibility of

healthcare professionals. Care with compassion was the key for sustainable and inclusive healthcare delivery.



Dr A Didar Singh, Secretary General, FICCI, said India needs a healthcare system which ensures accessibility to all. FICCI has been working steadfastly in this direction with its stakeholders in the healthcare sector and was bringing them on one platform to create a healthcare delivery model that is sustainable and inclusive.

Ms Shobha Mishra Ghosh, Senior Director, FICCI, made a presentation on completion of 10 years of FICCI HEAL. She said that FICCI will continue its journey for successful transformation of the healthcare ecosystem which will require a thorough reassessment of the very fundamentals that healthcare systems are based upon, and completely reengineering the entire continuum of care.



Knowledge Papers

FICCI-EY Thematic Paper on 'Re-engineering Indian Healthcare: Empowered patient (consumer), enhanced outcome and efficient business'

Today India needs to prioritize its healthcare requirements and focus to moving towards integrated care through robust primary and promotive care. We urgently need to strengthen our healthcare human resources, both in quantitative terms as well as performance through management reforms. Most essentially, we need to empower our healthcare consumer and move towards a patient-centric healthcare system.



This joint study by FICCI and EY highlights the need for healthcare providers to address the issue of trust deficit in their patients. The report cites a survey conducted by EY among 1000 respondents, where 38% believed that hospitals not always act in their best interest, while 24% believed that doctors may not act in their best interest.

The report takes a view on the overall scenario of health in the country and calls for action from all stakeholders – including the government, health care providers, academicians and entrepreneurs – to adapt to the evolving consumer and health needs in the country to be able to be best prepared for the next phase of growth.

FICCI-KPMG Paper on 'Indian Healthcare Start-Ups: An Inside Look Into Funding'

Recognising the need and role of start-ups in the Indian healthcare sector, this publication by KPMG in India and FICCI, investigates the challenges they face and puts forth suitable measures to boost fund flow.



The report highlights the various opportunities for

both startups and investors, wherein they can complement each other to create a flourishing healthcare start-up ecosystem in India.

One of the main highlights of the report is that 'Start-ups need to identify consumer–focused solutions, sought after by investors globally. Their focus has to be on extensive innovation, differentiated product offerings and sustainable business models.'

FICCI-EY Paper on 'Nursing Reforms – Paradigm shift for a bright future'

Nurses form the largest and one of the most crucial segment of human resources in the health sector. However, nursing as a sector in India continues to experience challenges in terms of Availability, Distribution and Retention. Nursing education and nursing practice both require strengthening too.

FICCI's Health Services Committee constituted a task force on Nursing Reforms to provide inputs on the present and future requirements for closing demand supply challenges, nursing skills for modern day medicine, accreditation models, regulation and, most importantly, restoring the due position nursing deserves in the society and the hospital hierarchy.



This joint paper with EY, on 'Nursing Reforms: paradigm shift for a bright future' aims to identify challenges in the nursing sector, and provide a roadmap for the Government, policy makers, industry, and education and research institutions with the purpose of strengthening nursing as a sector. The report has attempted to generate a comprehensive view on nursing as a sector which includes critical areas like nursing education, welfare, policies, reforms and practice.

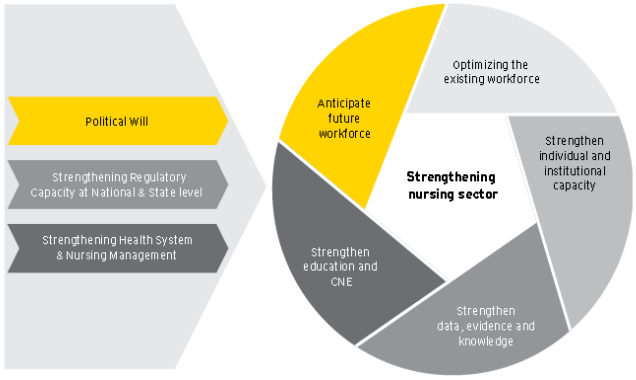
Keynote Session

This session was a special feature of the conference where eminent practitioners and academicians talked about their experience in some of the critical aspects of healthcare:

'Nursing Reforms in India'

Dr Arati Verma, Chairperson, FICCI Task Force on Nursing Reforms and Senior Vice President - Medical Quality, Max Healthcare

Dr Verma presented the highlights of the paper developed by the FICCI Task Force on Nursing Reforms along with EY, under the guidance of Ministry of Health & Family Welfare, GoI. The presentation included recommendations on various aspects of Nursing – education, services, administration and management, accreditation as well as research.





'A Triple Aim or a Triple Threat?'

Prof Stephen D Sisson, Professor of Medicine and Executive Director, Ambulatory Services, Johns Hopkins Hospital, USA

Prof Sisson spoke about the significance of patient centricity in a healthcare organization and how patient outcomes can be positively impacted by adopting these strategies.





'Talk on Organ Donation'

Dr (Col) Avnish K Seth, Director, Fortis Organ Retrieval & Transplantation; Director, Gastroenterology & Hepatobiliary Sciences, FMRI

Dr Seth spoke about the importance of organ donation and how organ transplant can be executed in a more systematic and successful manner. He also gave some recommendations that can be taken up at the national and state level along with the hospitals and donor families in order to strengthen organ donation in the country.





Thematic Session: "Re-engineering Indian Healthcare"

Healthcare in India is at a cross road and needs intervention in more ways than one. Unprecedented demand due to demographic changes and disease patterns, coupled with rising costs and the proliferation of technology, has brought on a revolution for transparency, new business models and efficiency. The sector is estimated to reach $160 bn by 2017 and $280bn by 2020. It is currently the 5th largest employer amongst all sectors in the country. The forces of consumerism in healthcare have paved the way for unconventional market entrants to rise to the challenge of delivering healthcare on the back of rapid digitisation.

This is posing significant challenges to incumbent players, but also disrupting the healthcare ecosystem as a whole. It is therefore time to "Re-engineer India's Healthcare" and incumbents must innovate beyond their traditional processes to evolve the sector.

The thematic session brought together stakeholders from various segments of healthcare to deliberate on innovative strategies and models needed to re-engineer our healthcare ecosystem. The panel discussion was divided in two parts, Panel A - Indian Healthcare Version 1.0 that had eminent healthcare leaders who talked about the evolution of Indian healthcare in the past decade. And Panel B - Indian Healthcare Version 2.0 that had relatively new players who have been able to successfully implement and scale-up innovative healthcare models. Some of the key highlights and recommendations from the session are given below:

Panel A - Indian Healthcare Version 1.0

- Health systems need to ensure access to quality care including preventive services, care coordination, treatment and disease management for patients with chronic conditions. Priority needs to be given to **Access, Affordability, Efficiency and Effectiveness**

- In past couple of decades, there has been an immense **growth in the private healthcare** sector in India with increase in not only multi-specialty but single specialty too. With a huge move of manpower towards the private sector, the ability to deliver high quality care of private organizations has increased. However, private healthcare has been able to cater to mostly urban areas and hence the larger population that lives in rural areas in India has not been able to benefit. Further, there has been an increase in the overall healthcare cost but at the same time the corporate hospitals are **adopting newer and innovative methods** of care delivery. We need to further use the technologies to **bring in efficiencies** in processes and systems.

- **Health Insurance** sector has become one of the most competitive sectors in India today with the help of regulation. There has been a lot of emphasis on awareness generation, collaborations as well as new product development. However, one of the biggest challenge is the affordability of private health insurance. There is a need to increase the coverage by government to make insurance more affordable.

- The Indian diagnostic sector has undergone huge advancement over past couple of decades and is expected to reach USD 32 billion by 2022, from USD 5 billion in 2012. However, there is a strong need for **regulation for the diagnostic sector** since only about 600 labs out of 100,000 are currently accredited by NABL. We need to increase our focus on quality and accreditation as well as generate awareness for early diagnosis for better outcomes. Further, we need to **encourage manufacturing of advanced equipment for diagnostics in India**, leverage telemedicine for better outreach as well as adopt digitization and newer techniques for diagnosis.

- India faces a shortage of doctors and hence there is a growing demand for private **medical education** in India which has given rise to increase in cost of medical education. There are 250 private medical colleges out of 426 medical colleges in total. Although the private colleges regularly enhance their health facilities, most of the beds in these colleges are underutilized and hence these colleges are unable to cater to patient care and research along with imparting training. As for public colleges, most of them are being run on backdated syllabus and not much emphasis has been given on faculty selection, staff salaries, updating teaching methodologies and using advanced techniques. Hence, there is a large scope for improvement of medical education in India for which the public and the private sectors would need to work in conjunction and support each other.

- One of the key developments in past few years has been that the **consumer** / patient is becoming more and more aware about their rights and have gained the ability to question their care provider. Hence, it has become critical for healthcare organizations to become patient centric through **accountability and transparency** and work towards reducing the trust deficit. They also need to use technology as well as communication methods like social media to educate the patient and spread healthcare awareness.

- Technology is completely transforming the way healthcare is being delivered in India with growing acceptance for advanced medical technologies. The private sector has been the major driving force behind technology adoption in the Indian healthcare segment. However, we still need to make efforts to make **appropriate technology** reach the people who need it the most while keeping it **affordable**. To optimize costs and effectively manage operations, IT solutions need to become an integral part of process management, patient care and the management information system (MIS) in hospitals. Also, there is an urgent need for clear regulatory policies for the sector and create a facilitating ecosystem for manufacturing in India along with Research and Development as well as education that will help reduce the cost of technology.

- The viability of a healthcare system depends critically on stimulating and sustaining **innovation**. The public and private sectors should be focused on developing holistic, sustainable approaches to health care financing and supporting continuous innovation. PPP can also play an important role in promoting investments in research and development to produce solutions across the continuum of prevention, treatment, and care.

- The India Pharmaceuticals sector has been on a growth path accounting for about 2.4 per cent of the global pharmaceutical industry. India produces 20% of global exports in generics, making it the largest provider of generic medicines globally. Clinical research and trials was a very successful sector in India in early 2000s due to availability of large pool of heterogeneous patients as well as low costs involved. Recently, government has been working towards creating a regulatory environment in line with the highest global standards. With the new **regulatory framework** in place, although the pharma and clinical research segment have not been able to grow much, there is much **more scope for capacity building and growth as well as transparency** to ensure ethical practices.



L to R - Dr Surinder Kher, Consultant, Clinical Development and Strategy; (Hony) Brig. Dr Arvind Lal, Chairman & Managing Director, Dr Lal PathLabs Ltd.; Prof M C Misra, Director, AIIMS; Mr Vishal Bali, Chair, FICCI HEAL 2016 Organizing Committee; Co-Chair, FICCI Health Services Committee & Asia Head - Healthcare, TPG Growth; Dr Nandakumar Jairam, Chair, FICCI Health Services Committee; Chairman, NABH & Chairman & Group Medical Director, Columbia Asia Hospitals India; Mr Ashok Kakkar, Co-Chair, FICCI Health Services Committee and Senior MD, Varian Medical Systems International India Pvt Ltd.; Mr Sanjay Datta, Chief - Underwriting & Claims, ICICI Lombard General Insurance Co. Ltd

<u>Panel B - Indian Healthcare Version 2.0</u>

- The start-up revolution has touched all sectors in India, the healthcare sector being impacted the most.

- The current **environment is very conducive and nurturing** for any entrepreneur. In the recent past increasing number of HNIs, seed funds, incubators and other private investors have extended support to start-ups. The government's '**Start-up India**' initiative that intends to provide encouraging ecosystem for start-ups will be a boon for the healthcare sector.

- Some of the **challenges** that Healthcare start-ups need to overcome are:

    - **Attracting capital** has been one of the biggest challenges in India. Although Indian healthcare startups have received huge traction from foreign investors in the past few years, a large number of start-ups still grapple to raise funds from institutional

setup. Funding challenge is not merely limited to seed rounds, but also for vital scaling up.

- Most healthcare start-ups face difficulty in raising funds since many people may agree to invest on curative care but not on preventive health and wellness.
- **Recruiting and retaining appropriate talent** is seen as another challenge. Although many people have started switching to jobs with start-ups, leaving their usually better paying jobs, the trend is yet restricted to few sectors. Most of the times it is also difficult for a start-up to make correct estimates on the number and type of employees needed.
- Many a time, start-ups face difficulty in choosing a **right investor** who would believe in their vision and allow them to execute that vision without getting in their way.
- Having a brilliant idea is different from making that idea a business success. For a start-up, it is very important to have **mentors** who have been through a similar process of starting or have business experience.
- To have a **scalable business model** is a mandate for a start-up for its growth. They would be successful only if they have a business model that has the potential of augmenting profit over time, while eliminating costs. Most of the entrepreneurs are not able to foresee this.
- Healthcare entrepreneurs need a lot of patience and resilience since the **gestation period** of their enterprise can stretch to 5-7 years.
- Most start-ups are based on technology and specifically digital technology, which can be a hindrance in customer acquisition, as although India is the second largest mobile phone market, the users of smart phones may not be ready to use the apps / programs.

- Healthcare start-ups in India have the **potential to emerge as an enabler of accessible and affordable healthcare**. Many start-ups have moved away from traditional healthcare delivery models to asset light, technology based and enabling platforms for patients and healthcare providers. They understand that there is a need to create sustainable businesses with long-term value and outcomes for patients.



L to R - Mr Kaushik Sen, CEO and Co-Founder, Healthspring; Mr Aditya C Burman, Managing Director, Oncquest Laboratories Ltd.; Mr Vishal Bali, Chair, FICCI HEAL 2016 Organizing Committee; Co-Chair, FICCI Health Services Committee & Asia Head - Healthcare, TPG Growth; Mr Manoj Gopalakrishna, CEO, HCL Healthcare; Mr Lalit Pai, CEO, Nightingales

Emerging Power of the Healthcare Consumer

When it comes to their healthcare choices, consumers today are engaged, aware and empowered more than ever. Transformational market forces coupled with rapid advancements in digital technology, are placing consumers at the centre of an increasingly virtual, personalized and delocalized healthcare system.

Advances in telemedicine, e-opinion portals, wearables and the proliferation of mobile health apps and other remote patient monitoring and communication technologies, are creating opportunities for new healthcare delivery models providing a plethora of services at the convenience of consumers, where they make the choice of when, where and how they want to consume it. Social media and being 'forever connected' is adding to this transformation with a demand for more accessible and accountable healthcare service. The demand is for the same level of digital experience and empowerment that they are used to in other industries, and they are not willing to compromise with the industry's traditional inefficiencies.

While responding to these changing dynamics can benefit the healthcare industry by improving the efficiencies, the path is fraught with challenges. Some of the recommendations for the healthcare organizations in order to become more patient-centric are:

- A **concerted effort** by policy-makers, patients, provider groups, and payers, to identify important health care needs and ensuring that services delivered reflect patient preferences and needs, is essential to the long-term success of a healthcare system.

- The growing trust deficit between the provider and the consumer needs to be given the utmost priority and efforts need to be made to fill this gap through **better communication**. This can be done through increased transparency, accountability, awareness generation as well as interaction i.e. more face time between the doctor and patient.

- Healthcare organizations need to give **highest priority to patient outcomes and wellness** to be able to fill the trust deficit and deliver patient-centric healthcare.

- Hospitals need to work towards providing a **complete service experience** like they are able to experience in other sectors such as hospitality, airlines, banking etc. Patient needs empathy right from the point when he/she enters the hospital premises to the point when he/she is discharged. All the staff, right from the security guard, administration, registration / payment counter as well as the nurses and paramedics, should be trained to treat the patient and the accompanying people in a polite and empathetic manner.

- **Awareness Generation** –
  - Hospitals can run awareness programs for consumers as to when should they go to a primary health centre (PHC) and when would they need hospitalization especially in case of epidemics.

- They can also generate awareness on what the consumers should expect from their care provider and what questions they can ask when they visit a doctor, for ex, preventive measures and symptoms for NCDs like diabetes, obesity, hypertension etc.
- Programs like peer-to-peer counselling on health issues through discussion forums can also help in generating awareness on common diseases and symptoms.
- There is also a need to spread awareness on cost of quality of healthcare since there is a perception that public healthcare delivery is free of cost, while it is costing the government a subsidy.

These programs will also help in lowering the burden on PHCs.

- Since a lot of channel migration is happening with respect to the way information is sought by a patient or his relatives, the hospitals need to strengthen their interaction through **online and social media** rather than just depending on the physical appointments.

- Doctors should be trained to become the **ambassadors** of their respective hospital who can work with their teams to give a comforting environment to patients.

- Healthcare organizations should be able to assist with **ancillary services** like mobility equipment, clean drinking water and rest rooms for visitors, support for boarding and lodging near the hospital etc.



L to R - **Mr Praveen Nijhara**, Head - CSMM Division, IMRB International; **Mr Mahesh Balasubramanian**, CEO & CMO, Kotak Mahindra GIC; **Mr Gautam Khanna**, CEO, P D Hinduja Hospital, Mumbai; **Mr Rajit Mehta**, MD & CEO, Max Healthcare; **Dr Harish Pillai**, CEO, Aster Medcity & Cluster Head Kerala, Aster DM Healthcare; **Mr Shashank ND**, Founder and CEO, Practo; **Ms Sushmi Dey**, Assistant Editor, The Times of India

- To ensure efficiency in patient service due attention should be given to **talent acquisition as well as retention** of clinicians, nurses, paramedics and other support staff. The critical need for increase in talent supply, in order to provide the patient with quality and efficient services, can be achieved through collaboration of public and private sector. The recent proposal by the government to involve the private sector in medical education is a welcome move.

- Creation of **appropriate forums** where issues being faced by the private sector can be tabled with the concerned authorities would be helpful in enhancing collaborations.

- The industry fully appreciates the need for affordable healthcare however sweeping price controls may keep the patients away from quality service. Dialogues in appropriate forums will help create a platform for win-win inputs.

Human Resources in Healthcare – Challenges and Solutions

According to the latest data, India is ranked 67th out of 133 developing countries in terms of the number of doctors and 75th in terms of the number of nurses. Although India continues to be a major supplier of doctors and nurses to developed countries, the domestic scenario looks bleak. While we carry 20% of disease burden of the world, we house only 8% of world's doctors and 1% of world's lab technicians. As per the estimates, India needs an additional 1.6 million doctors and 2.4 million nurses to match the global averages.

The healthcare industry in India currently employs nearly 5 million people. With strengthened coverage, scale-up of public health programs and increased investments by both public and private stakeholders, this number is expected to increase to about 7.5 million people by 2022. While the public health care network is widespread, majority of the service share lies with the private sector, which caters to 70% of out-patient and 60% of in-patient services. With a shift in focus toward quality of service, particularly with the rising demand for tertiary and quaternary care, the industry requires specialized and highly skilled resources, including doctors, nurses and other paramedical staff. As a result, the demand for trained manpower, especially nurses, will continue to increase every year.

So, what are the solutions? How will we ensure that the industry is prepared for these challenges? What are the successful models that various organizations have used to employ and retain the talent? How do we increase the availability of paramedical and allied healthcare workers? What reforms do we need in our nursing segment? Is there a role for the government as the industry tries to get ready for the huge task that lies ahead? This session intended to come up with answers to some of these questions.

Some recommendations arising from the session are:

- There is an urgent need to **increase the seats available in medical colleges**. Although the government has shown its commitment to increase these seats, there is much more that can be done. In 2010-11, India produced 37,000 MBBS doctors and 18000 post graduate doctors. Today, we have the seat capacity for 60,000 doctors and 26,000 post graduate doctors. This can be further increased by measures like increasing the average number of students in each college. Top 10 medical colleges in the world have an average of 250 students in each batch. However, in India we have up to 150 seats. If government decides to increase 25% of seats in its medical colleges, we will have 16,000 more doctors every year. We would need to set up more labs and classrooms which is lot easier than setting up hospitals. Similarly, we need to

increase the training capacity for nurses and paramedics. Private sector participation is indeed important for achieving this.

Further, conversion of 58 District Hospitals to medical colleges needs be fast tracked by the government.

- **Nursing reforms** - Despite the fact that nurses form the largest proportion of workforce in the health care sector, nursing is losing its appeal as a career of choice. Only 40% of nurses that are trained in India are actually working in the country. Some have moved to other countries for better work opportunities and some are either unemployed or prefer other better paying jobs. Hence, there is a need to overhaul the nursing education and curricula and at the same time there is a requirement for bringing necessary changes that can turn nursing into an attractive profession.

  FICCI's Task Force on Nursing Reforms has worked in partnership with EY under the guidance of Ministry of Health and Family Welfare, Government of India, and submitted some recommendations for bringing in reforms in the nursing sector.

- **Unequal distribution of medical colleges across the country** has been one of the major barrier for training of healthcare workforce. While states like Uttar Pradesh and Bihar account for 25% population of the country, they have 51 medical colleges. However, state of Karnataka, which houses only 5% of the population has 53 medical colleges. Also, 52% of all medical colleges in India are in southern states. Out of total 640 districts in India, 447 districts have no medical colleges. Similarly, most of the nursing colleges and schools are in south and there are none in north east. Also, bringing qualified health workers to rural, remote, and underserved areas is a mammoth task. 80% of Indian doctors cater to 28% of population residing in big cities. Hence, it is critical that we open more medical and nursing colleges in other parts of the country and provide reservation for local students. These doctors should then be asked to serve their own communities for a particular time.

  Further, we also need to focus on infrastructure creation in smaller towns where the families of practicing doctors can be provided with the right ecosystem like quality schooling, appropriate housing etc. in order to retain them.

- We need to **review our teaching methodologies** which should be competency and outcome based as well as experiential. Also, continuous training programs to keep them abreast with the advancements, like cognitive sciences, is essential.

- We need to introduce **new specialized courses** like geriatrics, interventional radiology, pain management etc., which are in tune with the current demand. We also need more specialists like oncologists, endocrinologists in the country. For 1 million cancer patients that India sees every year, we produce only 150 oncologists and only 67 endocrinologists. We have only 21 vascular surgery training positions in the entire country.

- We also need to increase our **allied healthcare workforce** like the technician assistants, through capacity and competency building, who can reduce the burden on the mainstream healthcare workers.

- We need to increase the **productivity of the existing workforce** as well as create efficiency and standardization in the entire system. There is a need for a cultural shift with pre-defined roles for everyone so that they are able to do their assigned jobs efficiently in order to reduce the burden on doctors and nurses.

- In addition, there is a need for **efficient managers** that will run these large healthcare systems. We need to build effective communication strategies and provide clarity on roles and responsibilities at all levels of administration and management.

- We need to learn from other sectors like hospitality and focus on people excellence in our healthcare organizations along with infrastructure, in order to attract and retain talent. **Career planning and continuous training** for existing workforce is extremely important. Also strategies like rotation across different job functions for junior and administration staff can be adopted in order to help them understand the environment and make them empathetic towards the patient.



L to R - Mr K S Bakshi, Executive VP-HR, The Oberoi Group; Mr Rohit Kapoor, Senior Director and Chief Growth Officer, Max Healthcare; Dr Anupam Sibal, Group Medical Director, Apollo Hospitals Group; Mr Bhavdeep Singh, CEO, Fortis Healthcare; Ms Thankam Gomez, Executive Vice President - Education, Berkeley HealthEDU; Dr Sanjay Virendra Desai, Director, Osler Medical Training Program, Johns Hopkins University

- **Standardization of curriculum** - With industry being in its infancy stages, we do not have any significant level of talent that has experience in driving a patient centric environment. New students are not patient ready. Hence, some regulation is needed to standardize our curriculum, quality / accreditation, working conditions, remuneration and career growth chart for all medical, nursing and allied healthcare colleges and institutions.

- **Technology** has to play a role to reduce the demand of healthcare workforce. We need to leverage telemedicine and digital health platforms equally across the country through partnerships at various levels.

- **Indian Diaspora** - There are 1.2mn doctors of Indian origin living abroad. It would be beneficial if these doctors can practice in India even for few weeks and partner with government and private hospitals to carry out teaching / mentoring programs or leadership trainings.

- **Indians getting medical education abroad** - Medical graduates who get education in countries like Ukraine, Russia, Kazakhstan, Nepal and China have to give an entrance exam in India to be able to practice here. Out of 12,500 students who give this exam, about 13% are able to clear it. Rest 87% look for other non-medical jobs in the country as they do not get the license to practice. Indian government needs to have a dialogue with these 30 Universities in these countries to understand their expectations from these students and may be collaborate with them to tweak their courses to some extent so that they can practice safely in India.

Emerging Financing Models in Indian Healthcare

Despite the various challenges faced by the healthcare sector in India, there is a significant scope for enhancing healthcare services considering that healthcare spending as a percentage of GDP is rising. The large gap in demand and supply of quality healthcare services, and growing capital demand owing to operational costs and technology acquisitions have further created new opportunities for investments.

There are vast opportunities for investment in healthcare infrastructure in both urban and rural India. Rural India is set to emerge as a potential demand source. Bed density of around 2.1 per 1,000 people, including 1.0 to 1.2 beds per 1,000 persons in rural and 3.8 to 4.2 beds per 1,000 persons at urban areas is required in next 5 years.

Over the years, investment required for one bed has increased from INR 1mn per bed to almost INR 10mn per bed for asset heavy models. This coupled with their long gestation period has led to increase in demand for investment. Non-asset heavy models require low capital expenditure but need funding for building the network, replicating and scaling up as well as marketing and branding activities.

India has also been witnessing a shift in investment patterns driven by multiple stakeholders - government, private and social investors. IFC has committed USD 500mn for healthcare in India which is 28% of their global healthcare investment. In last 5 years, PEs have invested approx. USD 4bn in India, mainly on tertiary care and diagnostics. The patterns are changing now and there is more emphasis on single specialty care.

This session provided insights into the emerging investment patterns that are playing a significant role in re-shaping the Indian healthcare industry.

Some of the highlights and recommendations from the session were:

- Hospital beds in India need to grow from 1mn to at least to 2mn beds in next 5-6 years, for which we need a capital investment of USD 60-80bn. Although 15-18% of all PE investment has gone into healthcare over the last few years, there is still a huge gap to be filled. Hence, we need **more funding options** above the PE funds. Other avenues like measure-line funding models and yield funds for sustainable financing need to be explored. India also needs more of seed funding and VC funds for innovations – for both products and services.

- One of the key challenge for any investor is **filtration of proposals** that they receive, getting quality plans and then building a pipeline. **Validation** of the ideas and post commercialization processes also demand time and resources. The industry needs to put together an ecosystem that will have medical experts, innovators, public health specialists as well as regulatory experts that will enable smooth functioning.

- We need to increase the focus on **single specialty, digital health and home healthcare** as well as invest more in projects that cater to **smaller towns and cities**. We also need emphasis on primary and secondary care rather than just tertiary care.

- It is evident from the current trends that the future funding from investors will depend highly on the **financial discipline of the receiving organization** as well as quality of outcomes. Hence, there needs to be focus on accountability and developmental outcomes with impact that can be measured.



L to R - Dr Prem Pavoor, Partner, Eightroads Ventures; Dr Priya Balasubramaniam Kakkar, Senior Public Health Specialist and Director - UHC Initiative, PHFI; Mr Matthew Eliot, Principal Investment Officer, IFC, New Delhi; Mr Ashish Bansal, Partner - Deal Advisory, KPMG India Private Limited; Mr Vish Narain, Partner, TPG Growth; Mr Aditya Sharma, Senior Partner, Unitus Seed Fund; Mr Manish Jain, Director, Yes2treatment

- Goals of any health systems can be addressed most effectively when patients are well-informed and are given choices about their coverage and care. We need to **empower the patient** to use appropriate financing for their healthcare needs to help avoid the financial strains that they go through – provide them with e-enabled platforms so that they get the right treatment, at the right time and place, with the right outcomes. This can be done through structured and efficient products in the market.

- Although government has higher capacities in terms of investment potential, higher investments for healthcare delivery have been coming from the private sector in India. Hence an impetus towards convergence of both through **public-private partnerships** (PPP) is the need of the hour. Government has already awarded projects worth of INR 40bn under PPP for healthcare and about INR 50bn worth of projects are in the pipeline. Various partnership models are being tried under PPP like Equity investment, Joint Venture, Franchising as well as social marketing. However, more regulation is needed for these models through which a balance for urban and rural areas can also be brought.
  PPPs have been successful in managerial or process driven quality of care through taking over dysfunctional units or in diagnostics and dialysis projects. Now we need more thrust towards primary and secondary care as well as trauma care.
  For better implementation of PPP projects, the models need to be well defined with proper regulation and guidelines. Government is currently working on the model agreements but we also need to work on the core principles for effective execution.

Technologies driving new models in Healthcare

Technology has always been a key enabler in healthcare providing clinicians better insights and tools for superior medical interventions. Over the decades it has helped significantly in the growth of evidence based medicine and an optimum use of technology has resulted in lowering the disease burden through early diagnosis and appropriate treatment methods.

Today, healthcare is at the cusp of a major transformation with the change in technology landscape and increased adoption of information & communication technologies, mHealth, remote patient access tools and integration of patient data across healthcare networks. Innovative healthcare models are being experimented globally as well as in India that can bridge the divide between the communities especially in the rural sector and the healthcare professionals in a most cost-effective manner without compromising the quality of care. Some of the key takeaways from the panel discussion:

- We need to work towards **using Technology appropriately for** –
  - ✓ Making healthcare cost effective
  - ✓ Reducing the hospitalization time
  - ✓ Reducing the burden on clinicians
  - ✓ Convergence of dug and device to give better outcomes
  - ✓ Needleless experience for patient
  - ✓ Make customer experience pleasant and give a comprehensive service right from when the patient enters the healthcare centre to when he/she leaves it

- Medical technology experience has to be made more **accessible and affordable** for the healthcare seeker in India. We need to **learn from the global experiences** and adopt them in

a way that it suits the Indian scenario in an affordable way. There needs to be a clear policy direction to encourage and support innovation and manufacturing of medical technologies.

- **Adoption of latest technologies** need to be encouraged **at all levels** as they offer immense potential to reduce the overall disease burden. The perception that technology is driving the increase in cost for healthcare is a skewed one and result of some unhealthy practices perpetuated by few and those surely need to be checked and controlled.

- While there is tremendous opportunity for the medical technology industry in India to innovate and "Make in India", we should desist re-inventing the wheel or creating sub-optimal versions under the garb of indigenization. Rather we need to "**Create in India**".

  The challenge around **scale** can be addressed by keeping global markets in view and thereby, creating quality products and solutions that are FDA/CE certified. Indian companies will have to focus on innovation, continuous improvement and local value addition to cater to the vast semi-urban and rural market.

  Imposing **tariff barriers** (like increase in custom duties etc.) in hope of import substitution to happen in short-term is a misplaced notion and would only enhance cost to the patients and hence should be avoided.

- Promoting aggressive use of technology to create health awareness, wellness and building preventive healthcare strategies to help minimize the rising NCD burden is the need of the hour. Both **private & public sector** can play a key role here working in partnership and creating **models of engagement** that involve communities at large to participate. This can also be a part of the CSR effort by the corporate sector and treated as such from policy perspective.

- The increased adoption of telemedicine, HIS, electronic health records, mHealth, and web-based services has made digital patient data expand, demanding the deployment of robust IT infrastructure in Indian healthcare organisations. It has amplified growth in data, digitization trends in health information and electronic medical records. However, **data availability** still remains one of the leading issues in our healthcare sector. We need to further leverage the mobile technology, with 220mn smart phones available in India, and boost our mHealth and EHR initiatives for better diagnosis and enhanced patient experience.

- With the health insurance sector poised for major growth in the coming decade, increasing demand from this sector for more **efficient systems for storage and retrieval of information** will put pressure on hospitals and other healthcare providers to imbibe technology to modernize existing infrastructure.

- Improvements in collaborative data exchange, workflows and mobility, and need for better financial management are the next phase of technological evolution in healthcare. In addition, the shift to mobile devices, wireless technology and cloud computing will help **reduce system costs and improve workflows**.

- There are larger volumes of procedures in India and lower availability of trained personnel, which drive the need for **automation**. Automation could also further improve output, thereby lowering the unit costs.
- We also need to adopt more **innovative models** like the e-ICUs and e-health for post-surgery connectivity in order to reduce the burden on care provider.
- Our **reimbursement and financing systems** need to be sustainable in a way that they support the use of medical technology and bring value to the patient.
- Value of **incremental innovation** in medical technology is very high. We need to understand this and work towards it.
- **Triage, Genetics, Surgical interventions through natural orifices** are various areas where there is huge potential for improvement through technology in India.
- Government should allow IITs, AIIMS to create more **collaborative models** like Stanford Biodesign, that are commercially viable, for research and development.



L to R - **Ms Sasa Bozic**, Director, Global Marketing, 24alife; **Ms Zoya Brar**, Founder and MD, Core Diagnostics; **Dr Nick Van Terheyden**, Chief Medical Officer, Dell Services; **Mr Ashok Kakkar**, Co-Chair, FICCI Health Services Committee and Senior MD, Varian Medical Systems International India Pvt Ltd; **Mr Probir Das**, Chair-FICCI Medical Devices Forum & MD, Terumo India P Ltd; **Mr Dinesh Lodha**, CEO, Sutures India Pvt. Ltd; **Mr Ashish Kohli**, Director, Surgical Care and Energy, J&J; **Mr Partha Paul**, Director - IGT & DXR, Philips Health Systems India

Unlocking India's potential as the Emerging Hub for Healthcare Start-ups'

- Role of Government, Investors, Academia & Industry

India has the potential to become the powerhouse of healthcare innovations. With an ever evolving Indian healthcare landscape, there is immense need for innovations that are not only unique in addressing the current healthcare challenges but are cost effective, scalable and easy to deploy. "Start-up India, Stand-up India", launched by the Hon'ble Prime Minister is a welcome initiative of

the Government of India to foster entrepreneurship in India. However, in order to realise India's real potential for innovation, all stakeholders viz. Government, Industry, Academia and Investors need to collaborate more effectively.

Government Initiatives:

The Government of India recognizes that start-ups, through integration of innovation and technology, would play a crucial role in fostering growth of the healthcare sector. Hence, it has launched initiatives, such as 'Start-up India, Stand-up India', to encourage and promote entrepreneurs and start-ups. Under the Start-up India Action Plan 2016, the government has made provisions like:

- ✓ Single-day registration process for start-ups
- ✓ Self-certification to reduce the regulatory burden and keep the compliance cost low
- ✓ Tax and capital gains exemption for three years
- ✓ A credit guarantee scheme is being worked out for the startups
- ✓ Setting up of 35 new incubators, which would provide the much needed support in the initial stages of a start-up's journey
- ✓ Setting up of Start-up India Hub - to create a single point of contact for the entire Startup ecosystem and enable knowledge exchange and access to funding
- ✓ Legal Support and Fast-tracking Patent Examination - to promote awareness and adoption of IPRs by Startups and facilitate them in protecting and commercializing the IPRs by providing access to high quality Intellectual Property services and resources, including fast-track examination of patent applications and rebate in fees.

Apart from these initiatives, the government has also recognized the need for a separate law for Medical Devices, a draft of which has already been prepared. Reforms for rules and regulations under the Drugs and Cosmetics Act is already in process and the government has put the draft in public domain for inputs.

Government support is also available through bodies like BIRAC, Department of Biotechnology, Department of Science and Technology, Department of Industrial Policy & Promotion under various Ministries. Ministry of Health and Family Welfare as well as Department of Pharmaceuticals are also open to dialogue and support.

Some recommendations:

- In the initial stages, **regulatory** hurdles could be eased and special privileges, such as custom duty exemption, tax exemption for a period beyond the existing three-year cap and loans at concessional rates, could be provided to start-ups engaged in medical innovation and research.
- To attract more investments, **special tax rebates** to both foreign and Indian investors interested in funding healthcare start-ups could be offered.
- Healthcare startups need **high domain expertise**. Hence, we need a pool of professionals and experts, not only from healthcare sector but also engineers, physicists, academicians, lawyers etc. to work together and devise solutions that are specific to Indian problems.

- Professionals from other fields and Academicians must be allowed to take gaps between their career to get involved in start-ups so that they are able to utilize their knowledge and talent, and then get back to their original roles when they want to.
- All the stakeholders like government, corporates, global institutions, foundations, investors need to come together and collectively **create a pool of resources** that can help and support start-ups in their incubation as well as for scaling up.
- There is a strong need to make the entrepreneurs understand the importance of patents and train them on how to apply for them and secure their **Intellectual Property Rights**. Lawyer groups and corporates together can take up this responsibility along with the government.



L to R - **Dr Shyam Vasudev Rao**, President, Forus Health; **Dr Malathi Laxmikumaran**, Director, Lakshmikumaran & Sridharan, Attorneys; **Mr K L Sharma**, Joint Secretary, Ministry of Health & Family Welfare, GoI; **Mr PR Ganapathy**, Co-Founder, Menterra; **Mr Shailendra Singh**, Joint Secretary, Department of Industrial Policy and Promotion, Ministry of Commerce & Industry, GoI; **Mr S Sridhar**, Managing Director, Pfizer Ltd; **Mr Pradeep K Jaisingh**, Founding Chairman, Healthstart India P Ltd;

Role of Innovations in Enabling Re-engineering of Healthcare

- Challenges for Adoption of Innovative Technologies

Developing markets have emerged as breeding grounds for the world's most compelling and disruptive innovations. Innovation has also been long recognised as a potential solution to the multitude of problems faced by healthcare sector in India.

In spite of the magnitude of the opportunity available, it is often observed that disruptive innovations succeed in proving worthiness and attracting early adopters but, fail when it comes to mass adoption. Aim of this session was to deliberate the challenges faced by innovators of disruptive technologies and to pave the path to lay concrete methods, means and frameworks to enable disruptive new technologies to be adopted and sustain in the market. Some of the recommendations arising out of the session are:

- Innovation should strive for and be assessed in terms of **utility**. Focusing only on the technology being disruptive is not enough. The innovation should be concerned with a common cause conceived collectively by the clinicians, industry and the Government. Innovation should have:

- ✓ important clinical value
- ✓ ability to be tailored according to the need of a healthcare system/provider
- ✓ ability to attract synergistic industry engagement

- Innovations should be accessible, affordable and of high quality. The real value of an innovation is a **measure of patient outcome** as compared to cost to reach the outcome. The ultimate aim of all innovations should be to achieve positive health outcome not profit.

- **Recognising disruptive innovations:** For any innovation to succeed, it is essential that it is recognised worthy in the existing context. Innovators need access to platforms where they can showcase their ideas. To enable this, the Government of India has created platforms like National Healthcare Innovations Portal to pool-in, evaluate and promote disruptive innovations submitted at the portal.

- **Technology transfers from innovators to industry:** After innovators come up with innovations it is critical to bring these innovations out into the market. This requires manufacturing at a scale as well as huge investment. Innovators need to work towards the scale of manufacturing along with compliance testing and approvals.

  Industry players can form synergistic partnerships with innovators to provide them scale, safety and efficiency of manufacturing. The Government is also taking initial steps in this direction, setting up an Innovation and Prototyping Lab in the state of Andhra Pradesh that aims to provide a platform for production of initial batches and testing.

- Healthcare innovation **cannot be an isolated activity**. Innovators should analyse the entire continuum of care and strive to involve clinicians in articulating the problems and understanding clinical challenges throughout the life cycle of an innovation.

- Perception of healthcare systems about innovations need to be changed. New and effective ways need to be devised to **engage the end users** to increase the likelihood of adoption. Since disruptive innovation is not always about being smaller, compact or cheaper, new technology may also require specialty. Motivating and training the on-ground user group, which is an aspect of customer focus should be given due consideration.

- Need of the hour is to find an approach to **focus equally on invention and adoption**. Innovators in India have witnessed many improvements in the innovation ecosystem in the country and have passionate hopes that it will be an interesting journey ahead.

- **Generating Clinical Data:** The existing structure to perform clinical studies to attain regulatory approvals is not very effective. Innovators have to reach out to public healthcare institutions to generate clinical data. Due to high patient volumes and lack of compulsion or motivation, clinicians are hesitant to invest time in research or to try a new technology. Consequently, innovators have to often generate clinical data overseas, which increases the cost and takes longer time.

- **Access to relevant information:** Innovators need to be empowered with quality knowledge base and information related to existing provisions, success stories of other innovators in the field and guidance from advisory panels comprising experts. Technology aggregation platforms need to be launched and promoted that can help innovators track technological reforms over time in their concerned field.

- **Marketing innovations:** Instead of forming single product companies, innovators can also associate with other innovators or entrepreneurs to leverage on established distribution channel, market knowledge and sales network. Such diversification and entering the market with more than one innovation will reduce the risk linked with failure of the entire company if one innovation fails to generate profits.

- A standard and sophisticated **distribution channel** where innovators or entrepreneurs can discuss the technicalities and unique selling proposition of their product or service can pave the path for an effective market entry.



L to R - Dr Yogesh Patil, Co-founder and Director, Biosense Technologies; Dr Peter Bauer, President, Inovise Medical USA; Mr Guruswamy K, Co-founder and Director for Asia Business, Perfint Healthcare; Mr A Vijayasimha, Advisor, Lemelson Foundation, SINE, IIT Mumbai and Partner, Vita Pathfinders LLP; Dr Satya Prakash Dash, Head - Strategy, Partnerships, Entrepreneurship Development, BIRAC, Department of Biotechnology, GoI; Dr Jitendar K Sharma, Sr. Consultant, NHSRC & Director, WHO Collaborating Centre for Priority Medical Devices & Health Technology Policy

Other features of the conference:

FICCI Healthcare Excellence Awards

FICCI Healthcare Excellence Awards, a platform to celebrate excellence and innovation in healthcare sector was organized in the evening of August 31, 2016 at Hotel Le Meridian, New Delhi.



This year's in its eighth edition, the awards, aimed at felicitating organizations and individuals for their efforts towards operational excellence, innovatively adopting and inventing technologies and processes for India, and improved healthcare delivery. The FICCI Awards have emerged as the definitive recognition for contribution to healthcare in the country over the years.

The Jury for the Awards was chaired by **Dr SY Qureshi**, Former Chief Election Commissioner of India. The Awards were given by **Dr Sanjay Jaiswal**, Member of Parliament, Lok Sabha; **Ms Sangita Reddy**, Chairperson FICCI National Services Council; Joint MD, Apollo Hospitals Group and Dr Qureshi.

The Winners for this year's Awards were:

FICCI Healthcare Excellence Awards 2016		
Sr.	**Winner**	**Project**
	Skill Development	
1	**Essilor India Pvt Ltd**	Vision Entrepreneur Program- Eye Mitra Optician
	Social Initiative	
2	**Aarogyasri Healthcare Trust, Government of Telangana**	Aarogyasri Health care trust GPS based mobile app
	PHC/CHC	
3	**Rural Health Care Foundation**	Setting up a Primary HealthCare Centre offering OPD facilities to cater to the underprivileged community residing in rural villages and urban slums of West Bengal
	Innovation in Medical Technology	
4	**Amrita Institute of Medical Sciences & Research Center**	Creation Of A Center For Innovation And Technology Development For 3D-Printing and virtual 3D Image Reconstruction in Pediatric Heart Disease - for enabling safer congenital heart surgery.
	Health Insurance Products	
5	**Apollo Munich Health Insurance Company Limited**	DengueCare
	Preventive Care	
6	**BD India**	BD's Central Line Care Management (C-LCM) Program
	Patient Safety	
7	**Amrita Institute of Medical Sciences and Research Centre**	Antibiotic Stewardship Program

Customer Service Improvement - Private		
8	**Aster Medcity**	Improvement in Patient Safety through Automated Prescription Audit Tool & Medication Management
Customer Service Improvement - Public		
9	**Civil Hospital, Ahmedabad**	Improving Patient Care with Information Technology - Driven Diagnostic Service
Lifetime Achievement		
10	**Dr Narottam Puri**	
Healthcare Personality of the Year		
11	**Dr K K Aggarwal**	



Jury for FICCI Healthcare Excellence Awards 2016 along with Dr Sanjay Jaiswal (Chief Guest) and Ms Sangita Reddy (Guest of Honour)



Healthcare Personality of the Year Award presented to Dr K K Aggarwal



Lifetime Achievement Award presented to Dr Narottam Puri

Poster Presentation

One of the key features of the conference was the Poster Presentation on the theme **"Re-engineering Indian Healthcare"**. More than 40 abstracts were received for this competition from healthcare professionals and students, out of which 20 were selected by the selection committee for final presentation.



The displayed posters were evaluated on the criteria:

1. Novelty of the Idea
2. Practicality
3. Impact & Scalability
4. Leveraging Technology
5. Clarity of Thought

The Jury for the competition comprised of **Mr A Vijayasimha**, Chair-FICCI Task Force on Healthcare Innovation & Advisor, Lemelson Foundation, SINE, IIT Mumbai and Partner Vita Pathfinders, **Dr Gayatri Mahindroo**, Director, NABH and **Dr Ravi Gaur**, COO, Oncquest Labs. The following winners were selected:

Winner:

- Dr Arati Verma, Senior Vice President- Medical Quality, Max Healthcare
- Dr Dhirja Sharma, Vice President- Medical Quality, Max Healthcare Institute Ltd
- Dr Uday Kapur, AGM- Medical Quality, Max Healthcare Institute Ltd

Presentation on "Zero Preventable deaths by 2020 – The Promising Future of Healthcare"



1st Runner Up:

- Khyati Mittal, Research Scholar, Amity Institute of Biotechnology, Amity University
- Sandhya Hora, Professor, Amity Institute of Biotechnology, Amity University
- Deepshikha Pande Katre, Assistant Director & Head- Centre for Medical Biotechnology, Amity University

Presentation on "Drug Delivery Systems of Herbal Drugs for Improving Health Care"

The awards for the poster presentation were given by **Mr K L Sharma**, Joint Secretary, Ministry of Health & Family Welfare, GoI and **Mr Shailendra Singh**, Joint Secretary, DIPP, Ministry of Commerce & Industry, GoI

2nd Runner Up:

- A Chakraborty, Amity Institute of Biotechnology, Amity University
- B.G Roy, Amity Institute of Biotechnology, Amity University
- Dr SS Lahiri, Professor Emeritus, Amity Institute of Biotechnology, Amity University

Presentation on "An Oral Anti – Cancer Formulation is able to selectively cause apoptosis of cancer cells keeping the normal healthy cells unharmed"

Speakers at FICCI HEAL 2016

S No	Title	First Name	Last Name	Designation	Organization
1	Mr	K S	Bakshi	Executive VP-HR	The Oberoi Group
2	Mr	Mahesh	Balasubramanian	CEO & CMO	Kotak Mahindra GIC
3	Mr	Vishal	Bali	Co-Chair, FICCI Health Services Committee & Asia Head - Healthcare	TPG Growth
4	Mr	Ashish	Bansal	Partner - Deal Advisory	KPMG Advisory Services Pvt. Ltd.
5	Dr	Peter	Bauer	President	Inovise Medical
6	Ms	Sasa	Bozic	Director, Global Marketing	24alife
7	Ms	Zoya	Brar	Founder & MD	Core Diagnostics
8	Mr	Aditya C	Burman	Managing Director	Oncquest Laboratories Ltd.
9	Mr	Probir	Das	MD	Terumo India P Ltd
10	Dr	Satya Prakash	Dash	Head - Strategy, Partnerships, Entrepreneurship Development	BIRAC, Department of Biotechnology, Government of India
11	Mr	Sanjay	Datta	Chief - Underwriting	ICICI Lombard
12	Dr	Sanjay Virendra	Desai	Director, Osler Medical Training Program	Johns Hopkins University
13	Ms	Sushmi	Dey	Assistant Editor	Times of India
14	Mr	Matthew	Eliot	Principal Investment Officer	IFC, New Delhi
15	Mr	PR	Ganapathy	Co-founder	Menterra
16	Ms	Thankam	Gomez	Executive Vice President, Health Education	Berkeley
17	Mr	Manoj	Gopalakrishna	CEO	HCL Healthcare
18	Mr	Manish	Jain	Director	Yes2treatment
19	Dr	Nandakumar	Jairam	Chair, FICCI Health Services Committee and Chairman & Group Medical Director	Columbia Asia Hospitals,India
20	Mr	Pradeep K	Jaisingh	Founding Chairman	Healthstart India P Ltd
21	Mr	Guruswamy	K	Co-founder & Director	Perfint Healthcare
22	Mr	Ashok	Kakkar	Co-Chair, FICCI Health Services Committee and MD	Varian Medical Systems International India Pvt Ltd
23	Dr	Priya Balasubramaniam	Kakkar	Senior Public Health Specialist and Director - UHC Initiative	PHFI
24	Mr	Rohit	Kapoor	Senior Director and Chief Growth Officer	Max Healthcare
25	Mr	Gautam	Khanna	CEO	Hinduja Hospital
26	Dr	Surinder	Kher	Consultant	Clinical Development and Strategy
27	Mr	Ashish	Kohli	Director, Surgical Care and Energy	J & J
28	Dr	Arvind	Lal	CMD	Dr Lal PathLabs P. Ltd.
29	Dr	Malathi	Laxmikumaran	Director	Lakshnikumaran & Sridharan, Attorneys
30	Mr	Dinesh	Lodha	CEO	Sutures India Pvt. Ltd
31	Mr	Rajit	Mehta	MD & CEO	Max Healthcare

32	Mr	**C K**	**Mishra**	Secretary	Ministry of Health & Family Welfare, GoI
33	Prof	**M C**	**Misra**	Director	AIIMS
34	Mr	**Sunil Kant**	**Munjal**	Jt. Managing Director	Hero Motocorp Ltd. & Chairman, Hero Corporate Service Ltd.
35	Mr	**Muralidharan**	**Nair**	Partner	EY
36	Mr	**Vish**	**Narain**	Partner	TPG Growth
37	Mr	**Shashank**	**ND**	Founder & CEO	Practo
38	Mr	**Praveen**	**Nijhara**	Head - CSMM Division	IMRB International
39	Mr	**Lalit**	**Pai**	CEO	Nightingales
40	Dr	**Yogesh**	**Patil**	Co-Founder & Director	Biosense Technologies
41	Mr	**Partha**	**Paul**	Director	Philips
42	Dr	**Prem**	**Pavoor**	Partner	Eight Roads Ventures India
43	Mr	**Harish**	**Pillai**	CEO	Aster Medcity & Cluster Head Kerala, Aster DM Healthcare
44	Dr	**Shyam Vasudev**	**Rao**	President	Forus Health
45	Ms	**Sangita**	**Reddy**	Jt MD	Apollo Hospitals
46	Mr	**Kaushik**	**Sen**	Founder	Healthspring
47	Dr (Col)	**Avnish K**	**Seth**	Director, FORT & Director, Gastroenterology & Hepatobiliary Sciences	Fortis Memorial Research Institute
48	Mr	**Aditya**	**Sharma**	Senior Partner	Unitus Seed Fund
49	Mr	**K L**	**Sharma**	Joint Secretary	Ministry of Health & Family Welfare, GoI
50	Dr	**Jitendar K**	**Sharma**	Sr. Consultant, NHSRC & Director	WHO; Collaborating Centre for Priority Medical Devices & Health Technology Policy
51	Dr	**Anupam**	**Sibal**	Group Medical Director	Apollo Hospitals Group
52	Mr	**Bhavdeep**	**Singh**	CEO	Fortis Healthcare
53	Mr	**Shailendra**	**Singh**	Joint Secretary	DIPP
54	Prof	**Stephen D**	**Sisson**	Professor of Medicine and Executive Director, Ambulatory Services	Johns Hopkins Hospital
55	Mr	**S**	**Sridhar**	Managing Director	Pfizer Ltd
56	Dr	**Nick Van**	**Terheyden**	Chief Medical Officer	Dell Services
57	Dr	**Arati**	**Verma**	Sr VP - Quality	Max Healthcare
58	Mr	**A**	**Vijayasimha**	Chair-FICCI Task Force on Healthcare Innovation & CEO	OneBreath Inc.

Delegates at FICCI HEAL 2016

S No.	Title	First Name	Last Name	Designation	Organization
1	Mr	Giridharan	Iyer	Marketing Director – India Region	Varian Medical Systems International India Pvt Ltd.
2	Mr	Jagjeet Singh	Kochar	Asst. Manager- Credits	Varian Medical Systems International India Pvt Ltd.
3	Mr	Tarun Ashok	Saxena	National Manager - Government Sales	Fujifilm India Private Limited
4	Mr	Sundar	A	Sr.Mgr – Prod Mgmt	Excide Life Insurance Co Ltd
5	Mr	Arnab	Acharya		Fortis Healthcare Ltd
6	Mr	Sai Prasad	Acharya	General Manager - HR	Reliance Jio Infocomm Ltd
7	Mr.	Dipankar	Acharya	Country Head (Affinity & Strategic Relationships)	Royal Sundaram General Insurance Co Ltd
8	Mr	Sumit	Agarwal	Country Manager	r2 Hemostasis Diagnostics India
9	Mr	Anil	Agarwal		GB Pant Hospital
10	Dr	Vijay	Aggarwal	Secretary General- Consortium of Accredited Healthcare Organisations and Advisor - Quality & Business Excellence	Max Healthcare Institute Ltd
11	Mr	Donal	Aggarwal	Sr. Executive	Avantha Business Solutions Ltd
12	Mr	Anurag	Aggarwal	Vice President	Ernst & Young LLP
13	Dr	Muzaffar	Ahmad	Former - Member	NDMA - National Disaster Management Authority
14	Mr	James Y.	Ajayi	Senior Counsellor (Consular, Medical & Education)	High Commission of the Federal Republic of Nigeria
15	Mr.	Mohd	Amir	Marketing Manager	Oncquest Laboratories Ltd
16	Dr.	Mrunalini	Anand	Sr. Consultant Pathologist	Oncquest Laboratories Ltd
17	Ms	Simi J.	Anderson	Convener & Chairman	Association for Medical and Wellness Tourism
18	Dr	AM	Anvar	Chairman & Managing Director	Punarnava Ayurveda Hospital Pvt Ltd
19	Mr.	Addision	Appu	Vice President - Investment Banking	J R Laddha Financial Services (P) Ltd.
20	Mr	Nikhil	Apte	Chief Product Officer - Product Factory, Accident & Health	Royal Sundaram Alliance General Insurance Co. Ltd
21	Dr	Anita	Arora		Fortis Healthcare Ltd
22	Ms	Bhavya	Arora	MBA Hospital & Health Management	IIHMR University, Jaipur
23	Mr.	Ashish	Arora	Director - FINANCE	P D Hinduja Hospital & Medical Research Centre
24	Mr.	Yogender	Arya	Manager- International Marketing	Global Hospitals
25	Mr	Amitav	Ash	Head of Marketing	HCL Healthcare Ltd
26	Mr	Prabh	Asheesh	PG Student	I N L E A D
27	Mr	Phanesh	Atmuri	National Manager - DR X- ray	Fujifilm India Private Limited
28	Mrs.	Mia	Avgustin	CEO PA	24alife
29	Ms	Kavita	Ayyagari	Project Director (Challenge TB)	The Union South-East Asia Office
30	Mr	Suresh	Babu	Deputy General Manager	HLL Lifecare Ltd.

31	Capt.	Usha	Bannerjee	Nursing Director	Indraprastha Apollo Hospital
32	Mr.	Ravi	Bansal	Manager (Rural Health & Education)	ITC Agri Business Division
33	Mr	Naveen	Bansal	Manager	Synergy India
34	Mr	Parthasarathy	Basu	General Manager – Business Strategy	Max India Ltd
35	Mr	Baljit Singh	Bedi	Advisor - Health Informatics, Member, MoH&FW National EHR Standardization Committee & Past President , Telemedicine Society of India(TSI)	Ministry of Health & Family Welfare, GOI
36	Ms	Neeta	Bhagat	Assistant Professor	Amity University
37	Ms	Vandana	Bhardwaj	Principal	Milliman India Pvt Ltd
38	Dr.	Nandita	Bhargava	Student of MBA Health and Hospital Management	IIHMR University, Jaipur
39	Mr.	Shubhankar	Bhattacharya	Student of MBA Health and Hospital Management	IIHMR University, Jaipur
40	Dr	SB	Bhattacharyya	Head - Health Informatics	Tata Consultancy Services
41	Mr	Sandeep	Bhoumik	AGM & Head-Sales	Max Healthcare Institute Ltd
42	Mr	Sudeep	Biswas	Assistant Manager – Marketing and Communications	KPMG
43	Ms	Hazel	Catherine	Deputy Manager – Learning and Development	Fortis Malar Hospital
44	Mr	Ashish	Chadha	General Manager- Sales & Marketing	Max Healthcare Institute Ltd
45	Mr	Puneet	Chahar	PG Student	Maulana Azad Institutes of Dental Sciences, New Delhi
46	Ms	Rekha	Chakrabarti	Sr. Manager Medical Administration	Columbia Asia Hospitals
47	Mr	Dipanker	Chakraborty	General Manager - HR	Reliance Jio Infocomm Ltd
48	Dr.	M.	Chandrasheker	Chief Executive Officer	Aarogyasri Health Care Trust
49	Ms	Archana	Chaturvedi	Assistant Professor	Amity University
50	Mr	Nitish Kumar	Chaudhary		Max Healthcare Institute Ltd
51	Ms	Salonie	Chawla	Associate Consultant	APCO Worldwide
52	Mr	Dev	Chopra	Sr. Executive – RA & QA	Terumo India
53	Mr	Snehal	Dalal	International Secretary - GFESH	Bhaktivedanta Hospital & Research Institute
54	Dr	Jayanta K	Das	Director	National Institute of Health & Family Welfare
55	Ms.	Ipshita	Deb	Student of MBA Health and Hospital Management	IIHMR University, Jaipur
56	Ms	Jasrita	Dhir	General Manager-Marketing	Fortis Healthcare Ltd
57	Ms	Jiji	Dias		Indraprastha Apollo Hospital
58	Mr	Paras	Duggal	Sr. Manager-Marketing	Indraprastha Apollo Hospital
59	Mr	Pawan	Dutta		Max Healthcare Institute Ltd
60	Mr.	Arif	Fahim	Senior Manager-Therapy Development & Reimbursement, South Asia & South East Asia	St. Jude Medical India Pvt Ltd
61	Mr.	Vishal	Gandhi	CEO	BIORx Venture Advisors
62	Ms	Alka	Gangwar	Product Executive	Oncquest Laboratories Ltd
63	Mr	Vikas	Garg	Bio-Chemical Engineer	Renalyx Health Systems Pvt Ltd

64	Dr	Ravi	Gaur	COO	Oncquest Laboratories Ltd
65	Mr	Sharad	Goswami	Director, Public Affairs	Pfizer Ltd
66	Mr	Amit	Goyal	Manager-Marketing	Indraprastha Apollo Hospital
67	Ms	Meenu	Gulati	Senior Consultant	KPMG
68	Mr	Gagan	Gupta	Associate Vice President	E & Y
69	Dr.	Vandana	Gupta	Student of MBA Health and Hospital Management	IIHMR University, Jaipur
70	Dr	Om Prakash	Gupta	Ophthalmologist , BHCC, UP	Bhaktivedanta Hospital & Research Institute
71	Mr	Pravesh	Gupta	Business Head (Healthcare)	AIMIL Ltd
72	Mr	Gaurav	Gupta	AVP	Synergy India
73	Ms	Saritha	Hajare	Head-External Communications	Pfizer Ltd
74	Mr.	Nitin	Hakla		Philips India Ltd
75	Mr.	Rajneesh	Handa	Business Head – Public private Partnerships and Govt. Affairs	Philips India Ltd
76	Ms	Sandhya	Hora	Student	Amity University
77	Mr	Naman	Jain	Senior Manager-Corporate Marketing	Indraprastha Apollo Hospital
78	Dr.	Sakshi	Jain	PT- Senior Physiotherapist	Max Super-Specialty Hospital
79	Dr	Shilpa	Jain	Program Manager- Business Development	Hindustan Latex Family Planning Promotion Trust
80	Dr.	Amit	Jain	Consultant Radiologist	CT Scan Centre
81	Ms	Ishita	Jain	Student	Maulana Azad Institutes of Dental Sciences, New Delhi
82	Ms	Damini	Jotwani	Innovator	Zamono Tech
83	Mr	Vinod	K	Chief Nursing Officer	Max Super Speciality Hospital
84	Dr.	Navdeep	Kalidhar	Manager- Strategy & Business Development	Indraprastha Apollo Hospital
85	Dr	Chandrika	Kambam	Vice President – Clinical Services	Columbia Asia Hospitals
86	Dr.		Kanupriya	PT- Physiotherapist	Max Super-Specialty Hospital
87	Mr	Sandesh	Kapare	Executive Health Claims Assessment	Bajaj Allianz General Insurance Co. Ltd
88	Mr	Vrinda	Kapoor		Max Healthcare Institute Ltd
89	Mr	Rohan	Kapoor		Make in India Campaign, GOI
90	Prof	Bimla	Kapoor	Dean	IL & FS Skills Health Academy
91	Ms	Mallika	Kapur	General Manager	AIMIL Ltd
92	Dr	Uday	Kapur	AGM - Medical Quality	Max Healthcare Institute Ltd
93	Dr.	Parmanand	Katariya		Indus Health Plus Ltd
94	Ms	Baljeet	Kaur	Student, Amity Institute of Biotechnology	Amity University
95	Dr.	Shobha	Keswani	Head- Physiotherapy And Rehabilitation Department	Max Super-Specialty Hospital
96	Ms.	Azreen Shabnam	Khan	Second Secetary	High Commission of the Republic of Fiji
97	Dr.	M. Samiullah	Khan	Treasurer	Muslim Educational Social & Cultural Organisation (MESCO)

98	Dr.	Riyaz	Khan	Chief Operating Officer	KIMS Group
99	Ms	Anju	Khanna	Sr. Executive Government Relations	Pfizer Ltd
100	Mr	Ramneek	Kharbanda	Associate Consultant	E & Y
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102	Mr	Rajat	Khosla	Marketing Manager - Indian Sub Continent, Medical GBU	JK Ansell Private Limited
103	Dr	Alok	Khullar	Head of Business Development	HCL Healthcare Ltd
104	Mrs.	Eva	Kovac	Psychologist	24alife
105	Ms	Manisha	Kumar	Deputy General Manager	Max Healthcare Ltd
106	Mr	Mukul	Kumar	Product Executive	Oncquest Laboratories Ltd
107	Mr.	Satish	Kumar	Head - Quality & Systems	Artemis Health Sciences
108	Mr	Abhash	Kumar	Co-Founder & CEO	Health Mir
109	Dr	Pinto	Kumar	JR Physio	AIIMS
110	Mr.	Subeesh	Kuyyadiyil	Asst. Administrator	Shri Sadguru Seva Sangh Trust
111	Mr.	Rakesh	Lalit		Johnson & Johnson Pvt Ltd.
112	Dr	Gayatri Vyas	Mahindroo	Director	NABH
113	Mr	Sudhakar	Mairpadi	Head- Quality & Regulatory, Health Tech	Philips India Ltd
114	Mr	Shikhar	Malhotra	Vice Chairman	HCL Healthcare Ltd
115	Dr.	Akanksha	Mamgain	Student of MBA Health and Hospital Management	IIHMR University, Jaipur
116	Dr	Manju	Mani	Director – Quality	Max Healthcare Institute Ltd
117	Ms	Ruchi Jakhmola	Mani	Assistant Professor	Amity University
118	Mr	Rupesh	Marwaha	AVP	Avantha Business Solutions Ltd
119	Dr	B	Mathangi	GM-Operations	Indraprastha Apollo Hospital
120	Dr	Gautam	Medhi		Apollo Hospital
121	Ms	Rashmi	Mehra	Student	Maulana Azad Institutes of Dental Sciences, New Delhi
122	Mr	Mohan	Menon	GM & Head- Marketing	Max Healthcare Institute Ltd
123	Mr	Neeraj	Mishra	Senior Vice President- Zonal Head Operations, NCR 2	Max Healthcare Institute Ltd
124	Mr	Ranjit	Mishra	GM – Prod Mgmt	Excide Life Insurance Co Ltd
125	Mr.	Raju	Mishra	Research Associate	CMO Asia
126	Mr	Vijay Umashankar	Mishra	CTO	CENSE, IISC Bangalore
127	Ms	Khyati	Mittal	Student, Amity Institute of Biotechnology	Amity University
128	Dr.	Ahmeduddin	Mohammed	Member	Muslim Educational Social & Cultural Organisation (MESCO)
129	Dr	Vikrant	Mohanty	Associate Professor	Maulana Azad Institute of Dental Sciences
130	Dr	A. K.	Mukherjee	Director General	Indian Spinal Injuries Centre
131	Dr	Shyama	Nagarajan	Partner & Chief Operating Officer	Healthcare Catalyst
132	Mr	Gurpreet Singh	Nagi	Sr. Product Development Specialist	Milliman India Pvt Ltd
133	Dr	Reena	Nakra	Head-Integration Group M&A Labs	Dr Lal PathLabs
134	Mr.	Anant	Nevatia	President	Rural Health Care Foundation(RHCF)

135	Mr	Shreyas	Nevatia		Rural Health Care Foundation(RHCF)
136	Dr	Rahul	Nigam	Manager S & O Advisory	KPMG
137	Mr.	Samuel Onwuzurike	Okere	First Secretary (Economic, Trade & Investment)	High Commission Nigeria
138	Mrs.	Alice Aku	Otuteye	Deputy High Commissioner	Ghana High Commission
139	Dr	Niranjan	Pai		APCO Worldwide
140	Ms	Manisha	Panda	Consultant- Strategy & Operations	KPMG
141	Mr	Vikas	Pandey		Pfizer Ltd
142	Ms	Gurvinder B	Parmar	Technical Director	KPMG
143	Dr	Amrut	Patel		Bardoli Satyagrah Hospital
144	Ms	Shailaja	Pathania		Essilor India Pvt Ltd
145	Mr.	Manas	Patra	Head - ESSS	P D Hinduja Hospital & Medical Research Centre
146	Mr	Harish	Pillai	COO	Indus Health Plus Ltd
147	Mr	Vaibhav V.	Poddar	Senior Vive President Head-Transformation & New Business	Max Healthcare Institute Ltd
148	Dr	Deepika	Ponnappa	Head- Clinical Operations	HCL Healthcare Ltd
149	Dr.	Sanjeev	Popli	Senior Consultant Cardiac Anaesthesiologist	BLK Super Speciality Hospital
150	Mr	Himanshu	Priyadash	Head of Government Relations - Market Access	Pfizer Ltd
151	Mr.	Vinod	Purohit		Johnson & Johnson Pvt Ltd.
152	Mr	KV	Raghuraman		Varian Medical Systems International India Pvt Ltd.
153	Mr	Rishi	Raj	Director – Strategy and Corporate Development	Max India Ltd
154	Ms	Simmy	Rajan		Indraprastha Apollo Hospital
155	Dr.	J.V.	Ramamurthi	Expert QMS in Healthcare	Independent Consultant
156	Mr	Ramish	Rambissoon	Director	Johns Hopkins
157	Mr.	Rohit	Ranjan		Johnson & Johnson Pvt Ltd.
158	Mr	Vaibhav	Rao		Pfizer Ltd
159	Mr	Vikas	Rastogi	Head-Finance	HCL Healthcare Ltd
160	Ms.	Roopa	Rawat	Rheumatology Nurse and Educator	Spinal Injuries
161	Dr	Sachidananda	Ray		Philips India Ltd
162	Mr	Kaushik	Ray	Chief Human Resource Officer	HCL Healthcare Ltd
163	Ms.	Yasmin Zaveri	Roy	Senior Advisor, Economic and Trade Affairs	Embassy of Sweden
164	Mr.	Sujan	Saha	Student of MBA Health and Hospital Management	IIHMR University, Jaipur
165	Ms	Rachna	Sahney	Assistant Professor	Amity University
166	Dr	Ajay	Sankhe	Founder & Director	Bhaktivedanta Hospital & Research Institute
167	Mr	Manish	Sardana	Director – Terumo Interventional Systems – India	Terumo India
168	Mr.	Christo	Sasi	Student, Amity Institute of Biotechnology	Amity University
169	Mr	Sharad	Saxena		Max Healthcare Institute Ltd

170	Mr	Abhishekh	Saxena	PhD Scholar, Amity Institute of Biotechnology	Amity University
171	Ms.	Sanchita	Saxena	Student, Amity Institute of Biotechnology	Amity University
172	Dr.	Jennifer	Sayyed		Indus Health Plus Ltd
173	Mr	Piyush	Seth	CEO	First Medical Services
174	Dr.	Sundeep	Seth	Student of MBA Health and Hospital Management	IIHMR University, Jaipur
175	Mr	Debayan	Shah		Pfizer Ltd
176	Mr	Nitin	Sharma	Sr. Executive	Max Healthcare Institute Ltd
177	Ms.	Neeraja	Sharma	Head Marketing, Health Systems	Philips India Ltd
178	Dr	Dhirja	Sharma	Vice President - Medical Quality	Max Healthcare Institute Ltd
179	Dr.	Ekta	Sharma	GTL - Quality & Systems	Artemis Health Sciences
180	Mr	Pranjal	Sharma	Editorial & Knowledge Advisor	24alife
181	Mr	Lokesh	Sharma	Principal and Head – Government Solutions, South Asia	IMS Health Information & Consulting Services India Pvt Ltd
182	Mr.	Sanjeev	Sharma		IMA
183	Mr	Ankit	Sharma		GB Pant Hospital
184	Mr	Rajesh Kumar	Sharma	Sr. Product Development Specialist	Milliman India Pvt Ltd
185	Dr	Gopal	Sharma	Director	Satyabhma Hospital
186	Ms	Vartika	Sharma		APCO Worldwide
187	Dr	Shashank Shanker	Sharma	MBA Hospital & Health Management	IIHMR University, Jaipur
188	Dr.	Monika	Shashank	Head-Lab Systems & Projects	Oncquest Laboratories Ltd
189	Mr	Chandershekhar	Sibal	HOD Medical Division	Fujifilm India Private Limited
190	Mr	Marcus	Simon	Manager Health Technology Assessment & Reimbursement International Division	St. Jude Medical India Pvt Ltd
191	Mr.	Luka	Simunovic	Art Director	24alife
192	Mr	Narendra Kumar	Singh	Deputy General Manager	Indraprastha Apollo Hospital
193	Ms	Jasmine	Singh	GM Ops	Max Hospital, Pitampura
194	Dr.	Sanjeev	Singh		Amrita Institute of Medical Sciences and Research Centre
195	Mr	L.M.	Singh	Project Director	IPE Global Ltd
196	Mr.	Ambrish	Singh	Specialist-Therapy Access, India-Healthcare Economics & Reimbursement	St. Jude Medical India Pvt Ltd
197	Mr	Tejinder	Singh	Sr. Consultant, Medical Device Sector	Israel Trade Promotion Center
198	Ms	Aastha	Singh	Student	Maulana Azad Institutes of Dental Sciences, New Delhi
199	Mr	Anuj	Singhal		Techplus Digital Pvt Ltd
200	Mr	Taksh	Singhvi	Partner	Ernst & Young LLP
201	Dr	Ajit	Sinha		
202	Ms	Shruti	Soman	Asst Manager - Marketing Communications	Indus Health Plus Ltd
203	Ms.	Aditi	Sood		Johnson & Johnson Pvt Ltd.

204	Ms	Tanya Shanti	Spisbah	First Secretary Trade and Economics	Australian High Commission
205	Mr.	Vijayant	Srivastava	General Manager Risk & Portfolio Management Philips Capital	Philips India Ltd
206	Mr	Vivek	Srivastava	Co-Founder & CEO	Healthcare At Home
207	Dr	Akash	Sud	Head-Medical Process	Fortis Healthcare Ltd
208	Dr.	Naveen	Talwar	Consultant Orthopaedic Surgeon	Fortis Healthcare Ltd
209	Dr.	Naveen	Talwar	Senior Medical Advisor / Medical Director	HCL Healthcare Ltd
210	Mr	Masayoshi	Tamura	General Manager	Hitachi India
211	Dr.	Karan	Thakur	General Manager Operations & Public Affairs	Indraprastha Apollo Hospital
212	Mr	Abhinav	Thakur	Managing Director	Accurex Biomedical Pvt. Ltd
213	Dr	Gaurav	Thukral	Senior Vice President & Business Unit Director	Healthcare At Home India
214	Dr	Jamhoih (Jamie)	Tonsing	Regional Director	The Union South-East Asia Office
215	Mr	Aman	Toor	Assistant Product Manager-Marketing	Oncquest Laboratories Ltd
216	Dr	R.S	Uberoi	Chief Quality Officer	Indraprastha Apollo Hospital
217	Mr.	Yogesh	Upadhyay		Johnson & Johnson Pvt Ltd.
218	Mr.	Paresh	Upasani	General Manager	Philips India Ltd
219	Mr.	Janez	Uplaznik	Founder and Owner	24alife
220	Dr	Shyla	Vahab	Chief Medical Officer	Sri Vaidya Ayurveda Pvt Ltd
221	Ms	Latika	Vats	Dir – RA & QA	Terumo India
222	Dr	K	Venkataramanan	Director- Projects & Program	Bhaktivedanta Hospital & Research Institute
223	Dr.	Anupreet	Vig		I N L E A D
224	Dr	Saumya	Vig	PT- Physiotherapist	Max Super-Specialty Hospital
225	Mr	Vikas	Vij	Chief Marketing Officer	Indraprastha Apollo Hospital
226	Mr.	G	Viswanathan		Johnson & Johnson Pvt Ltd.
227	Mr	Aravind	Viswanathan	Franchise Director	Johnson & Johnson Medical India
228	Mr	Gautam	Wadhwa	Senior Vice President	Max Healthcare Institute Ltd
229	Mr.	Mohammed	Yakoob	Head Operation-Karnataka	Piramal Swasthya
230	Ms	Jayanthi K			Tuscano Equipments Private limited
231	Ms.	Tanushree		VP - Enterprise Sales	Braahmam Net Solutions Pvt Ltd
232	Dr.	Soujanya K		Ex JEO	Dr. NTR Vaidya seva Trust
233	Dr.	Ruchi		Student of MBA Health and Hospital Management	IIHMR University, Jaipur
234	Ms	Neetu		Student	Maulana Azad Institutes of Dental Sciences, New Delhi
235	Ms	Nida		Student	Maulana Azad Institutes of Dental Sciences, New Delhi
236	Ms	Mamta		Student	Maulana Azad Institutes of Dental Sciences, New Delhi
237	Ms	Samridhi		Student	Maulana Azad Institutes of Dental Sciences, New Delhi
238	Ms	Pragati		PG Student	I N L E A D
239	Ms	Tanu		PG Student	I N L E A D

240	Mr	Bhanu		PG Student	I N L E A D
241	Mr	Pawan		PG Student	I N L E A D
242	Ms	Sonam		PG Student	I N L E A D
243	Mr	Anurag		PG Student	I N L E A D
244	Mr	Bindresh		PG Student	I N L E A D
245	Ms	Prerika		PG Student	I N L E A D
246	Mr	Yogesh		PG Student	I N L E A D
247	Ms	Riya		PG Student	I N L E A D
248	Ms	Napsiya		PG Student	I N L E A D
249	Ms	Neetu		PG Student	I N L E A D
250	Mr	Praveen		PG Student	I N L E A D
251	Mr	Jai		PG Student	I N L E A D
252	Ms	Priyanshi M		Student, Amity Institute of Biotechnology	Amity University

Organising Committee 2016

Chair

- **Mr Vishal Bali**, Co-Chair-FICCI Healthservices Committee and Asia Head-Healthcare, TPG Growth

Advisors

- **Dr Nandakumar Jairam,** Chair - FICCI Healthservices Committee; Chairman – NABH; Chairman & Group Medical Director, Columbia Asia Hospitals India
- **Mr Ashok Kakkar**, Co-Chair-FICCI Healthservices Committee and Sr. Managing Director, Varian Medical Systems International India Pvt Ltd
- **Dr Narottam Puri**, Advisor-FICCI Healthservices; Ex-Chairman, NABH and Advisor-Medical, Fortis Healthcare Ltd

Members

- **Hony Brig. (Dr) Arvind Lal**, Chairman & Managing Director, Dr Lal Path Labs
- **Mr Rajit Mehta,** MD & CEO, Max Healthcare
- **Ms Archana Pandey,** Senior Director-Corporate Affairs, Max India Ltd
- **Mr Gautam Khanna**, CEO, Hinduja Hospital
- **Dr Girdhar Gyani**, DG, AHPI
- **Dr Anupam Sibal**, Group Medical Director, Apollo Hospitals Group
- **Mr Varun Khanna**, MD, Becton Dickinson
- **Mr Aditya Burman**, Managing Director, Oncquest Labs
- **Dr Nagendra Swamy**, President & Chairman- Quality Council, Manipal Hospital
- **Mr A Vijay Simha**, CEO, OneBreath Inc., Bangalore
- **Dr Ravi Gaur**, COO-Operations, Oncquest Laboratories

FICCI Team

- **Ms Shobha Mishra Ghosh,** Senior Director
- **Ms Sarita Chandra,** Deputy Director
- **Ms Shilpa Sharma,** Deputy Director
- **Mr Anirudh Sen,** Deputy Director
- **Mr Syed Quasim Ali,** Assistant Director

About FICCI

Federation of Indian Chambers of Commerce and Industry

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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