



4th Healthcare Conference

Harmonization of Indian Healthcare within the Global Ecosystem

16 September 2016
Hyderabad

Knowledge Partner



"OF ALL THE FORMS OF INEQUALITY, INJUSTICE IN HEALTHCARE IS
THE MOST SHOCKING AND INHUMANE."

Dr Martin Luther King Jr.



Foreword

AmCham India, with a successful 25 years of journey, knitting together the trade & commerce related activities of American Companies operating in the Indian Landscape, has also started embracing relevant social/ community related challenges as part of its community outreach, and working on finding relevant solutions through various CSR and other initiatives. In the year 2013, AmCham Hyderabad championed the focus on an extremely important topic: “Healthcare”, impacting a value chain of stakeholders; Medical practitioners, Hospital administrators, Healthcare startups, Regulatory Professionals, Product designers and developers, Business Consultants/ Regulatory Advisors, Academicians/ Researchers, and Government & Regulatory Authorities...

The 4th Healthcare Conference titled “Harmonization of Indian Healthcare within the Global Ecosystem”, held on 16th September, 2016, in Hyderabad, once again, evidenced keen interest in the key stakeholders of the larger community pan India.

The Inaugural Session had welcome address by Dr. Kiranmai Pendyala, Chairperson, AmCham Hyderabad, & Regional CHRO/ CVP, AMD. The inaugural address was delivered by Mr. Pratyush Kumar, Chairman AmCham India / President Boeing India, while special remarks were made by Mr. George Sibley, Minister Counsellor Political & Economic Affairs, US Embassy Delhi, and Sanjiv Navangul, AmCham Pharma Committee Chair/MD Janssen India (J&J). The Key Note on “Healthcare Landscape” was delivered by a witty and knowledgeable Mr RatanJalan, Founder & Principal Consultant, Medium Healthcare Consulting. The Panel on “Global Harmonization” built in a constructive debate from speakers interested in healthcare regulations, pricing policies, and increasing outreach to patients across India. The Panel on “Innovation & Technology” focused on identifying accelerators that member companies are incorporating into their R & D pipeline, exciting new products and services getting infused into the markets, while at the same time addressing the issue of rising costs of health care products/ services. The third Panel in the Conference zoomed in on “Skills Development”, given the buzz around India’s positive demographic dividend and Millennials entering the workforce, the Speakers deliberated upon interesting challenges in healthcare, and creative methods to be deployed to skill and scale India’s next gen of healthcare professionals, to meet the increasing demands of Indian citizens ailing, as well as catering to the increasing volumes of medical tourists from across Africa, Asia, Middle East, etc

The Conference was wrapped up by Mr. Sashidhar Reddy, Vice Chair, AmCham Hyderabad & CVP/ Site Lead, Qualcomm.



Inaugural Session

The government should increase spend on healthcare, though with greater focus on rural and semi-urban India. We need to provide greater thrust towards PPPs to roll out relevant healthcare initiatives. Creating dialysis centers in government hospitals to increase access and supplying generic drugs through Pradhan Mantri Jan Aushadhi Yojana are some of the pioneering initiatives taken by the government. Digital India Program also offers host of opportunities to improve healthcare access.

India has leadership position in generic drugs and vaccines. In fact, 80% of the AIDS drugs are manufactured in India. With over 2,30,000 medical tourists in India last year, medical tourism offers yet another opportunity to leverage our world-class clinical outcomes.

The government's move to control prices, we firmly believe, should involve all the stakeholders to ensure objectivity and long-term impact.

Pratyush Kumar
Chairman, AMCHAM India

Given the enormity of challenge in improving quality, affordability and access of healthcare in a country as large and as diverse as India, the role of harmonization and innovation can hardly be overemphasized. This conference will set the tone for strengthening relationship between India and the United States for accelerating adoption of innovation in this vital field; case in point being work on vaccine development. Recent signing of Logistics Support Agreement between India and the US was one great step towards starting a strategic dialogue.

We constantly need to work on removing obstacles in way of harmonization and innovation. In certain cases, better and more frequent communication between the two governments can play a vital role in fostering progress.

George N Sibley
Counsellor for Economic Affairs &
Environment, Science and Technology
U.S. Embassy, New Delhi



Pratyush Kumar
President of Boeing India &
Vice President of Boeing International

Pratyush Kumar is President of Boeing India and Vice President of Boeing International. Based in New Delhi, Kumar is Boeing's most senior in-country leader. Before joining Boeing in 2012, Kumar served in various leadership roles at General Electric (GE) for close to a decade in the United States and in India. He started his career as a consultant with McKinsey & Company in the US. In between McKinsey and GE, Kumar was an entrepreneur, working at a US high-technology startup, Coventor, and founding a Boston-based biotech company, Cytosome.

Kumar is Chairman of American Chamber of Commerce in India, Chairman of FICCI's Aviation Committee, Chairman of ASSOCHAM's cybersecurity council, Regional President of the IndoAmerican Chamber of Commerce (IACC), and a member of the Executive Council of the Aviation Cooperation Program (ACP) between India and the US. He also serves on the board of Aerospace and Aviation Sector Skills Council, Confederation of Indian Industry's (CII) Defense Committee and The Energy and Resources Institute's (TERI) Advisory Board.

Kumar earned a bachelor's degree in mechanical engineering from the Indian Institute of Technology Delhi and a doctorate in Materials Engineering from the Massachusetts Institute of Technology, where he was also an Industry Collegium Fellow supported by the Leaders for Manufacturing program.



George N Sibley
Counsellor for Economic Affairs &
Environment, Science and Technology
U.S. Embassy, New Delhi

George N Sibley joined the Embassy of the United States at New Delhi on May 31, 2013 as the Minister Counselor for Economic, Environment, Science and Technology Affairs. His office leads and coordinates all aspects of U.S.-India economic, trade, investment and energy policy, as well as climate change, environmental protection, space policy, and science and research cooperation.

He is also the U.S. Co-Chair of the U.S.-India Science and Technology Endowment Fund (USISTEF) in New Delhi, India. The Endowment Fund offers competitive grant support to innovative startup projects that are bi-national, socially relevant, and commercially viable.

Mr Sibley joined the Foreign Service in 1988 and is a career member of the Senior Foreign Service. Before arriving in New Delhi, Mr Sibley was Director of the Office of Environmental Quality and Transboundary Issues, at the U.S. Department of State. Prior to that assignment Mr Sibley served a year in Iraq as the Senior Advisor for Northern Iraq and as the Team Leader of Provincial Reconstruction Team Ninewa, following two years as the Director of the Office of Iraq Political Affairs at the Department of State. He previously served as Consul General in Kolkata, India from 2002-2005.

Mr Sibley graduated in Biology and Religious Philosophy and holds a Master's Degree in Public Policy.

Special Remarks

Given the unacceptably high level of under-diagnosis and under-treatment when it comes to healthcare in India, we need to focus on diseases, which have very poor success rates in terms of treatment. And as is evident from a report released by United Nations Development Group, we, as a country, need to focus a lot more on education and healthcare to achieve progress in the real sense. In healthcare, we need to move away from our current skew towards hospitals and encourage higher investment on outpatient services and preventive and promotive care.

In bringing global standards and cutting-edge technology in healthcare, MNCs have made significant contributions. It is equally commendable that these organizations are taking pioneering initiatives to address the affordability gaps.

Sanjiv Navangul
AMCHAM Pharma Committee Chairman



Sanjiv Navangul
Managing Director
Janssen India

Sanjiv Navangul was appointed the Managing Director of Janssen India in August 1 2013. In addition to his current responsibilities, he also handles the South Asian markets of Sri Lanka and Bangladesh. Prior to joining Janssen India, he was the Managing Director of MSD, Philippines.

He has over 25 years of experience in pharmaceutical industry, which spans various geographies across Europe, Asia and India with experience in varied business functions such as Sales, Marketing, Supply Chain, Finance, Strategy and General Management.

Sanjiv is active in Healthcare Policy in India and is Vice President – Organization of Pharmaceuticals Producers of India (OPPI - representative body of the MNCs in the pharmaceutical sector) and is also the Chairman of the Communication and Public Affairs Work Group –OPPI. He is currently the Chairman- American Chambers of Commerce (AMCHAM) – Pharmaceutical Committee.

He was adjudged the winner of OPPI Marketing Excellence Award for 3 years in a row for New Product Launches in India and is also credited with spearheading the well-known Industry first initiatives and innovative Disease Management Programs.

Sanjiv holds a Degree in Pharmacy and a Masters Degree in Business Administration. He has been a part of one year Executive Management Program at Harvard.

Indian Healthcare Landscape

Instead of sharing the oft-quoted statistics about the lack of hospital beds or trained physicians in the country, Mr Ratan Jalan chose to share his perspectives on some of the fundamental issues in Indian healthcare.

- Unfortunately, we seem to be singularly focused on large multi-specialty tertiary care hospitals. Given the multiplicity of challenges in healthcare and the lack of resources, both financial and human, it becomes even more important for us to get our priorities right. Focus on preventive and primary care will go a long way in reducing the burden of diseases and improving affordability and availability. Given the excessive skew towards larger cities, it is no less important for us to include smaller towns and rural India with equal, if not greater, emphasis while devising solutions. Instead of reinventing the wheel, we could adopt some of the successful role models in these areas, which have been implemented across the globe.
- Innovative healthcare delivery models, some of them leveraging technology, can prove to be a blessing. And they could range from primary care and tele-medicine to chronic care and home healthcare. However, such models need to focus on the real needs felt by the masses, if they have to achieve worthwhile scale.
- Some of the recent initiatives taken by the Government particularly in relation to regulatory framework, medical education and PPPs are indeed heartening. The government should increasingly explore ways to enhance its role as an enabler rather than continue to be a healthcare services provider burdened with inefficiency.
- Chronic diseases have proved to be an unmanageable burden even for the developed countries. Large scale screening, mass awareness campaigns and incentives aligned to prevention and self-management are some of the solutions, which would impose lesser cost burden on the society. However, lack of proper business models in the area of prevention has proved to be a major bottleneck and resulted in grossly inadequate traction.

Ratan Jalan
Founder, [Medium Healthcare Consulting](#)



Ratan Jalan
Founder & Principal Consultant
Medium Healthcare Consulting

He is driven by an urge to make a difference in healthcare. Innovation in business models and patient empowerment have been at the core of what he does.

Earlier, Ratan Jalan was the CEO of Apollo Health and Lifestyle Limited, part of the Apollo Hospitals Group, for almost a decade. He created some of the most successful and innovative healthcare formats in the country such as a nationwide network of The Apollo Clinic and The Cradle, South Asia's first boutique birthing centres. He also led some of the strategic marketing initiatives and international projects for the group.

In 1996 as President, Ratan set up Asian Health Services, India's first hospital architecture and consulting firm as a Joint Venture with ServiceMaster, then a Fortune 500 company. In a short span of three years, the firm became the undisputed thought leader in healthcare and had served leading organizations like Wockhardt Hospitals, Escorts Hospital, Max Healthcare, Aditya Birla Foundation, IL&FS and Gleneagles Hospitals.

Ratan has over four decades of experience across diverse industries and functional responsibilities. He started his

professional career in the information technology industry with HCL Technologies and then moved to advertising at Lintas (now Lowe). During his ten years there, he started and headed the integrated marketing division and worked on leading Indian and international brands.

Ratan was awarded the Marketing Impact of the Year Award by S P Jain Institute of Management, a leading business school in India. He has been nominated as one of the 50 most influential professionals in retailing by Retailers, a leading industry publication. He was inducted into the Hall of Fame at the 2008 Franchise Awards for the success of The Apollo Clinic initiative. He is also a frequent speaker at leading management institutes such as Indian School of Business, IIMs and FMS and various industry forums such as, CII, FICCI, ASSOCHAM, AIIMA and World Economic Forum. He was one of few panelists invited from India at Harvard Business School Global Centennial Summit.

He is an alumnus of IIT Kharagpur and Harvard Business School.

PANEL 1

Global Harmonization



"Since you are an integral part of a social system, let every act of yours contribute to the harmonization of social life. Any action that is not related directly or remotely to this social aim disturbs your life, and destroys your unity."

Marcus Aurelius



PANEL 1

Global Harmonization

Moderator

Joseph A Nicholas President and CEO, CTSI

Panelists

Dr M Padmanabh Reddy CEO, NICE Foundation

Satya Gottumukkala President, Eli Global, India

Dr Balaji Utla Vice-Chairman and CEO, Kria Healthcare Private Limited

Arif Fahim Senior Manager – Therapy Development & Reimbursement, St Jude Medical

OVERVIEW

There is immense scope to achieve harmonization, standardization and adoption of some of the best global practices to address India's unique healthcare problems. The panel emphasized the role such initiatives could play in improving clinical outcome, reducing cost and enhancing accessibility. Given multiplicity of stakeholders and the enormity of the challenge, the role of government, both as a regulator and a facilitator, was also discussed. Finally, the panel dwelled on some of the widely ignored gaps and the possible solutions based on global best practices.

KEY TAKEAWAYS

Understanding Global Harmonization

Harmonization ought to look at bringing in standardization in various facets across the globe. Cost reduction and increase in efficiency being the major resultant advantages, standardization becomes even more vital in the context of Indian healthcare. The ability to provide universal healthcare in an efficient and cost effective manner is, to a large extent, driven by standardization. Current attempts at standardization in healthcare, be it treatment protocols or patient health record, have achieved little success primarily because we have failed to take into account varying interests of different stakeholders. In fact, ignoring smaller players and not providing adequate room for subsequent adaption have often jeopardized such initiatives.

In case of medical devices or consumables, any attempt at standardization should take into account three key attributes: safety, clinical efficacy (and not limited to just the short-term results) and finally, the price. It would be illogical to view cost implications of a device purely in the context of cost of hospitalization. Long term health gains, unfortunately, rarely get factored in either by the hospitals or the insurance companies.

“People look at the cost of a treatment or a device on an episodic basis. Nobody values what does it take to keep the patient outside the hospital.”

Arif Fahim

The Technology Perspective

Some of the proven technology-based solutions in the West could help us address the problems of access, quality and cost in healthcare. Better clinical decision making can be enabled by standardization of processes, which may require interventions from regulatory bodies. For instance, in the US ObamaCare incentivized reporting of clinical outcome data in a standardized format to help comparison and decision making. If we can equip the last mile worker in rural India, be it the ASHA or the primary care physician, with simple, yet effective, technology to help deliver better healthcare, it will be harmonization in the real sense for Indian healthcare.





Tele consultation is yet another example, which could help address the enormous short supply of qualified specialists.

We can't offer high quality healthcare without proper technology, which often tends to be expensive. Given the widespread poverty, we need an E-class Benz at the price of a Nano. There are various concepts or initiatives such as frugal innovation, reverse engineering or 'Make in India', which can come into play to help us achieve the seemingly impossible objective.

“ We need an E-Class Benz at the cost of a Nano. India needs that sort of innovation, because you can't offer high quality healthcare without appropriate technology.”

Dr Padmanabh Reddy

Role of Government

Given the large numbers and diversity of players in the entire healthcare ecosystem, which includes medical devices & pharmaceuticals companies, hospitals/ healthcare service providers, medical colleges, health insurance companies and others, it is important for the government to devise and implement regulations keeping the big picture in mind. Unfortunately some of these regulations tend to have single-minded focus on cost without taking into account the long-term impact or tend to be a knee jerk reaction to a crisis with little emphasis on sustainability.

Public Private Partnership (PPP) is another area, which warrants greater thrust, since it hasn't witnessed much success so far. The major problem in PPP is finding a model, which is beneficial for all. Unfortunately, in some cases the State Governments have looked at it as an 'outsourcing' model with the entire burden of accountability getting passed onto the private player. The true spirit of PPP is its risk-sharing ability. The best way to do it is to create space for dialogue, where mutual distrust is taken away.

Healthcare organizations on their part should gear



themselves up to share greater responsibility and hence reducing the need for unnecessary government interference. To illustrate the point, the panel shared the example of a global automotive giant deciding not to patent the anti-braking system technology as it could potentially save millions of lives.

“India didn’t have landlines. And that proved to be a blessing in disguise. Like it happened in telecom, could there be an opportunity for us to leap-frog in healthcare?”

Satya Gottumukkala

Primary Care and Community Healthcare Models

To address the real problems in healthcare in India, one has to look beyond the large urban hospitals. The NHS model in

UK, particularly in relation to primary care, could offer quite a few learnings in the Indian context. A properly implemented business model focused on general physicians could be an answer to 80% of the common healthcare needs in the country. In Krishna and Khammam districts in Andhra Pradesh, there are entrepreneurs who have started innovative business models around family clinic with diagnostic facility. Similarly one of the hospitals in Hyderabad has a business model around tele-medicine in remote villages in Telangana.

Similarly, the concept of Community hospitals, which is quite prevalent in the US, could provide yet another approach for finding the right solution. World Bank, in association with certain State Governments, had initiated study to understand the feasibility of such models at district levels.

“It is the new kid on the block, who is more likely to drive innovation. IBM, for example, couldn’t have created Google!”

Dr Balaji Utlra



Joseph A. Nicholas

President and CEO, Cancer Treatment Services International

Joseph A Nicholas, President and CEO of CTSI, began his career at Eastman Kodak, holding prominent positions in sales, marketing and product development. During the mid-90s, Mr Nicholas was recruited to assist in starting a technology venture, Allin Interactive, where he played an integral role in raising public money in the successful pursuit of an IPO with parent company, Allin. In 2001, Mr Nicholas was named CEO/President of a UPMC venture company, D3 Radiation Planning. UPMC is a multi-billion dollar entity, non-profit provider of services in Western Pennsylvania and offers advanced radiation treatment planning to hospitals and freestanding institutions.

In early 2005, Mr Nicholas became CEO of Alliance Oncology, a joint venture between D3, UPMC and Alliance Imaging. Under his leadership, Alliance Oncology opened two cancer centers in partnership with Providence Hospital of Southern California. At Alliance, Mr Nicholas also negotiated partnerships with two world renowned organizations in Boston, Massachusetts.

Since commencing operations in India, CTSI has successfully launched three healthcare brands – American Oncology Institute, American Institute of Pathology and Laboratory Sciences (AmPath) and Citizens Hospital. American Oncology Institute offers comprehensive cancer care based on top US standards and protocols. AmPath serves as a national pathology reference lab and features a direct clinical collaboration with UPMC, one of the top 10 hospitals in the US. In March 2014, CTSI announced a partnership with GE Healthcare to expand American Oncology Institute's network of locations in India to 25, all of which will offer cancer treatment based on top US standards of care.

Mr Nicholas graduated from Indiana University, where he received the prestigious Eastman Kodak Scholarship Award.



Dr M Padmanabh Reddy

CEO, NICE Foundation

Dr Padmanabh Reddy is a neonatologist with over three decades of experience. He began his career as a neonatologist in a reputed maternity hospital in Hyderabad where he headed the Neonatology Unit for almost 14 years. During this period, he was invited by WHO to the Division of Neonatology, Department of Pediatrics, University of Illinois at Chicago, USA, for "Leadership Training in Neonatology". He also had a clinical attachment at St Thomas Hospital/Guys Hospital, United Kingdom for observational studies in neonatology. He has to his credit, creation of various models, which have been strategically conceptualized, designed and created at several newborn units in best of the hospitals in Telangana and Andhra Pradesh. Understanding that the hospitals are generally focused on commercial gains and probably do not benefit the deserving and the needy, he set out with a mission to create an entity which would help realize his objectives and vision of helping the needy.

In 2002, he started an organization known as, "NICE Foundation", which was registered as a charitable trust, with a goal to accomplish and achieve a powerful impact of saving lives. The foundation has been recognized by various national and international organizations including Planning Commission of India, Rockefeller Foundation, Bill and Melinda Gates Foundation and UNICEF among others. Dr Padmanabh is a member of the task force of Andhra Pradesh for implementation of some strategic government initiatives including IMNCI (Integrated Management of Newborn and Childhood Illnesses).



Satya Gottumukkala

President, Eli Global, India

Satya has over 28 years of experience out of which 18 are in healthcare and life sciences industry, in management development and maintenance of information systems. He has expertise in IT, ITES and BPO / KPO services. He is currently President at Eli India and runs Medflow as its CEO. In his last role, Satya was Country Head – India and Emerging Markets at Anthelio Healthcare Solutions and served on the Indian Board apart from managing Hyderabad and Mumbai locations.

In the past 9 years Satya was involved in three M&A deals and has vast experience in managing integration of organizations post the mergers. He was involved in the FCG-CSC transition in India, did an acquisition of an HIS product in India right from due diligence to closure.

He is actively involved with Industry forums like American Chamber of Commerce in India (AMCHAM), Indo American Chamber of Commerce and with management institutes like Symbiosis, ASCI and University of Hyderabad, where he serves on the Board of School of Management Studies.

Satya was involved in Co-founding a company “HealthAsyst” During this period, he also managed the complete HR function for the company apart from managing the overall operations. He spent three years in US managing one of the largest healthcare accounts for Wipro.



Arif Fahim

Senior Manager – Therapy Development & Reimbursement, South Asia & South East Asia

Arif Fahim leads Therapy Development, Reimbursement and Healthcare Economics for St. Jude Medical in South Asia, South East Asia, Hong Kong and Taiwan. Arif is responsible for driving strategic initiatives for the company, including development of alternate and new business models, creating in-house market intelligence based support systems, fostering cross industry partnerships for enhancing market access, leading healthcare payer interactions with Government and Private payers, among several others.

Arif additionally serves as the organization’s representative on various industry forums such as FICCI, CII, Amcham, among those also as Chair - Health Economics & Reimbursement sub group at AdvaMed, where he is instrumental in driving industry policy on health technology assessment and medical device reimbursement.

Arif holds a Bachelors’ Degree in Commerce Honors from the University of Delhi; is an award recipient and Masters’ Degree holder in Marketing from the University of Durham, UK; and has executive education in Health Economics and Health Technology Assessment from the Centre of Health Economics, University of York, UK.



Dr Balaji Utla

Vice-Chairman and CEO, Kria Healthcare Private Limited

Dr Balaji Utla, is the Vice Chair and CEO of Kriya Healthcare Private Limited since May 2016. He is also the Co-Founder of Pennidhi Foundation focused on creating livelihood for Dalits and Tribal Youth from low income backgrounds. In his earlier role, Dr Balaji incubated and set up Piralal Swasthya (formerly known as HMRI) while pioneering innovative solution engineering and developing an apt Public-Private-Partnership model that has since become the industry benchmark. Under his charge, Piralal Swasthya's foot print increased to cover 11 states; a population of over 4.5 crores. Piralal Swasthya is today a recognized leader for innovations, use of technology and adoption of leadership/managerial best practices in the not-for-profit space.

With over 30 years of experience in varied businesses and areas such as Strategy, Leadership, Operations, Organization Development, Learning and CSR, Dr Balaji was instrumental in setting up divisions/companies for various start-ups and large corporations apart from being an advisor to several more.

Earlier, Dr Balaji was the Founding CEO & Vice-Chairman of Satyam Foundation, the not-for-profit foundation of Satyam Computer Services Ltd (rechristened Tech Mahindra). Under Dr Balaji's stewardship, Satyam Foundation grew to be one of the largest volunteer driven foundations in the Indian IT industry and Satyam received the Corporate Citizen Award from FICCI in 2006 and the TERI award in 2007.

Dr Balaji has served as an Associate Professor in the Department of Business Management at Osmania University between 1984-1993 and has several writings published in his credit.

PANEL 2

Technology & Innovation



"We cannot solve a problem by using the same kind of thinking we used when we created them."

Albert Einstein



PANEL 2

Technology & Innovation

Moderator

Ritesh Dogra Managing Partner, Medium Healthcare Consulting

Panelists

Jay Krishnan CEO, T-Hub, Hyderabad

Divya Prakash Joshi Site Director, Medtronic

Dr Gaurav Thukral Sr VP and Business Unit Director, Healthcare At Home India

Raghu Punnamraju Senior Director, Parexel International

OVERVIEW

Given the widely prevailing healthcare challenges, the need for innovative solutions and the role of technology to address a large segment of the under-served population cannot be overemphasized. Panel comprised of eminent professionals representing diverse background: medical devices, healthcare start-ups, incubators and healthcare technology. The deliberations in the panel covered quite a few themes around the subject, which ranged from identifying pockets of opportunities to moving towards need-based innovations; not to forget the role government could play in helping some of these innovative business models in scaling up over time. The role of technology in acting as catalyst to solve the problems of access, quality and affordability was also one of the key themes of the discussion.

KEY TAKEAWAYS

Role of Technology

The sheer diversity of the panel brought forth varying perspectives on the role of technology. From a clinical perspective, tools such as data analytics and cloud computing could play a large role in overall clinical decision making, in turn, driving better clinical outcomes. At the same time, in a new business model such as home healthcare, technology, for example at the individual care giver level, has been leveraged to drive both quality and productivity. The panel suggested that technology would eventually move from its role of being an enabler in healthcare ecosystem to a solution in many instances. The role of technology platforms in creating large-scale healthcare awareness and bridging some of the last-mile gaps in healthcare delivery was also highlighted.

“There is a lack of proper ecosystem for medical device and therapy innovations in India.”

Divya Prakash

Realizing the Impact of Innovation

Innovation should be focused on developing business models that solve real problems faced by the masses, with utmost focus on patient safety and care. The success of an innovation should be determined in terms of its sustainability and the impact made on the number of lives. Ironically, success quite often gets determined by the funding or the valuation, rather than the true impact.

While innovation in Indian healthcare is taking place at an amazing rate, there are very few examples, which have managed to reach any worthwhile scale. Dream-based, as opposed to need-based, innovations appear to be dominating the scene. Instead of depending on internal stakeholders' hunches or simply replicating what has been done in the West, the right strategy has to be guided by the efforts put in identifying real consumer's needs. One of





ways to foster such innovation would be to involve all the stakeholders in the system. Medtronic, for instance, integrates physicians and engineers in a team to develop such need-based solutions.

Innovations, which fail to close the loop, will have inherent weakness and lead to poor adoption. The panel shared examples such as an app on your smartphone giving you the heart rate, without guiding you 'what to do thereafter'. End-to-end solutions, as is happening in other categories, is the only way to solve some of the big healthcare problems, be it malnutrition or communicable diseases. Quite often, it is the service component, which is integral, but ignored when it comes to solutions centering around technology.

“Providing healthcare services at home would help free up beds, and thereby create additional capacity.”

Dr Gaurav Thukral

Role of Government

The ideal role of a government should be that of an enabler and a facilitator. Government should refrain from playing a larger-than-life role and occupy *drivers seat*. A focus on public private collaboration in the true spirit would help in fostering innovation, creating awareness and increasing reach.

Another factor restricting the scope of innovation in India is the state of the intellectual property rights. Going ahead, the government should ensure a balance between the importance of the reach of an innovation and the protection of ownership rights of an innovator. Considering the lack of accountability and also inadequate standardization in Indian healthcare, government should focus on creating adequate standards and regulations that create a conducive environment for impactful and sustainable innovations. Some of the innovations, which have already taken roots and have shown early signs of success, such as home healthcare, need the support of regulatory framework on an urgent basis.



“For the first time, we are seeing a government, both at the Centre and at the State level, which is willing to ‘get out of the way’, if that’s what is considered best to foster innovation.”

Jay Krishnan

Role of Private Entities

One of the key aspects, hampering innovation in India is blindly imitating business models from the West. The venture capitalists are somewhat hesitant to invest in original ideas leading to innovation. They prefer investing in a business model that has been successful in developed nations, though it might not be suitable for the Indian ecosystem. Some areas in healthcare such as biotech and medical devices have higher incubation periods and hence, unfortunately, do not attract adequate investment.

Government, to an extent, has started to play its role in facilitating an ecosystem that encourages innovation,

especially in healthcare. Now, the private sector has to start playing its part with a lot more vigour. The investment firms and venture capitalists need to focus on business models that would create a sustainable and scalable impact in the Indian context

“Technology has the potential to be one of the biggest contributors in creating healthcare awareness as well as driving quality.”

Raghu Punnamraju

**Ritesh Dogra**

Managing Partner, Medium Healthcare Consulting

Ritesh Dogra is Managing Partner at Medium Healthcare Consulting. He has led a number of engagements in areas as diverse as planning and execution of new Healthcare Business Models, Market Insights and Expansion Strategy for Fortune 500 Medical Equipment MNCs and Performance Transformation of quite a few large hospitals in the country across diverse geographies. He has received numerous accolades from clients for his rare insights and extraordinary commitment.

In addition to being a contributor to different industry magazines, Ritesh is a frequent speaker at industry forums and healthcare management institutes. Ritesh has attended the Executive Education Program on 'Leading Innovation' at Harvard Business School. He has also served as a member of the evaluation panel for some of the Global B-School competitions including Global Social Venture Competition Asia- Africa Region, organized by Haas School of Business at UC Berkeley.

Ritesh is an MBA from the Indian School of Business. In recognition of his leadership and commitment at ISB, he was one of the 12 recipients of the Young Leader Award amongst a batch of 440 students.

**Jay Krishnan**

CEO, T-Hub Hyderabad

Jay Krishnan is the CEO of T-Hub Hyderabad, one of the largest incubators in the country for start-ups and entrepreneurship. In his current roles as the CEO, he has been instrumental in incubating some of the most innovative business models focused on solving problems of population at large.

Previously, Jay has been a founder of three different start ups across the globe in IoT and Energy Management sectors. He has had two successful exits in US & India. He has worked for deals worth over \$50M across the globe. His experience in start ups ranges from planning and executing business models to assisting them with their Go-to-Market Strategy and Expansion plans in different segments and countries.

As a C-level executive, Jay has run businesses in companies like Aditya Birla Minacs, Cisco systems, Juniper Networks and Intel Brooktrout Dialogic Inc. Jay has completed his Executive MBA in General Management from IIM Bangalore.



Divya Prakash Joshi
Site Director, Medtronic

Divya is Site Director at the Medtronic Engineering & Innovation Centre, Hyderabad. He has over 25 years of experience in Engineering, R & D, Operations, Quality and Reliability Management and has held organizational leadership roles in his previous organizations. He has been with the India Centre since its inception in June 2011.

Divya has been instrumental in growth of the center over last five years. The India center has grown to achieve capability and capacity in terms of domain knowledge expertise, product knowledge, processes and test equipment to deliver high standard of innovative engineering solutions to the Strategic Business Units of the company. He has led efforts in planning & setting up a state-of-the-art test & development lab (Hardware & Software). He is driving efforts for innovation and with a MOU with the T-Hub Hyderabad, it is on the anvil to establish incubators in Govt and private hospitals to strengthen the engineer –physician relationship.

Prior to joining Legacy Covidien in 2011, Divya had worked with Larsen & Toubro, Gujarat Narmada Fertilizers, Oil & Natural Gas Commission, Indian Navy - Defence Research & Development Laboratory in various leadership roles.

He is has a degree in Mechanical Engineering, Masters in Reliability & Quality Engineering, Masters in Armament & Weapon Technology, Masters in Personnel Management, PG Certificate in Business Management & ADP from Wharton.



Dr Gaurav Thukral
Sr VP and Business Unit Director, Healthcare At Home India

In his current role as Sr VP and Business Unit Director with Health Care at Home India Pvt Ltd (HCAH), Dr Gaurav aims to bring a difference in the current healthcare delivery ecosystem. A doctor-turned-administrator, Dr Gaurav is heading the HCAH's business and looks after the operations and business development for the firm.

Dr Gaurav is leading the execution of the business plan and new business strategy for HCAH, India. He has implemented the firm's policies around recruiting, staffing, training and account management that result in top-notch client service as well as a positive work environment fostering a pattern of long-term staff retention. He is actively involved in strategic communication plans and campaigns that demonstrate a creative approach.

Trained as a physician (DNB Internal Medicine), HIV/AIDS master trainer, an Intensivist and rheumatologist, Dr Thukral has more than 30 publications to his credit. He is an M.B.B.S., D.N.B. (Internal Medicine), PGDHM, PGDMC. Besides this, he is also an ardent columnist, radio jockey and holds a PG Degree in Mass Communication.

A winner of several prestigious awards and recognitions, Dr Thukral is a certified NABH Assessor. He was awarded 1st place for FICCI Heal Poster presentation in 2015 on "Capacity Building in HealthCare", a presentation on Clinical Audits at FICCI Heal 2010 and Patient Safety Conference 2011. He is also a Six Sigma Green belt from BSI and FICCI Quality Forum. His keen interest in quality in healthcare has brought him the membership of QCI, ISQUA, API, & ISCCM.



Raghu Punnamraju

Senior Director, Software Engineering PAREXEL Informatics

In his current role as Senior Director, Software Engineering, Raghu heads Parexel India Engineering team. He is also a part of the India Leadership team at Parexel.

Raghu has over 21 years of experience in delivering innovative technology solutions. He started as a programmer and held various senior roles in the US with Dematic, GE Healthcare and Intermountain Healthcare. Raghu has been associated with Parexel for over 5 years in leadership roles in software engineering and management. He has over 10 years experience in technological enabling of Health and Life Sciences industries.

Raghu received his Bachelors of Engineering with specialization in Computer Engineering from National Institute of Technology, Rourkela followed by Masters of Science, Management of Information Systems from University of Wisconsin – Lubar School of Business. He has also completed his Masters in Business Administration from University of Warwick, Warwick Business School.

PANEL 3

Skill Development



"The more we give importance to skill development,
the more competent will be our youth."

Narendra Modi



PANEL 3

Skill Development

Moderator

Nick Mitchell Managing Director, Phenomenex India Private Limited

Panelists

Sanjiv Navangul Managing Director, Janssen India

Dr Evita Fernandez Managing Director and Chief Consultant Obstetrician, Fernandez Hospital

Marut Setia Director - Education & Skill Development, GE Healthcare

OVERVIEW

In the healthcare sector, the topic of skill development can be overwhelming. Given the diverse background of the panelists – representing providers of healthcare services, pharmaceuticals industry and medical equipment manufacturers - the deliberations covered a wide range of issues such as the role of the government and corporations, opportunities to adopt some of the global best practices, need for suitable changes in regulatory framework and equally importantly, the societal need to look at skill development differently. The panelists shared examples of some of the success stories in India. The panel reiterated the imperative to drive skill development initiatives and hence, contribute to India's "Well-Skilled Workforce" targets for the 21st century.

KEY TAKEAWAYS

Skill Development in Healthcare

Large scale skill development can play a pivotal role in addressing the need-supply gap on one hand, and the wide spread unemployment on the other. Millions of young women in India, for example, continue to die while giving birth because of poor access to healthcare. Every year 13 million births in the country, out of a total of 22 million, happen in government hospitals. We simply don't have enough doctors to meet this avalanche. We have to reduce costs and find an innovative solution that is not dependent on doctors.

Education and skill development need to be looked at very differently. It is not just about college education, which has more to do with imparting the right attitude. The panel also highlighted the need to create appropriate business models for skill development. "Until we do that all that we are doing is trying to douse a fire." said Setia

Healthcare is not like any other industry. It has the unique ability to 'do good, and do well'. For anyone to witness a patient surviving miraculously after receiving the right

treatment, or dying in the absence of such a service, can truly be a transformational experience. As a consumer when it comes to healthcare we do nothing out of choice; we blindly follow the instructions of the healthcare professionals.

Given the pervasive nature of the industry and woefully inadequate manpower resources, Navangul offered a radical suggestion that a short course on a healthcare-related subject should be mandatory for any educational degree program.

"Every year 13 million births in the country, out of a total of 22 million, happen in government hospitals. We simply don't have enough doctors to meet this avalanche."

Dr Evita Fernandez

Scope for Adopting Global Best Practices

Even the rich nations like the UK rely on midwives to deliver babies. With the help of a short-term bridge course of 9-12 months, nurses can get extremely competent as midwives, grow into confident professional colleagues and help solve the problem of maternal and neonatal deaths in the country.

Another successful example on similar lines has been the 15-day training programme for midwives in Nigeria on 'how to use an ultrasound'. Today it has the direct impact on a population of over 120 million in that country.

In one of the hospitals in South Africa, they had 60 babies in the neonatal units and not enough work force to handle these volumes. They provided intensive training to young girls, who had barely finished their high schools. And they did a marvelous job in providing care in that setting. It is yet another pointer to the fact that we need to find innovative

solutions to solve the problems we have.

We could also look at developing relationships with foreign universities and have exchange programs as a mutually beneficial association. While they have the appropriate technology, expertise and experience, we have the volumes. We also need to build a culture of internships and use it as a force multiplier.

Success stories in Indian healthcare

Fernandez Hospitals at Hyderabad has taken a giant leap and started a Professional Midwives Education and Training Programme in 2011. Since then, the hospital has already trained over 50 midwives, who have helped deliver thousands of babies. The hospital often collaborates with highly trained midwives from the UK for the programme. This step has the potential for large-scale adoption and can achieve even more with governmental support in terms of appropriate policy changes.

GE Healthcare launched a mission to accelerate the building of a *Skilled India* that aims at creating a 100,000-strong skilled healthcare workforce. The company has partnered with healthcare and education experts to set up healthcare education and training institutes. These institutes will provide



accredited skill building programmes for students who have passed the 12th Standard and skill enhancement programmes for existing healthcare professionals. It has already set up institutes in cities such as Mumbai, Noida, Bhatinda and Bhubaneswar and aims to set up at least one healthcare education and training institute in each state.

Role of the government, corporates & other institutions

All great organizations are skilling machines. They keep on investing continuously in training people to do better and different jobs. They also recognize that the education system has its own limitations and is not geared towards creating candidates, who are ready-made to shoulder the desired responsibilities once employed. Organizations like Johnson & Johnson consider it their duty to bridge this gap.

A change in mind set, which focuses more on prevention, can be the best solution to solve healthcare problems in India. Initiatives such as Swatch Bharat Abhiyan shouldn't be looked at superficially. It shouldn't be just about removing dirt on the road, but should be more about improving overall cleanliness and hygiene. It can do wonders for Indian healthcare.

"Healthcare is not like any other industry. It has the unique ability to 'do good, and do well'. For anyone to witness first-hand a patient surviving miraculously after receiving the right treatment, or dying in the absence of such a service, can truly be a transformational experience."
Sanjiv Navangul



The reason many countries are ahead of us when it comes to healthcare is because of our deep-rooted sense of entitlement at all levels. Our dependence on wanting to start something new relies too heavily on the support provided by the government. The government, truly speaking, has managed to give the much-desired thrust on this neglected issue through Skill India movement and a host of accompanying initiatives.

Since skill development is also about the trade-off between effort and gain perceived on the part of the recipient, the government, the corporate sector and the society at large has to address it: not just in monetary terms, but also in terms of the desired social status for skilled workforce. For example, if one becomes a X-Ray technician and gets low salaries after putting in three years in study and making the necessary investment, then the prospects seem to be hardly encouraging for such a skill.

We certainly need to re-look at bottlenecks like PNDT Act and our regulatory framework in general to be able to solve

large-scale problems in healthcare. The panel strongly believes that in the absence of a supportive regulatory framework, skill development initiatives could hardly yield the desired results. One of the crucial imperatives and hence, expectations from the government is for it to create the right legal support system.

"The buck does not stop at the government. It is for us to do the most we can with the opportunities we identify."

Marut Setia



Nick Mitchell

Managing Director,
Phenomenex India Private Limited.

Nick Mitchell is the Managing Director of Phenomenex India. Phenomenex's separation science technologies are employed in research and development laboratories around the world. Pharmaceutical companies, biotechnology firms, hospitals and clinical research centers performing diagnostic testing are Phenomenex's primary customers.

Nick has been traveling to India for over a decade and is passionate about developing stronger economic bridges between India and the United States. He actively participates in AMCHAM India and is on the Board at the National Level. He also participates in the Hyderabad Chapter of Confederation of Indian Industry (CII) in an effort to align himself with individuals and companies that have a similar passion.



Dr Evita Fernandez

Managing Director and Chief Consultant Obstetrician
Fernandez Hospital

Dr Evita Fernandez (FRCOG) is the Managing Director and Chief Consultant Obstetrician at Fernandez Hospital, Hyderabad. She strongly believes in the need to empower women to make choices, especially with regard to issues surrounding birth.

Out of her conviction of the vital role and need for Professional midwives in India, Dr Evita launched a two-year Professional Midwives Education and Training (PMET) Programme at the hospital in 2011. She is spearheading PROMISE – the Professional Midwifery Services campaign, committed to creating a national cadre of professional midwives, who are vital in the care of low-risk pregnant women.



Marut Setia

Director Education & Skill Development, GE Healthcare

Marut is Head of Education & Skill Development for GE Healthcare across Africa, South Asia and ASEAN region and is on a mission to ensure that GE becomes a leader in this space. Marut has been a part of the prestigious GE leadership programs like FMP & CAS and has experience in working across 8 different GE businesses globally. He is extremely passionate about creating and scaling new business models and over last 2 years has been an “Intra-preneur”, and is leading a start-up team at GE Healthcare.

With an outstanding pedigree from top institutes like NIT & IIT, Marut has a track record of exceptional performance in positions of increasing leadership responsibilities, while delivering growth & profitability. His key expertise is in areas of Business strategy, business management, corporate finance, commercial operations management and M&A integration.

Marut has completed his MBA in Strategy and Finance from IIT Delhi.



Sanjiv Navangul
Managing Director
Janssen India

Sanjiv Navangul was appointed the Managing Director of Janssen India in August 1 2013. In addition to his current responsibilities, he also handles the South Asian markets of Sri Lanka and Bangladesh. Prior to joining Janssen India, he was the Managing Director of MSD, Philippines. He has over 25 years of experience in pharmaceutical industry, which spans various geographies across Europe, Asia and India with experience in varied business functions such as Sales, Marketing, Supply Chain, Finance, Strategy and General Management.

Sanjiv is active in Healthcare Policy in India and is Vice President – Organization of Pharmaceuticals Producers of India (OPPI - representative body of the MNCs in the pharmaceutical sector) and is also the Chairman of the Communication and Public Affairs Work Group –OPPI. He is currently the Chairman- American Chambers of Commerce (AMCHAM) – Pharmaceutical Committee.

He was adjudged the winner of OPPI Marketing Excellence Award for 3 years in a row for New Product Launches in India and is also credited with spearheading the well-known Industry first initiatives and innovative Disease Management Programs.

Sanjiv holds a Degree in Pharmacy and a Masters Degree in Business Administration. He has been a part of one year Executive Management Program at Harvard.

Sponsors

American Oncology Institute

American Oncology Institute (AOI), the international brand for US-based Cancer Treatment Services International (CTSI), is the only cancer center in India managed by American medical experts. AOI provides evidence-based, comprehensive cancer care matching top American standards for quality and safety and seals the gap between standards of care in India and the US.

In addition to providing the same level of care as top US hospitals, AOI locations feature state-of-the-art technology not widely available in India such as the TrueBeam linear accelerator, the Calypso System, fully-integrated Electronic Medical Record (EMR) and 4D PET/CT. For patients requiring surgery, AOI partners with eminent hospitals to provide world-class, multi-disciplinary cancer care.

In March 2014, CTSI announced plans to partner with GE Healthcare to build a network of 25 cancer centers throughout India over the next five years. The network will be arranged in a hub-and-spoke fashion and will help AOI bring access to top-quality cancer care for scores of Indians to whom it is not currently available. Each AOI location offers care based not only on the latest clinically-proven medical evidence but on the ideal of maintaining the highest possible standards for trust, transparency and technology.



Parexel International

Headquartered near Boston, Massachusetts, Parexel operates in 84 locations in 51 countries around the world, and has 18,600 employees. Parexel provides the most comprehensive drug development capabilities of any CRO worldwide. Our global regulatory expertise, Phase I-IV clinical research services, integrated eClinical technologies, and advanced commercialization services all work together to move you through the development journey more smoothly and cost-effectively from beginning to end. For over 30 years, Parexel has proven to be a trusted partner for the complex development journey required of biopharmaceutical and medical device companies.

Parexel strives to be the premier provider to the biopharmaceutical and medical device industries for the development and commercialization of new medical therapies worldwide. Parexel's mission is to combine the strength of expertise, experience and innovation to advance the worldwide success of the biopharmaceutical and medical device industries in preventing and curing disease.



Medtronic

Medtronic is the global leader in medical technology—alleviating pain, restoring health, and extending life for millions of people around the world. Medtronic operates in 160 countries with more than 85,000 employees around the world and annual revenue of \$27.8 billion.

Medtronic began its operations in India in the year 1979. Headquartered at Solitaire Corporate Park in Mumbai, it has offices at Ahmedabad, Bengaluru, Chennai, Cochin, Dhaka, Gurgaon, Hyderabad, Kolkata, New Delhi, Pune and Vadodara. Our businesses primarily fall into three groups: the Cardiac and Vascular Group (CVG), the Restorative Therapies Group (RTG), and the Diabetes Group. The Cardiac and Vascular Group encompasses Cardiac Rhythm and Heart Failure (CRHF), Coronary, Structural Heart and Endovascular businesses; the Restorative Therapies Group includes Spine and Biologics, Surgical Technologies and Neuromodulation businesses; and the Diabetes Group offers Insulin Pump Therapy and Continuous Glucose Monitoring Systems (CGMS).

Covidien is now a part of Medtronic. The Covidien Group's businesses represent a broad portfolio of industry-leading products and services. These businesses include Early Technologies, Advanced Surgical Technologies and General Surgical Products, Medical Supplies, Respiratory & Monitoring Solutions, and Venous Solutions.

The Medtronic logo consists of the word "Medtronic" in a bold, blue, sans-serif font.

Janssen

Janssen, the pharmaceutical division of Johnson & Johnson, is dedicated to addressing and solving some of the most important unmet medical needs in Oncology, Immunology, Neurosciences & Analgesia, Dermatology, Infectious diseases and Metabolic diseases in India.

Driven by a strong commitment to the health and well-being of patients, Janssen brings innovative products, services and solutions to people in India and throughout the world. Janssen recognizes the impact of serious conditions on people's lives, and aims to empower people through disease awareness, education and access to quality care in six therapeutic areas.

The Janssen logo features the word "janssen" in a lowercase, blue, sans-serif font, followed by a stylized blue graphic element that resembles a curved arrow or a drop.

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The S&P Global Market Intelligence division provides company data, pricing and marketing data, analytic measures, reference data and classifications, and ratings and research services. The S&P Dow Jones Indices division offers various indices, including equity, fixed income, commodities, real estate, strategy, and custom indices that help investors to identify, measure, and capitalize on global investment opportunities; and research, education, and market commentary services. The S&P Global Platts division provides real-time news and price information; market reports and analytics; end-of-day market data; geospatial data and maps; conferences; and a weekly television program broadcast for the commodities and energy markets.

The company was formerly known as McGraw Hill Financial, Inc. and changed its name to S&P Global, Inc. in April 2016. S&P Global, Inc. was founded in 1888 and is headquartered in New York, New York.

S&P Global

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Medium Healthcare Consulting

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We are passionate about innovation, since we find it to be a potent force-multiplier. Our innovative mindset has helped us achieve unprecedented success in terms of newer business models, service delivery processes or simply in our approach to marketing.

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"DO SOMETHING WONDERFUL, PEOPLE MAY IMITATE IT."

Albert Schweitzer



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