

# Hospitals of tomorrow

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The Think Turf 2016 summit had industry doyens giving suggestions on building smart hospitals

BY TEAM HR

The 'Think Turf 2016 Building Smarter and Intelligent Hospitals', held on 18th March at Westin in Gurgaon, focused on offering cutting edge solutions that leverage technology to reduce cost and enhance healthcare delivery. The event was organised by 'Healthcare Radius' and ITP Publishing India in association with Schneider Electric. During the welcome note, Anil Chaudry, president & managing director at Schneider Electric, India, said, "Today healthcare has become one of India's largest sectors, both in terms of revenue and employment. And it is growing at a brisk pace due to its strengthening coverage and increase in expenditure by private and public players." This industry is expected to become a \$ 282 to 300 billion industry by 2020. It is the second largest service sector employer. It has 5% contribution to GDP.

"Now the growth in the sector will be managed by increase in investment. But, more importantly, deploying technologies will increase efficiencies of existing as well as coming facilities. That's where Schneider Electric pitches in. With our indigenous design philosophy, we deliver solutions which seamlessly integrate energy, automation and software to provide what we call "life is on" for everyone, everywhere and every



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moment. And with this mission, Schneider Electric has a strong strategic local and global commitments especially in healthcare," he said. Energy use in healthcare has very big challenge. "In the last two decades, this will definitely increase to about 36% due to more technology, patients, data centre and back offices," he said.

This was followed by the keynote address by Dr Sudarshan Ballal, chairman, Manipal Health Enterprises. "I would like to share my views on what smarter and intelligent hospitals is. Healthcare has come a long way and this is an example I give most of my students, when I give introduction to medicine. When my grandmother was operated about 40 years ago for gall bladder

1. From left to right: Surender Kumar Dhiman, Kapil Garg, Michael Sullivan, Joy Chakraborty, Dr Mudit Saxena and Gaurav Chopra during the first panel discussion.

2. Anil Chaudry, president & managing director at Schneider Electric, India.



surgery, it was a government building and she stayed in the hospital for three weeks and she had foot long scar. The entire family was with her few weeks. The foot long scar has certainly given way to key holes laparoscopic surgery and robotic surgery. From this footlong scar, there is hardly any scar seen now. But the question is, if this medical progress good enough?" he asked.

He added, "You go to the hospital and you do not know what your bill is going to be. You may estimate Rs 30,000 or Rs 3 lakh and you may come out with a bill of Rs 10 lakh. You go the hospital and don't know how long it takes to finish the billing. And certainly you have no control over the discharge process. After the doctor tells you can go home, you already will be sitting in the hospital since eight hours or more to go home. And that's the kind of hospitals we run these days and this has to change. I am sure everyone recognises this great man, who is no more, who said the biggest in-

novation of 2012 will be the intersection of biology and technology and a new era has begun and that's what we are looking at."

This was followed by a panel discussion on 'Think Turf - Building Smarter & Intelligent Hospitals', which was moderated by Gaurav Chopra, managing director, HKS Architects.. The panelists were Dr Mudit Saxena, COO, HCG Hospitals, Joy Chakraborty, COO, Hinduja Hospital, Kapil Garg, director, Paras Hospitals, Surender Kumar Dhiman, Head - engineering services and design standardisation, Fortis Healthcare, and Michael Sullivan, Global VP, Healthcare & Lifesciences, Schneider Electric. Being asked what changes he considered after completing projects, Dhiman of Fortis said, "In the corporate world, ROI is a very frequently used word and so you have to work within the budgets, within the medical programmes and dream projects take about three to four years of time for

**3.** Dr Harish Pillai moderating a panel discussion.

**4.** Bibhor Srivastava, publishing director, ITP India

**5.** Dr Sudarshan Ballal, chairman, Manipal Health Enterprises

**6.** Michael Sullivan, Global VP, Healthcare & Lifesciences, Schneider Electric.

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**7. From left to right:** Param Hans Mishra, Deepak Uppal, Sanjay Batra, Rob McIntyre, Vaibhav Poddar and Manu Malhotra during the second panel discussion.

completion. The brief, which is given to you in the beginning, often changes by the time project is nearing completion. So I would dream that the brief won't change nearing completion. All of us should spend more time in planning. More time in market analysis and provide for future trends which might hit the market two years down the line." He added that about five to six hospitals, of which he was a part of, the moment they were completed, it fell short of space. "So in the quest of meeting our budgets, our facilities space per bed, it will be a good idea if some elbow space is given in important areas like diagnostics and some more other clinical areas," he added.

Garg of Paras lamented how planners often don't plan hospital spaces well. "Space constraint is the biggest challenge we are facing today. Add to that the cost of the space. Today I am fighting for space, I don't have more OPDs, I don't have more diagnostic area, I don't have more OT space," said he. Joy of Hinduja Hospital pointed out that the pain points are the same but the magnitude is different for various cities. "I come from a place where you have to expand around the existing facility. If I really need to buy the space, probably in 20-25 years we will not reach break even. But one of the major challenges, I want to mention is that our facility is older than many. We really want to renovate and give a fresh look but the challenge is as soon as we think about

shutting down something, we look at the patients and it's very difficult to take this step. Because if we shut down and take for renovation, the number of beds and services will be reduced, and I am sure that patients will not like it," he added.

"We have been hearing the integration of technology into facility even from a planning perspective. But how do you define those parameters that defines that technology?" asked Chopra. To which Dr Mudit of HCG added, "I think from my wish perspective, affordability is one major issue in India. How you build your system and make sure the runout cost is low and as a result of which you are able to bring that cost curtailment and the benefits are passed on to the patients?". He added hospitals are learning from service industry- the way currently the room menus are being designed or room lights are being designed. "Patients can order your food online. Patients have to tap the app or caller system or nurse alarm bell system," he added.

This was followed by a session by Michael Sullivan, global VP, Healthcare & Life Sciences, Schneider Electric. "Intelligence integrated hospitals can be used to improve energy efficiency and financial performance. But how they can improve patient care, particularly patients safety and satisfaction? He asked to focus on three areas are financial performance, patient safety and patient experience- especially in private healthcare.

The second panel discussion, which was on 'Smart Hospitals Profit by Design', was moderated by Dr Harish Pillai, CEO, Aster Medcity, Kochi. The panelists were Deepak Uppal, executive director, Vatika Healthcare, Sanjay Batra, project director, Medanta-the Medicity, Rob McIntyre, global solutions architect, Schneider Electric UK, Param Hans Mishra, chief of medical administration, Indian Spinal Injuries Center, Manu Malhotra, founding partner, RSMS Architects, and Vaibhav Poddar, senior VP, transformation & new business, Max Healthcare.

"A patient in general ward or presidential suites wants the best of the comfort. Is there a right model? But patient quality and safety cannot suffer. Keeping these two things in mind, what will your advice be to build smart hospitals," asked Dr Harish to the panelists. According to Deepak of Vatika Healthcare, "I would consider relevant to having a sustainable hospital build in the most efficient manner. Planning is the first part and keeping in mind patient safety, infant abduction and I would say staff security and safety and having a holistic view is crucial to achieve these objectives."

Batra of Medanta pointed out about the irrelevance of putting high tech IT oriented system in tier II and III towns. "The model has to be different for different cities-whether you want to go to a multi-specialty or you want to limit yourself to a certain specialty. There is no common model," he added. Manu of RSMS Architects echoed, "I agree with that there cannot be one single model for hospital building coming up in Delhi, Gurgaon or a tier two city." He suggested, "You should minimise the first cost-that is capex. Build adequate per square feet, per bed, minimise the second cost -operations per square feet. So from our standpoint, we have identified these two things from project goals," said he.

Rob spoke about the benefits of pre-fabrication. "A pre-fabricated set-up mitigates



lot of coordination challenges and provides a vast cost saving. From a mechanical perspective if you take a decentralised approach it's pre-fab," said he. From an energy perspective, he said, "If you use intelligent software to control the chillers, it will provide at least 25% saving on your energy use, plus the savings on the wear and tear of your chillers and mechanical plan."

Speaking on safety aspects of hospitals, Mishra said, "There should not be too long walking distances for doctors, nurses or lift, so that your employees don't spend lot of time going from one place to another."

Poddar of Max pointed at the lack of predictability of government regulations. "Existing building is approved but when you expand it doesn't get approved because the bylaws have changed. So how do you get approval when these things have changed? If you look at the world's largest hospital, none of them has been predicted to expand," said he.

The summit ended with vote of thanks delivered by Bibhor Srivastava, group publishing director, ITP Publishing India. [HR](#)

8. Delegates in rapt attention.