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Future of Healthcare in Asia

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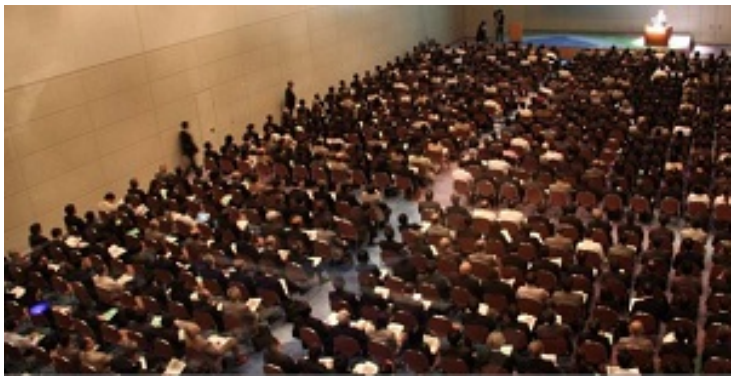

Healthcare industry is in a period of evolution accelerated by changing demographics and market forces propelled by insurge of healthcare awareness, availability of technology and fast access to information, giving rise to disruptive technologies and value chain. The evolving embedment of technologies in healthcare delivery platforms is on track to witness revolutionary growth.

Developed countries like Australia, Japan and Singapore are facing huge pressure of healthcare cost and resource management due to ageing population and lifestyle diseases increasing every year. On another hand, consumers are getting technology savvy and have much faster access to information and control than ever before. Linking the two scenarios, industry is coming up with easy interface devices and solutions that enables quality care delivery at low cost. Challenges in healthcare delivery and the need to cost contain opens a window for industry to bring future technologies that revolutionize the way healthcare management and services are delivered. BioSpectrum takes a look at the future growth of digital healthcare landscape in Asia and its revolutionary approach.

Cloud technologies in healthcare sector is going through a leap jump all over the world and Asia-Pacific (APAC) is also in the run to explore innovative solutions to enable efficient and fast medical and healthcare delivery. Frost and Sullivan mentions that market for cloud technologies, which included Software-as-a-Service (SaaS) and Infrastructure-as-a-Service (IaaS) offerings, was worth $194.4 million in 2012 and is expected to expand at a compound annual growth rate (CAGR) of a whopping 22.3 percent between 2012 and 2018.

"Cloud providers are experimenting with innovative models of collaboration and their most sort-after customers are government organizations investing in healthcare information technology," remarks Ms Natasha Gulati, senior industry analyst at Frost and Sullivan. Three major industry transformations that will be catalysed by cloud solutions are healthcare industry vertical clouds, telehealth, remote patient monitoring and consumerisation of healthcare.

Industry Vertical Clouds: Adoption of electronic medical records (EMRs) and electronic health records (EHRs) has spurred a wave of interest in industry vertical clouds as these can help extract maximum value from digitization of healthcare.

Telehealth and Remote Patient Monitoring: This has enabled telemedicine and patient monitoring devices to capture critical physiological data and action it on the fly so that the time taken to respond to an adverse situation can be minimized.

Consumerization of Healthcare: A single, convenient biometric identifier or a mobile phone would be sufficient to secure healthcare information about each patient.

Mentioning the challenges of adoption of cloud technologies in healthcare ecosystem, Ms Gulati says, "Healthcare providers are cognizant of the long term cost benefits of cloud solutions. What they are looking for now, are reliable technology partners who can address their concerns over data privacy and security. While many healthcare IT vendors emphasize on the enhanced security and back-up support provided by cloud technologies, the message has not successfully reached hospital CIOs yet. This is why healthcare continues to invest in private clouds while other industries are rapidly moving to public or hybrid cloud models."

Global mobile health (mHealth) market reached $8.3 billion by the end of 2013, according to a report by Allied Market Research, and is projected to reach $58.8 billion by 2020, at a compound annual growth rate (CAGR) of 32.3 percent from 2013-20. "Per capita expenditure on healthcare in developed economies is increasing at a faster rate than inflation and income levels, chiefly due to ageing population and chronic diseases which are lifestyle driven," noted Mr James Franco and Ms Yojana Jeevane, research analysts at Allied Market. Ubiquitous access of smart mobile devices globally has enabled diagnostic and monitoring devices to render seamless healthcare services. Thus, this market is expected to grow at a significant pace in the next seven years. This projection is backed by the fact that integration of advanced wireless technology with portable healthcare devices is feasible, increasing incidences of lifestyle diseases, cost and convenience factors, government initiatives, affordability of smartphones, notes Mr Franco.

Smartphone applications are supplementing the mobile health industry to bring innovation that can be reached to consumers as well as healthcare professionals. According to a report by Global Information, around 15 percent of mobile health applications are primarily designed for healthcare professionals. These include Continued Medical Education (CME), remote monitoring and healthcare management applications. Currently there are 97,000 mobile health applications in major app stores, 42 percent of whom adhere to the paid business model, according to GI Global.

Wireless patient monitoring (WPM) technology is being considered an affordable method to take healthcare monitoring and delivery platforms closer to consumers. Venture capitalists, start-ups and innovative device developers are taking keen interest in developing wearable technologies that are easy to manage and affordable to avail. "Investment funding in WPM technologies have increased, mainly due to an aging population and a consequent rise in the incidence of chronic diseases," notes technical insights industry analyst, Mr Saju John Mathew. "There is a growing need to manage patients in remote locations as hospital costs are escalating and the ratio of physicians to patients is skewed."

Point-of-care diagnostics market (POCD) in Asia-Pacific region is expected to grow at a CAGR of 13.6 percent from 2013 to 2018 and is likely to be centred to Japan, China, and India for a period of five years, according to an industry report. The surge in POCD market is attributed to factors including massive population base, keen interest of international as well as domestic players to bring new technologies and tap the opportunity and interest of government to reduce healthcare cost.

Futuristic Strategies

Integration of information and technology into a healthcare delivery platform is designed to give way to the concept of 'home healthcare', a key focus area for governments to support aging populations and manage infrastructure congestion. Industry stakeholders are working towards the vision of smart communities where concerted advancements in healthcare as well as other industries will pave the way for the progress of society as a whole, enabled by innovation and technology in healthcare.

Understanding the country specific needs and investment in research and development, followed by new product launches are the current strategies adopted by companies to maximize opportunities evolving in the healthcare industry. Partnerships, collaborations, profile expansion, joint ventures and mergers and acquisitions are some of the growth strategies adopted by

industry players. However, effective integration of health information, would require extensive collection and dissemination of information among hospitals, physicians, laboratories and diagnostic centres.