

Welcoming 2018

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Express Healthcare garners learnings of the leading healthcare experts from the year 2017 and what they expect 2018 to be!

Pooja Rao, Co-founder, Head of R&D, Qure.ai

We expect AI to make strides in the healthcare industry. The rapid rise in global population and the time and years of experience it takes to train a doctor has led to the shortage of physicians around the world. Artificial Intelligence has the potential to add tremendous value to the healthcare industry. From medical imaging to electronic medical records, pharma, genomics and health insurance, artificial intelligence is establishing a foothold and gaining traction in a heavily regulated space that has conventionally been slow to move with the times.

With this comes the recognition for the need and importance of good quality data to train algorithms with. There is much to be gained by harnessing machine learning to crunch complex medical data. Artificial Intelligence not only improves diagnostics and patient care but saves costs algorithms with. There is much to be gained by harnessing machine learning to crunch complex medical data. Artificial Intelligence not only improves diagnostics and patient care but saves costs and possibly even discovers new therapies. Additionally, deep learning is not affected by human factors such as emotions, fatigue and stress, reducing errors and biases caused by the same.

A synergy between AI and the doctor's expertise holds the key to revolutionizing the healthcare industry.

Dr V L Ramprasad, COO – MedGenome

2017 has been a very eventful year for **Medgenome**, with significant milestone achievements. Medgenome is the first company in India to launch a validated liquid biopsy test for cancer patients and the carrier screening test for couples planning to have a baby. The Diagnostics test menu has expanded to over 400 tests. Medgenome has grown over 100 per cent YOY as a result of expanding client base resulting and increased volumes. 2018 is going to be a very exciting year as Medgenome will be launching new tests which are very specific and crucial to India's overburdened healthcare system. Some of the new test launches would be in the domain of infectious diseases such as TB & Dengue.

Ameera Shah, Promoter and MD, Metropolis Healthcare

"The year 2017 has been an optimistic year for us at **Metropolis Healthcare**, with a constant focus of providing customers with quality diagnostic services. We have continued to expand our presence in global markets in which we operate, besides expanding into other markets in India. The diagnostic industry has emerged as a prominent game changer in the healthcare sector. India has also become one of the leading destinations for medical tourism and high-end diagnostic services, with tremendous capital investment for advanced diagnostic facilities, thus catering to a greater proportion of population.

In the upcoming year, we aim at bringing international tests and technology to India and providing them to the customers at cheaper prices. We want to grow in the direction that allows us to be present at every nook and corner that brings us closer to the customers. We look forward to stringent regulations in the diagnostic market that will resist the entry of dubious players. Implementation of these standardised protocols will ensure consistent and world-class services to all the consumers.

Healthcare IT and evolving technology has benefited the pathology industry. Health tracking mobile applications and online services such as booking appointments online for preventive healthcare check-ups, booking a path/lab test, obtaining reports online are further shaping this segment. For any organisation aiming to become a success in this rapidly growing diagnostic laboratories market, the best move at the moment is to plan to invest in tier II and tier III cities of India. The companies should expand their network by collaborating with more health institutes and increase their collection centres in India resulting in widespread reach and more access for the masses."

V Thiagarajan, MD, India Home Health Care

India is an emerging market for the home healthcare segment and is steadily finding its niche in the healthcare industry. Many new entrepreneurs and investors are focusing their interest towards tapping the potential of this sector which has been evaluated at a whopping \$2.2 billion in 2013. The projected rate of growth is about 8 per cent per annum till 2020. At **IHHC**, we feel that the growing geriatric population, rising demand for rehabilitation services, pregnancy care services, skilled nursing services, and palliative care services among others will contribute to the growth of the segment. The digitisation push from the government will also make it easier for people to access healthcare services. With the ease of availability of medical data of patients including history, diagnosis and course of treatment among others, companies catering to this segment will be better equipped to connect and improve the overall home healthcare experience for the patients and their families.

Taher Abbasi, COO & Co-Founder, Cellworks Research India

Digital transformation is set to overhaul the global healthcare industry as its set to move on another level.

Here are some emerging healthcare trends that will talk about changing landscape and adoptions that would be seen in upcoming year 2018

Artificial Intelligence – Big data aggregated provides opportunity to learn from past and predict the future. Some clinical questions are better suited to use of artificial intelligence because of right datasets. Further, AI will help healthcare practitioners in mining of the data to identify risk factors for providing efficacious clinical treatment.

Precision Medicine – In cancer, there are misspellings in important genes that drive the cell to grow out of control and eventually move around the body. Different patients have different misspellings and hence do not benefit from same treatment. Because of the differences across patients the conventional one-size- fits-all treatment paradigms have low response rates. Therefore, this emerging approach helps to deal with cancer disease in better and effective way.

Non-Invasive Monitoring – Non-invasive monitoring approaches will enable in collecting patient data longitudinally across multiple time points. This is enabled by various sensors to track patient vital signs 24×7 through wearable devices, complemented by blood and saliva monitoring techniques.

Personalisation – With the ability to monitor impact of treatment on a disease in real time – the opportunity is to learn and course-correct. Personalisation will allow making treatment decisions rationally and through real-time debugging.

Mobility and cloud – Mobility and cloud access is and will help patients and doctors interact better and real-time. Globally, majority of doctors already use smartphones and medical app and access drug info on smart phones on a regular basis. Hospitals, insurance companies, and doctor's offices are now storing patient medical records in the cloud, with patients able to access test results online 24×7. Now, mobile devices perform ECGs, DIY blood tests, or serve as a thermometer, for 'anytime, anywhere' users.

Overall, with rise of digital technology adoption by the healthcare ecosystem, the overall clinical care delivery for patient empowerment will be more streamlined and thereby improve the way healthcare facilities function as well.

Rajiv Bhalla, MD, Barco Electronic Systems

The Age of Disruption – if there was ever a moniker that perfectly encapsulated the essence of today's digitally-empowered era, it is this. Our lives are increasingly playing out on the digital edge, at the intersection of the real and virtual worlds. Delivering valuable insights through access to cutting-edge visualisation and networking solutions is, as a result, rapidly becoming an essential strategic imperative to support digital transformation across every industry within the business ecosystem.

For healthcare and medical applications

What is most important for healthcare and medical service providers is delivering the best outcomes, and that isn't possible till the time they have dependable, robust, and high-quality display systems to complement their skills and enhance their decision-making capabilities. This makes it imperative for doctors and hospitals to aggressively adopt state-of-the-art visualisation and imaging solutions that support their functions in the OR and diagnostics rooms. Having the complete picture of a patient's condition available to them on-demand in real-time can help in making more informed decisions and enhancing the quality of patient care delivered to the end-user.

For smart cities

India has been rapidly moving towards a technology-first approach, and the ambitious smart cities mission is set to further accelerate this evolution. But to truly enable smooth day-to-day operations and better query resolution will require seamless interconnectivity between the various stakeholders, from the end-user to service providers to city administrators.

This is where centralised control rooms powered by innovative technology solutions come into the picture. By enhancing the flow of information between various stakeholders, these control room solutions can play a major role in optimising productivity, enhancing real-time monitoring, and augmenting decision-making processes. Moreover, hi-tech security and surveillance solutions in interconnected control rooms will also pave the way for better citizen safety, which is one of the prime requisites for new-age smart cities.

Probir Das, Director and Founder Member, Medical Technology Association of India (MTAI)

Going by how 2017 turned out for the healthcare industry, 2018 is expected to keep healthcare providers, patients as well as technology partners on their feet, for better.

Technological Advancement

- AI, Mobile Health, Electronic Records, Remote Diagnosis and Delivery – Like all spheres of life, healthcare too will witness a bigger role of digital technology and machine learning (ML). The rapidly advancing technologies will show signs of percolation into practices like drug discovery, clinical decision making, patient diagnosis, precision medicine, and medical R&D. AI and ML are already present in their nascent form in drug discovery and clinical decision making. There will be a tremendous increase in their use starting next year. Global medical device industry would start to adopt integrated AI and ML systems.
- Democratisation of Healthcare and moving away from quaternary and tertiary care bias– 2018 may be the beginning of the journey of focusing more on 'health care' than 'sick care'. We will see democratisation of the healthcare ecosystem as health provisions become more broad-based than just hospital based care.

Policy / Regulatory Regime

- Level Playing Field – Given that 2017 has seen both public and private sector or the benefit of patient safety and quality, I hope to see emergence of a level playing field for medical device manufacturers in 2018. We are actively engaged with government authorities to remove the current distortions in the system like high import duties (compared to even ASEAN countries), high GST rates on life critical devices, poor health spending / lack of a risk pooled reimbursement mechanism, poor training and R&D. Some of our deliberations are expected to be implemented in 2018.
 - Trade Margin Rationalisation – The feeling that medical device manufacturers charge exorbitant prices is misplaced but that led to the government imposing price caps on stents and knee implants. The truth is that the current dynamics of healthcare creates needs and enables each level in the supply chain to charge a margin. In the lack of a credible risk-pooled reimbursement system, the sum-total of these margins are passed on to the patient who may feel it is too expensive for his/her pocket. We are mindful of this and are supporting the Government's intention to bring in rational and transparent trade margins across the value chain. There should be a positive development soon, may be as early as 2018.
- Hopefully these and other developments would reduce the financial outgo for patients and the healthcare industry would see correction in its reputation.
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