

INTERVIEW

Dr. Prathap C. Reddy, Founder, Chairman, Apollo Hospitals Group



# India needs cutting edge technology to become a global healthcare destination

Health care in India has been revoultionised in the recent past. Not just in India but across the globe Apollo has carved a niche for itself by proving health care technology which is on par with any of its western counterparts. Dr Reddy who started Apollo Hospitals gives his take on the current health care scenario with Shivani Arora.

**You have been the pioneer in revolutionising private health-care sector. Where do you see it now?**

In India, the last few decades certainly did witness a healthcare revolution. High quality healthcare on par with global standards has certainly become a lot more accessible and affordable. There has been an immense development in our capability to diagnose faster, provide advanced medical care and undoubtedly technology and in particular, high end medical technology has been a huge enabler in bringing about much of this this paradigm shift. Millions of lives have been saved with timely intervention and at the core of this positive progress is a resolute commitment to provide superlative patient care. Yet, personally, I am of the view that we continue to be where we were over three decades ago, that is before 1983, the year when India's first private hospital, Apollo Hospitals in Chennai opened its door to the people of this country. My seemingly harsh view is based on the reality which is that till date, over 40% of the country's population travels over 100 Km from towns and villages to access even basic medical care. The healthcare imperative for the future has to be that the benefits of positive progress should cascade to all and only then can we claim to be a truly inclusive nation. The biggest healthcare challenge ahead of us in the present day is that of the rising burden of non-communicable diseases (NCDs) In the WHO study referred to during 'The Future of Healthcare, A Collective Vision' conference hosted by Apollo Hospitals in February 2014, it was said that non-communicable diseases kill almost 36 million people each year. The impact of this burden on India could cost India around 60% of its GDP. Furthermore, the health infrastructure is in a woeful state in the country. We need to add 100,000 beds annually for the next 10 years to address the need-gap and be in sync with the mandated WHO standards of beds to population.

**According to you, what more needs to be done in healthcare sector?**

Like I said, I foresee a deluge of NCD's plaguing our society in near future and we need to be prepared to face this calamity. It is pivotal that we are alert and aware. I think the primary step is to create much greater awareness about early detection and the importance of regular health checks. We also have to upgrade the technology available in India. At Apollo we already have the best infrastructure and diagnostic equipment, thanks to companies like Toshiba for their streamlined processes that have equipped us to handle emergencies. I have personally adopted my home town in Chittoor district under the auspices of a first of its kind endeavour called Total Health and in time, this will emerge as a role model in community development. In addition, Apollo's upcoming campaign 'Life is priceless' - Live Healthy India will represent our nationwide drive to create awareness about one's health and the value of one's life.

**What are the challenges ahead?**

The healthcare challenges and needs in India are four-fold:

- i. India faces the human and economic threat posed by NCDs. Cardiovascular diseases, cancers, chronic respiratory diseases, diabetes, and other NCDs are estimated to account for 60% of all deaths in India, making them the leading cause of death - ahead of injuries and communicable, maternal, prenatal, and nutritional conditions. Furthermore, accordingly to WHO, the NCDs account for about 40% of all hospital stays and roughly 35% of all recorded outpatient visits. NCDs not only affect health, but also productivity and economic growth. The probability of dying during the most productive years (ages 30-70) from one of the four main NCDs is a staggering 26%.
- ii. The second biggest challenge is an acute shortfall of skilled human health resources in the country despite being the second most populous nation in the world. India needs to double its doctors, triple its nurses and quadruple its allied health workers at a bare minimum to cope with the need.
- iii. An attitude to be prepared from a monetary perspective for coping with costs associated with illness and treatment is almost absent in India. Barely does 10-12% of our population has health insurance and over 80% of our people pay out of pocket for health expenses, making it the biggest reason for indebtedness in India.
- iv. A scientific temper and a climate of innovation are critical to address these manifold challenges. Sadly, India is yet to accord healthcare - a priority national sector status and this at the root of many of the challenges that we are faced with.

**How far are we from being a global health care destination?**

India can become the world's preferred healthcare destination undoubtedly! We already have thousands of patients from across the globe coming in for treatment. The present government is taking steps to improve the visa process to enable more medical tourists to come in and that's a positive step ahead. Improved connectivity to the country would also be helpful. In addition, the Government needs to actively promote India's capability to provide a superb blend of Eastern and Western acumen – high end care with great compassion - high tech with high touch.

**What do you think of medical equipment of foreign capital brand comparing with domestic brand's one?**

At Apollo we use the best of equipment from across the world. We are now all set to install the Proton Beam Therapy, which would be the first of its kind across South East Asia, Africa and Australia. This launch that marks the beginning of the next wave of advancement in radiation therapy in India. An imperative is for India to make the procedures easy. We have to go through so many clauses for even clinical trials, leave alone manufacturing medical equipment. It is my dream to see the health scenario in India improving in terms of quality of healthcare, awareness about health, early detection, more number of hospitals, doctors, nurses and paramedics and on the whole to see a healthy nation.

INTERVIEW

Dr. Rochita Venkatramanan, Radiologist, Apollo Heart Centre



# Advanced CT scanners by Toshiba at Apollo Hospital in Chennai

The world today seems to be moving forward with developments in technology. The medical field is one such field which has benefitted immensely from the growth of technology. Toshiba introduced the Aquilion ONE™ which is a 320 detector row CT and Apollo hospital in Chennai was the first to use this machine. Dr. Rochita Venkatramanan, radiologist at the Apollo heart Centre shares her views on Aquilion ONE™ with Shivani Arora.

**What are the key features of Toshiba CT Scan machine?**

Aquilion ONE™ is extremely easy to use. User friendliness is very important because the scanner is not just used by doctors but also by technologists. Secondly it is the fastest scanner in the world and works at the speed of a jet. It has 320 detectors and gives 640 slice view of the heart and covers the whole heart in one rotation. It is difficult to take an image of the heart in between two beats. But this one machine is quick enough to take an image in between the two heart beats.

**In what ways is it better that other products in similar category?**

The images produced by the scanner are crisp and clear and hence makes the diagnosis very accurate. The more accurate the diagnosis the better the treatment. Toshiba is the only company to introduce a 640 slice CT Scanner. None of 64 or 128 or 256 slice CT scanners can scan a complete heart in one single rotation and give such a clear picture. This machine is used not just to scan the heart but can be used to scan other organs like the brain, kidneys and organs which are within the 16cm size. It is excellent to scan babies as well. The main advantage of this machine is that it is so quick that the patient is exposed to very little radiation. Lower radiation, lesser amount of dye, accuracy and comfort of the patient are the main advantages of this scanner. In November 2008, Apollo Heart Centre in Chennai installed India's first 320 row CT Scanner Aquilion ONE™.

**What was your first impression and how has it impacted healthcare in India?**

My first impression was that of amazement. I thought we were already using one of the best scanners. And here came something even better than that which works like a super computer and gives us such accurate images. It is perfect to scan hearts with fast heartbeats, irregular heartbeats and those with grafts. If a patient is having recurrent chest pain post a bypass surgery, we can scan the heart and see if the grafts are working properly or not. If there is a blockage, we look at the native artery and try to stent it. If the grafts are fine we see if the pain is coming from the smaller arteries and can be treated with just medication. A clear understanding can prolong the patient's life by tailoring the treatment. So it immensely impacts the healthcare scene in India. We not only use it to scan hearts but for other body parts too. The other day we had a child with completely burnt hands due to an electric shock. We scanned his hands to see which arteries were working and with the help of that reconstructed his hands.

**It has unique features such as 16 cm detector which is the largest size to date. How is it better from other conventional ones with smaller detector or dual source?**


Yes, it is a unique machine and has many advantages over the conventional and smaller devices. It makes it easy to scan hearts with irregular beats or cardiac arrhythmias, fast heartbeats and patients with stents. Basically the image produced by this scan is three dimensional and gives us a complete view of the heart, whereas an image formed during a cath angio, which is an invasive procedure, is flat and two dimensional. We can also scan the brain, chest and other smaller organs. We can check blood flow in various parts of the body, check internal bleeding in patients, small tumours in bowels, arterio venous malformations, etc. Once the focus is identified, we can immediately plug the bleeding artery or vein. It basically helps to save many lives and is a boon to the medical world.

## A CT Scanner Should Not Just Be About Technology - Aquilion ONE™

Toshiba launched the world's first dynamic volume CT scanner Aquilion ONE in 2007. This scanner employs cutting edge technology to accelerate clinical decision-making and optimize patient care. For example, the exam time for diagnosis of a stroke is reduced to less than 5 minutes with Aquilion ONE, from 30 minutes by other methods.

Aquilion ONE keeps evolving to change clinical pathways to diagnose a variety of diseases. The latest software that was showcased at the RSNA 2014 includes a number of 4D analysis applications to enhance diagnosis of joint, airway and vascular diseases.

The new "PUREVision" CT detector has 40% better light output, resulting in better image quality using less radiation. Since diagnostic performance and patient safety should never be an option, Toshiba's commitment is to incorporate PUREVision detectors across the entire Aquilion CT product range.



Aquilion ONE is a trademark of Toshiba Medical Systems Corporation.