

Apollo, Medtronic develop portable dialysis unit in India

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Singapore: Apollo Hospitals Enterprise, one of the leading healthcare providers in Asia, and Medtronic, global leader in medical technology, have partnered to bring to market an innovative, affordable and portable hemodialysis system in India to help improve access to care for End Stage Renal Disease (ESRD) patients who need Renal Replacement Therapy (RRT).

This collaboration will leverage a Medtronic-developed technology platform, supported by clinical insight from Apollo. Both organizations envision an affordable and accessible health care delivery system that addresses the critical need for dialysis solutions in India. Both companies do not expect the collaboration to materially impact their earnings in the respective company's fiscal year.

Specifically, the collaboration seeks improved accessibility, outcomes, affordability, operational ease, and environmental protection while providing hemodialysis services to ESRD patients requiring RRT.

Medtronic intends to develop and manufacture key components of this system in India, with an investment of more than \$25 million. For the first time, Medtronic is establishing an India R&D team that will focus on design, development and manufacturing of key components of the system in India. The commercial launch of the product is slated for 2016.

Dr Prathap C Reddy, chairman, Apollo Hospitals said, "Our partnership with Medtronic will help in fulfilling our vision of delivering better clinical outcomes through bench-to-bedside innovation. This alliance reinforces Apollo's commitment to research-driven healthcare. We are undertaking this landmark initiative to explore opportunities in dialysis solutions to address a critical need with the right, yet affordable treatment as part of our legacy of providing clinical excellence. This collaboration is a further symbol of Apollo's commitment to having a share in everyone's good health by touching lives."

"Medtronic is committed to creating technologies that can reduce barriers to treatment, enhance and extend the lives of patients around the world, and reduce healthcare costs. In the case of hemodialysis, both the cost and lack of mobility of current systems have made broader access to dialysis treatment difficult and expensive. Our goal is to build a unique, internally developed system that will be portable, will lower costs, and will be more efficient in its use of water and other

critical features than existing dialysis systems. Our collaboration with Apollo allows us to further tailor our system to best meet the needs of patients and physicians in India and will leverage Apollo's deep expertise and reach in treating ESRD patients," said Mr. Omar Ishrak, chairman and chief executive officer of Medtronic, Inc.

In India, approximately 10 percent of adults (nearly 7.5 crore or 75 million people) suffer from chronic kidney disease, and it is estimated that nearly two lakh (200,000) new ESRD patients require dialysis or kidney transplant every year. In spite of multiple efforts to decrease the high mortality and improve the quality of life of ESRD patients, several important infrastructure and economic barriers have prevented broader access to dialysis treatment in India.

When a patient reaches ESRD, options for survival are very limited unless they receive RRT. The best treatment option for ESRD patients is renal transplant. However, research suggests that only five percent of ESRD patients receive a needed transplant. This gap between demand and supply of organs will only widen over time, as more patients develop kidney disease and enter ESRD.

The next best treatment alternative to RRT for ESRD patients is dialysis, a process that enables the removal of excess metabolic waste, toxins, and water from the blood. Dialysis is performed using two modalities - peritoneal dialysis and hemodialysis. Hemodialysis is by far the most widely used treatment option globally and in India. More than 90 percent of patients who undergo dialysis in India receive hemodialysis. Today, the standard frequency of receiving hemodialysis is three sessions a week, each lasting between three to five hours per session. Patients typically receive this therapy in a hospital or stand-alone dialysis centre, with a very limited number of patients receiving therapy at home.

Apollo Hospitals and Medtronic expect that a new portable system would broaden a healthcare provider's capability to serve patients from hospital to home, saving costs to the healthcare system overall.